### LACKING PARTNERSHIP IN PUBLIC PRIVATE PARTNERSHIP PROJECTS

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**ABSTRACT.** During the economic crisis the realisation of PPP-contracts in the Netherlands showed a growing number of disputes, thus jeopardising the partnership in a PPP-project. In some projects the contractor submitted claims to (try to) obtain more money, while the contracting authority did not accept each and every claim, leading to discussions and legal disputes. An important cause of this behaviour seems to be financial difficulties of the contractor and/or losses incurred during the realisation of the project. As the assumption was that PPP would lead to value for money, lengthy disputes didn't fit the bill. This led to the question how to prevent contract disputes jeopardising the partnership in a PPP-project and which dilemmas will confront parties. Based on our research, we found that it is possible to prevent disputes leading to a lack of partnership, despite the dilemma's parties are confronted with. It does however take a well-considered approach from all parties concerned during both tender and realisation of a PPP project.

## INTRODUCTION

In the Netherlands PPP has become an accepted method of public procurement and integral approach for infrastructure and housing projects for little over a decade. For PPP-projects DBFM(O)-contracts<sup>1</sup> are frequently used. The Dutch government has implemented PPP-contracts with the presupposition that it would be able to complete large infrastructure and housing projects faster and

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more efficiently – i.a. through life cycle costing – with the use of PPP (Dutch government, 1998).

For a proper use of the private sector's contribution and to achieve the desired results the following principles were formulated (Dutch government, 1998): (1) formulating an output based (functional) description of the contracting authority's requirements, (2) using an integral approach to procurement and project realisation, thus combining the consecutive stages (design, build and maintenance), corresponding disciplines (like obtaining permits, coordinating relocation of cables and pipelines, stakeholder management, IT etc.) and an integral project scope (e.g. an integral scope like a road corridor and total housing concept) (3) optimising or broadening the project scope and contract duration in order to obtain value for money, (4) transferring risks to the party best able to control them, (5) payment based on performance instead of products delivered, (6) integrating finance into the contract resulting in an actual transfer of risks for an optimal incentive for the private sector to control and reduce risks, (7) realising mutual cooperation and (8) tendering based on price/quality ratio. It was also stated that in order to realise a proper redistribution of tasks and responsibilities by means of PPP, both the public and the private sector will have to build mutual trust. Both the public and the private sector were confident of the benefits made possible by this relatively new contracting method and integral project approach.

During the realisation of several DBFM(0)-contracts however it became clear that all that glistens is not gold. Although there have been several DBFM(0)-projects deemed successful in their realisation thus far, the relations between the contracting authority and the contractor of a couple of DBFM(0)-contracts proved to be strained. One contract in particular has been in the newspapers on numerous occasions because of the problems experienced, which over a period of time led to the partnership between contracting authority and contractor suffering because of it (Houtekamer, 2015).

For the purpose of this article it is relevant to establish when a partnership in a PPP-contract may be considered to be lacking. In our view the partnership in a PPP-contract is dysfunctional (i.e. is lacking) when parties have predominantly negative discussions with each other and are lacking in mutual cooperation and trust, often combined with (legal) claims.

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The fact that DBFM-contracts haven't been free of dysfunctional relations between contracting parties is one of the reasons which instigated Rijkswaterstaat – the procurement agency for the Ministry of Infrastructure and the Environment – to investigate options for a new vision on public procurement in cooperation with representatives of the private sector aiming for successful tendering and realisation of (PPP-)projects (Koenen, 2015 November). To quote one of the representatives involved: "our interdependency means that dysfunctional relations are not an option" (Koenen, 2015 November).

An important aspect of dysfunctional relations during the realisation of the project in the context of this article is that this leads to additional discussions, claims, ineffective contract realisation and loss of time leading to additional and possibly unnecessary costs. The question therefore is how to prevent this negative effect becoming a reality.

Afore mentioned developments encouraged us to look into the emergence, possible prevention and/or termination of dysfunctional relations within a PPP-project. More specifically it led to the following defining question of our research: "How to prevent contract disputes jeopardising the partnership during the realisation of a PPP-project and with which dilemmas may parties be confronted when they decide both during the preparation and tender stage and the realisation stage<sup>2</sup> of a PPP-project on actions to prevent these disputes?"

### **RESEARCH METHOD**

The findings in this article have been based on literature research and several interviews held over the period of 2012 to 2015. The interviews were conducted in 4 case studies on the PPP-projects the 2<sup>nd</sup> Coentunnel, the A12 Lunetten-Veenendaal, The Kromhout barracks and a DBFM-housing project in the Netherlands. Furthermore information was gleaned from several interviews held in 2012 with representatives of financiers, (both lenders and shareholders) and from interviews in 2015 with parties with experience in projects burdened with dysfunctional partnerships. The information gleaned from both literature and above mentioned interviews has been subsequently reviewed and qualitatively analysed.

# CAUSES OF CONTRACT DISPUTES

Logic dictates that in order to prevent disputes it is necessary to know the causes of these disputes. A cursory research of existing literature on the sources of construction disputes in both traditional and PPP-contracts and the interviews mentioned above shows a multitude of dispute sources (see Table 1). As the dispute sources found where either not actually subdivided into categories or only limitedly so and in different ways we have – seeing the number of dispute sources – for clarities sake subdivided the sources detected into categories.

TABLE 1 Add title of this table

Category	Dispute sources
Behaviour:	(1) parties act out of self-interest (Cheung, 2009), (2) parties act as adversaries (Cheung, 2009), (3) parties are influenced by negative emotions (Cheung, 2009), (4) parties show hostile and aggressive attitudes (Cheung, 2009), (5) parties perceive the other lacking in good faith (e.g. not pointing out contract mistakes or oversights in order to be able to claim extra costs) (Cheung, 2009), (6) parties act with guile or with calculated efforts to mislead, distort, disguise, obfuscate or otherwise confuse (Cheung, 2013), (7) parties act unfairly (Cheung, 2009), (8) undue focus on money issues (Cheung, 2009), (9) opportunistic behaviour (e.g. when submitting a bid, submitting costs for additional work, etc.) (Cheung, 2013), (10) parties are not able to cooperate (Lousberg, 2011), (11) unreasonable client requirements (price, quality and/or volume) (Cheung, 2013), (12) overestimation of ones abilities (interviews 2015), (13) inconsistent behaviour / decision making (Jahren, 1990).

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Inflexibility:	(1) lack of knowledge and/or creativity in problem solving (Cheung, 2009), (2) parties are not open to other solutions than their own (Cheung, 2009), (3) rigid hierarchy in internal organisation (Cheung, 2009), (4) inability to overcome conflicting interests (van Heuckelum, 2007).
Communication:	(1) parties make (unchecked and/or unfounded) assumptions on the other parties views (Cheung, 2009), (2) insufficient information for informed decision making (Cheung, 2009), (3) different interpretation of information (Cheung, 2009), (4) dissemination of incorrect or insufficient information (Cheung, 2009), (5) asymmetrical information and uncertainty (Cheung, 2013), (6) lack of (timely and effective) communication (Lousberg, 2011).
Financial / payment issues:	(1) payment failure or delay by client (Cheung, 2009), (2) payment failure or delay by main- contractor to subcontractor (Cheung, 2009), (3) arguments about the costs of additional works, time delays, etc. claimed by the contractor (Cheung, 2013), (4) late release of retention moneys to the contractor (Cheung, 2009), (5) economic considerations (Jahren, 1990), (6) the final bid was (too) low (Jahren, 1990 and LaBarre, 2014), (7) errors in the bid (LaBarre, 2014), (8) financial results (e.g. earnings) of the project and/or contractor are unsatisfactory (interviews 2015), (9) client refuses fair compensation for costs incurred (Cheung, 2013), (10) one of the parties involved is in financial difficulties (interviews 2015).

(1) delays due to the contractor (Cheung, 2009), (2) errors (Cheung, 2009), (3) uncertainties (Cheung, 2013), (4) substantial contract / scope changes (Cheung, 2009), (5) arguments about the assessment and/or allocation of damages (Cheung, 2009), (6) changed conditions (LaBarre, 2014), (7) defective specifications (Cheung, 2013), (8) inadequate contract documentation (LaBarre, 2014), (9) ambiguity, inconsistency of contract provisions (Cheung, 2013), (10) inequitable risk allocation (Cheung, 2013), (11) the nature of stakeholders involvement (e.g. adverse stakeholders) (LaBarre, 2014), (12) increasing project complexity (LaBarre, 2014), (13) feasibility issues (interviews case studies), (14) the existing conditions are less favourable than expected (interviews 2015). (1) arguments on the quality, measurement and valuation of contracted work (Cheung, 2013), (2) arguments on the work progress (time and delays) (Cheung, 2009), (3) client is late in honouring its commitments (Cheung, 2009), (4) contractor ceases work on the site (Cheung, 2009), (5) one side decision making of one party due to a power imbalance (Cheung, 2009), (6) late information and instruction from consultants (Cheung, 2009), (7) lack of integration (LaBarre, 2014), (8) party's lack

The three categories "behaviour", "inflexibility" and "communication" can be seen as subcategories of an overall category "the human factor", while the categories "financial/payment issues", "risks" and "performance issues" can be seen as subcategories of an overall category "project related issues". Cheung et al. divide construction disputes as either "contractual" or "speculative" (Cheung, 2013). In our view however the categorisation of "speculative" is falling somewhat short of the scope of human behaviour which may be a source of dispute without necessarily being

of cooperation, e.g. where stakeholders are

concerned (interviews 2015).

**Risks:** 

Performance issues:

rooted in speculative or opportunistic behaviour. The categorisation and the sources for disputes are derived from both traditional and integrated contracts, such as Design and Construct and DBFM(O), as these sources as such are not typical for one type of contract.

According to Cheung et al. (Cheung, 2013) risks, uncertainties, inadequate contract documentation, and behavioural factors are notable dispute sources. As such we can concur with these findings, however – as interviews in the context of aforementioned case studies show – the mere existence of one or more of these circumstances do not necessarily lead to disputes and/or a lack of partnership between contractor and contracting authority. Moreover the construction industry is to a certain extent used to working with uncertainties, while a contract is unavoidably incomplete in terms of the inability to incorporate provisions to deal with all possible contingencies (Cheung, 2013).

Whatever the actual source of a conflict, be it contract related issues or sources indicated as part of the human factor, at any point there is a more or less conscious decision to tackle an issue in a certain way leading to a dispute between parties. From the start of the (preparation of) a tender to the completion of all contract obligations parties encounter several stages and abutments where their decisions made may both positively or negatively influence the partnership in a PPP. Stages and abutments in the procurement and realisation of DBFM(0) projects are: (1) the (contractual) allocation of risks including the contracts with subcontractors, (2) deciding on what relevant contract information should be disseminated to the private sector during the tender, (3) the draft of the contract provisions, (4) the method of tendering (lowest price, award criteria), (5) the draft of the best and final offer (price cuts, risk assessment and acceptance). (6) contract control strategies, including the decisions on mutual cooperation and communication, (7) contract changes, (8) stakeholder management, including e.g. back-to-back contracting of subcontractors, (9) decisions on contract performance and (10) submission of claims.

At each of these stages decisions are made by one or either party which may lay the foundation for future partnership or lack thereof. Whether or not an actual conflict arises between parties depends on the actual circumstances of the case. In each and every case each party will have to decide which action or counteraction is necessary in order to achieve the required partnership, if indeed a partnership is required.

#### DILEMMAS

Issues can escalate into negative discussions and actual (legal) disputes, but solutions to those issues are not always straightforward. Whenever deciding on actions necessary to prevent a PPP-contract to end up lacking in actual partnership, parties may encounter several dilemmas during the preparation, tender and realisation stages of the project. In this paragraph we will explain what kind of dilemma's parties may encounter.

Dilemmas can be identified in the following areas:

- 1) interests of contract parties;
- 2) mutual cooperation;
- 3) allocation of risks; and
- 4) profitability.

### Interests of Contract Parties

Contract parties often have diverging interests, which for the purpose of this article are defined as the circumstances where the interests of the parties involved are not similar. At some points interests may converge, but for some points they will not.

A specific characteristic of large integrated contracts such as DBFM(O) is that the majority of these contracts are awarded to consortiums consisting of multiple partners. As van Heuckelem et al. stated (van Heuckelum, 2007) the partners in a consortium – to a greater or lesser extent – have different and/or conflicting interests, prone to all sources of dispute. If managed insufficiently diverging and/or conflicting interests can have a negative influence on the cooperation between the consortium partners, which in turn may negatively influence the added value of the cooperation within the consortium (van Heuckelum, 2007). As experience with some Dutch projects shows, diverging and/or conflicting interests may influence the contractor's performance and its relations with the contracting authority negatively.

In addition to diverging interests between the consortium partners (shareholders of the Special Project Company (SPC)), diverging and sometimes conflicting interests may also exist between the organisation of the contractor (SPC), its subcontractors (Engineering and Procurement Company (EPC)/Maintenance Procurement Company (MPC)) and/or other stakeholders (e.g. financiers, mother organisations, etc.) (Koenen, 2016). One example of these conflicting interests is the tension between the interests of the individual shareholders (return on investment) and the long term performance of the contractor.

Also the contracting authority for the most part has different main objectives than the private parties of the contractor (consortium) -SPC, EPC, shareholders, financiers - and the subcontractor(s). Public and private parties operate in different arenas. Rijkswaterstaat for example, being the procurement agency of the Ministry of Infrastructure and Environment, is responsible for the management and maintenance of the main infrastructure network in the Netherlands. Rijkswaterstaat's main objectives are ensuring reliable travel times, improved accessibility and a safe and liveable environment. The objectives of the private sector are e.g. business continuity and possible growth, making profit, continued employment of its employees, controlling and/or reducing risks, preventing (financial) losses, image control and/or improvement, customer satisfaction, etc. The interests of the public and the private sector therefore do not only diverge, but they may also conflict. An example of a situation leading to possible conflicting interests is the need for the contracting authority to keep the costs down and the private sector to make a profit or in some cases to prevent (further) losses.

The negative effects connected to diverging interests may be aggravated if e.g. one of the consortium partners (SPC shareholders) is in severe financial difficulties. In these circumstances the other consortium partners will probably take protective measures in order to limit their own risks arising from this situation, affecting the willingness of partners to cooperate with each other. If again the consortium partner in financial difficulty is also the EPC contracted by the SPC, of which the consortium partners are shareholders, it may also influence the SPC's contract performance leading to even more problems and disputes; as such a party may be inclined to opt for (cheaper) short term solutions for problems etc. out of financial considerations. As short term solutions may not contribute to the life cycle of the project it may also lead to creating additional risks and/or underperformance of the contractor on both the short and the long term, which in turn leads to discussions with the contracting authority and possible financial penalties.

The difficulty for the contracting authority when these negative effects of diverging interests occur is to distinguish between the company in financial difficulty as one of the shareholders of the SPC and the EPC as subcontractor for the construction stage, especially if the representative of the SPC – say e.g. the project manager – is employed by the same company as the EPC. In these circumstances this company is focussed on recouping its losses as much as possible from whatever source possible. If recouping its losses cannot be achieved through its partners or otherwise, the company will turn to the contracting authority as a natural source of recouping its losses e.g. by claims for additional works because of unclear contract provisions, etc. If however the claims are perceived by the contracting authority as unfounded and/or unreasonably high this in turn leads to strained relations between the contractor (SPC) and the contracting authority.

Faced with a contracting partner on the verge of financial collapse, the (governmental) contracting authority is confronted with the dilemma of the possibility to adopt a more lenient approach to the contractor's claims – thus providing it with more funds to survive and prevent mass layoffs or even bankruptcy – versus possible legal problems concerning material changes of the contact's provisions and/or state aid (Procurement Directive 2014).

Especially when public pressure is high – e.g. in times of economic crisis – this dilemma may put the contracting authority in a difficult position, as the political parties constituting the government do not want to be seen in any way to contribute to mass layoffs for a possible lack of intervening measures.

If a contracting authority should decide that – within the legal constraints – there is a possibility for a more lenient approach another dilemma emerges. Namely the dilemma that this solution may lead to a vicious circle, where the contractor takes a gamble (price cuts) when drafting its best and final offer in order to secure the award of contract, with the aim to obtain additional payments in a later stage, if necessary through lengthy discussions and/or the submission of claims.

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Problems connected to this dilemma may be magnified in circumstances where the contractor finds one or more loopholes in the contract, e.g. an inconsistency between the technical requirements. During the realisation stage these loopholes may lead to claims for compensation. Interviews show that team members of the contracting authority may view such an attitude to be less reliable or even untrustworthy. In these circumstances the contracting authority may not be inclined to give in to these claims. Team members of the contractor however may be of the opinion that unwillingness of the contracting authority to compensate costs resulting from the need to repair ambiguous of even faulty contract provisions is unreasonable. Thus the issue may grow into a dispute.

The diverging – and sometimes conflicting – interests may also lead to a dilemma relating to the transparency needed between the contracting parties in order to be able to build trust and proper mutual cooperation during the realisation of the project. During the tender stage the private sector may feel hampered to be completely transparent if it fears a negative influence of said transparency on its competitiveness during the tender. While during the realisation stage both parties may feel hampered to be completely transparent. E.g. when parties are afraid that the other party may abuse knowledge about one's own insecurities during negotiations etc., or when disputes have already arisen. Both parties will therefore be confronted with the dilemma regarding the need or wish for transparency in order to improve mutual relations versus the risk of damaging one's own interests.

### **Mutual Cooperation**

Closely connected to the interest of contracting parties, more specific their diverging interests, is the possibility of poor cooperation between their respective project teams. Poor cooperation in this case is defined as the situation where parties have difficulties in communicating, understanding each other or working together aimed at achieving a mutual target. The causes leading to poor cooperation can be multiple. Several of the categories of dispute sources as mentioned above also apply as causes of poor cooperation between the project teams, particularly "the human factor". It is however possible that, despite project related issues occurring, mutual cooperation is good in which case these issues do not affect mutual cooperation negatively. Moreover cooperation between the different organisations, departments and institutes within and/or related to the contracting authority may be lacking. The same can be said about the cooperation between the different private parties constituting or related to the contractor (SPC), such as the shareholders, subcontractors, financiers, etc. If cooperation within these organisations and their stakeholders proves to be poor it may have a negative effect on the realisation of the project.

Case study interviews show that the contracting authority can distance itself from the actual realisation of the project too much. In some projects e.g. the relations with stakeholders – such as local authorities and rail/port authorities, whose infrastructure has to be reconstructed as part of the scope of the project – are so complex and delicate that leaving the contractor to manage these relations on its own may be less feasible. Dependent on the circumstances of the project the contracting authority may find that its involvement is necessary in certain areas, such as stakeholder management. In those cases both parties will have to decide in what way mutual cooperation will have to be established, with which the contracting parties will be confronted with the dilemma of how far to go with the cooperation provided to the other party, especially in areas which are the other party's responsibility?

The contracting authority e.g. will want to ensure that it does not provide cooperation in a way which will lead to involuntary taking back responsibilities from the contractor, especially when it is already paying for these services. The contractor on the other hand will need to control its project realisation costs, while it will also want to keep its client satisfied.

#### Allocation of Risks

With "allocation of risks" is meant the positioning of the risks with either the contracting authority or the contractor and its subcontractors. The party whose responsibility the risks have become will bear the effects (positive or negative) when one or more of these risks materialise.

The actual allocation of risks is an important issue when drafting the contract provisions. The basic premise for a proper division of risk in the Netherlands is that the party best able to manage a specific risk will be the party to bear said risk (Dutch government, 1998). But

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how to establish which party is best able to bear the risk? In general the risks connected to the design and construction of e.g. an office building can be better managed – prevention and control included – by the contractor. But can that principle be adopted without limitation to all risks connected to e.g. the realisation stage of the project?

Part of the allocation of risks is the subsequent manifestation of risks, the actual becoming a reality of risks during the realisation of the project, with which the positive or negative effects of these risks come into fruition. In most cases risks becoming a reality will lead to extra costs for the party whose responsibility these risks are.

An example of a risk which might be difficult to fully allocate to the contractor is the risk regarding permits to be obtained by the contractor for the (re)construction of e.g. locks, bridges, fly-overs, sound barriers, etc. These permits have to be obtained in time, while a local authority may take too long to grant these permits. A question facing the contracting authority then is in how far the risks connected to the timely acquisition of these permits can be allocated to the contractor? What if e.g. there is a protest group of local residents adamantly opposed to the realisation of the infrastructure? Such a protest group may use all (legal) options available to hinder the actual realisation of the infrastructure irrespective of the contractor's attempts to appease all parties involved. What if e.g. some stakeholders involved use all means available to hinder the actual realisation of the project in order to gain concessions from either the contracting authority and/or the contractor? To what extent is it reasonable to allocate these kinds of risks to the contractor?

When deciding on the actual allocation of risks one can transfer all aspects of risks to the contractor or e.g. incorporate limitations to the risk transfer by capping the effects if certain risks actually manifest themselves or by retaining all or part of the risk with the contracting authority. An example of a cap is providing for a time limit on procedure time for permits and exemption applications for which the contractor will bear responsibility above which the risk will fall back to the contracting authority. A dilemma facing the contracting authority with the allocation of risks in the preparation stage is whether the allocation of risks with either the contractor or the contracting authority, will negatively influence the value for money of the project. It goes without saying that the actual value for money of a project will only be known after its completion.

In practice it makes a difference if risks which materialise on the side of the contractor are allocated to the SPC or EPC, as in most DBFM(O)-contracts a large part of the risks connected to the project are transferred to the contractor (SPC), while the financiers require the SPC to outsource all or at least the majority of those risks to the subcontractors through the use of so called back-to-back contracts. Through the financing agreements, the SPC will have to meet strict conditions, which are aimed at reducing the risks for the financiers (Nagelkerke, 2013). As a result of these conditions the financiers will not easily be affected by the manifestation of risks as they will make the SPC as risk free as possible. Although there is supervision by the financiers, the effects of it may not be easily visible for the contracting authority (Nagelkerke, 2013).

The financiers may view (financial) difficulties of the EPC differently than when the SPC itself encounters problems, at least as long as the payment of interest and amortisation by the SPC isn't threatened. As mentioned above however (financial) problems of the EPC may have their impact on the realisation of the project and affect the relations with the contracting authority. It will therefore not suffice for the contracting authority to rely on the influence of the financiers for the (sub)contractor to sufficiently assess, earmark provisional sums and/or manage the project risks (Nagelkerke, 2013). This means that one of the presuppositions with the introduction of PPP namely that "integrating finance into the contract results in an actual transfer of risks for an optimal incentive for the private sector to control and reduce risks" (Dutch government, 1998) - proves not to be fully tenable. The contracting authority will therefore need to monitor the project progress and in some cases will have to take a position on whether or not, and if so in how far, it will actively involve itself in the actual realisation of the project itself.

Case study interviews mentioned above show that when risks manifest themselves and the contracting authority encounters the question whether it should get more involved in the actual realisation of the project, e.g. by contributing to stakeholder meetings, it faces the dilemma that *the* involvement of the contracting authority regarding mitigation of (the effects of) risks allocated to the contractor may lead to taking back responsibility of risks initially transferred to the contractor, while it also needs to take action in order to assist the contractor to solve problems which it may not be able to solve (easily) when left to act by itself.

Particularly with stakeholder management the interviews showed that it may be necessary for the contracting authority to become more involved with the aim to facilitate the contractor's efforts and if necessary to prevent stakeholders making additional demands. The question facing the contracting authority therefore is what strategy to adopt when the contractor is faced with difficulties – materialisation of risks included – which it may not be able to solve easily if left to its own devices and how to prevent involuntarily taking back responsibilities and risks.

### Profitability

When tendering for a contract the private sector in addition to having to understand the contracting authority's requirements in order to draft the best offer suited to these requirements, it also has to assess the competition it is confronted with in order to make sure it has a chance to win the contract. Especially when the economic situation is difficult some participants in the tender may feel pressured to take a price cut or to take on extra risks in order to win the contract. As such a low price or taking on extra risks does not automatically imply that there will be difficulties ensuing from it. Experience shows however that this may be different when the final offer is too low and/or when the risks taken can be considered illadvised. When drafting its final offer the dilemma facing the private sector therefore is how to draft a competitive offer, without it being too low or containing too many (insufficiently controllable) risks?

For this article we define the offer being too low or risks being taken ill- advised when it will lead to a situation where the contractor will not be able to absorb the losses emanating from the tender strategy adopted, being either the application of too large price cuts or accepting too many or large risks without sufficient financial reserves to cushion the effects of the risks materialising or both.

Contractors may have different reasons to want to win the contract. E.g. they may not have won a contract recently, or they really need the work, etc. In these circumstances the contractor may identify the risks, but might not calculate them (fully) in its offer. As a result the contractor in some cases can hardly make sufficient profits

or makes (substantial) losses when risks do materialise. Interviews show that a recurring basis for a lack of partnership in some projects is constituted by the fact that the contractor has submitted an offer that is too low and/or that the contractor has taken – or not sufficiently incorporated into its final offer – too many or large risks.

To prevent the private sector submitting tenders which are too low and/or include too many or large risks without sufficient provisional sums to cushion the effects, the procurement strategy of government procurement agencies as stipulated in the Dutch Procurement Act (article 2.114) is aimed at awarding the contract to the economically most advantageous tender (EMAT). In addition the Dutch Procurement Act provides for the possibility to refuse to award the contract on a tender which is abnormally low (article 2.116). The question however is "when is an offer too low" and/or "when are risks taken ill-advised", leading to the conclusion that the price offered is abnormally low and thus can be rejected by the contracting authority. One example of a possible solution to this problem is stipulating a floor price, beneath which the tender is deemed invalid. However stipulating a floor price may lead in some cases to excluding innovative solutions which are much cheaper, because of its innovative approach to the requirements (Koenen, 2015 August). The dilemma which faces the contracting authority here is how to ensure that the private sector is stimulated to submit the best (innovative) offer possible at the best possible price, without the private sector submitting offers which it cannot within reason meet?

In short how does one prevent infeasible offers being submitted and/or exclude them if they are, while maintaining a level playing field for all parties involved?

#### Consequences of a Lack of Partnership

The importance of investing in a proper partnership can be derived from the consequences connected to a lack of partnership. A dysfunctional relationship between the contracting parties, the consortium partners and/or subcontractors may have an adverse effect on the added value of the contract as estimated by both parties. E.g. because it negatively influences the contractor's performance or the contracting authority's willingness to facilitate the contractor in any way. Subsequent additional discussions, legal proceedings, ineffective contract realisation, missed opportunities, loss of time, mistakes, etc., may lead to additional and possibly unnecessary costs for both contracting parties.

## PREVENTION OR MITIGATION OF DISPUTES

As all parties involved in the realisation of a project – complex integrated contracts included – have a vested interest in a smooth realisation of the project an important question is "how to prevent contract disputes jeopardising the partnership in a PPP-project". A question easier posed than solved. As interviews and literature research show there usually is not just one dispute source the cause of an actual dispute between contracting parties, although in the majority of the cases there is consensus that the human factor is a very important factor in disputes coming into existence. In this paragraph we will therefore limit ourselves to possible lines of approach connected to the dilemmas above to prevent or mitigate disputes.

### **Diverging Interests**

Both in the pre-contractual and contractual stages of a project both parties should take the various interests of the other party into account when they have to work together in a PPP project. When preparing the project the contracting authority will have to conduct a research on the composition of the relevant section of the private sector, on expertise available and on the existing culture within this section of the private sector. An example of a topic the contracting authority will have to research is to what degree the relevant private parties are used to working with uncertainties, or how prone they are to price cuts and subsequent opportunistic behaviour, etc.

Once familiar with the private sector, one has a basic knowledge of the interests driving the contractor. This knowledge can be employed to realise a clear expectation management between both contracting parties from the start. To this end the contracting authority will have to paint a clear picture of its requirements and the contractor of its expertise, the possible solutions it can offer and which risks it can actually manage. In addition parties need to explain each other's interests and (company) culture to each other throughout the realisation of the project, in other words parties are transparent and take trouble to understand each other.

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The basis for this should be a joint business-like approach which allows both parties to realise their (different) interests. This means that parties must be open and transparent about their own interests, expectations, targets and requirements, the risks identified and the measures (to be) taken for the prevention of these risks materialising and how to mitigate them if they do. Through a clear expectation management, where the interests and expectations of both parties meet, parties have a chance to actually achieve their targets. The basis for successful expectations management however is open communication; parties should be able to inform each other on all relevant issues. To this end it is important that parties can trust each other (also Lousberg, 2011). By being able to have an open discussion on each other's expectations of the other can be met or not, thus preventing later disappointments.

An important aspect of a DBFM contract is the adage 'time is money'. The costs of delay in a DBFM contract are higher than in 'traditional contracts'. The costs of delay may even be a more important issue for the contractor than for the contracting authority, as these costs are not automatically covered by additional payments from the contracting authority. Within the framework of the contract and its risk allocation this should be addressed in the partnership. Both parties should be able to react quickly regarding the issues at hand which (might) jeopardise achieving their main targets. Should therefore issues or problems arise, or risks materialise, it is important to be able to act and to decide quickly on possible solutions (also interviews case studies) and on how parties can facilitate each other in mitigating the consequences, without parties losing themselves in discussions on who should bear the consequences, and without one party taking over a risk belonging to the other party. Loss of time should be prevented as much as possible. Both parties should therefore bring all relevant issues forward in time and strive for a timely solution of the issues at hand. Within the framework of the contract and its risk allocation, parties should not hesitate to help or facilitate each other in risk management and/or achieving each other's separate and common targets, without involuntary taking over responsibilities or tasks.

To achieve this reciprocal transparency is key, even if conflicting interests make it difficult at times. By being clear on one's interests and targets and showing (project transcending) consistent behaviour

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the contracting authority will enable (potential) contractors to take these interests and targets into account when drafting their final offers and possibly incentivise the private sector not to take illadvised price cuts and/or risks, thus reducing the risk of being confronted with the need for leniency at a later stage. It may also help prevent a vicious circle developing, where the contracting authority takes back risks originally allocated to the contractor. In addition said transparency and consistent behaviour invites a reciprocal behaviour from the private sector in order to achieve a satisfied customer, which will benefit them both during the current project and in future tenders.

However it isn't just the case of diverging interests between the contracting authority and the contractor. There are e.g. also the interests of the different stakeholders of the SPC, the financiers, subcontractors and stakeholders of the contracting authority to take into account. Both parties for their part of the supply chain therefore should - from an economic point of view - work on the quality of the supply chain and support each other where and whenever possible in achieving this. Both parties will have to establish its own organisation with this purpose in mind. When one also takes into account that according to LaBarre et al. contractors with higher performance measures have fewer contractual and legal problems than those with lower ratings (LaBarre, 2014), it stands to reason that once the integral supply chain is meeting higher performance levels unnecessary costs related to an insufficiently working supply chain, such as costs due to failures or insufficient implementation of the project life cycle, can be prevented. In addition a powerful incentive for parties in the supply chain to work together is not only having to shoulder the penalties and losses because of an inadequate performance but also being able to share in the benefits of a properly working supply chain.

Clear expectations management aids parties finding common ground and mutual understanding on the issues where interests diverge. As mentioned above open communications are necessary. Unambiguous contract provisions can help to achieve open communications as the opposite is also true, namely that ambiguities may cause interpretational difficulties, in particular when the interests of parties are incompatible (Cheung, 2013).

### **Mutual Cooperation**

In practice cooperation is 'man-made'. According to Lousberg (Lousberg, 2011) a cooperative climate may possibly be the most important factor for the prevention of conflicts. To generate mutual cooperation he furthermore states that it is vital to have joint targets at a higher level than specific differences of opinion and that the level of cooperation is linked to the interests involved in a way that parties perceive their interests to be positively connected. Other factors mentioned by Lousberg of influence on the prevention of conflicts are: (1) proper contracts as a means to help solving discussions and a tool in understanding the other party's basic position, (2) understanding each other's culture, (3) mutual trust based on transparency, openness, respect and integrity, (4) not simply rely on blind trust and (5) miscellaneous factors, such as proper contacts, informing each other on developments from one's own organisation and perspective and a willingness to share (Lousberg, 2011). Lousberg also states that trust benefits from transparency on information, interests, profitability and risks, while it is nourished by personal contacts, sharing interpretations and experiences and identifying and solving problems in cooperation (Lousberg, 2011).

In our view to achieve a cooperative climate parties should endeavour to properly match the skills and personalities of their project teams. If the teams are sufficiently compatible, it provides for a basis for proper mutual cooperation. In addition the teams should consist of professionals with knowledge of and experience with PPP. According to Jahren et al. the most important factor on dispute prevention or resolution is staff competence (Jahren, 1990), which Cheung labels as "behavioural factors" and Lousberg as "cooperation is man-made". He also states that contractors prefer contracting authorities who are responsive to problems, act as team players, behave consistently, and look at the intent rather than the letter of plans and specifications. In addition he states that the people involved should be fair, reasonable, experienced and respectful, thus developing a team atmosphere and avoiding adversarial relations. To elaborate on this fairly subjective statement of Jahren et al., the practice within Rijkswaterstaat learns that e.g. a mutual team-coach, weekly informal meetings, sharing issues, helping each other without taking over responsibilities and an open attitude of both parties are very helpful for proper mutual cooperation.

Cooperation will be promoted when parties take the time to get to know each other (professionally) and each other's culture and backgrounds before making demands and when they find a means of cooperation which allows both parties to achieve their (individual) targets (Lousberg, 2011). A practical means of getting to know each other over the life time of the project used by Rijkswaterstaat are informal meetings during which the teams explore possible solutions for risks and possible problems (Koenen, 2015).

In this framework parties could opt for helping or facilitating each other in achieving their respective goals whenever possible and within the boundaries of the contract. Interviews show that both parties should have a flexible and cooperative attitude, with a focus on how to solve problems together and getting the project realised. Major issues should preferably be identified early.

If and when a dispute arises clear escalation procedures are important. What steps are necessary when parties do not reach an understanding and which officials have to be involved at what stage? Apart from an escalation procedure agreed upon by the contracting parties themselves, which could be sufficient if parties are able to properly communicate with each other, it could be argued that a project may benefit from establishing a so called Dispute Resolution Board (hereinafter: DRB). There are positive experiences with a DRB set up to prevent issues growing into legal procedures through an early involvement in the project of its arbitrators before even the notion of possible claims arise (Chapman, 2000). According to Chapman possible reasons for the success of the DRB is that the DRB is appointed at the commencement of the project and is actively involved throughout the construction, e.g. through regular site visits. Chapman also states that the DRB has "real-time" value as it becomes part of the project and thereby can influence, during the contract period, the performance of contracting parties. In addition the DRB meets the need for prompt, informal, cost-effective and impartial dispute resolution (Chapman, 2000). Establishing a DRB does however need careful consideration of the make-up of the DRBpanel, its process and possible accountability (Kirsh, 2013).

Although there may be more than one way to skin a cat we are of the opinion that the incorporation of provisions on a cooperationand/or escalation model in the contact aimed at preventing disputes and thereby a dysfunctional relationship between the contracting parties is advisable. Judging by the positive experiences on a DRB as described above the establishment of a DRB and thereby making smart use of its merits in prevention of disputes may well be the way to go.

As to the question how far the contracting authority should go in its zest for mutual cooperation, interviews show that it should be aware of the risk of possible improper and substantive involvement in the design and construction of the contract, thus leading to involuntarily taking back risks and sub optimisation of solutions. One should also be aware however of possibilities to make smart use of the expertise available in one's own organisation to support and facilitate the contractor's performance, e.g. where (possible) imperfections can be earmarked during their day to day work thus unburdening the contractor in monitoring its own performance or by aiding the contractor in its stakeholder management with difficult stakeholders.

According to Ogburn et al. effective communication is the most powerful tool to ensure successful delivery and completion of a project, while sharing information also allows for early detection of possible conflicts (Ogburn, 2014). He further states that the need for effective communication and dissemination of information will always be the single most important factor in a construction project (Ogburn, 2014). In our view effective communications are also the basis of an effective cooperation. With it transparency can be achieved and as a result trust can be build, which in turn will benefit solving possible problems.

Communication, whether oral, in writing, by digital or other means, as part of the so called "human factor" is pivotal to the success of both the project and cooperation between contracting parties, be it e.g. the contracting authority with the contractor or the contractor with its subcontractors. More or less equivalent Diekmann et al. state that people can make or break a project (Diekmann, 1995). They further state that people do not cause disputes, but the quality of people can affect the project dispute performance, by either greatly helping or hindering the process of settling disputes and that of the people on the project, the contractor's personnel have the greatest opportunity to impact the dispute climate of a project (Diekmann, 1995). We agree with the latter, but we are also of the opinion that the contracting authority's personnel also have impact on the climate of mutual cooperation or lack thereof; after all it takes two to tango.

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### Allocation of Risks

In PPP projects a more strict risk allocation is applied. An important principle regarding this risk allocation is that each party is made responsible for the tasks and risks it is best able to control (Dutch government, 1998). With more traditional contracts the contractor could fall back on the contracting authority as the party bearing the majority of the risks, in PPP projects this is in many cases no longer possible. This requires a new approach from both public and private parties, including the need for a culture change in both public and private organisations. It is possible that at the start of this changed procurement strategy the contracting authority may have required more than the market parties actually were able to deliver at that time.

In order to get a clear view on how best to allocate risks the contracting authority will need to have a thorough knowledge on the relevant private sector, so that it will be able to assess its capacity to actually manage the risks and to absorb its effects should they become a reality. The contracting authority should specifically take into account the possibilities of the private sector regarding the complexity and financial scope of the project in relation to the degree risks regarding construction and design can reasonably be allocated to the market. The contracting authority should not allocate too many risks in a complicated project to the contractor. During the precontractual stage the contracting authority should be aware of the risks connected to the project and what an equitable allocation of these risks implies. The contracting authority should ensure state of the art risk management, meaning a thorough risk analysis, analysis of possible control of these risks and the costs of the risk control. During the tender procedure the contracting authority and tenderers should discuss the risks extensively, so that all parties have a proper understanding of all aspects of the risks and - if (legally) appropriate - allocate (part of the) risks accordingly. In this context the private sector will need to be clear and realistic in the risks it can manage and communicate this to its (possible) clients beforehand.

According to Cheung et al. (Cheung, 2013) construction projects face enormous uncertainties and the contract is unavoidably incomplete in terms of the inability to incorporate provisions to deal with all possible contingencies. They also state that risk allocation in a construction contract is inequitable when the contracting authority shifts all or most risks to the contractor, while some of these risks are beyond the controllability and foreseeability of the contractor. In this context, contract incompleteness is the key element leading to disputes (Cheung, 2013). So, the contract should be absolutely clear on which party is responsible for which risk as from the beginning of the tender (Cheung, 2013).

During the case study interviews it was put forward that both contracting authority and tenderers must have enough information to be able to estimate the possible costs should a risk materialise. The consequence may be that the contracting authority has to put substantial effort in acquiring and disseminating information about specific risks and take control measures beforehand during the preparation stage of the project. Information dissemination regarding the allocated risks is viewed as very important. If sufficient information is available risks can be properly assessed. To illustrate we describe two examples. First, the risks connected to the condition of existing infrastructure, e.g. the asphalt. The contracting authority should have the actual condition examined thoroughly if it wishes to equitably allocate the risk of meeting the quality requirements of maintaining the existing infrastructure to the contractor. Second, the risks connected to acquiring permits. In some cases the contracting authority may need to acquire the most risky permits itself.

During the preparation stage the contracting authority has to elaborate extensively with which measures it will be able to prevent and/or control risks materialising. The contractor will have to do the same during the tender. Part of the contractor's control measures will be to incorporate financial reserves and extra time (planning buffer) in its offer in order to cushion the effects of risks which do materialise. The assessment of risks and its subsequent allocation however is difficult. Interviews show that in tenders it is necessary to put out a contract which is clear-cut and has equitable provisions and risk allocation. In addition the requirements and subsequent offers need to be feasible. The contracting authority therefore must i.a. make sure that the scope of the project is not too complex or too risky for the contractors. If these boundary conditions are met the value for money will not negatively be influenced. A more 'out-of-the-box' option may be sharing (costs of) certain risks between the contracting authority and the contractor, as incentive for both parties to mitigate the effects of materialised risks.

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Relevant to the manifestation of risks is the subsequent mitigation of its effects. Both parties should ensure that risk management during the entire life cycle of the project (including risk analysis and control) is an integral part of the realisation of the project. Interviews show that it may be advisable for the contracting authority to have a more active involvement in the actual prevention and control of risks. To this end parties should be able to communicate on all aspects of the contract with respect for each other's interests and responsibilities. Also the contractor must keep the contracting authority up to date regarding risk control. At the same time the contracting authority does need to keep an eye on the risk of involuntary taking back risks, as one of the possible problems following from involuntary tacking back risks is negatively influencing the value for money of the project.

If risks however materialise during the realisation, parties should cooperate and look for solutions to prevent further escalation of the negative consequences of these risks. Subsequently parties will also have to agree on how to tackle its financial consequences, for which transparency and openness is key. Interviews show that in this way parties can look for solutions together in order to keep the costs as low as possible while subsequently assessing which party has to bear the (financial) consequences. In this way the party actually burdened with the extra costs will have the assurance of the costs not being higher than necessary.

### Profitability

The profitability or lack thereof is a species of "diverging interests" between contractor and contracting authority. This may be illustrated by the contracting authority's interest to contract the work for a reasonable price, or in other words to achieve value for money (Dutch government, 1998), versus the interest of the contactor to achieve as high a profit as possible given the circumstances. Through a competitive tender the contracting authority aims to achieve an acceptable price level, as contractors will have to compete with each other in order to win the contract. However the competitive tendering system often encourages awarding contracts to the lowest bid, (in some circumstances) resulting in the contractor behaving opportunistically to recoup the deficit stemming from the cutthroat bids through post-contract claims (Cheung, 2013). Especially when competition is fierce during times of economic crises the private sector will be incentivised to apply sharp price cuts (Koenen, 2015 November). When combined with an opportunistic approach to the realisation of the project the resulting problems may prove to be unsolvable (Dohmen, 2015).

The question for both contracting parties therefore is how to prevent offers that are too low? How to prevent opportunistic behaviour? Ideally the contractors are open about what they can and cannot deliver at a realistic price, while on the other hand the contracting authority has a clear view on the private sector's expertise and capacity and how to approach the market to ensure realistic bids being tendered. With integrated contracts such as PPP an additional complexity arises through the back-to-back contracts with subcontractors. Even if the SPC has no (financial) difficulties in realising the project the subcontractors may. In order to obtain a realistic pricing the contractor therefore should involve expertise from these subcontractors to estimate the project costs and risks properly. On the flip side the contracting authority should have insight in the risk assessment and the bid in order to prevent contractors winning a contract at unrealistic prices.

One possible solution may be that after appointing the preferred bidder, bidder and contracting authority go over the contents (including risk pricing) of the bid together. However this requires transparency and openness from both parties, which may not always be easy when the contractor is in need of the work. In those cases overestimation of ones possibilities is lurking. Another solution although one which takes some clear communication and time - is showing (project transcending) consistent behaviour which will enable (potential) contractors to take this into account when drafting their final offers and possibly incentivise the private sector not to take illadvised price cuts and/or risks. A third possible solution is drafting award criteria incentivising contractor's to submit realistic bids, both on price and on content, which can easily be upheld during the contract realisation, coupled with a proper assessment of the feasibility of those promises after submission of the bids. Interviews show e.g. that the private sector may opt for catchy quotes and unrealistic promises if the contracting authority's method of procurement warrants such an approach, with the idea to talk their way out of this predicament after award of contract. By removing possible perverse incentives the idea is to prevent such opportunistic behaviour.

#### CONCLUSIONS

Overall it is possible to prevent disputes leading to a lack of partnership, despite the dilemma's parties are confronted with. It does however take a well-considered approach from all parties concerned.

On the subject of (diverging) interests of parties, the approach to prevent disputes necessitates i.a., (1) clear expectations management based on research aids parties finding common ground and mutual understanding on the issues where interests diverge, (2) reciprocal transparency, (3) parties should help and facilitate each other within the framework of the contract and its risk allocation, (4) parties should work on the quality of the supply chain, (5) open communications and (6) an unambiguous contract.

For mutual cooperation parties should: (1) establish compatible teams (flexible and cooperative), (2) realise open and effective communications, (3) create mutual trust, (4) create joint targets, (5) get to know and understand each other, (6) establish clear escalation procedures, (7) realise effective communication and dissemination of information.

Risk allocation necessitates: (1) clear-cut contract provisions, (2) equitable and feasible risk allocation, (3) feasible requirements, (4) providing sufficient information to the contractor, (5) feasible offers by the contractor, (6) proper risk management, (7) communicate on all aspects of the contract with respect for each other's interests and responsibilities, (8) mutual cooperation to prevent (costs of) risks.

And finally regarding to the issue of profitability the following solutions may be possible: (1) after appointing the preferred bidder, parties go over the contents (including risk pricing) of the bid together, (2) showing (project transcending) consistent behaviour enabling (potential) contractors to take this into account when drafting their final offers (3) applying award criteria incentivising contractors to submit realistic bids which can easily be upheld, coupled with a proper assessment of the feasibility of those promises.

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### NOTES

- 1. DBFM(0) stands for Design, Build, Finance, Maintain and Operate.
- 2. With realisation stage is meant both the design and construction of a building or infrastructure.

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