

**ASKING WHY?  
PREVENTING DYSFUNCTIONALITY OF CONFLICTS  
IN PUBLIC PRIVATE PARTNERSHIP PROJECTS.**

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**Abstract**

*Research shows that 42% of the Public Private Partnership Projects in Dutch area development is qualified as having serious conflicts with an undesired delay, from which 10% is dysfunctional. The question here is: how to prevent this dysfunctionality? In search for an intervention on an operational level that can be used in negotiations on economic feasibility e.g. by a project manager, a hypothesis is derived from a rigorous and comprehensive review of past literature on conflict management. For the purpose of testing this hypothesis, of which “asking why” is the core, a simulation was run in which project developers and representatives of a municipality negotiated about the program for a former railroad area. The intervention was expected to decrease the level of conflict. Results show that, under the condition of a dominant negative cooperative climate, it does.*

**Keywords:** conflict, public private partnership, area development, intervention.

**INTRODUCTION**

This article is written from a project managers point of view. As a project manager of Public Private Partnership (PPP) projects in area development and as a Phd-researcher at the same time, I wondered why conflicts in those projects were so intense. My research shows that in a Public Private Partnership for area development projects there is a chance on dysfunctional conflicts (Lousberg, 2010). A dysfunctional conflict is defined as: the perception of the impossibility of a simultaneous conjunction of aspirations, where feelings of hospitality or fear play their part and that results in an undesired delay or a break down of the relationship. That there is a chance of dysfunctional conflicts, is confirmed in a survey amongst members of the Dutch Association of Municipalities/ Vereniging

van Nederlandse Gemeenten (VNG). The survey reveals that 42% of the PPP projects in area development is qualified as having serious conflicts –all on economic feasibility- with an undesired delay, from which 10% is dysfunctional.

Further, from a case study on dysfunctional conflicts in a PPP in area development a few elements emerged that seemed to be constituent for the cause and the prevention of dysfunctionality (Lousberg, 2010). Results suggested that the image that participants had of each other was dominant in the conflict becoming dysfunctional. For the prevention of dysfunctionality a relation was suggested with understanding differences in perception of the economic feasibility of the project.

In search for an intervention for preventing dysfunctionality on an operational level, to use e.g. by project managers, while negotiating on economic feasibility in PPP projects in area development, a rigorous and comprehensive literature study was conducted (Lousberg, 2010). Covering ground that has been covered many times before, was expected. It did only partly; the operational level was missing and the proposed interventions were not tested in negotiations on economic feasibility in the context of a PPP project in area development.

From project management-, process management- and area development literature (e.g. De Caluwé et al, 2007, Graham, 2007) it was concluded that the search for causes and operational perspectives on prevention didn't result in a theoretical basis and didn't result in a application of prevention on an operational level.

Further, from the economic game theory (e.g. Camerer, 2003, Saner, 2005) it is concluded that the influence of differences in perception if an agreement is not reached, possibly gives a partial description of the emergence of dysfunctionality in conflicts, but still no explanation.

Next, from the literature on negotiation (e.g. Fisher et al, 2004, Lawrence & Lorsch, 1967) it is concluded that “constructive negotiation” is a possible direction for prevention of dysfunctionality, but not concrete enough to serve as an operational perspective for preventive acting.

However, in conflict literature an explanation is found for the emergence of conflicts (e.g. Glasl, 1997, De Moor, 1991). The explanation of De Moor was selected because of the central role of the concept of “assumptions” in his model (De Moor, 1991: 19,115) comparing the result of the above described case study in which “images of each other” seemed to play an important role in becoming the conflict dysfunctional. The escalation from functional conflicts to dysfunctional conflicts is caused by dysfunctional habits of thinking, which originate in personal assumptions about our selves and the world around us; assumptions which form the basis of our perception.

These assumptions therefore are an important clue for the prevention of dysfunctionality. The question is then: how to deal with differences among each other? At the end of the search in literature, there are two elements of intervention selected for the prevention of dysfunctionality in conflicts: taking care of a positive cooperative climate CC+ and the operational intervention Confront C, De-escalate D and Explore E.

Summarizing the above brings us the following hypothesis: the chance on dysfunctionality of conflicts in negotiations on economic feasibility between municipalities and project developers in a Public Private Partnership, can be reduced by confrontation, de-escalation and exploration of each other differences of perception in a positive cooperative climate.

Central research question is: will this intervention work in practice?

## **RESEARCH STRATEGY**

The question is interpreted as a demand for the effect of an intervention in the practice of a project manager. The intervention is then the cause, or the independent variable, and the effect on the level of conflict, or the dependent variable (Den Hertog et al, 2000: 63, Baarda et al, 2001: 114).

For the selection of a research strategy that fits, two qualities of the strategy are required:

- the possibility of elimination of the influence of other variables in order to exclude other explanations (compare Den Hertog et al, 2000: 64)
- conformity of the research practice with the reality of PPP in area development.

The first quality concerns the internal validity of the research strategy. It answers the question on how the collected observations exclude other, unintended interpretations and are exclusive due to the independent variable (Meerling, 1981: 217). To meet this internal validity it is necessary to control the influence of other variables. The research strategy of an experiment offers the possibilities of a strong control, while the strategy of a survey offers limited, and the case study no possibilities of control (Braster, 2000: 22). Therefore preference is given to the experiment.

The second quality that is required from the research strategy, conformity of the research practice with reality, concerns the external validity as it answers the question on how the results of the experiment can be generalized towards circumstances and subjects that are not examined in this single concrete experiment. (Meerling, 1981: 217).

Main characteristic of a field experiment is that it is conducted in a natural habitat (Den Hertog et al, 2000: 69), that is: under natural circumstances and with natural subjects. In a field experiment several cases should have been found, in which:

- the negotiation table is accessible;
- the negotiation conditions in the several cases are the same;
- there is a possibility to control these conditions.

It was assumed that this was impossible in the practice of PPP in area development and therefore a choice was made in favor of a laboratory experiment under simulated circumstances with natural subjects.

## **SIMULATIONS**

Simulations are laboratory situations in which a system is imitated by letting people play after the processes in that system (Joldersma et al, 1995). Simulations originate from so called “wargames” (Duke et al, 2004: 32). Newspapers reported that Norman Schwarzkopf was given operational responsibility for the Gulf War because he had prepared a new and surprising strategy for this mission in a war-gaming exercise (Geurts et al, 2007: 537). Beside that, simulations are used all over the world as a means to learn people new things and to train them (compare De Caluwé et al: 1996). Learning and changing are closely connected. Therefore a simulation can be used to produce a cultural change (compare De Caluwé, 1997). Further, simulations are applied on a large scale in research in social sciences. (Duke et al, 2004: 221). The behavior of a individual or a group can be observed and manipulated in a simulation under circumstances that are hard to find or difficult to control in reality.

### **External validity of simulations**

An important question while using simulations in research is de question of the external validity of simulations. Concerning the required similarity between the research practice and the practice of a PPP in area development, here the starting point is used that in assessing the artificiality of simulations it’s not the question whether an experiment that uses simulations is external valid, that is: meets standards in that field, but it’s the question whether it’s sufficient valid for this specific objective (Vissers et al, 2001: 142).

### **Distinctive characteristics of the reality to be simulated**

Condition for coinciding the reality of the simulation with the reality of practice is that the characteristics of the context in which the interaction in the simulation takes place, coincides with the characteristics of the context in which the interaction in practice takes place. These characteristics are therefore the criteria

for the external validity of the simulation; a “brief” for the selection and/or design of the simulation. What characteristics serve as such is next.

In prior research the characteristics of the context in practice are listed (Bult Spiering, 2003: 44). Because of the finding in the earlier mentioned survey that all the serious conflicts were about economic feasibility, economic feasibility is added to these characteristics. So the differences of opinion in the simulation should concern this economic feasibility.

Further, based on one of the results of the above mentioned case study, namely the image that participants had of each other was dominant in the conflict becoming dysfunctional, the characteristic of stereotype images of each other was added to the list of the required characteristics of the simulation.

An overview of the characteristics is given in figure 1.

<b>Public Actors</b>	<b>Private Actors</b>	<b>Network</b>	<b>Project</b>
Societal return	Economical return	Many different actors	Final, but a long duration
Common interest	Shareholder interest	Complementary	Solution for a specific problem
Minimalise risks	Taking risks	Mutual independent	Large political and societal interest
Decision making by multiple actors	Decision making by limited actors	Large commitment	Location specific, unique and indivisible
Political market	Products- and service market	Striving for mutual gains	Many means necessary
Open system	Closed system	Long enduring non hierarchical relationships	Means are scarce
Role: policy	Role: development	Strong dynamics	Risks are large
Images are stereotype	Images are stereotype	Reputation is important	Spin-off is important
			Economic feasibility key issue

**Figure1:** *Required characteristics of the simulation of PPP in area development*

### **Selection of the simulation**

Besides the above discussed criterion of external validity, the internal validity

was a criterion in selecting the simulation, specific the possibility to control the variables.

Investigated are the possibilities of using simulations for participatory policy analyses (Roelofs, 2000, Kuit, 2002, Duke et al, 2004, Geurts et al, 2007), the possibilities of a simulation in which making decisions in a so called “Urban Decision Room” are the key issue (Van Loon et al, 2008), the so called Commons Game (Powers, 1993) and a simulation that is developed for teaching purposes at the Louvain University in Belgium (Coppens, 2008). The last one is chosen because of the controllability of the variables.

### **Elaboration of the simulation**

To give the subjects the opportunity in the simulation to construct their reality and hence to identify themselves with it, the structure of the simulation is kept open as much as possible (compare Roelofs, 2000: 77). However, because of the content of the hypothesis the context and the roles are cut towards the situation in PPP in area development. This is elaborated in role descriptions. In these role descriptions a number of differences in interests between the representatives of the municipality and project developers are incorporated together with a instruction to and how to fight during the negotiations (compare De Dreu et al, 2006: 931). These differences in interests and instruction were supposed to contribute to the emergence of a conflict, where the fight instruction was supposed to contribute to the escalation or dysfunctionality of the conflict.

The above shows in short how the simulation is structured; more important however is the subjects’ opinion. Report on that follows in the chapter called Evaluation.

## **EXPERIMENT**

### **Design**

The experiment is designed as a “pure experiment” with a “before- and after measurement” (Braster, 2000: 20, Baarda et al, 2001: 120) Besides the control of possible disturbing variables, as elaborated on before, from a point of view of internal validity there are four more requirements for pure experiments (Den Hertog, 2000: 86, 87):

- applying a control group
- setting people to conditions at random
- constraining to an exact formulated intervention
- reliable and valid measurement of the independent variables

Next is elaborated to what extent the design of the experiment did meet these

requirements.

*Applying a control group*

In a pure experiment two groups are distinguished: an experimental group that is subject to the intervention and a control group without this intervention but under the same circumstances. At first in the experimental group measurements were done on fixed points in time, supposing that they marked the moment before and after the sequence of a difference in opinion, followed by an intervention. On the same point in time during the simulation, measurements were done in the control group. Figure 2 shows this.

Point in time	$t_1$		$t_2$
Experimental group	Measurement $m_1$	Intervention	Measurement $m_2$
Controle group	Measurement $m_3$	No Intervention	Measurement $m_4$

**Figure 2:** *Design of the experiment*

*Setting people to conditions at random*

Concerning the subjects the experiment was set up in two phases; starting with test simulations with naive subjects that were organized as a preparation of the phase with professionals.

The naive subjects from the first phase were students of the Department of Real Estate & Housing of the Faculty of Architecture of the Delft University of Technology. These were at random, in fact with a dice, selected from a group of students with minimal a bachelor degree, because they were supposed to adapt quickly the roles of director of urban development or project developer.

In the second phase project managers of area development projects from municipalities as well as from project developers were used, all respondents of the survey. These subjects were at random assigned to a simulation run.

*Constraining to an exact formulated intervention*

Besides the role description for the actors in the simulation, an instruction was written for the facilitators. At the moment that they determined a strong difference in opinion during the negotiations, they were asked to execute the in the hypothesis described intervention of Confront C, De-escalate D and Explore E differences in perception by articulating three sentences:

1. Explain to each other why you value the separate functions differently (C+D)
2. Explore next how to find a solution base don that ( E)

3. NB: under no circumstances you are allowed to show your opponent your values or bottom line.

This last sentence was meant to avoid that the subjects after the intervention would put their carts completely open on the table, as happened during one of the test simulations. .

#### *Reliable and valid measurement of the independent variables*

The effect of the intervention on the level of conflict in the experiment was measured by a questionnaire that fits an assessment list for feedback after a conflict (Vrolijk, 2003: 373). At first it was planned to measure by means of triangulation by completing questionnaires by all participants. However, as appeared to be in the test simulations, a strong test effect resulted from completing the questionnaires by the subjects.

Furthermore, self full filling prophecy of the facilitators who had to select a strong difference in opinion by the subjects had to be avoided. By that they could have been a priori tended towards a decrease of the level of conflict.

Finally only the data from the lists of the assessors that were present in each run of the simulation were processed.

#### **Expectations**

Based on the ladder of escalation of Glasl (De Dreu, 2004: 48) it was expected that the level of conflict would show a more or less continuous line during the simulation to a certain point and, after the hypothetic intervention, would decrease.

The findings from the experiment are given here by means of the data of the 9 simulation runs with the professionals as subjects.

#### **Findings**

The homogeneity of the collected scores on the questions from the assessment list proved to be good. For the sum score of the first measurement a Cronbach  $\alpha$  of 0.79 was calculated and for the second measurement a Cronbach  $\alpha$  of 0.85.

Calculated for both measurements is for each pair of players their average level of conflict, after which the average score of difference between the first and second measurement could be set.

Based on the T-test on this average score of difference, without distinction between a positive or a negative cooperative climate, a decrease of the level of conflict of 5.6 could be established in the experimental group and an increase of 1.75 in the control group; so in total a decrease of 3.85 on a theoretical maximum of 70: more than 5 %. This decrease is significant;  $p < 0.001$  at a  $df = 7$ .

By means of an analysis of the frequency of the level of conflict at the moment of the first measurement it was set that the median was in between 33 and 34 of the theoretical maximum of 70. Based on that it was proposed that if the subject had a sum score of 34 or higher, he or she was contributing to a negative climate, while if he or she scored 33 or less, he or she contributed to a positive climate.

Hence 4 groups were selected from the entire dataset:

1. the one in which both subjects contributed to a positive climate;
2. the one in which the developer contributed to a positive climate and the director of urban development contributed to a negative climate;
3. the one in which the director of urban development contributed to a positive climate and the project developer to an negative climate;
4. the one in which both contributed to a negative climate.

In the groups 1, 2 and 4 a statistical test was not possible because they were too small.

After this step in the statistical analysis a question of definition emerged. Only for the group in which both players contributed to a positive climate, it can be proposed that the condition was that of a positive climate just before the intervention; respective a negative climate when both players contributed to a negative climate. A positive climate was defined as a climate in which both players score an average or less than average level of conflict; a negative climate as a climate in which both players score a more than average level of conflict. If one of both players shows a more or less than average level of conflict, is not possible to propose that there is a positive respective negative climate, because for the same reason it can be proposed that there is a negative respective positive climate. However, data show that in group 3 project developers score dominantly negative compared to directors of urban development. Based on that, the condition of group 3 is defined as a dominant negative climate.

In this group 3, based on a T-test of the average difference score per couple, a decrease of the level of conflict of 5.17 could be established in the experimental group and an increase of 1.5 in the control group; so in total a decrease of 3.67 on a theoretical maximum of 70: more than 5 %. This decrease is significant;  $p < 0.002$  at a  $df = 4$ .

## **EVALUATION**

With the subjects –the professionals- their assessment on the content of reality of the simulation was evaluated. This was assessed on average with a 6 out of a

scale of 10. Remarkable was that this score was higher when the subjects assessed the outcome of the simulation as positive than when the subjects assessed it as no outcome. The content of reality proved to score insufficiently on aspects of content, but sufficiently on the relational aspect; average, the content of reality was assessed as sufficient.

All though the simulation was set up as if there was a balance of power, it can't be excluded that the extent to which the project developers compared with the directors of urban development contributed negatively to the cooperative climate, could be explained from a difference in power; a difference in perception of their position.

Out of a qualitative analysis of the control group with students as well as professionals it appeared to be that a strong difference of opinion without the external intervention was followed or by an own intervention or no intervention at all. In the control group with professional subjects this led under the condition of a dominant negative climate remarkable enough to an average increase of the level of conflict with 1,50 while in the experimental group this led to an average decrease with 5.17. Based on that the own intervention seemed to result in an increase and the intervention by a third party to a decrease of the level of conflict, and the intervention by a third party seemed to be more effective than an own intervention. However, it can not be excluded that the intervention by a third party is possibly experienced by the subjects as an instruction that was obeyed out of courtesy, rather than as an intervention.

We would have liked to do more simulations with professionals in order to establish the effect of the external intervention in a positive climate. However this was very hard to organize because participation in the experiment was often assessed by the professionals as too aggravating.

## **CONCLUSION**

This article was a report on the experimental test of the following hypothesis: the chance on dysfunctionality of conflicts in negotiations on economic feasibility between municipalities and project developers in a Public Private Partnership, can be reduced by confrontation, de-escalation and exploration of each other differences of perception in a positive cooperative climate.

Proven was that, under the condition of a dominant negative climate, a strong intervention to prevent dysfunctionality in negotiations is to confront, de-escalate and explore differences in perception by asking why?

The central question of this article: does the intervention work in the practice of negotiations on economic feasibility in PPP projects, can therefore be, partly, answered with: in principle yes. However, this conclusion is based on the necessary limited reality of an experiment in a simulation that lacks the richness of practice. Therefore it is interesting to proceed with the research by a thorough examination of that practice and answering the question: how, in practice, disfunctionality of conflicts is prevented? : subject of a case study that is currently conducted.

In this way an unnecessary delay of projects or even breaking up relations can better be prevented and therefore losses on invested capital avoided.

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