The allocation of a contract for public construction projects in Europe usually requires a European tender procedure. This has to do with the size, the use of public means and the complexity of this type of projects. Compared to regular partnerships, it is hard to develop trust between the buyer and supplier in procurement situations. Inspired by transaction costs economics, in construction procurement processes are still considered as predominantly legal processes that are required before starting a project. Consequently the legal requirements usually prevail over the social process of deciding on the right firm to establish a collaborative relation or the best proposal for constructing infrastructure. Nevertheless, the right partner and good design are critical for project success.

We argue that the basis for successful cooperation between client and contractor is created during the procurement stage of construction projects. Only parallel processes of organisational sensemaking and bargaining will create a common understanding of the project and its environment. Therefore tender processes should be considered as an essential step in front-end project management and designed accordingly.

Based on interviews and observations in two Dutch case studies, a Design Build contract for a Provincial Government House and a Design, Build, Finance, Maintain (DBFM) contract for a large Tunnel, we demonstrate why procurement processes should be considered as negotiation processes in which the procurement system facilitates the actors in making decisions for the future project. This kind of awareness contributes to a sound starting position for the project team and stimulates internal motivation for collaboration. Implementing these insights requires further development of strategic project management competences and involvement of the project manager in procurement processes.

The combination of increased project complexity (Baccarini, 1996; Walker, 2007), changing government roles (Blanken, 2008) and the construction sector’s poor professional functioning (Construction Task Force, 1998) has changed interactions involved in construction projects. Public principals remain more distant to construction projects, sourcing out more and more of the work. Contractors become involved in projects more early, and as a consequence, the contracts to govern construction projects have to be signed earlier in the process, when the chances to unforeseeable contingencies are considerable.
In current procurement practice, tactical opportunities and opportunism for short-term financial planning are more commonplace than most dare to acknowledge (Hoezen, 2012). Many projects exhibit minimal input to defining their needs and translating these to functional requirements. They rather haste to move on to latter stages of the building process based on a seemingly transparent image of the costs and time line of the project. Inspired by transaction costs economics (Williamson, 1998), procurement processes are still considered as predominantly legal processes that are required before starting a project. This is often translated by the actors into a process in which the legal terms prevail over the social process of deciding on the right firm to establish a collaborative relation or the best proposal for constructing infrastructure (Volker, 2010). Nevertheless, both the legal and social aspects of collaboration are critical for project success. In order to be able to trust each other it is critical for supplying contractors to understand the client’s initial motivation to invest time and money in design, and for clients to understand the contractor (Cuff, 1996). In other words, both parties need to make sense of each other to cross organizational borders (Pemsel & Widén, 2011) because once they start collaborating formal and informal communication mechanisms will develop (de Blois, Herazo-Cueto, Latunova, & Lizarralde, 2011). Hence it is argued that developing trust, a common language and an understanding of all parties’ requirements should be critical in the procurement phase, to ensure maximum disclosure and allow for the identification of areas of deficiency within the team as a whole (Brown, 2001). Especially in case of integrated contracts in which several phases of the construction process are included in the deal, parties are condemned to collaborate for an extensive period of time. It is thus imperative that partners are able to develop a shared aim of the project before this relationship is made official in a legal document. Front-end project management thus becomes crucial for project success (Morris, 2009).

**PURPOSE OF THE RESEARCH**

Recent research indicates that the governance and thus success of projects is not just influenced by formal aspects of the legal contract but also by informal and collaborative elements between contracting parties (Eriksson & Westerberg, 2011). We argue that the basis for successful cooperation between client and contractor is created during the procurement stage of construction projects. Only parallel processes of organisational sensemaking and bargaining will create a common understanding of the project and its environment, expressed in formal and informal rules and procedures. Therefore tender processes should be considered as an essential step in front-end project management and designed accordingly. Based on two case studies, a restricted tender for a Provincial Government House and a competitive dialogue for a large infrastructure tunnel, we demonstrate why procurement processes should be considered as negotiation processes in which the procurement system facilitates the actors in making decisions for the future project. This kind of awareness contributes to a sound starting position for the project team and stimulates internal motivation for collaboration.

**THEORETICAL BACKGROUND**

*Communication during the procurement phase*

Already in the sixties, Higgin and Jessop (1965) concluded that the construction industry faced project failure, as a result from abortive work, misunderstanding and delays. They concluded this was mainly caused by poor communication. Since then, good communication was found to be crucial for project success repeatedly. Brown (2001) introduced the concepts of understanding and negotiations in relation to communication in design processes. He explained communication problems not just by focusing on problems of understanding between the construction parties, but also by showing how communication problems are useful ‘as a commercial negotiating tool’ for hidden agendas.

Procurement is often connected to the concept of transaction costs economics, which associates inter-firm exchanges with costs caused by negotiation, administration, and contracting (Williamson, 1998). As transaction costs economics provides the basis for procurement, procurement processes in construction are still considered as obligatory legal processes in order to contract a particular party. Therefore contracting agencies do not invest much in growing trust in procurement situations, since they have to await which one of the contenders will gain the contract. Suppliers, on the other hand, remain distant from the contracting authority as long as they are in competition.

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**Figure 1: outline of the theoretical background**

- Procurement processes
  - bargaining
  - sensemaking

- Decision during project execution
  - based on (dis)trust and congruent/divergent understanding

- Project success
  - level of performance
with others. They keep information to themselves, which also makes it difficult to develop trust. Furthermore, one-to-one situations are not allowed in public tendering situation because contracting authorities shall treat economic operators equally and non-discriminatory and shall act in a transparent way (European Parliament & Council of the European Union, 2004, p. art 2). In this context Hoezen, Voordijk, Dewulf & Dóreé (2008) clearly address the psychological aspects of the competitive dialogue procedure. They conclude that in case of dynamic dialogues, both buyers and suppliers feel insecure whether acting conform the legal principles of objectivity, transparency and non-discrimination. To conclude, this means that compared to regular partnerships, it is harder to develop trust and build a relationship in procurement situations.

Sensemaking as a basis for project success
According to Ring and van de Ven (1994), organizations focus on bargaining (formal processes) and sensemaking (informal processes) during negotiations. By negotiation parties develop joint expectations about their motivations, possible investments and perceived uncertainties. To a certain extent they also get to know and understand each other. By information confinement, by turning tacit knowledge into words and schemas, by sharing knowledge, assumptions and mental models, and by reducing the impact of biases, parties grow and create meaning of the transaction, the context of the transaction, and the value of it to the other party and to oneself. This is confirmed by research of Vlaar, Van den Bosch, and Volberda (2006), who found that whilst parties try to come to a consensus about contract terms, their attention gets focused: they are forced to articulate, deliberate and reflect on their individual ideas, they interact and they reduce biases, judgement errors, incompleteness and inconsistency. Vlaar et al. (2006) also state that the identified mechanisms in the bargaining processes help in making sense of the inter-organizational relationship and of its context. Organisational sensemaking is a social process during which members of an organization interpret their environment in and through interactions with others, thus constructing observations that allow them to comprehend the world and to act collectively (e.g. Isabella, 1990; Weick, 1995). Sensemaking processes are assumed to play a central role in the procurement of projects. When two parties with different backgrounds, working cultures and belief systems intend to work together, there is a risk that problems linked to understanding could arise (Sutcliffe & Huber, 1998). Yet, since the two parties intend to work together, they have to create coherent understandings in order to come to collective action. Striving for congruent views on the purpose and expectations of both the project and the relationship create a basis for successful cooperation, since it helps the decision making process during construction of the project.

In figure 1 a schematic overview is given on how procurement is likely to influence project success through decision making. When during the procurement stage the meaning of the transaction is made mutually clear, a basis for trust and congruent understanding is created. This basis helps parties to make decisions that contribute to project success.

RESEARCH APPROACH
The research is based on two empirical case studies in construction: one case about a Design Build contract for a Provincial Government House (Case A) and one case about a Design, Build, Finance, Maintain (DBFM) contract for a large infrastructure Tunnel (Case B). The research aim is to explore how sensemaking and bargaining can be integrated in the current procurement processes. This requires data collection on how actors deal with “operational links, needing to be traced over time, rather than mere frequencies or incidence” (Yin, 2009, p. 9). Case study research therefore seems to be the best method to satisfy the research aim. For this study, data were collected through a combination of interviews, desk research and observations (see also Hoezen & Volker, 2012). The cases were selected through the personal network of the researchers. Each author was involved as a non-participant observer in a case

<table>
<thead>
<tr>
<th>Data source</th>
<th>Case A: Provincial Government House</th>
<th>Case B: Road Infrastructure Tunnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desk research</td>
<td>15 documents (working documents, competition rules)</td>
<td>13 documents (2 evaluation reports, 4 procurement protocols, 6 versions of the contract and 1 document containing the 2780 dialogue questions and answers)</td>
</tr>
<tr>
<td>Interviews</td>
<td>Informal conversations with project team and client body members during a 7-month period noted in a research log of 30 pages.</td>
<td>29 interviews, generating 357 pages of transcribed interviews</td>
</tr>
<tr>
<td>Observations</td>
<td>Period before official announcement until the process was cancelled right after selection phase (July 2007 - January 2008) - 20 meetings (general reports)</td>
<td>During the first year of the construction stage (September 2008 until July 2009)</td>
</tr>
</tbody>
</table>

Table 1: Data collection methods for the two cases
(author 1 in case B, author 2 in case A) and collected additional data by interviews and informal conversations. Table 1 includes an overview of the data used for the two cases.

Case studies were used as a rich empirical description of particular social entities that are based on a variety of data sources (Easton, 2010). The variety of different forms of data allowed for triangulation between self-report, observed behaviour and official justifications of the case data. The data were initially analysed as separate case identities and then systematically and collaboratively compared on emerging constructs. Throughout data analysis and reporting the authors were frequently going back and forth between the interpretation and the original data. This process can be characterized as ex ante use of theory in qualitative research (Andersen & Kragh, 2010). The general aim of this approach is "not to build consensus among diverging theoretical perspectives but rather to use their divergences as vantage points for creating new insights" (Andersen & Kragh, 2010, p. 53). Therefore, we analysed the documents and used interviews and observations to indicate which elements of the procurement process were key in the sensemaking process (how participants grew and created meaning), and how this caused them to make the decisions that contributed to the performance of the project.

CASE DESCRIPTIONS

Case A concerns the selection of a Design and Build consortium for a new part of the governmental offices of the Province of Utrecht. The current offices of the Province consist of a tower, built in the 90s, and a lower block called 'The Stars', built in the 70s. The case concerns a restricted tendering procedure for a new building replacing 'The Stars' for a fixed price of €9 million. Eight consortia of architects, contractors and project managers applied for this tender. The exclusion and selection criteria were based on strict organizational and financial requirements of the consortium but the deciding factor was suitability of the architect, to be assessed based on three reference projects that were designed by the proposed leading architect. Three consortia were excluded due to not meeting the minimum requirements, resulting in five potential suppliers.

The selection committee, consisting of members of the executive board of the Province and an independent chair, determined the degree to which the reference projects fulfilled the criteria of a 'public, timeless, business-like character with a human scale' in a single meeting of three hours. They were assisted by an architectural expert. This resulted in a decision to allow all five parties into the award phase. Unfortunately the tender was cancelled immediately after the selection phase due to reconsideration of the decision to replace the lower part of the building.

Case B involves the Second Coen Tunnel project is large and complex (estimated net present value 300 million), and contains the maintenance of an existing, 40-year old tunnel plus the construction of a second tunnel alongside the current one. The project was procured by the Dutch Highway Agency called Rijkswaterstaat in a competitive dialogue procedure. Five consortia met the qualification criteria and were therefore invited to participate in the dialogue. Based on the evaluation of the intended actions for carrying out the project, three suppliers were invited to the next consultation stage. These parties all went into a dialogue process about risks and optional requirements. The contract was awarded to the consortium having best met the agency's requirements, both qualitatively and financially, based on the economically most advantageous offer.

The contract for the Coen Tunnel project was signed in 2008, and the maintenance of the existing tunnel was then transferred to the contractor. The construction stage for the new tunnel started in 2009 and finished in 2013. In this case the agency felt that the contractor had claimed much more money and delay time than was realistic. This resulted in decreased benevolence from the agency's side. During execution of the contract, bad performances of the contracted became immediate reason for penalties. The formal legal agreement apparently did not meet the informal psychological agreement.

THE EFFECT OF PROCUREMENT PREPARATION ON DECISIONS PROCESSES

The buyer in case B was much more experienced in procuring and contracting than the buyer in case A. However, the experience of the agency in case B did not include DBFM contracts or the competitive dialogue procedure. This meant that both organisations had to make sense of the procurement process itself and of the specific implications of the process for the organization of their project. For case A, the organisation was looking for a contractor who could design and build their new governmental office building, of which the specifications were drafted at a conceptual level. Although the agency decided to offer a Design and Build contract, the observations indicated that the board members were not aware of the integrated - and therefore not traditional - construction process. So their perception of partnering was not in line with the legal format of the potential commitment. For case B, the organisation sought for a service-provider who could not just design and build, but also reconstruct and maintain their tunnel for a period of 30 years. The interaction with the different contractors during the procurement phase triggered the agency to rethink their assumptions that provided the basis for the contract and
the actual roles and responsibilities of both parties. During the dialogue in the procurement phase risks and optional requirements were discussed at length. This created the basis for the partnering agreement. The agency in Case A obviously had a different perception of the binding character of a legal procedure as intended by the European procurement law. It appeared as if they used the tender to consult the market about the prospective of their construction project. During the tender the agency realized that they had lost control over the project and hesitated about the initial starting position. The positive market reply, however, made them realize that starting a tender procedure could actually result in a legal obligation of several million Euros. Their formal action to cancel the project was a result of an informal loss of control caused by increased sensemaking.

THE EFFECT OF BARGAINING ON DECISIONS PROCESSES

The experiences in Case B showed that due to a lack of experience with the specific tender procedure, the rules for negotiation were unclear. The legal principle of non-discrimination implicated that the procuring agency provided all potential suppliers with the same tender information. Information given to one of the suppliers during a dialogue conversation should therefore be given to the other suppliers as well. Reproducing information, exchanged during a conversation, is difficult. It made the buying agency reluctant to give any information at all. As one of the agency’s employees said: “I’d give as little information as possible: when I’d say nothing, it would not be possible to say something wrong either”.

Before each dialogue conversation, potential supplier therefore had to hand in their questions in writing. During the dialogue, only these questions (and no complementary ones) were discussed. After the dialogue, answers to the questions were sent to all the potential suppliers, except for the few questions that concerned intellectual property. Thus, the procuring agency made sure to act conform the non-discrimination principle. Potential suppliers on the other hand, were not too convinced that the procuring agency would handle their design solutions confidentially. The legal principle of transparency did not comfort them at all: “We would not give too much information with concern to our design solution: who would know if another supplier would gain the contract using our brilliant ideas?”

As a result, the bargaining process did not include much exchange of information: during the dialogue conversations the agency just answered the questions that were handed in at forehand, and suppliers did not want to share too much either.

Due to the fact that neither one of the parties in case B was willing to give too much information to the other, both of them had to go through individual sensemaking processes. They interpreted the acts and words of the other without checking whether their interpretations matched reality. An example of a situation in which individual sensemaking took place, is when the Alignment Decision (formal legal court decision about the agency’s infrastructure plans) for the Tunnel was rejected. At that time, two of three bids were already rejected, yet no preferred bidder had been appointed. The agency decided to await a positive Alignment Decision before it would appoint the preferred bidder. With a preferred bidder, the Agency faced the risk that it would have to pay the bidder anyways even when the project would not take place. Not appointing the preferred bidder was a cheap exit option in case the Alignment Decision would stay out. A bargaining process started, during which the remaining bidder tried to convince the agency to appoint the preferred bidder anyways. Instead of explaining its action, the agency kept repeating that it would not appoint a preferred bidder. Then an individual sensemaking process started, resulting in the conclusion of the remaining bidder that the agency wanted to get rid of him. Meanwhile it did not know about the agency’s difficulties even to get the decision to start the project.

As a result, when the project eventually started, the contractor had to make uninformed decisions, influenced by strong (negative) ideas of the principal’s motives. Both parties acted upon assumptions about the other parties’ values and interests instead of upon what really mattered to each other. Parties did neither understand nor trust each other. A few months after the project execution started, people from outside the project were called in to mediate between the principal and the contractor. Only after this renewed sensemaking process, principal and contractor were able to make decisions in line with the project’s goals, instead of only thinking about their own organizations’ interests. Only then, the project performance became acceptable.

THE EFFECT OF SENSEMAKING ON DECISION PROCESSES

In Case A most of the uncertainties relate to the domain specific knowledge of the agency. The decision makers were uncertain about the response of the market parties on their announcement. The market was very tight at the moment and the project budget was narrow. In the end, eight potential suppliers replied to the call, of which three did not meet the minimum requirements. The agency applied the selection criteria on these five suppliers and concluded that they all had met the official selection criteria. The fear for insufficient competition turned out to be unjust. The selection was based on the mood boards that the suppliers submitted to show their frame of references. This can be considered as a passive bargaining process by the means of architectural design. Since none of the members of the selection committee had domain specific knowledge, they invited an architect to inform them about the background of the potential suppliers. This clarification increased their information position, enabling the committee members to internally reconsider inviting the consortia for the next phase of procurement. The actual bargaining process was about to begin when the tender was cancelled. Thus, in Case A the use of the procurement process uncovered the fear of negotiating a commitment. There were two aspects that caused a lack of support for the continuation of the project. Firstly, internally one was
still not convinced that reconstruction on the proposed location was the best solution for their accommodation problem. The democratic character of the Dutch Provinces requires elections every four years. The decision to rebuild a part of the building was taken in a previous period of administration. This meant that the current director had to execute a decision of his predecessor, which did not make sense to him. This also caused the second aspect to come to play: the fear of committing to an integrated Design and Build contract. Such a contract would mean losing control over the actual building aspects that were not included in the specifications would never be realized. This individual process of sensemaking within the agency preceded the common process of collective sensemaking between the agency and the market party during the negotiation phase.

In this case, the project did not become successful, due to decisions before the project even started. However, it can be argued that the principal’s sensemaking process during the procurement stage, made him realize that he held a different perception of what working in an integrated contract entailed than the constructors did. Before this could cause the project to fail, the principal stopped the project.

CONCLUSION

The two cases described in this study show how processes of bargaining and sensemaking during the procurement of projects influence the decisions that both principals and contractors make. Bargaining processes induce processes of both individual and collective sensemaking. These latter are shown to be important to create trust both in the own organization and in the others. Furthermore, sensemaking processes help to grow understanding of the project, its context and the other party’s purposes. In both cases the actions of both principal and contractor were determined by their mutual levels of trust, and the congruency of their understanding of the project. In case A, the decisions of the principal had major impact since he cancelled the project, thus preventing the project performance to become disappointing. In case B, both parties made decisions on the basis of distrust and divergent understanding of the project, its context and the other party’s purposes. Lack of dialogue caused them both to fill in the blanks according to their assumptions without a proper dialogue about their true interests and values. These decisions led to a bad start of the project, with a low performance level. The fact that the performance only increased after the process of renewed sensemaking, underlines the importance of this process for project success.

Given that the sensemaking process starts in the early beginning of projects, we conclude that the basis for successful cooperation between client and contractor is created during the procurement stage of the project. Processes of bargaining and sensemaking are of major influence to create a basis of trust and understanding between the parties involved. This basis determines the decisions that are made by those parties; decisions that, in turn, are affecting project success.

IMPLICATIONS

In daily practice, the economic and legal context of projects tends to overshadow the social aspects of partnering decisions. The findings in the two cases show that in integrated projects, the traditional briefing process as part of front end project management is replaced by negotiating the specifications during procurement. A complicating factor is that during procurement the legal requirements of transparency, objectivity and non-discrimination change the conditions of interactions. Yet, this can also be considered an opportunity as it creates a parallel sensemaking process between supply and demand and increases the chance of mutual understanding of the contract, decreasing the information asymmetry between the parties. It would be interesting to further explore these kinds of processes in projects outside construction and outside the public context.

The experiences in the cases showed that being able to interact and negotiate with the actual (future) project team members during the procurement phase is an important element for project success. We therefore suggest creating room for pre-contractual interaction and sensemaking processes in the selection process of project partners. This could be placed into collaborative tender procedures such as best-value procurement (Kashiwagi & Byfield, 2002) or a competitive dialogue (Hoezen, 2012), but could just as well be integrated in regular restricted tenders. The lack of communication between buyers and service providers is for a great deal caused by the strict interpretation of the legal frame, not by the law itself (Volker, 2010). Furthermore, our work implies that not only the contract manager, but also the project manager should be involved in the tender process in order to negotiate over terms and conditions, and starting to design the project organisation based on the proposals of the suppliers. The decision about the procedure is taken at a very early stage of the project development. As addressed by Morris (2009), good project management also requires strategy development and implementation. Since these skills are not yet considered as core competences of a project manager, this involves a substantial investment of organisations to establish a culture of strategic management in the initial phases of project design. The introduction of programme management might contribute to this development (Pellegrinelli, Partington, & Gerald, 2011). Another means could be to increase the level of professionalism in strategic purchasing and client commissioning (Murray, 2009; van Weele, 2005). Either way this takes a broader approach of the project manager.
REFERENCES