

Complexity and control: how do they work in PPPs?¹

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0. INTRODUCTION

Public-private partnerships (PPPs) are hot in the public sector, and hence a popular topic for public sector scholars to study (Hodge and Greve 2005; Pollitt 2005; Skelcher 2005). Nonetheless, little systematic knowledge is available about the design, the control and particularly the performance of PPPs. Some of the main issues in PPP-research therefore include the democratic quality of PPPs (Skelcher, De Rynck, Klijn and Voets 2008), their policy impact (McLaughlin and Osborne 2000), and management issues (Klijn and Teisman 2000).

The study of PPPs is also complex, as they include a range of forms (Skelcher 2005) and are highly contingent (Pollitt 2003). The type and number of cases studied and reported in the literature is therefore varied, as is the number of theoretical perspectives - if any - used. It is clear that the main binding element in PPP-research is the object of study, rather than a joint conceptual or theoretical perspective (see for instance the work of Considine, Greve, Hodge, Klijn, Koppenjan, Osborne, Skelcher and Teisman).

Like in other OECD-countries, PPP is also a popular theme in the public sector in Belgium (Voets, Verhoest, Troupin and Van Gestel forthcoming). In this context, the Flemish government currently sponsors a five-year research project (2007-2011) to study PPP-practices at the Flemish and local level. The research project focuses in particular on the way public partners try to control specific PPPs, and how this affects the performance of those PPPs. The fundamental question of the research project is the following: which factors - in terms of institutional design, control and government capacity - influence/have an impact upon the performance of PPPs? Linked to the former, we also explore which theoretical perspectives provide the best insights and explanatory power. Main perspectives tested include interorganisational cooperation, trust, control mechanisms (networks, control and markets) and neo-institutional economics.

This paper is based on that research project. It deals with two questions in particular. Firstly, how do public partners control different stages of a PPP? Secondly, how is control affected by elements of complexity? As such, the independent variable is complexity, while the dependent variable is control.

The paper also brings in empirical evidence, namely two case studies concerning the DBFMO² of local sports infrastructure (swimming pools). These case studies are the first in a series of cases studied in the long range research project. The case studies show the usefulness of the concepts of complexity and control, but also suggest some amendments.

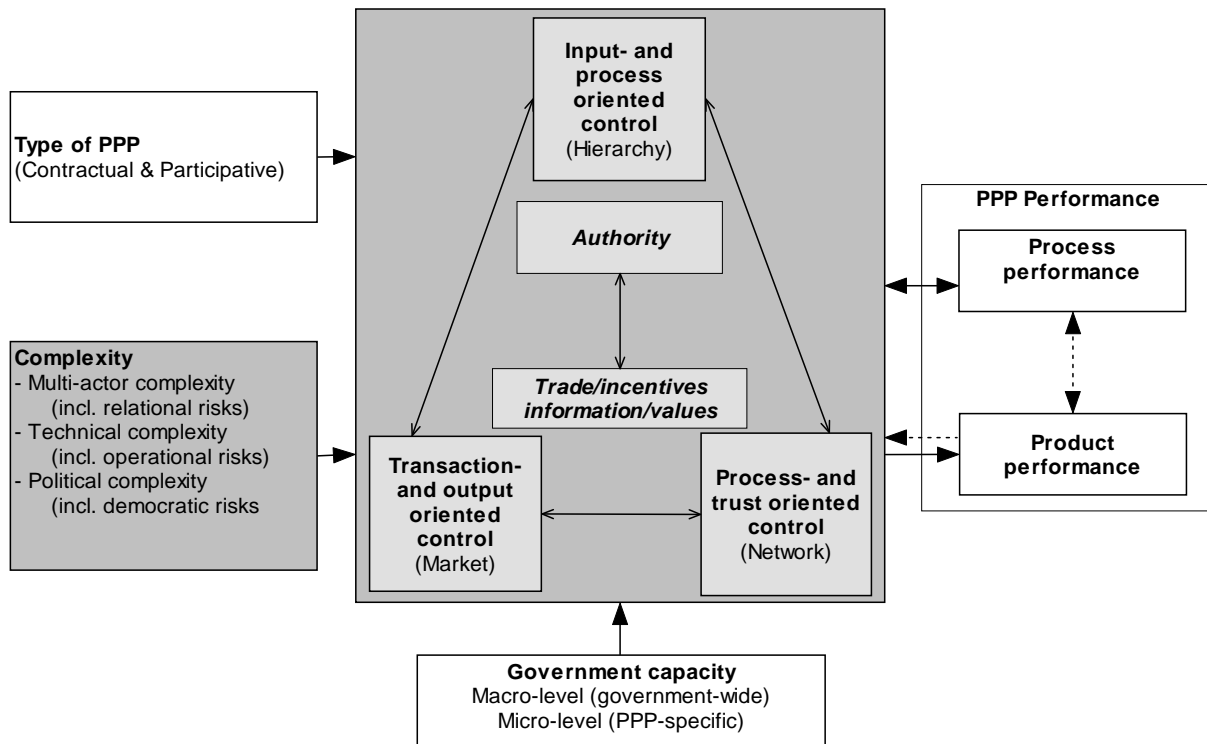
The first section of the paper briefly introduces the conceptual framework developed to study the abovementioned questions. We will only elaborate on the parts relevant in this paper, being control and complexity. The second section of the paper discusses two case studies. Both cases involve local sports infrastructure projects, set up by local governments and private partners. The paper concludes with lessons learned, and critical reflections on the use of these concepts in future PPP-research.

² Design, Build, Finance, Maintain, Operate.

1. CONCEPTUAL FRAMEWORK

This paper draws on a more elaborate conceptual framework, used in the long-term research project (Van Gestel, Voets and Verhoest forthcoming, see Figure 1). As the figure shows, key components are the type of PPP, complexity, government capacity, the control mix, and performance. Only the two boxes marked in grey are dealt with in this paper.

Figure 1: Conceptual framework



We assume that the interaction between control mechanisms, instruments and actions on the one hand (making up the control mix), and between them and the PPP-performance on the other, is influenced by different aspects. Three main antecedent and independent variables are expected to affect the latter: the type of PPP (we distinguish ‘contractual’³ and ‘participative’⁴ PPP), the complexity of the PPP (defined by a set of features, including the perceived risks), and government capacity to manage PPPs.

In doing so, the conceptual framework draws on different theoretical perspectives: interorganisational cooperation, trust and network theories, Weberian control theories and

³ This form heavily relies upon contractual agreements between the partners. Goals are set by the public parties implicated by the project. This model implies clearly definable outputs, easy to monitor by the government. There is limited room for the private partner to negotiate, because the goals are already clearly stated by the public party. During the execution stage, renegotiations, recommitments are limited.

⁴ In this type, a special purpose vehicle is formed to manage the project, incorporating all partners. This method leaves room for developing a “real” partnership - hence labelled ‘participative’. The outputs are not defined in a very detailed way (e.g. because it involves an innovative building technique, not yet completely developed). During the PPP-stages, there will be constant (re)negotiation and (re)commitment by the partners. In this type, public parties have less ex ante control on the output. This form relies on a real commitment of public parties to engage in a relationship-building process with private partners.

neo-institutional economics, which emphasise market control mechanisms. The framework draws on a range of insights in literature on control theories and on PPP, trying to combine and test them in a novel way. The control component however draws heavily on the work of Bouckaert, Peters and Verhoest (forthcoming).

1.1. Complexity

Complexity is a key variable in the study of PPPs (Hodge and Greve 2008). Complexity is however a multi-dimensional concept. We unfold complexity in terms of multi-actor complexity, technical complexity, and political complexity. Complexity also entails the element of risk, and risk is therefore an essential element of PPPs (Klijn and Teisman 2005). Three types or groups of risks exist (Das and Teng 2001; Ducatteeuw 2005; Koppenjan and Van Ham 2002): operational or performance risks, relational risks, and democratic risks. Each dimension of complexity is related to one of these groups of risks. We assume that each of these elements affects the control mix used/found in the PPPs.

1.1.1. Multi-actor complexity

The multi-actor dimension encompasses actor-related elements commonly used in network literature (see Voets 2008 for an overview). The number of actors involved in the PPP is relevant: the higher the number of actors (all other things being equal), the more complex the PPP becomes. Actor-related complexity however also depends on their nature (public, private, from different governmental tiers), their resources and interdependencies (objective and subjective), and the extent to which the scope of the PPP is relatively straightforward or multi-functional (e.g. merely a swimming pool vs. a multifunctional sports complex combined with conference facilities).

The relational risks⁵ are linked to the multi-actor complexity, as strategic behaviour is typical in a multi-actor setting; like in any interorganisational or interpersonal relationship, there is always the risk of a partner not cooperating in good faith (Das and Teng 2001).

1.1.2. Technical complexity

Technical complexity refers to the extent to which selection- and allocation criteria can be defined clearly, results can be defined on beforehand, the project is pioneering/unique or building on standardised approaches and private partners have to invest without having a use of it in other PPPs (also relevant in terms of transaction costs), and whether there are many players around in the market or not. Finally, it also refers to the extent to which the PPP is Design, Built, Finance, Maintain and/or Operate.

The risks associated with the technical complexity are operational or performance risks. Paraphrasing Das and Teng (2001:253), performance risks embrace all kinds of hazards, except those related to co-operation (which refers to relational risks), that can lead to the failure or unsatisfactory performance of the PPP, despite satisfactory cooperation among partners (Das and Teng 1996). So even when relations between partners are excellent, and

⁵ Relational risks are expected to be more important in participative PPP, which feature less contractual safeguards.

there are little democratic risks perceived, the performance of the PPP can be inadequate because of other reasons (e.g. the global financial crisis, hampering access to required funds and loans). The performance risks involve the operational risks of the project, planning risks (delay of permits by governments), design risks (designing mistakes, possible necessary changes in design), construction risks (construction delays and mistakes), maintaining risks (unexpected costs during exploitation period, force majeure risks, and tort liability), and financial risks (insecurities during calculation of estimates and inflation). When the outputs can be clearly defined, public partners often try to turn these risks over to the private partners (i.e. risk-sharing).

1.1.3. Political complexity

Essentially, this dimension of complexity refers to the degree to which the PPP is salient or not in political terms. We expect this to be an important element that affects control, as a high political complexity (e.g. competition of political parties, supportive or protesting societal stakeholders) is expected to lead to a different control strategy by governments than a PPP with low political salience. Political complexity is developed here in societal salience (support or opposition of societal stakeholders, salience between (in this paper local) governments, and salience between (in this case local) political parties. The last element is brought in because of the typical Belgian political system, which is dominated by party politics and features coalition government.

The democratic risks are linked to political complexity, as the degree thereof will trigger strict or looser control efforts by public partners. Depending on the societal, intergovernmental and party political salience, democratic risks vary from low to high. We assume that the higher the perceived democratic risks, the stronger the control of public partners will be. They will for instance try to closely monitor the project or might go to court whenever they feel their voice is not represented in the implementation of the project.

We assume that the level and type of complexities and perception of these risks influences the control mix used and hence the performance achieved by PPPs. Partners will be less inclined to make far-reaching commitments when complexities and risks are perceived (too) great, whereas these commitments contribute greatly to the added value of PPPs. Depending on the level of the perceived complexity and risk, public actors are expected to try to control the PPP more strictly or more at a distance. Depending on the type of complexity and risk, the type of control is also expected to differ, e.g. the contract containing more hierarchic, market or network-oriented elements - as one of the ways to reduce complexity and the perception of risks (and thus the uncertainty of partners) in PPPs is to stipulate controlling and monitoring mechanisms in the contract. We will now elaborate on the concept of control.

1.2. Control

The crux of the conceptual framework is the black box of control. Control is used here in its broadest sense, namely the cycle of guidance, control (in its strict sense) and evaluation (Kaufmann et al. 1986), encompassing the mechanisms and instruments used by government to intentionally influence the decisions and the behaviour of other governments or private partners in order to achieve government objectives (Verhoest, Peters, Beuselinck, Meyers and Bouckaert 2005).

In the context of PPPs, also paraphrasing White (1991:189), control can be defined here as the general mechanisms and more specific sets of instruments that public actors use to consciously influence the behaviour of other public and private actors in the PPP to achieve the public actors' goals.

The black box of control can be fit into the well-known trinity of hierarchy, market and networks (HMN). The distinction between hierarchies, markets and networks as three fundamental mechanisms of control in social life is widely accepted in the literature (Thompson et al. 1991; O'Toole 1997; Kaufmann et al. 1986). A PPP can be considered a social system in which interdependent actors develop certain interaction and communication patterns, with a certain level of endurance, to deal with a policy problem or programme (Hufen and Ringeling 1990; Kickert and Van Vugt 1984). Table 1 presents their basic features.

Table 1: Basic features of hierarchy, market, and network

	Hierarchy	Market	Network
Base of interaction	Authority and dominance	Exchange and competition	Cooperation and solidarity
Purpose	Consciously designed and controlled goals	Spontaneously created results	Consciously designed purposes or spontaneously created results
Guidance, control and evaluation	Top down norms and standards, routines, supervision, inspection, intervention	Supply and demand, price mechanism, self-interest, profit and losses as evaluation, courts, invisible hand	Shared values, common problem analyses, consensus, loyalty, reciprocity, trust, informal evaluation – reputation
Role of government	Top-down rule-maker and steering, dependent actors are controlled by rules	Creator and guardian of markets, purchaser of goods, actors are independent	Network enabler, network manager and network participant
Resources needed	Authority Power	Bargaining Information and Power	Mutual Cooptation Trust
Theoretical basis	Weberian bureaucracy	Neo-institutional economics	Network theory

Table 3.1: The features of hierarchies, markets and networks (based on Thompson et al. 1991, O'Toole 1997, Kaufmann et al. 1986, Peters 2003)

(Bouckaert, Peters and Verhoest forthcoming:29)

In such a system, three ways of social interaction are possible. Firstly, individuals or organisations interact on the basis of authority and dominance. This is the case if actors have unequal positions and if rules and instructions or commands determine the behaviour of the dependent party. The central pattern of interaction is authority, operationalized in administrative orders, rules and planning on the one hand and dominance and authority as the basic control system on the other hand.

Secondly, individuals or organisations interact on the basis of exchange. This is the case if partners have equal and independent positions and if price and rewards determine the mutual behaviour. Market control is based on competition, bargaining and exchange between actors. The price mechanism, incentives and the self-interest of actors coordinate the activities of the different actors by creating an 'invisible hand'.

Finally, individuals or organisations interact on the basis of shared values, solidarity, and conviction. This is the case if partners have equal but mutual dependent positions. Network control takes the form of cooperation between actors whose inter-organizational relations are ruled by the acknowledgement of mutual interdependencies, trust and the responsibilities of each actor.

This typology matches the classification by Alexander (1995: 36-40) in which he ranks coordination strategies by the level of voluntarism/coerciveness. He distinguishes between control strategies, based on authority, structural changes (hierarchy) or competition (market) on the one hand, and cooperative strategies, based on mutual exchange of resources, cooptation and information (network).

In our opinion these three mechanisms provide a useful typology to analyse control efforts within the public sector; they prove to be a powerful analytical tool that should be used to further the study of PPP. This trinity is used in very distinct ways, in inter- and intra-organisational research: to study different government levels (Hegner 1986), to label different state models (Van Heffen and Klok 2000), to name different ways to operate local government (Bouckaert et al. 2002), to analyse interorganisational clusters (e.g. Osborne (2000) about bringing in third sector parties to provide personal social services or Lowndes and Skelcher (2002) to analyse partnerships), as a way to control staff departments in organisations (Vosselman 1995), or to assess control within organisations in general (Ouchi 1980), also defining a bureaucratic, market and social mechanism to control.

These three general mechanisms can be made more concrete in the form of control instrument typologies. In cybernetics, the control system contains three subsystems: an ex ante subsystem of planning and target setting; an ex nunc and ex post measurement and monitoring subsystem and an ex post subsystem of evaluation, audit and feedback. We use a control instrument typology based on existing typologies (see for instance Van der Doelen, Lindblom, Dunsire, Etzioni) and developed further by Verhoest (2005) and Bouckaert, Peters and Verhoest (forthcoming).

1.2.1. Hierarchic control instruments

Hierarchic control is closely related to the bureaucratic mechanism, referring to the principle of the Weberian bureaucracy based on (arbitrary) rules about available inputs, required processes and/or standards of results and quality. The actor that controls sets the rules and standards, monitors and evaluates the compliance with those rules and standards by the implementing actor. Typically, the bureaucratic or hierarchic mechanism is used in vertical relations between dominant actors and their subordinates (Verhoest 2005).

There are a number of typical features of a hierarchy. First of all, control is top-down. Actors that are being controlled are considered relatively passive objects (hence also referred to as the single actor model). Secondly, authority is the interaction pattern. There is a clear distinction between politics and administration. Politics control and decide on the strategic goals, and are the basis of the control relationship. Hierarchic control typically works through routine and an authoritative control structure. This enables the development of bureaucratic routines. Rules and commands are the basis for planning in a normative power relation; supervision is the basis for management control. In terms of sanctioning (positive and negative), rewards and punishment are being used. Finally, conflicts are resolved through authority, exercised by the controlling government.

These features can be translated into a typology of hierarchic control instruments. Control, focused typically on input and process, then is achieved by:

- Restrictive rules
- Veto power
- Power of annulment or the competence of a higher public body to annul decisions made by lower public bodies
- Ex ante rules and directions/regulations

- Detailed procedures (e.g. detailed step-by-step plans)
- Ex ante authorisation and approval
- Supervision or punctual inspections of primary processes (i.e. primary supervision)
- recognition procedures
- Direct instructions
- Line item-budgeting, involving very detailed picture of expenditure (decreasing autonomy to allocate money differently)

1.2.2. Market oriented control instruments

The general assumption with the market mechanism is that actors base their behaviour on the price on a competitive market. The main difference between the market mechanism and bureaucratic mechanism is that there are no ex ante rules set by higher levels that direct implementation processes through which implementation can be monitored. The norms are set by the market in the form of a market price (Vosselman 1996).

The market mechanism is therefore based on a horizontal interaction relation, between equal actors (Verhoest 2002). The control instruments used here are often formulated in terms of a principal-agent relationship. To reduce the opportunistic behaviour of the agent, the principal-agent theory points to three strategies (Verhoest 2003). A first strategy is monitoring, which means that the principal can observe, monitor, and evaluate the behaviour and/or results of the agent. Monitoring thus reduces the information-asymmetry between principal and agent. Secondly, bonding implies that the principal can incorporate ex ante safeguards to prevent the agent of taking actions which prejudice the interests of the principal. The agent can also set up an internal control system of its own. A third strategy involves rewards and transfer of (typically operational) risks. The principal builds in sanctions and rewards to stimulate the agent. Transfer of risks also lowers incongruence of goals.

These features can be translated into a typology of market control instruments. Control, typically focused on output and transaction, then is achieved by:

- Contractual agreements
- Performance norms and monitoring
- Result-oriented reporting
- Transfer of risks
- Performance control and audit provisions (auditing internal control)
- Mediation and conciliation service (strong market orientation: very strict mediation, usually one round, followed by court)
- Contractual monitoring moments (e.g. revision of contracts each 5 years)
- secondary supervision (audit internal control mechanisms)
- Degree of competition
 - Before the negotiation
 - During the contract (e.g. evaluating the contract each 5 years, continuous pressure)
- Market-oriented financing
 - Result-oriented financing (result-bound financial incentives) (e.g. finances dependent on visitor numbers)
 - Both result-oriented rewarding and punishing
 - Benefit sharing
 - Benchmarking (financing dependent on results in comparison to similar projects in the market)

1.2.3. Network control instruments

While networks have some features of the hierarchic and market mechanism, there are sufficient arguments to consider it a distinct mechanism (Verhoest 2002).

A first feature is that interactions are based on reciprocity. Trust, collaboration and loyalty are key concepts in networks. Secondly, the network mechanism is based on the idea that actors are able to identify complementary interests. This leads to resource exchanges between actors, based on interdependent relations, trust, loyalty and reciprocity (Kickert, Klijn and Koppenjan 1997). Next, government as an actor in networks is an equal of other actors. Government does not hold a hierarchic position vis-à-vis other actors (although government is of course a special actor because it has a monopoly of a number of resources, like using force). Policy then is being developed in a network, rather than merely being implemented.

Typically, policy is the outcome of the interaction process between independent partners, meaning that the distinction between policy development and implementation becomes vague. Fifthly, the network mechanism involves a specific set of management strategies (Kickert, Klijn and Koppenjan 1997), in which success is not necessarily measured in terms of goal achievement but (also) in terms of satisfaction of participants about the process itself and whether joint solutions for problems can be forwarded. In network control, fine tuning and flexibility takes priority over generic instruments like legislation and one-size-fits-all solutions. Networks are also featured by coalitions. To avoid the negative impact of fragmentation and proliferation, networks are set up by stakeholders, customers or based on policy cycles. Finally, conflicts are solved using the reputation of network members.

These features can be translated into a typology of network control instruments. Control, typically focused on process and trust, then is achieved by:

- Network management (including culture and relations)
- Mutual control
 - Frequent (personal) contacts, extensive consultation and collaborative procedures
 - Control through people, based on social control, reputation, legitimacy, ...
 - Advising, co-decision making
- Horizontal control, involving stakeholders and peers in the process, like:
 - User panels
 - Users in boards
 - Visitations (e.g. to benchmark each others control systems)

The three-fold typology of control instruments can be used to map to what extent they are present or not in a case. However, the formal presence of such instruments is only part of the control story. We are interested in understanding the mix of these three types of control, in terms of their mutual interaction, variables that affect the mix, and the overall impact of the mix on performance of PPPs. We refer to a control mix since the three types are ideal-types that never occur in their pure form (Parsons 1995).

We also analyse the control mix from a dynamic perspective, in order to understand how the mix changes, for what reason, and with what effects. To be able to do so, we need to introduce a set of PPP-stages.

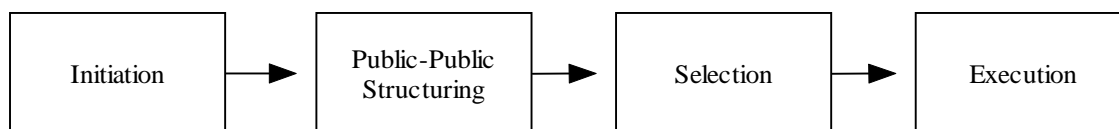
1.3. PPP-stages

As PPPs are dynamic processes, interaction between the abovementioned variables is analysed in a dynamic way. To do so, we distinguish between different stages of a PPP. Most publications distinguish stages in terms of the substance or project management of the PPP. Koppenjan and Van Ham (2002) for instance defines the phase of exploration (initiation), planning (definition & design), realization (build) and operation (operate & maintain).

If one takes an actor-oriented perspective, the distinction becomes somewhat different. Based on the model of the centre of expertise on PPP of the Flemish government ('Vlaams Kenniscentrum PPS'), the four stages we use here are (see figure 2): the initiation stage (similar to the exploration phase), the public structuration stage (similar to the planning phase), the selection stage (a separate stage in which the private partners need to be selected) and the implementation stage (bundling the realization and operation stage).

In this paper, we focus on PPPs involving infrastructure development (as they are the most common type, see Eggers and Startup 2005). This means that the execution or implementation phase can be divided into two different sub stages. The first sub stage refers to the building of the infrastructure itself (i.e. the realization stage), the second sub phase is maintaining and/or managing the infrastructure (i.e. the operation stage). For example, the execution of the PPPs reported in this paper implies both the construction of the swimming pool and the management of the facility.

Figure 2: PPP-stages



(www.vlaanderen.be/pps)

1.3.1. First phase: Initiation

Regardless of the purpose, forming a PPP needs considerable investments by all parties. The main incentive for governments is the pre-financing and possible cost-saving of infrastructure projects. This is also one of the main critiques of the recent PPP-revival, namely that it has only provided the government with a mega-creditcard (Hodge and Greve 2007).

The initiation stage is therefore mainly concerned with an exploration of the possibilities to set up a PPP or not to achieve public goals. If multiple governmental actors are involved, this already involves interaction between public actors to analyse goal compatibility, potential for resource sharing, etc. In this stage however, all aspects do not need to be developed in full detail.

The conclusion of this stage is the decision of the public party or parties whether or not to act as a 'triggering' entity (Doz et al. 2000) for the formation of a PPP. Because of legal constraints, the initiative for PPPs remains almost always in the hands of public actors (Flamey and Knaepen 2005).

1.3.2. Second phase: Public-public structuring

The next stage is a stage of project structuring between all involved public parties. All implicated public parties, local governments, specialized agencies are included in discussions about the project. The end point of this stage is a shared view on need and aims of the project, detailed in a plan of action, a project dossier. This detailed plan will later on serve as the basis for private partner selection. It is important to stress that this approved project dossier is comparable to the result of the commitment phase as defined in the model above, but is much more elaborate.

The triggering government should also consider inviting stakeholders (like end-users, inhabitants) to the negotiation table to diminish the democratic risks. In this stage, the triggering public party will perform a preliminary testing of the added value of the project. If the outcome of this testing proves the PPP to be beneficial compared to the public execution of the same project, the next stage is initiated. In theory, all these elements are considered in this stage, because a suboptimal public-public structuring phase has implications on the stages later on in the process.

Private entities are not included at this stage. This means that in the stages later on in the process, a new round of negotiations and commitment will be undertaken, in order to capture the genuine cooperation of the private partner.

1.3.3. Third phase: Selection

Private parties are now involved for the first time. The 'triggering' public actor should make the procurement procedure public, stating the selection procedure publicly, open to every private party that wants to participate in the partnership. Private sector incentives to participate are the profits and the opportunity to enter new markets, former government monopolies. Selection criteria must be made up in advance. This reduces the 'open process' approach that is possible between public actors in the previous stages. Depending on the applied procedure, there is more room for real negotiations and commitments (see the case studies reported in this paper, showing how two different procedures were used, resulting in different relations with the private actors).

1.3.4. Fourth phase: Execution

This stage involves the implementation of the commitments taken in the preceding phases. In theory, there is no room for renegotiations, recommitments and a broadening of the commitments made in the public-private relationship, as they should be put into a new tendering process. Additionally, there is only limited room to exit the arrangement. It seems that an underlying thought is that, when the right private partner is selected, the project will be completed in accordance with the general outlined principles. UK research on PPPs shows that this is not necessary the case (Partnerships UK 2006) and renegotiations are rather frequent.

For the purpose of this paper, the four stages are used for case description, but clustered for case analysis. Because the first two stages involve public actors only, we analyse the public-public relations together in one public-public stage. In the third and fourth stage, the focus shifts to the public-private interactions, hence joined into the public-private stage.

2. THE CASE STUDIES

The research project - and hence this paper - builds on a multiple case study design. To understand how control takes shape in a PPP, and to flesh out the relevant elements of complexity that come into play, a comparative design is used. The cases selected are similar in a number of aspects, but differ on other aspects.

Sets of cases are selected, with varying degrees of complexity, at different governmental tiers, at different stages of the PPP, with varying performance, and of a different type. This allows for cross-case comparisons, based on key variables of the conceptual framework.

The case studies reported in this paper make up the first set. They are both contractual PPPs, they both involve the same scope (pool infrastructure, are both DFBMO, involve similar actors (two local governments and private consortium-, ... As the analysis shows however, there are also relevant differences between both.

Data was drawn from official documents (contracts, calls, ...), grey material (personal notes, e-mails, ...), and semi-structured interviews (10 interviews per case) with PPP-partners (public and private) and observers.

Dommelslag

The pool infrastructure 'Dommelslag' is the outcome of a PPP involving two neighbouring local governments (Overpelt and Neerpelt) and a consortium of private partners.

Both local governments share some features: they are similar in size, population, budget, and governing coalition. They are also considered complementary in terms of their spatial structure and a number of functions (e.g. Overpelt being a more industrial municipality and Neerpelt having a flourishing centre for retail trade), but they both had their own swimming pool.

In the mid 1990s, both local governments were confronted with old-fashioned and run-down pools on their territory. Both pools needed to be renovated and adapted to new health and safety norms. In both cases, studies for renovation showed a very high pricetag. The Overpelt pool was owned and managed by the local government, the Neerpelt pool was owned and managed by a private school through a non-profit organisation in which local government was represented and which received an annual subsidy for the pool.

In 1997, both local governments decided to set up an intercommunal pool infrastructure involving private partners. The motivation to replace their separate pools with a joint PPP was functional and financial; they wanted to provide a better (e.g. more basins & attractions like slides) and more cost-efficient pool. The project was named 'Dommelslag' and opened in 2003 as the first pool infrastructure in Flanders designed, built, financed, maintained and operated using a PPP. It is considered a success by all stakeholders involved: local governments, pool users (citizens, schools, swimming clubs) and private partners operating it.

Elshout

The context of Elshout is similar. The pool infrastructure 'Elshout' is the outcome of a PPP involving two neighbouring local governments (Brasschaat and Schoten) and a consortium of private partners.

Both local governments share some features: they are similar in size, population, budget, and governing coalition (but not identical). They are not considered complementary in terms of their spatial structure and a number of functions, and both had their own swimming pools.

In 1997, Schoten was confronted with an out-dated swimming pool that could not meet new health & safety standards, unless it would finance a very expensive renovation. The swimming pool was also located in a district, mainly served the local schools and clubs, and could not expand in that area. A study ordered by Schoten explored two options, namely to build a new pool or to renovate the old pool. As both options proved as costly, the first option was chosen by the municipal council.

Brasschaat owned and operated a swimming pool with indoor and outdoor basins, providing a regional function as it attracted people of the whole region. In 1999, they also ordered a study to see if their pool infrastructure could be modernised. The outcome of the study was similar: renovation would be very costly, and in combination with a number of exploitation problems with the existing infrastructure, local government officials decided to explore a different option. That option became concrete in contacts with Schoten, that faced a similar challenge; they decided in December 2001 to develop a joint pool infrastructure through PPP. The result, 'Elshout', opened to the public in January 2006.

2.1. Public-public stage

For the purpose of the case analyses, the four phases of a PPP defined in section 1.3. are clustered in two main stages. The 'public-public' stage joins the initiation stage and the public-public structuring phase, because there are only intergovernmental interactions between the local governments involved. We will now elaborate on the analysis of both cases in terms of complexity and control in this stage.

2.1.1. Complexity

In this section we will explore how the elements of complexity influence the institutional design and the use of specific control instruments and general control mechanisms. Table 2 lists the different aspects of the multi-dimensional complexity-concept for both Dommelslag and Elshout in the public-public stage. This table is too extensive to discuss every aspect in detail, so we limit ourselves to the most relevant differences between both cases in terms of multi-actor complexity, technical complexity and political complexity. Main differences between cases are put in italics in the table.

First of all, table 2 illustrates that the multi-actor complexity is quite similar in both cases. Important differences between the cases are the robustness of the governing coalition (stronger in Dommelslag) and the uniformity of the stakeholders (difference in culture between the swimming clubs of Schoten and Brasschaat). Also, unlike Dommelslag, in Elshout Brasschaat was the sole owner of the grounds where the swimming pool would be built. This gave Brasschaat a dominant position in the network. Nevertheless, both cases have a workable multi-actor setting.

Table 2: Complexity in the public-public stage

	Dommelslag	Elshout
Multi-actor complexity	<p><u>Two neighboring municipalities</u> (Overpelt and Neerpelt)</p> <ul style="list-style-type: none"> ➤ similar in size, population, budget and administrative culture ➤ Led by the same Christian democratic party completed with a socialist coalition-party (vast majority) <p><u>Stakeholders</u></p> <ul style="list-style-type: none"> ➤ schools, swimming clubs, diving club, inhabitants of the municipalities 	<p><u>Two neighboring municipalities</u> (Brasschaat and Schoten)</p> <ul style="list-style-type: none"> ➤ similar in size, population, budget and administrative culture ➤ Led by the same Christian democratic party completed with different coalition-party (small majority) ➤ Brasschaat was owner of suitable grounds and wanted the swimming pool to be built on it <p><u>Stakeholders</u></p> <ul style="list-style-type: none"> ➤ schools, swimming clubs (Brasschaat: swimming schools; Schoten: competition clubs), diving club, inhabitants of the municipalities
Technical complexity	<p>A pool-infrastructure capable of providing bathing-facilities for schools and sport-clubs at a fair price on the one hand and recreational elements to attract recreational swimmers on the other hand (population of 30 000 inhabitants).</p> <p>The municipalities were convinced that the private partner would finance the optional recreational elements because these elements would generate income for the private partner. For the elements municipalities thought indispensable for providing the public task, they counted on a cost of € 3,75 million.</p> <p><u>problem of structuring two municipalities</u></p> <ul style="list-style-type: none"> ➤ in order to go in dialogue with the private candidates ➤ in order to acquiring the grounds (ownership structure) <p>Specifications of the swimming pool Technical expertise present in the market Possibility of an advantageous VAT-regime <i>First project in its kind in Flanders</i></p> <p><u>Operational risks</u></p> <ul style="list-style-type: none"> ➤ lack of private interest ➤ Adverse selection 	<p>A pool-infrastructure capable of providing bathing-facilities for schools and sport-clubs at a fair price on the one hand and recreational elements to attract recreational swimmers on the other hand (population of 70 000 inhabitants).</p> <p>Previous to the idea of cooperation, both municipalities had made a study concerning respectively the construction of a new swimming pool (Schoten) and the modernisation of the old swimming pool (Brasschaat). Constructing a new swimming pool for Schoten would cost more than € 5 million, modernisation of the swimming pool of Brasschaat would have a price tag of € 3,5 million.</p> <p><u>problem of structuring two municipalities</u></p> <ul style="list-style-type: none"> ➤ in order to go in dialogue with the private candidates ➤ ownership structure ➤ consultation <p>Specifications of the swimming pool Technical expertise present in the market Possibility of an advantageous VAT-regime</p> <p><u>Operational risks</u></p> <ul style="list-style-type: none"> ➤ lack of private interest ➤ Adverse selection
Political complexity	<p><u>Societal salience</u></p> <ul style="list-style-type: none"> ➤ presence of a sense of urgency <p><u>Salience between local governments</u></p> <ul style="list-style-type: none"> ➤ location of the future swimming pool <p><u>Salience between political parties</u></p> <ul style="list-style-type: none"> ➤ <i>overall consensus</i> ➤ <i>'soft' opposition parties</i> 	<p><u>Societal salience</u></p> <ul style="list-style-type: none"> ➤ presence of a sense of urgency ➤ strong opposition against the implementation in Brasschaat (Schoten: petitions, protests) <p><u>Salience between local governments</u></p> <ul style="list-style-type: none"> ➤ location of the future swimming pool ➤ <i>specifications of the swimming pool</i> <p><u>Salience between political parties</u></p> <ul style="list-style-type: none"> ➤ <i>disagreement in the governing coalition (ad hoc majority in Schoten)</i> <ul style="list-style-type: none"> ▪ <i>implementation in Brasschaat</i> ▪ <i>collaboration with private partners</i> ➤ <i>Strong and aggressive opposition parties</i>

Secondly, in terms of technical complexity, both cases are also alike. However, a relevant difference is the possibility to get an advantageous VAT-regime. Unlike Elshout, this aspect was of secondary importance in Dommelslag.

Finally, one of the key differences is found in terms of political complexity. This complexity was considerably higher in the case of Elshout than it was in the case of Dommelslag.

The next section will elaborate on control in both cases, and will show how these elements of complexity affect the control mix in the public-public stage.

2.1.2. Control

The typology of specific control instruments, presented earlier in this paper, was used to make the analyses of the two cases possible. To avoid a too detailed report of the cases, we will not report or distinguish each single control instrument used. Instead, we present a more general picture of the control-mix used in both cases. In what follows, we present the elements of complexity and accompanying risks in relation with the use of certain control mechanisms.

Dommelslag

In the public-public stage of Dommelslag, we mainly find network-like instruments, the network mechanism of control.

The first contacts between the municipalities for instance developed in a particular informal manner. Already previous to the project Dommelslag, many informal contacts took place between the different key actors within both municipalities. In other words, there already existed a network-like relation between the key actors of both municipalities. The political actors within that network had a common history of interaction, reducing the relational risks significantly. As a result, the initiation of the project developed in a rather informal and closed manner. The decisions were taken by the political heavyweights (mayor and involved aldermen), the ratification by the municipal councils was ex post and only a formality. A first step to formalisation was the establishment of an inter-local workgroup, which also operated in a network-like manner.

The cooperation between the two municipalities was formalized further with the establishment of the intermunicipal Service Association Pelt (which among others required formal authorization of the municipality councils, so elements of the hierarchic mechanism). But even in this more formalized setting, the working method did not change much. The municipal councils approved the decisions made by the key actors ex post to the actual decision.

The most important task in this stage was the drawing up of the specifications. The stakeholders, as users of the future swimming pool, participated in the process of drawing up the output specifications.

The problem of intermunicipal cooperation and common purchase of the necessary grounds was solved with the establishment of a service association as a separate legal person, that would become the vehicle to structure the actual PPP.

Because of the low political complexity, the development of the project was kept within the governing coalitions. To save time, the complete project was taken in hands by a political heavyweight in both municipalities, assisted by administrative expertise. The governing majority could permit such an elitist and closed way of working, because they relied on a vast majority in the municipal council, and did not expect much resistance from the opposition. The stakeholders were consulted, but decisions were taken in this select group.

Given the technical complexity of the project, the municipalities Neerpelt and Overpelt decided to use a 'concessie van openbare werken' ('concession of public works') for public tendering. This legal instrument was chosen because of the possibility it presented to formulate clear requirements concerning the desired output and cooperation. The use of this instrument would also have an effect on the utilization of control mechanisms in the public-private stage of the PPP (in relation with the private partner). The result in this phase is a detailed blueprint, being a product of the network negotiations between the two municipalities on the one side and between the stakeholders and the Service Association Pelt on the other side. The detailed output specifications would effect the public-private stage, as it restricted the freedom of the private candidates in their proposals (see below).

Elshout

Similar to Dommelslag, Elshout faced a workable level of multi-actor complexity. It was relatively easy to bring all relevant actors together. In the first steps in the public-public stage of Elshout, network-like instruments were used mainly. Because of the weak link between both municipalities (compared to Dommelslag), the agreements however had to be contractualized in an 'afsprakennota' ('agreement note'), intended to curb the relational risks (illustrating more market-like control behavior). The negotiations preceding the agreement were therefore harder and characterized by more distrust in comparison with Dommelslag.

The difference in culture of the swimming clubs and the involvement of quite a few actors would have demanded a prolonged public-public structuring phase to align positions. The public actors however were weary to increase relational risks by giving such negotiations too much attention. The public actors also wanted to save time, and therefore opted for a different legal procedure than Dommelslag. By using a 'domeinconcessie' ('domain concession') the municipalities did not/could not make use of extended specifications on beforehand, hence avoiding an intense deliberation round to draw up such specification (as was the case in Dommelslag). Moreover, a key political person of Brasschaat had close relations with the Port Company Antwerp ('Antwerpse Havenbedrijf'), which provided access to technical expertise on how to use domain concessions.

Brasschaat was owner of the grounds and Schoten was not prepared to purchase a share in it. For that reason, there was no need to establish a separate legal person. Hence, Brasschaat and Schoten opted for the most simple form of intermunicipal cooperation, being the Interlocal Association. This association would advise Brasschaat (being sole owner and concession giver) about the choice of a suitable private candidate. Schoten, however, wanted guarantees as a compensation for the implantation of the swimming pool in Brasschaat. This resulted in the agreement note mentioned above. In Schoten, the decision of establishing the interlocal association was taken by an ad hoc majority in the municipal council (so one party of the governing coalition opposed, and the other party got votes from a party in the opposition). Within this formalized setting, there was improved ground for more network-like control.

The price tag of the project was an important factor for the municipalities (especially for Brasschaat). Therefore, it was essential for the municipalities that the project could profit from an advantageous VAT-regime. The best guarantee to make sure that the advantageous VAT-regime could be applied on the project, was the use of the 'domeinconsessie'.

The political complexity had a great effect on the institutional design and the control mechanisms. Because of the societal, party political and intergovernmental salience, the municipality councils were closely involved in the process and much attention was paid to get their ex ante authorisation (i.e. a hierarchic control-instrument). This way, all political parties were engaged in the project, meaning they had less grounds to resist the project after being consulted or even having approved decisions. The pressure to act rapidly was an extra motivation to make use of the domain concession.

At this stage, the most important task was composing the conditions for the 'domeinconsessie'. The latter occurred in mutual consultation in the body of the Interlocal Association. Due to the restrictions of this legal instrument, the outcome was a rather vague blueprint for the project - the grounds had to be used to construct and operate a pool infrastructure. This had its consequences for the next stage since the private candidates were almost entirely free in designing their proposal. In this way, the public actors were more dependent on the quality of the incoming tenders.

2.1.3. Interim conclusion

In both Dommelslag and Elshout, a number of components of our complexity concept have pressed a clear stamp on the course of the process of the PPP. In the case of Dommelslag the nature and size of the project, the relevant actors and the small political salience during the public-public stage have resulted in a technocratic structuring by a select group of relevant actors who interact on a network-like basis. A further formalization took place by establishing a service association with the same group of actors sitting in the Board of Directors. Like we expected, the structuring of the two independent municipalities was formally dominated by network instruments.

Particularly for the case of Elshout, the political salience surrounding the project resulted in the focus for creating (party political) policy support for the project. This had an effect on the structuring of the two municipalities in a way that every political party was represented in the Interlocal Association. Similar to Dommelslag, the structuring of the two independent municipalities was dominated by the network mechanism. However, because of the weak ties between the two municipalities and low mutual trust, the agreements between the two were contractualized (so complemented by the market-oriented mechanism). Because the future swimming pool would be constructed on Brasschaat territory, Schoten demanded some compensations (60-40 division of the costs, better connections and public transportation from Schoten to the swimming pool,...).

Finally, the choice of using the 'domeinconsessie' in Elshout was influenced by the political salience, the possibility to get an advantageous VAT-regime and the access to the expertise through the connections with the Port Company. The use of this 'domeinconsessie' would have a severe impact on the use of control mechanisms because it implied restricted ex ante use of control mechanisms. The option for a concession of public works in Dommelslag on the other hand allowed the public partners to control in a very detailed manner what the private partner would have to propose as a project.

We will now focus on complexity and control in the public-private stage, shifting the focus of the intergovernmental relations to the public-private interactions.

2.2. Public-private stage

The public-private stage clusters the third and fourth stage defined in section 1.3. In this stage, we shift our focus to control relations between public and private actors.

2.2.1. Complexity

The conclusion of the public-public stage marks the beginning of the public-private stage, where the PPP-project continues in a new configuration. The public parties are now united in their intercommunal bodies (whether or not with an own legal personality) and the private partners enter the arena. This new constellation brings up new aspects of complexity. Table 3 gives an overview of the new issues of complexity that appear in this stage (so it does not repeat the elements in table 2 of the public-public stage).

The major differences between the complexity in the two cases, besides the diverse public structuring, are the characteristics of the private partners. In Dommelslag, a loose consortium of private companies with limited experience was selected, increasing of the operational and relational risks. In Elshout, on the other hand, the selected consortium was more robust, experienced, and had a sturdy financial profile. However, one of the private partners had a fundamentally different idea (and culture) about the exploitation of pool infrastructures. This also affected the relational and operational risks in a negative way. Finally, the political complexity in both cases disappeared somewhat to the background.

Table 3: Complexity in the Public-private stage

	Dommelslag	Elshout
Multi-actor complexity	<p>In this stage the two neighboring municipalities (Overpelt and Neerpelt) had organized themselves in the <i>Intermunicipal Association Pelt</i>. With the Decree of Intermunicipal Cooperation (2001), they had to reform the intermunicipal cooperation into the <i>Service Association Pelt</i>. Since this decree, the municipals where obliged to take members of the opposition (with advisory vote) into the Board of Directors.</p> <ul style="list-style-type: none"> ➤ <i>Board of Directors (small and close group)</i> ➤ <i>General Assembly (mayor of Neerpelt and ex-mayor of Overpelt)</i> ➤ <i>Body with legal personality</i> <p>Three private candidates signed in for the tendering procedure The selected candidate was S&R Pelt:</p> <ul style="list-style-type: none"> ➤ <i>consortium of several companies (constructors, architect, maintenance firm, exploitation firm)</i> ➤ <i>loose connection between the different firms</i> ➤ <i>Their first project</i> ➤ <i>Constructors wanted to leave the after the delivery of the swimming pool</i> ➤ <i>Maintenance firm wanted to cooperate with a rival consortium</i> <p>Stakeholders</p> <ul style="list-style-type: none"> ➤ schools, swimming clubs, diving club, inhabitants of the municipalities 	<p>In this stage the two neighboring municipalities (Brasschaat and Schoten) had organized themselves in the <i>Interlocal Association Brasschaat-Schoten</i>. This association was set up after the Decree of Intermunicipal Cooperation (2001), so followed similar rules as Dommelslag.</p> <ul style="list-style-type: none"> ➤ <i>body without legal personality</i> ➤ <i>exists out of the two municipal councils</i> ➤ <i>Board exists out of representatives from every political party</i> ➤ <i>Gives binding advice to Brasschaat</i> <p>Three private candidates signed in for the tendering procedure The selected candidate was Sportavan:</p> <ul style="list-style-type: none"> ➤ <i>consortium of three big companies (constructor, maintenance and exploitation) experienced</i> ➤ <i>The exploitation firm has a different opinion than the other partners</i> <ul style="list-style-type: none"> ▪ <i>Forced out of the consortium</i> ▪ <i>Sportavan becomes Sportoase (two partners take the exploitation-responsibility)</i> <p>Stakeholders</p> <ul style="list-style-type: none"> ➤ schools, swimming clubs (Brasschaat: swimming schools; Schoten: competition clubs), diving club, inhabitants of the municipalities
Technical complexity	<p>A pool-infrastructure with three basins, recreational elements, wellness-facilities and cafeteria Total investment of € 7,5 million financed by the private partner Yearly endowment of € 1 million to the private partner</p> <ul style="list-style-type: none"> ➤ 50 % Overpelt ➤ 50 % Neerpelt <p>Operational risks</p> <ul style="list-style-type: none"> ➤ demand risk ➤ Failure private partner 	<p>A pool infrastructure with three basins, recreational elements, wellness-facilities, fitness-facilities and multifunctional cafeteria Total investment of € 14,3 million financed by the private partner Yearly endowment of € 1,25 million to the private partner</p> <ul style="list-style-type: none"> ➤ 60% Brasschaat ➤ 40 % Schoten
Political complexity	<p>Societal salience</p> <ul style="list-style-type: none"> ➤ entrance fee for the recreational user too high 	<p>Societal salience</p> <ul style="list-style-type: none"> ➤ Entrance fee for the recreational user too high <p>Democratic risk</p> <ul style="list-style-type: none"> ➤ Free-rider problem (neighboring municipalities)

2.2.2. Control

The starting point of the public-private stage were the specifications ('lastenboek') and the tender procedures drawn up by the public partners in the previous stage. In both cases this document was the basis on which the tendering and the future cooperation between the public and private partners would take shape. Like we stated before, in Dommelslag the use of the 'concessie van openbare werken' made it possible to define many and detailed unilateral provisions. In Elshout, by using the 'domeinconcessie', much more additional negotiations were needed once the partner was selected.

Dommelslag

In Dommelslag, contacts between the public partners and the private partners channeled through the Service Association Pelt. The specifications that had been established by the Service Association were an important source of control. A number of obligations with respect to the construction and the exploitation of the future swimming pool had been registered in it. By using a 'concessie van openbare werken', the municipalities were able to fully develop competition between the private candidates. Further negotiations were conducted with the preferred bidder. To do so, a steering group was established (with the leading figures of both public and private partners), as a relatively network-like instrument. The results of this negotiation were written down in the concession agreement (being a typical market instrument).

The steering group continued to exist after the new swimming pool opened its doors. This group acts as an informal discussion platform between the representatives of the Service Association Pelt and the representatives of the private consortium. The contract stipulated that, after the construction phase, the public and the private partner would have contact moments twice a year, but in practice, this frequency was much higher, up to one meeting each month. A possible reason can be found in the dominant network-like controlling culture of the public actors. An other possible reason is that the unstable and inexperienced position of the private partners at the beginning of this stage required a narrow involvement of the public partners.

The departure of the private constructors and the directors of the exploitation firm during the public-private stage resulted in a private consortium with a small financial basis. In addition, distrust appeared when one of the private partners wanted to cooperate with a rival consortium. Network-like control mechanisms alone seemed no longer sufficient to get things straightened out. The public partner had to make use of the legal weapon of putting the private consortium into default ('ingebreke stelling'), so using market control instruments present in the contract. These problems were however fixed a few months later, and trust was gradually restored.

The political complexity shifted from the actual issue of building a swimming pool, to the quality-level of the swimming pool and the price level of the entrance fee. A year after the opening of the new swimming pool, the private partner unilateral raised the entrance fee for the recreational swimmer, which was allowed by the contract. Remarkable in this context was the reaction of the public actor. It was not the increase of the prices what created resistance on behalf of the public partner, but the fact this occurred without prior consultation (as we stated this was not required according to the contract). As a result, the public party suspended the steering group meetings for some months. The public party used this pressure instrument to obtain a registration of a consultation procedure for raising the prices into the contract. So even when the general control mechanism is network-like, other control mechanisms are present as well.

Elshout

In Elshout, because the (societal) stakeholders (end-users) were not (or minimally) involved in the public-public stage, they now became involved during the appraisal of the private candidates. In this way, the municipalities could counter criticism that stakeholders were not sufficiently heard. To do so, stakeholders, civil servants and politicians of both municipalities were divided into groups in order of themes (architecture, finances, exploitation, sport facilities).

As a result of using the 'domeinconcessie', the municipalities in the case of Elshout were more limited in their ex ante control instruments. Thus, the municipalities could not impose concrete provisions on the construction and exploitation of the future swimming pool. Consequently, the municipalities were dependent on the quality of the incoming tenders.

After the selection of the private candidate and the approval of the 'domeinconcessie', the public parties had to negotiate an additional 'exploitation agreement'. The application of a double contract structure was needed because of the restrictions of the 'domeinconcessie'; so control was strengthened by adding additional agreements.

During the negotiations for this exploitation agreement, it became clear that the exploitation company of the private consortium had a different view on running a swimming pool than the public partners. In addition, the exploitation company was not very keen to bear any operational risks. This created a great distrust between the public party and the exploitation company. The public partner used a market-oriented control mechanism by playing its role as sponsor to force the exploitation company out of the consortium: *"The deal would go on without the exploitation company or the deal would be off"* (politician).

Still during the construction of the pool infrastructure, a neighboring municipality decided to give its inhabitants a discount when they went swimming in the swimming pools of Brasschaat and Schoten. This arrangement made it possible for those people to swim at a lower price than the inhabitants of Brasschaat and Schoten. Taking into account the societal salience surrounding the swimming pool, this would have a severe effect on the perception of the own inhabitants on the swimming pool. Brasschaat and Schoten used network-like control to get the private partner to implement a more advantageous tariff for the own inhabitants (i.e. illustrating collaboration-oriented behavior).

During the construction and after the opening of the pool infrastructure, the two municipalities in the body of the Interlocal Association took more distance of the project and withdrew to a purely supervision function. The public partners left the realisation of the project in large degree in the hands of the private partner. While the different contracts create a wide set of control and monitoring instruments (see table 4 below), the Interlocal Association barely used them so far.

Giving the private partner much autonomy to maintain and operate the pool infrastructure, but preserving the possibility for supervision and having ultimate decision power provided the public partners with the feeling of trust in the cooperation and in the automatic progress of the project.

2.2.3. Interim conclusions

The decision in the public-public stage of using the 'domeinconcessie' in the case of Elshout and the 'concessie van openbare werken' in the case of Dommelslag had consequences for the public-private stage. In Dommelslag, the public actors could formulate some obligations concerning the exploitation of the pool infrastructure. This gave the public actor in Dommelslag the opportunity to create competition between the private candidates to come up with the best solutions, and sharp prices. The public party also used market-oriented control instruments frequently (competition, output-oriented specifications, severe negotiations,..). The use of the 'domeinconcessie' in Elshout on the other hand restricted the use of ex ante control mechanisms. To compensate this, the public party had to negotiate a separate exploitation agreement. During this negotiations the public party applied network- and market-like control mechanisms to come to a desired product.

In Dommelslag, the outcome of the selection phase resulted in the selection of a loose private consortium without much experience with this kind of project. Shortly after the construction of the pool infrastructure, the consortium fell apart. As a result of the relatively unstable and (after the departure of some private actors) rather small consortium, the public partner closely monitored and controlled the project. The steering group became the core of the cooperation. In this group, the public and private actors interacted on a network-like basis, except for some periods of crisis. The contracts were rarely used to exercise control, again except in moments of crisis. As the project progressed, cooperation would support more and more on mutual consultation. The contract disappeared to the background, but created the conditions where network mechanisms could develop. In interviews, the public actors compared the contract with the private partner with a 'marriage contract': one hopes one never has to make use of it.

In the case of Elshout the exploitation company was forced out of the consortium. The two remaining private partners however gained a lot of trust from the public partners. This trust was mutual; one the one hand the public party trusted in the competence of the private partner and on the other hand the private party trusted in the goodwill of the public partner. This trust diminished the perceived relational and operational risk, which effected the use of control instruments and mechanisms.

Table 4: Control elements in the contracts

	Dommelslag	Sportoase Elshout
Information and consultation	+++	+
Supervision	++	+++
Tarrif setting	++	++
Financial guarantees (besides insurance)*	++	+
Provisions in the exploitation phase	+	++
Provisions in the construction phase	++	+++
Maintanance	+	++
Dispute regulation	++	++
Qualitative service and optimal management	+	+
Target groups	++	+
Interpretation swimming pool**	+++	+

*Obligatorily fill of social capital (above the legal amount)

**Mark that also at Elshout a detailed interpretation of the swimming pool was given up. This interpretation was however entirely done by the private partner and concerns the selected project proposal

As we stated above, the use of different legal instruments in the two cases had complications for the opportunity of ex ante control. Nevertheless, table 4 indicates that, in the end, no major differences appear between Dommelslag and Elshout in terms of content of the contracts. The major difference is the degree of interpretation of the swimming pool concept. Another important difference found relates to the area of information and consultation structures (more focused on in Dommelslag, if compared to Elshout). This might be explained by the different controlling cultures within the municipalities which also impregnated in the PPP.

Table 5: Focus on control mechanisms in the contracts

		Dommelslag	Sportoase Elshout
Information and consultation	construction	<ul style="list-style-type: none"> - Obligation to supply all information and facilities hence the leading civil servant is able to exercise his task - Steergroup (1 x per month) - Attending yard meetings 	<ul style="list-style-type: none"> - The concession holder sends a report to the inter-local association quarterly
	exploit-ation	<ul style="list-style-type: none"> - Steer group (formal 2x per year, factual twice a month) - During conflict aim at a friendly arrangement 	<ul style="list-style-type: none"> - Annual report concerning the exploitation of the complex
Supervision	construction	<ul style="list-style-type: none"> - Leading civil servant - Number of decisions reserved to the Service Association Pelt - Control of the accountancy 	<ul style="list-style-type: none"> - The concession holder provides at all time access to the yard and access to all documents and pieces relevant for the yard as well as accountancy. - The right letting the accountancy check by external auditors - After the construction the concession holder delivers a post-intervention dossier (as built)
	exploitation	<ul style="list-style-type: none"> - Control of the accountancy 	<ul style="list-style-type: none"> - The concession holder is obliged to provide access to the accomodation and insight in all documents and pieces relevant for the exploitation of the project - Control on the accountancy - The right letting the accountancy check by external auditors
Dispute-regulation		<ul style="list-style-type: none"> - Friendly arrangement as first option: two adjudicators by respectively the one and other party. Possibly addition of a third independent adjudicator - Court 	<ul style="list-style-type: none"> - Reconciliation court as first option: two members by respectively the one and other party. - Court

Table 5 summarizes the focus on control in the contracts. It clearly shows that in the case of Dommelslag, in formal terms, a larger emphasis is put on consultation and information supply than in the case of Elshout. With the latter, the accent lies on supervision and control. In the case of Elshout, this supervision and control is not applied so strictly (e.g. external monitoring of accountancy) as the agreements might indicate, because public actors trust the capacity and expertise of the private partner. In the case of Dommelslag, the actual consultation and information supply on the other hand are still stronger than formulated in the agreements.

2.3. Linking the public-public stage to the public-private stage

In this section, we link the main control insights of each stage. As table 6 shows, in the public-public stage of the PPP, we mainly find network control. This can be explained by the interdependency of the municipalities, who are seeking alignment in both cases. The relatively small differences between the two cases can be explained by the difference in informal use of the formal network-like setting. Also, the different structuring of the cooperation between two municipalities effects the used control instruments and mechanisms. The use of a service association in Dommelslag for instance allowed more mechanisms of hierarchic control (e.g. Board of Directors) than the inter-local association in Elshout.

Table 6: Control across the phases

		Dommelslag			Sportoase Elshout		
		H	M	N	H	M	N
Pub-pub	Initiation			+++		+	++
	Public-structuring	++		+++	+		+++
Pub-priv	Selection	++(+)	++	+	+	+++	(+)
	<i>(negotiation in particular)</i>	+	+++	+(+)	+	+++	+
	Execution	+(+)	++	+++	+	+++	+(+)

*+: low use, ++: moderate use, +++: high use

In the selection phase (first part of the public-private stage), we find more difference in control between both cases. In Elshout, more emphasis is put on market-like control. A possible explanation is the use of the 'domeinconcessie', which restricts municipalities in their ex ante control. This made them more dependent on what the market offered them in the field of pool facilities. In Dommelslag, by using a 'concessie van openbare werken', the municipalities could formulate more ex ante requirements. For that reason, they had more seizure over the private candidates.

In the actual negotiations (i.e. part of the selection phase), in both cases, the emphasis lies on market-like control. The preferred bidder is selected and the public and private partners become more or less equal partners at the negotiation table. The end of this phase is the contract.

In the execution phase (second part of the public-private stage), the private actors and the public actors become full partners. In this phase, the control mechanisms used by the public partner are both network- and market-like. In Dommelslag, the accent lies especially on network control. A first possible explanation might be the dominant control culture within the municipalities. A second possible explanation might be the unstable situation in Dommelslag, in terms of the make-up of the private consortium, required a close involvement of the public partners at the beginning of this stage. In Elshout, the emphasis lies mainly on market-oriented control. The most logic reason for this, is that the public partners considered their task that of being a more general one, namely ensuring that a pool infrastructure was present (as opposed to Dommelslag, where public partners were also much more interested in the actual substance of that infrastructure). In Elshout, the public parties stick to their supervisory role, and the private actor is regarded as the one who knows best how to develop and operate a pool complex. The negotiated contract and the risk-sharing remain the most important (underlying) control instrument.

Interestingly, although the performance dimension is not part of this paper, it is relevant to point out that the difference in complexity and control between both cases does not seem to generate much difference in the performance of the PPPs. Firstly, the resulting infrastructure is relatively similar. Secondly, in both cases, local governments, users, and private partners are satisfied. Among other things, this results in high visitor numbers (in comparison with the past and in comparison with the initial expectations). Although the initial cost of the Elshout complex is almost double the initial cost in Dommelslag, there are no large differences in the annual contributions from the municipalities to the private partner. An important factor that plays here is the larger range of users in Elshout (which results in more recreational swimmers and advantage of scale). Moreover, the additional fitness activities in Elshout ensure an extra income source to the private partner, limiting the exploitation shortages. This however might also be the result of the fact that, in the case of Elshout, the private partner had much more freedom to fill in the pool infrastructure to his own vision. The relation between control and performance therefore needs additional analysis, but falls out of the scope of this paper.

3. CONCLUSIONS

In the introduction, we posed two questions: how do public partners control different stages of a PPP, and how is control affected by elements of complexity? We will point to the main elements and lessons relevant for discussion, using the most illustrative examples of the case studies.

Complexity vs. control

We find that the control mix is indeed affected by elements of complexity. The first set of case studies share a number of features of complexity (e.g. most elements of technical complexity), which lead to the presence and use of a number of similar control instruments. However, it is also clear that a number of differences in complexity help to explain differences in the control mix.

In the public-public stage, for instance, the control relations between different partners differs in the two cases. In Dommelslag, Neerpelt and Overpelt already featured close and friendly contacts between the leading officials in both (similar) governing coalitions before the PPP. This pre-existing 'network' clearly facilitated the interactions during the public-public stage, making the process of drawing up a joint project a relatively network-like process, based on trust and reciprocity. In Elshout, this positive history between the two governments was not present before the PPP. They were more distrusting (in comparison with the case of Dommelslag), and negotiated hard with one another, making it a more market-like setting because exchange was the main interaction pattern. This is illustrated by the way Schoten negotiated with Brasschaat - which wanted to get the pool infrastructure on a plot of land they owned on its own territory - and got compensations for agreeing to the location.

Another illustration of how the difference in complexity affects control is the ownership structure of the public resources. In Dommelslag, both governments set up a joint organisational structure as a legal person, with a joint ownership of the plot of land where the pool infrastructure is built (even if it is fully located on the territory of Overpelt). In Elshout, Brasschaat owns the plot of land and has little interest in sharing it with Schoten and vice versa, and the joint project structure of both governments is no legal person but merely a coordination platform that meets a couple of times a year. As a result, the

Dommelslag case involves a much more shared and network-like ownership and interaction on equal footing, with frequent meetings. In Elshout, Brasschaat behaved more dominantly, and Schoten responded with demands of its own, trying to get a good deal. Gradually, after a common agreement was put down, Brasschaat and Schoten evolved to an equal partnership, and more network-like instruments and mechanisms came in place.

In the public-private stage, we also find illustrations how complexity affects control. In Dommelslag, the public partners of course use market instruments to select and contract a private consortium. However, they continue in a network-like fashion, involving many and close contacts with the private consortium, emphasising good personal relations and trust, also meeting frequently. The public actors clearly want to have a high degree of control over the substance of the PPP. Consequently, they opt for a legal procedure which allows them to do so. In contrast, the Elshout case shows how public actors take a more distant position, letting the private partners decide about substance - as long as a pool infrastructure would be built. Hence, in Elshout, the public-private interactions are much more business-like, much more formal, and limited to a couple of meetings a year.

Another example is the way the political complexity leads to the use of different control instruments. The high political complexity in the Elshout case leads to a much attention for stakeholders, political parties, etc. while the low political complexity in the Dommelslag case involves a relatively closed, network-like control relation with the governing elite.

Different uses of control instruments

Another conclusion is that the threefold control instrument typology is useful, but should be developed further. Although we related the individual control instruments to one control mechanism, it becomes clear that individual control instruments can be used in different control mechanisms. As such, if one focuses on their actual use, they make up more a continuum (e.g. more market-, more hierarchy-, or more network-like) than absolute categories. Contracts for instance can be framed in a market-like fashion (e.g. can be enforced in court, are very detailed, are frequently monitored, have a range of sanctions, etc), but also in a network-like spirit (e.g. are only gentlemen's agreements, are relatively simple and not highly detailed, have a joint monitoring, weak or no sanctions, etc.). Similarly, incentives can be market-based (harsh financial sanctions and rewards, court interventions) or network-based (like exclusion of negotiations, loose of trust and reputation). An example of this can be found in the contracts of our two cases. In Dommelslag, the contract emphasised instruments of information and consult, while in Elshout the contract mainly contains instruments of monitoring and control.

Formal content of control vs. actual behaviour of partners

The case studies show that there is a difference between the formal content and presence of control instruments on the one hand, and the actual behaviour partners develop. There is a distinction between formal control versus informal behaviour.

A clear example is the way in which the governments in the Dommelslag case exercise control. In the public-private stage, the private consortium suddenly raises prices, which they are allowed to do so by the contract. The public actors however are upset, and expected that the private partner, in the network-like atmosphere of trust and mutual consultation, would have discussed this with them on beforehand. They even act by

freezing the relations with the private partner for a period of time. So while the private partner behaves and acts within the control instruments used, the public actors have different expectations about that use and respond with actions outside the formal control instruments.

Another illustration is the agreement note ('afsprakennota') between partners in Elshout that sums up ten points to conclude the public-public stage. In formal terms, it is a typical agreement between network partners, but the actual behaviour to reach that agreement shows a much more market-like relation, with hard bargaining, distrust and exchange, instead of trust and reciprocity.

These findings spark our interest in the actual control that takes shape in interactions between actors in the PPP. So on the one hand, we use a typology of formal control instruments, that might fit (closer to) one of the three control mechanisms. On the other hand - and this is where PPP-research should be developed further - is the level of the actual interactions between actors. The formal instruments are relevant as they provide grounds for control, but their presence or absence says little about their actual use or relevance in concrete practices. One PPP might involve a wide set of control instruments but without being used in the interaction between actors, and vice versa. It is the combination of the formal and informal picture that we aspire to develop further to enrich the PPP-research.

Control cycles through stages

Another conclusion is that the stage-approach is valuable to understand control in the PPP, as control instruments, mechanisms and practices in one stage for instance present institutional constraints in the following stage.

From the analysis of the public-public stage, we learn that even while the public actors are positioned horizontally (two local governments in each case), the actual interaction is different. While the history of close and good contacts between local government officials in the Dommelslag case lead to a very network like interaction, the relations between local governments in the Elshout case is much more market like. This context leads to a different structuration between public partners, with different control instruments. In Dommelslag, for instance, control is developed more technocratic. In Elshout, on the contrary, the structuration is very market-like, and includes the search of a broad societal and political support for the project.

It is also shown that the different outcome of the public-public stages in both cases leads to a different interaction process in the public-private stage. The way the specifications are drawn up as the end product of the public-public stage, and the choice for a certain type of legal procedure to enter the public-private stage, clearly affects the dynamics of negotiation in the public-private stage. The option in Dommelslag to use 'concessie voor openbare werken' enables them to exercise detailed control on the substance of the PPP, while the option in Elshout to use 'domeinconcessie' leaves them with little control during the selection stage, expect the need to construct a pool infrastructure on that plot of land. As a result, the contracts and negotiations in Dommelslag are very intense in the beginning of the public-private stage, while the contracts and negotiations in Elshout are less intense, and need to be complemented later in the public-private stage by a number of other documents to achieve the desired results.

We conclude that while the conceptual framework needs to be developed further in a number of directions discussed above, it proves a valuable basis to work on. We need to make a more systematic distinction between formal control instruments and mechanisms and informal control practices. We also need to continue to develop the control-language - however useful, for instance to map potential control instruments systematically - which needs to be linked with the actual use in the interactions between partners.

Finally, it is clear that we are not able to unlock the full potential of (these components of) the conceptual framework in the first set of case studies discussed in this paper. We expect that the relevance of the components will become more clear when we have analysed the next sets of case studies, as they bring in more differences in terms of complexity features. We are only at the beginning of an interesting journey in the world of PPPs.

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