

Tendering for co-operation Municipality-contractor

A.G. Dorée

University of Twente; School of Management Studies; Dept. Construction Engineering & Construction Process

Summary

The European Union (EU) has strongly influenced the perspective on the way public organisations (should) utilise markets. The EU directives on procurement, and the battle against cartels, resulted in extra attention towards the relationships between municipalities and construction contractors. Figures suggest that municipalities prefer limited tendering procedures, and avoid public tender procedures. This paper reports on the research into the reasons for such behavior. Analysis of municipalities' procurement and tendering practice uncovered an intricate mechanism for project control. Municipalities implicitly use the prospect of future assignments to restrain contractors' misbehaviour. By doing so municipalities reduce uncertainties and risks. Contractors' demeanour becomes more flexible, co-operative and quality orientated because of this mechanism. Through the use of this mechanism the relationship municipality-contractor has developed to a kind of co-makership relation. Bending the procurement and tendering practice towards more public tendering is expected to make project control more troublesome.

1 Introduction

Over the last decade the relationships and interactions between municipalities and civil engineering contractors have become a delicate matter. New visions on the task and functioning of public agencies have emerged, more attention is drawn to fairness of public conduct and to the integrity of civil servants, and last but not least the appreciation of the co-ordinating role of the marketplace has increased. This has resulted in policies for privatisation, which state intentions of less government and more market, in initiatives for reducing and slimming public agencies, and in attempts for making these agencies operate in a more businesslike way. These developments, supplemented by the introduction of the EU procurement directives, have compelled politicians and policy makers to take more interest in the procurement of civil engineering works, and made them more critical towards the current procurement practice of municipalities.

In the debate on what would be the best tendering and procurement practices, a controversy arose. In a decade of growing faith in the functioning of markets, the municipalities appeared to greatly prefer commissioning the works to a limited number of contractors. In the period between 1991 and 1993 over 65 percent of the projects, which equals 45 percent of turn-over, was commissioned after negotiation with a single contractor. Public tender procedures were seldom used (in 7% of projects;

17% of turn-over). Of all public agencies the municipalities scored the lowest on percentage of work procured through public tendering procedure. For the politicians and policy makers who plead for more use of the market, these figures were hard to understand and to explain. So, the municipality officials had some explaining to do on matters of procurement, and on their relationships and interactions with civil engineering contractors: *Given the benefits of the market, why is the public tendering procedure so deliberately avoided by the municipalities?* The research described in this paper focused on that question.

The next section, (*research project in retrospective*), describes the history of the research project. The original aims and propositions are explained and their development towards a theoretical framework as well as a tentative perspective on the market relationship between municipalities and construction contractors. Section three shows a snapshot of the tendering and procurement practice of the Dutch municipalities. The figures and graphics are based on data gathered by the WAC Central Bureau. Section four reaches to the core of the empirical research. This section deals with the cooperation between municipalities and civil engineering works contractors. The research findings are confronted with the developed perspective (section 2). Section five gives a summary of the conclusions. The sixth and last section reflects on the consequences of the research findings for the controversy over best tendering practice.

2 Research Project in Retrospective

The research project started in autumn 1991. In that period several contraction out and privatisation policies were implemented. Municipalities were down-sizing in staff. Until then the municipalities did most of their design work within their own organisation ("in house design"). This was expected to change due to the "down sizing policies". The design work was no longer seen as a core-business, so design activities formerly performed by the municipalities would be commissioned from the market sector (in relation to this development see Brenk 1988, van der Krogt et al. 1986, Trait d'Union 1988, SGBO 1988 and several internal RWS reports 1984-1991). In the same period construction contractors became aware of the necessity to transform their re-active position on the construction market to a more pro-active position. The fragmentation of the design and construction was seen as an obstacle for innovation in construction products as well as construction technology. Several publications argued that integration of design and construction, bringing the responsibility for these phases under one single point, would overcome this stagnation in innovation (this dates back to the early sixties: Emmerson 1962; Banwell 1964; Bowley 1966). The turn-key, design/build and design/construct, were expected to give a positive contribution to the performance of the construction industry as a whole (compared to the traditional design-bid-build procurement systems). [Haselhoff et al. 1988; van Waarden 1989; Van der Berg 1990; Mischofsky 1991]. So in the early nineties, municipalities were expected on the one hand to commission more design tasks, and on the other hand construction contractors were exploring the possibilities of forward integration towards more design-construct like procurement methods. In 1991, representatives of the professional bodies of the managers of the municipalities and of the construction contractors met and founded a

research project the investigate the possibilities of design/construct procurement of construction works.

In the first phase of the research project a survey under municipalities was conducted. The aim was to verify the propositions concerning the contracting out of design tasks and the possibilities for design-construct procurement. Early 1992 some 280 questionnaires were sent out to municipalities, 89 responded. The questionnaires confirmed the propositions. Municipalities expected down-sizing and saw the possibilities of design-construct procurement.

In the same year a series of interviews were undertaken. These interviews showed the same positive attitude towards design-construct. However, these interviews also showed something else. The number of design-construct projects was very small (less then 2 in 100) and was not expected to increase. This seemed a paradox. Although the possibilities of design-construct procurement was acknowledged, although more design tasks were commissioned out, the amount of design-construct projects was not expected to grow. The main factors impeding the growth of design/construct procurement were related to procurement and tendering policies, policies based on lack of experience with design/construct and sensitivities. The normal procurement routine was heavily biased towards design-bid-build; The city councils were suspicious of procurement systems which implicated more contractors' involvement. More contractors' involvement was seen as unfavourable in terms of corruption probability. The views of local politicians on procurement procedures, and on the role of the contractor, seemed the main obstacle for the application of design/construct procurement. This hesitant attitude was not shared by the municipalities' civil servants and by construction contractors. In their opinion the politicians' views were based on false propositions. This brought the propositions behind the tendering and procurement into the focus of the research effort. Coincidentally some corruption affairs led to a nationwide discussion on the procurement practice of municipalities. This alertness was further increased by investigations with showed that municipalities had, in relation to other public organisations, the lowest percentage of works procured through public tendering procedures (see table 1). Municipalities had some explaining to do: What reasons were there to avoid public open tendering procedures? Why did they frequently prefer to work with a select number of construction contractors?

Table 1. Tender practice of diverse clients (period 1990–1994).

	turn-over (min)	pb (%)	sel (%)	lim (%)	projects (no)	pb (%)	sel (%)	lim (%)
min. traffic & transportation	2583	75	11	13	2592	25	30	45
other centr government	840	58	28	14	2964	21	24	55
provinces	1176	50	27	24	2956	17	25	58
municipalities	8415	20	38	42	34345	7	29	64
water authorities	463	55	19	27	1444	14	22	64
main contractors	1922	0	62	38	17407	0	42	58
private sector clients	3833	0	49	51	35452	0	33	67
total ('90-'94)	19231	26	38	37	97160	5	32	63

pb. = public tender; sel.= selective tender; lim. = limited tender

3 Municipalities' Tendering Practice

In the Netherlands there are about 625 to 640 municipalities (this number changes from year to years through merging). It is expected that the municipalities spend some four billion Dutch guilders a year on construction works over the next four years, which stands for 47 percent of public spending, and 30 percent of total spending, in this sector of the construction industry. To get a more detailed picture of the municipalities procurement practice a database is used. This database was kindly provided by the WAC Centraal Bureau BV. The WAC collect information on projects (mainly road construction). Contractors in this field inform the WAC each time they put in a bid for a job. In the period 1991–1993 the WAC was informed some 55,000 times for a total of 19,265 projects (project with municipalities as client). The average turn-over per year was 1.6 billion guilders. This database was used to separate the three main tendering procedures (see table 2).

Table 2. Breakdown of tendering practice.

	projects (number)	turn-over (in millions dfl)	municipalities
open tendering	7%	1339	19%
selective tendering	26%	4984	36%
limited tendering	67%	12942	45%
totals		19265	
			914
			1727
			2195
			245
			556
			623
			4836
			639

More detailed analysis showed:

- the average municipality spend 7.5 million guilders on 30.1 projects; therefor 8.1 contractors were involved. Of these 30.1 projects, 2.1 were open tendered, 7.8 were selective tendered and 20.3 were limited tendered.
- 2001 contractors applied for work in this sector. 1277 contractors got one or more contracts awarded.
- 61 percent of the municipalities did not once in the three year period procure via open tendering procedure.
- the average project size was 251,000 guilders (OT: 682 kfl; ST:346 kfl; LT:170 kfl). fifty-two percent of the projects was smaller than 100,000 guilders.
- only 8 out of 19265 projects were larger than 10 million guilders (approx. 1 in 2400 projects). So, more than 99.999 percent of the projects stay below the EU-procurement directives' threshold of 5 million ECU. This threshold forces the open tendering procedure. Below this threshold municipalities are free to select the tendering procedure freely.
- the average open tender procedure counted 16.2 contenders, the average selective tender 3.8.

The figures justify the statement that municipalities preferred limited tendering procedures and granted contracts to a limited number of selected contractors.

4 Co-operation with Contractors

To get insight into the reasoning behind tendering procedure selection, interviews were carried out in the second half of 1992. These interviews revealed an atmosphere of co-operation between municipalities and contractors which was opposite to the expectations formed through literature surveys. Publications on procurement and on client-contractor relationships presented a rather harsh picture of the construction market and of the way the players on this market had to co-operate (Haselhoff et al. 1988; Moshini et al. 1989; several publications in Fenn et al 1992; see also Dorée 1994). The attitudes of municipalities and contractors towards each other were far less antagonistic, opposing, hostile and conflicting than were predicted by literature.

Table 3. Municipality-contractor relationship.

	expected	observed
• mechanism of allocation	market	prior experience
• competition	price	quality and conduct
• tendering	open	selected and limited
• project coalitions	ad hoc	deliberate choice
• horizon	project delivery	beyond project delivery
• objective	profit per project	satisfied client
• practive	competitive/legalistic	co-operative/flexible
• basic attitude	mistrust	mutual trust
• atmosphere	adverse	open/harmonic
• contacts	ad hoc	continuous
• entry barriers	low	high

The difference between the expected relationship and the observed relationship was striking. To verify this observation Van Heteren carried out 35 intensive structured interviews. Furthermore for 117 projects the co-operation within the project was evaluated. The results of this investigations supported the findings of the explorative in-depth interviews. So the question was, what makes the relationship municipality-contractor so special, and how does this relation differ from other client-contractor relationships? It was expected that the answers to this question would shed more light on the tendering preference of the municipalities. To get theoretical footing the relationship municipality-contractor was analysed from the perspective of three mainstream theories: the rational contingency paradigm, the transaction cost economics paradigm and the network paradigm. These paradigms represent subsequently: co-ordination of activities through hierarchy, through market and through inter-organisational networks. But before we get into that, let us first of all look at some results of the empirical research.

Contractors' continuity uncertainties: Compared to other businesses, construction contractors face problems a consequences of the characteristics of the product. Three characteristics are of main importance in this context: The scale of the product, the uniqueness of the product and the location of the product. The production location is in terms of production lay-out, compared to other indus-

tries, a dislocation. Not the products, but the production apparatus is distributed. The three given characteristics make it impossible for contractors to produce on stock. Therefore, to buffer fluctuations in assignments contractors have to maintain a pending workload. To reduce uncertainties about the future workload, and so reduce the uncertainties about continuity, contractors try to preserve relationships with clients who are expected to generate projects in the future. Since it is impossible to lay products on stock, contractors try to establish a stock of clients. Obtaining a kind of preferred supplier status at a number of clients, constitute a relatively certain future workload and turn-over. These clients should be nurtured. The 35 structured interviews of constructions contractors executives confirmed this argumentation. The interviews showed that contractors strive for more continuous relationships with municipalities, and treat the *regular* clients differently from the *once in a while* client (especially more co-operative less legalistic and less opportunistic).

Clients' contracting uncertainties: Since procurement and tendering concern contracting problems, the transaction cost economics paradigm (tce) proved to be the best suited for the description and analysis of this procurement problem. The characteristics of the construction market fit well to the tce framework (as given by Williamson 1985). tce acknowledges that in *make or buy* decisions production costs are not the only costs to be considered. Contracting-out introduces all kinds of transaction costs. These costs are necessary in order to find a contract party, to reach an agreement, to draft a contract, and to enforce the contract. Furthermore, although contracts are drafted to reduce risks, they also introduce risks. What if the contract turns out to be imperfect, or if the specifications have to be changed? In such cases elements of the original agreement have to be renegotiated. This renegotiating differs from negotiation in the pre-contract period because the post-contract renegotiation takes place in a *small numbers* bidding situation. An ill fated (devious) contractor may exploit this situation (in tce terms this is called *opportunistic* behaviour). Knowing he is the only person with whom negotiations are conducted, he can assess the cost and problems the client will have to bear in case the original agreement is terminated during construction. This puts the contractor in a strong bargaining position. Correcting contract imperfections or effecting change orders may come dear. Another risk for the client is formed by the so-called *hit and run* tactics, which happens when a contractor chooses to discard the contract terms, cuts corners, expecting this malpractice to stay uncovered until he has collected his fee, and is out of reach (also a show of *opportunistic* behavior). Remember, the contract is not the final product. A contract is a formal promise about a postponed delivery. If all seems well at the time the agreement is reached, the contract is drafted and signed; nevertheless that doesn't mean that all will certainly go well during execution of the contract. Since views, insights and attitudes change in time, contracts implicate risks.

Interviews municipality officials: Conducted interviews showed that practitioners, the officials of municipalities, are very much aware of the uncertainties and risks hidden in the use of contracts. Their main concern is project control and therefore control over the contractors' *opportunistic* behavior. Field investigation further showed the use of a mechanism to control this opportunistic behavior: the municipalities directed the contractors' view, beyond project delivery, towards the future. If the contractor delivered good quality work, showed a professional attitude and flexible co-operation, he would be considered as a potential candidate for future projects. This mechanism was predicted by the tce framework as a safeguard: "*introduce trading regularities that support and*

signal continuity intentions" [Williamson 1985:34]. These signals are expected to reduce the tendency to opportunistic behavior, because such behaviour may induce an end to a presupposed continuous trading/business relationship (you might lose a client). Proverbially spoken: It seemed clients steered contractors through the projects by using future projects as carrots, instead of using the threat of legal repercussions as sticks. By using this mechanism the municipalities were able to reduce the uncertainties and risks inherent in contracting out situations. The contractors, aware of the clients' memory, are driven to do more than just fulfil the contracts' specifications. Since the client recollects former experiences with contractors before procuring and commissioning new projects, it pays for the contractor to put in some extra effort. The primary contractors' objective shifts from fulfilling the contract to satisfying the client. So, through this mechanism the municipalities are more in control than without it.

Furthermore, the utilisation of the safeguarding mechanism induces a situation in which limited tendering procedures are favoured and work is repeatedly commissioned to familiar contractors; A pattern of recurrent transactions emerges. The interactions and relationships of clients and contractors becomes more continuous, more stable and more exclusive. This takes the client-contractor relationship into the realm of the network paradigm. Accordingly the research was re-directed to look more closely into client-contractor interactions to seek and evaluate network characteristics. Project evaluations were conducted to verify the utilisation of this safeguarding mechanism. The contractors sensitivity for this mechanism was already substantiated by the 35 structured in-depth interviews of contractors' executives. The effectiveness of the safeguarding mechanism compared to legal action is tested in yet another concise survey.

Project-evaluations: To get a more in-depth insight into the interaction and co-operation client-contractor on projects, 117 projects of 117 municipalities were evaluated. Data was gathered from the municipalities as well as from the contractor. The project managers of the municipalities were asked several questions about the characteristics of the project, and the performance of the contractor. To measure interaction and co-operation the project managers were asked to react on 50 statements concerning different aspects of co-operation. They were asked to state a percentage of agreement: absolute agreement corresponding with 100 percent, a score of 0 percent corresponding with no agreement at all. The scores on the 50 statements were clustered to 12 variables, 6 variables referring to aspects of lack of co-operation, and 6 referring to positive aspects of co-operation. The 117 cases were ranked on a value of co-operation, and clustered into 7 compartments, numbered I-VII. Compartment I contains the 16 projects that scored lowest on client-contractor co-operation. Compartment VII the 16 projects that scored highest (see Figure 1).

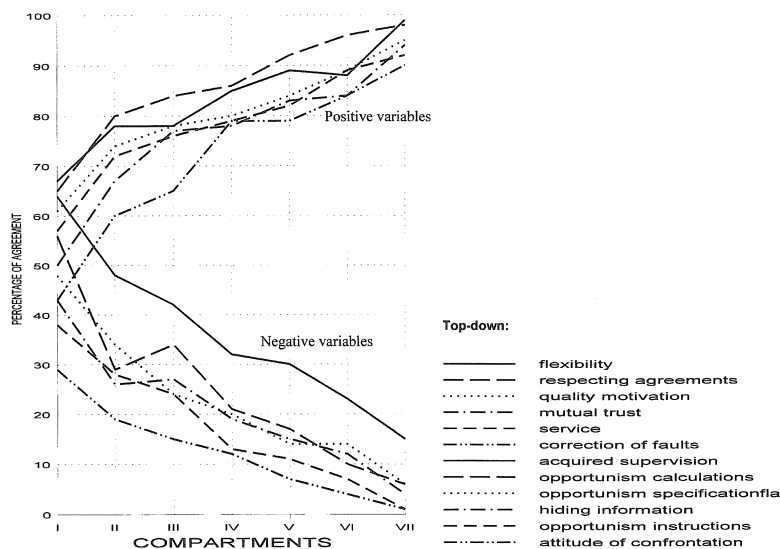


Fig. 1. Co-operation variables across compartments.

The project evaluations showed several aspects of the relationship municipality-construction contractor:

- the client-contractor relationship is more co-operative than expected (verification of the observed nature of co-operation);
- the relationship municipalities-contractors reveal characteristics of co-makership;
- the result paint a consistent picture (absolute correlation of the variables score in the interval [0.36 ; 0.80]; and 99.99 percent significant);
- client-contractor relationships are continuous: only 5 to 8 percent of projects is performed in a new client-contractor combination; more than half of the projects is performed in a combination that has a duration of over 10 years;
- first time client-contractor combinations score on average the lowest on co-operation.
- significant correlation of the expectancy of future work scores and the co-operation variables (esp. *mutual trust*);
- contractors see performance their on quality and co-operation important to ensure the likelihood of future assignments;
- the results of the project evaluations confirmed the use of this mechanism, where the client uses the carrot of future work to control contractors opportunistic behavior, in stead of the stick of legal actions.

Corrective effectiveness of the safeguarding mechanism: To test the effectiveness of this *carrot*-mechanism, another 50 municipality officials were contacted to respond on a concise questionnaire. This questionnaire was built around the corrective use of the carrot-mechanism. It proposed the use of carrot-signals in a corrective fashion, as an implicit warning of exclusion of assignments in the future: to make clear to the contractor that he was placing his preferred supplier position at stake. The results of this investigation were:

- post-contractual re-negotiation was a familiar phenomenon to 96 percent of the interviewed;
- contractors' opportunistic behaviour was a familiar phenomenon to 92 percent;
- 70 percent saw the described signals as *very* effective;
- 76 percent perceived the signals as far more effective than legal actions.

The results of this survey confirm the effectiveness of the *carrot* mechanism. A number of respondents noted that clients should be very careful in using these corrective signals. As such signals are given more often, they lose their strength. Also these signals, may be perceived as playing hard-ball, may destroy mutual trust and a co-operative atmosphere, and may toughen the situation.

5 Conclusions

The empirical data support the theoretical propositions formulated on the notions of the transaction cost paradigm. The first field investigations, and the matching of the findings with the transaction cost economics paradigm, resulted in a perspective on client-contractor relationships which can be summarised in three statements:

- the building process is performed by a temporary coalition organisation. Given the characteristics of products and the structure of the construction industry this type of organisation is inescapable. This statement is not developed in this paper (for elaboration of this statement see Dorée 1995);
- contracting-out introduces uncertainties and risks (esp. risks of opportunism);
- risks are reduced by commissioning projects to familiar contractors (into the network realm).

The results of the research project show the problematic nature of the construction market, and the strategies adopted by the municipalities to overcome this problem. The data gathered by the empirical research supported the assumption on the use of the safeguarding mechanism. In their effort to gain more control over separate projects, municipalities choose to reward the performance of the contractors and their flexibility with new assignments. Therefore they prefer the selective and limited tendering procedures, and avoid the open public tendering procedures. Subsequently recurrent transactions alter the relationships between the municipalities and contractors from just ad-hoc contracting parties towards *co-makership*.

Now it is clear why municipalities prefer assigning work to familiar contractors. Their tendering practice is aimed at enforcing co-operation in the projects. The implicit relation between contractors' performance and the awarding of future assignments supplies a strong control mechanism on contractors' opportunism. A smart contractor looks beyond the delivery of a specific project. More public tendering would weaken this control mechanism, since the work is not awarded on the basis of past performance.

6 Discussion

The described mechanism has strong implications for the selection of tendering procedures. Public tendering procedures depend on the market for selecting a contractor. Normally, price competition decides which contender gets the job. Public tendering has no memory. It is unaware of contractors' performance on past projects. For rewarding a good job with new assignments, the specific selection of contractors must be in the hands of the client himself. The safeguarding mechanism requires the client to be in control of the selection of the contractor, otherwise the carrot will not be convincing. This is best established by the selective and limited tendering procedure. Broad utilisation of the *carrot*-mechanism must lead to a construction market dominated by limited tendering procedures. The outcome of this study raises questions about the adequacy of the European procurement directives, especially about the emphasis on open public tendering combined with price competition. It appears that the underlying views on the functioning of markets are more idealistic than realistic. The directives ignore the problematical nature of transactions in the field of construction and building, and disregard the value of the procurement (tendering) selection as an effective tool in project control.

Intermezzo: Why not use tendering procedures in which the client pre-selects a small number of qualified contractors, and then exercises price competition to make the final decision? In that case you use the safeguarding mechanism as well as the market mechanism. The answer is that this competition between a selected set of contenders, may turn out entirely non-competitive. The main thought behind the market mechanism as a price reducing mechanism is based on the assumption of large numbers competition. Small numbers competition may induce price agreements. The competitors set prices high and divide the workload. In such cases there is nothing the client can do, he cannot negotiate, has to accept the lowest bid, and to commission the work. So instead of being better off by using both mechanisms, the client can only hope and pray that the competitors don't succeed in reaching an agreement between themselves. Here neither the market, nor the client is in control. This enforced competition between selecting contenders might be the most fallible tendering procedure.

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