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BJEIRMI, B., BEGG, P. and SCOTT, J.

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PARTNERING ISSUES: THE EVALUATION OF LOCAL AUTHORITY ADOPTION OF PARTNERING IN SCOTLAND

Bassam Bjeirmi,¹ Paul Begg and Jonathan Scott

The Robert Gordon University, The Scott Sutherland School of Architecture and Built Environment, Garthdee Road, Aberdeen, AB107QB, UK

This paper focuses on the practical implementation of partnering arrangements within local authorities. The construction industry is the subject of ongoing criticism for poor performance on all types of construction throughout the construction process. Analysis of the construction industry highlights that historically there has been significant fragmentation and a poor record in terms of quality, waste, financial claims, safety and efficiency. Arguably, this is caused by the lack of communication throughout the construction process. This has resulted in calls for changes to the procurement methods and for the adoption of new processes that aim to improve construction performance through communication. Partnering is one such procurement method that claims to aid discourse, increase productivity, lower costs and provide stability and open accountability for each stage of the construction process. It offers an alternative to the widely used traditional procurement process. This paper investigates the issues associated with the implementation of partnering agreements within local authorities in Scotland. After discussing the reasons behind the development of partnering arrangements and the expected benefits, it presents a number of issues identified as a result of a research project into several partnering projects. These issues are prevalent during all the stages of the construction process with one of the main issues being the process of setting up the partnering arrangement including the criteria used for the selection of partners. Other issues include the role and the attributes of the partnering facilitator, the effect on project design, social training required and the role of the client and his/her quantity surveyor within the partnering arrangement. These issues have affected the success of the partnering arrangement.

Keywords: contractor selection, facilitator, partnering, project management, value management.

INTRODUCTION

Construction industry literature has been exhausted with investigative reviews and research on the state of the construction industry and its processes. The remit for the Simon report in 1944 was to produce 'recommendations to ensure that building organization shall be so improved as to provide the best possible service to the nation while maintaining an efficient and prosperous industry'. Subsequent reports such as "Constructing the Team" by Sir Michael Latham (1994) and "Rethinking Construction" by Sir John Egan (1998) had similar remits. Investigation and analysis of the traditional methods of construction describe a process that is often fragmented, of low quality, high waste and high claims (NAO 2001). Consequently, the

¹ b.bjeirmi@rgu.ac.uk

construction industry consistently under-performs on issues such as cost, quality, value, time and function (Fisher and Green 2001).

One of the conclusions of the 1944 Simon Report was the need for 'complete collaboration between building owner and contractor'. This is a repeating theme in subsequent reports resulting in recommendations for the adoption of new processes that, it is claimed, will improve the performance of the industry (Egan 1998). It is suggested that improved collaboration can be realized through partnering and, consequently, there has been increased interest in this form of procurement that has been seen by many as an important way of improving construction/project performance. Benefits from partnering are claimed by Sanders and Moore (1992), Abudayyeh (1994), ECI (1997), Black *et al.* (2000) and Drexler and Larson (2000) and NAO (2001). In particular, Abudayyeh (1994) notes that partnering offers a 'winwin' scenario for the client and contractor by "[improving] problem solving and fostering synergistic teamwork".

There is no doubt that in certain situations partnering has been very effective in developing better working relations and in producing good quality projects, particularly in the form of strategic partnering. Alternatively, on other occasions, it has failed to be an improving factor and has produced lower value projects resulting in higher costs. This dichotomy is highlighted by Fisher and Green (2001) and is echoed by Bresnen and Marshall (2000) and Cartlidge (2002).

Public bodies are constrained by the necessity to be transparently accountable for the expenditure of taxpayers' money (ECI 1997). Consequently, there are administrative procedures where committees approve estimates and tenders and any potential overspend during construction requires to be reported and explained. A traditional tendering system assists in meeting these criteria by avoiding commercial arrangements that might be seen to be open to possible corruption. Against such a background, it is likely that the implementation of partnering by a public body, whose procurement has historically been pursued along traditional lines, would potentially raise more issues in relation to partnering implementation than within the private sector.

Ng *et al.* (2002) refer to only two notable pieces of literature on partnering in the public sector and these suggest that, paradoxically, administrative procedures in this sector designed for accountability often work against open relationships with contractors. This can jeopardize the partnering objectives originally established for the project, which would generally emphasize open accountability.

Additionally, there is a lack of information describing the issues involved in the intricate, day-to-day management of partnering arrangements. In particular, Fisher and Green (2001) note that there is little benchmarking of the process in order to understand the relative effectiveness of different strategies.

The aim of this paper is to identify the main issues associated with the implementation of partnering arrangements within local authorities and evaluate them against the theory as determined from the literature. This will be achieved by an investigative study into a series of projects to identify issues throughout the process. Although these issues have not resulted in any formal challenging of value or accountability in any of the projects studied, they were consistently present and constitute a significant debate in relation to partnering in local authorities.

RESEARCH METHODOLOGY

After an initial literature search and a pilot study investigation, it became clear that there were a number of issues that affected partnering relationships in the local authority environment. These issues involved contractor selection procedures, training and facilitation, the effect on the quality of design, dealing with changes to the work and the roles of key parties. A series of interviews were then conducted to investigate how the issues affected specific projects. A cross-case analysis was then used to compare each case studied.

The data reported here is derived from the investigation of six case studies of relatively large-scale partnering projects undertaken by experienced local authority clients. Three of these projects were already completed, two were ongoing at the time of the investigation, and the last was in its early phases where negotiation to reach an Agreed Maximum Price (AMP) was still in progress. All were building projects with a high degree of complexity and ranged from 2 to18 million pounds. Seven professionals were interviewed consisting of two clients, three architects and two facilitators.

The evaluation and appraisal of the issues is based on qualitative data. In each case, a semi-structured interview based around a number of key themes was carried out with each of the team members. Interviews were conducted over a six-month period and covered all aspects of initiating and implementing the partnering projects.

All questions were open-ended questions, which allowed for further elaboration and discussions. The resultant interview transcripts were coded manually to capture data on common themes, issues, unique circumstances and events across the cases.

PROBLEMATIC ISSUES IN PROJECT PARTNERING

An analysis of all projects was carried out to identify the main issues facing project partnering and evaluate how these issues affected the partnering arrangement in local government construction projects. A total of five categories of issues were identified as follows:

- Selection of the partnering contractor.
- Partnering training.
- Pre-construction issues.
- Construction phase issues.
- Key roles.

Selection of the partnering contractor

Black *et al.* (2000) highlight a report which notes that "Partnering implies selection (of partners) on the basis of attitude to team-working, ability to innovate and to offer efficient solutions". However, some commentators suggest that partnering does not need to rely solely on openness, good communication and teamwork to produce value but may also need an element of competition (NAO 2001). Additionally, Baxendale and Greaves (1997) argue that competition and partnering are compatible in certain circumstances.

On the other hand, Ng *et al.*'s (2002) findings state that the use of any competitive tendering arrangement was the origin for many subsequent problematic issues including the level of commitment of stakeholders to the project partnering arrangement. In the cases that he studied, the profit margin was very low and cost

control during the project was difficult with regard to defending the margin. As a result, the contractors would systematically change their priorities from the project partnering arrangement to a "win–lose" profit protection attitude (Ng *et al.* 2002).

Further information on the selection of partners in local authority scenarios is provided by ECI (1997). This suggests that it should be based on compatibility of the partners, their experiences, reputation and past relations. Different partnering arrangements that can be used by the public sector, which are tailored to avoid contravening the anti-competitive legislation, are highlighted. Much of the literature advocates the selection of the main contractor on an analysis, which addresses both the 'hard' issues (for example, finance) and the 'soft' issues (for example, environmental considerations) (NAO 2001; OGC 2003).

However, local authorities must justify expenditure of taxpayer's money, which means that they must open up construction work to competitive tender on a projectby-project basis and ensure that the main contractor is bound by contract. This does not inherently encourage long-term relationships as advocated by CIC (2005). Local authorities can also be restricted by EC anti-competitive rules. The result is that the extent to which they can use one contractor, and therefore partnering in its pure form, on a series of projects without intervening competition, is limited.

In the cases studied, a selection process had been designed which ensures that the necessary transparency is retained. The contractors who initially respond to an advertisement inviting interest are required to complete questionnaires on commercial standing, specific experience and business methods, with the latter specifically relating to attitudes to partnering. The form is required to comply with EU rules for projects over £3.6 million. A small number of contractors then continue to the next stage of the selection process.

This second stage is based on a selection interview model developed by the Scottish Executive (2004) where the contractor answers questions that are weighted in terms of price and quality. These weightings can be adjusted as appropriate but were generally 60/40 in relation to price/quality respectively in the cases studied (price is based on the contractor's on-costs submitted for the prime costs of construction). Each contractor's answers are scored by a selection panel, which is made up of client and consultant team representatives. The scores are analysed by software that rates each contractor, resulting in a preferred contractor. The process retains transparency and provides a degree of competition on on-cost, but not on the prime cost of the work.

The third stage of the process is negotiation to agree the Agreed Maximum Price (AMP). This stage is potentially adversarial since it involves costing the work to set this price. In the absence of significant changes to the project, the contractor is paid on a cost plus basis until this maximum is reached, but not beyond. The contractor and client fulfil the formal contractual requirements by concluding a JCT Prime Cost Contract with sharing arrangements for savings.

There is an issue here as to whether this is partnering in the true sense, as agreeing the AMP has the potential to become an adversarial process that does not seem to encourage the trust and confidence that, the literature emphasizes, is required.

Furthermore, the AMP depends to a substantial degree on subcontractors and suppliers' quotations. This means that the competitive element has effectively been moved down the supply chain to be managed by the main contractor. This has some similarities to management contracting where the management contractor receives a

percentage fee from a client for pre-construction advice services and then for managing works contractors on site. Is there a necessity, therefore, to spend time and money on the complicated contractor selection process, training, the provision of a facilitator, negotiations, etc., when the competitive selection of a management contractor might be more appropriate?

In some situations, the selection process is not as formal as that described above and ranges from negotiations with a number of contractors over issues of cost and partnering attitudes, to the direct appointment of a known contractor based on historical performance where time is a critical constraint. Whilst, as Cartlidge (2002) highlights, this indicates that partnering is an approach that is flexible to suit specific circumstances, it also raises issues of transparency and accountability.

Partnering training

Cartlidge (2002) notes that trust is not found in abundance in the construction industry but it is crucial within and between partnering organizations for the process to work (ECI 1997). NAO (2001) offers a number of practical case studies, perhaps over emphasizing the positive aspects of partnering, but nevertheless emphasizing the need for social training for staff. All the literature states that partnering is a collaborative agreement based on the need for communication and trust. In an industry where this is not prevalent (Latham 1994; Egan 1998), this requires training. NAO (2001) and ECI (1997) suggest training methods that start with the client but should cover all members involved in partnering. Training workshops are essential and should be used throughout the project. These should focus both on teamwork, communication and trust and also on the practical needs of construction projects, such as conflict resolution and the need for measurement of progress (ECI 1997; Critchlow 1998). The theory is that over time trust will build up between parties, particularly with strategic partnering but also with project partnering. Bresnen and Marshall (2000) caution that to suggest partnering will change attitude in the construction industry, however, is too simplistic.

The training in the cases studied involved a single generic workshop for the Architectural Services Department and a few invited contractors that took place around ten years ago. It was organized as a result of the Latham recommendations and was mainly an information session on the principles of partnering and its benefits. Beyond this, there have been no formal training sessions. Facilitators had not received any specific training. On individual projects, a partnering workshop is held after agreement of the AMP and all the parties, including the client, attend this. There is a case for partnering workshops prior to agreeing the AMP since this is a period of negotiation that has the potential to become adversarial. However, there is an issue with the fact that the contractor has not been formally appointed prior to agreeing the AMP and therefore an event that directly implies that he has been appointed is problematic.

The training in the projects studied did not appear to continue after the initial workshop and the important position of facilitator seemed to be neglected in relation to training. In general, training did not seem to comply with the recommendations from the theory. Organizations need to use existing staff and all the participants in the above cases had extensive experience of traditional, adversarial project management. There is an important issue, therefore, concerning how the necessary attitudes for dealing with the traditional adversarial system of project administration could be transformed into attitudes appropriate for partnering with a single workshop.

Pre-construction issues

In 1962, the Emmerson Report into the construction industry advised that 'in no other important industry is the responsibility for design so far removed from the responsibility for production'. All the literature suggests that there will be increased quality in the overall design of a project that uses partnering. This stems from the early integration of the design process into the partnering arrangement, ensuring that design is not a separate exercise done in isolation. Fisher and Green (2001) suggest that partnering leads to better innovation in particular. This stems from the input from the various partners into the assessment of the design, particularly in relation to buildability, during the early stages of the process. This minimizes design changes during the construction of the project, which can lead to significant cost increases (NAO 2001). Cartlidge (2002) emphasizes that partnering increases the amount, reliability and speed of information that can inform a design thereby avoiding changes later in the construction phases. This is particularly the case with information from parties further down the supply chain.

ECI (1997) also notes that improved quality in the finished product results from partnering, which is achieved through quality management systems, which all the literature encourages throughout the project. However, a partnering team that is committed to a particular design should not significantly change this design but concentrate on the problem solving aspect of how to construct it. A contractor involved in a partnering scheme, therefore, should not unilaterally change whole aspects of a design on the basis of reducing risk or finance (ECI 1997).

The process of agreeing the AMP, which involves the contractor's quantity surveyor, the client and his/her quantity surveyor and the designers, raises the important and sensitive issues in relation to design. Ostensibly, the task is to ensure that the client's requirements are met within the available budget. However, clients and designers perceive that the process drives inevitably towards paying premium rates for the simplest building to construct – a box in other words. Negotiations are often carried out using costs from previous projects as a basis, but clients have the perception that where elements of the new project are different, the costs of these elements generally seem to be added to and not substituted for the previous costs. Also both designers and clients tend to feel that the pressure is on them to defend the design or to accept costcutting design changes, which may impair the operational effectiveness of the facility, rather than on the contractor to defend his prices. The process can become one where the contractor simply advises continually that the design is too expensive and asks for cheaper alternatives. The contractor has a perceived interest in maximizing the AMP so confidence in the system depends on careful scrutinization of costs by the client's quantity surveyor. The process can be 'tense', although it is generally without animosity, and it needs strong input from the client's quantity surveyor and the facilitator.

There is also an issue concerning the level to which the design requires to be complete by the negotiation stage. For maximum benefit, the contractor's input to the design should be at an early stage. However, this is not realistically possible before the AMP has been fixed because the contractor has not been formally appointed. The need to fix the AMP requires that there is sufficient design to do this effectively and a value of 80% complete was the quoted figure for the cases studied. Failure to do this leads to a situation where later design requirements will result in increases in the AMP and potential cost overruns. This again tends to undermine the value of partnering since improving the quality of design; meeting the budget and reducing the period required for the construction process are not necessarily mutually compatible.

There is also a perception that the quantity surveyors involved in the process of fixing the AMP are driving design decisions on the basis of finance and time, with the result that the designer's authority is being reduced without diminishing his/her responsibility. The perceived necessity for speed can lead to poorly thought-out design decisions, which cause consequential problems and are therefore not necessarily more cost-effective in the long run.

There were clearly significant and sensitive issues in the pre-construction phases of the projects studied which do not sit comfortably with the theory of partnering, particularly in relation to design and the control of cost.

Construction phase issues

The partnering literature focuses on the selection phase of construction, which is admittedly the key area, being the foundation of any partnering arrangement. The ECI (1997) explains, however, that after the selection process is completed it is important to keep the process running. The OGC (2003) adds that all methods of communication, risks and evaluation of work during construction should be assigned prior to construction beginning.

Egan (1998) noted that the lack of quantitative information during construction was a major factor that affected the success of future projects. Workshops should be held by the facilitator regularly to keep up to date on the performance of the project in relation to the objectives agreed to prior to the start of construction in order to show whether improvements could be made and to meet to avoid any disputes. During the construction process, all members are encouraged to be honest and forthright with any issues to avoid future conflict (ECI 1997). These issues should be summarized in a monthly performance evaluation report.

The NAO (2001) highlight that the construction phase is essential to the success of a project and the appropriate project management framework is required. This, again, needs to be clearly set out prior to the commencement of construction (NAO 2001). The lack of clear roles and responsibilities in a partnering arrangement could lead to confusion and projects being late or over budget (NAO 2001).

In general, clients perceived that there were fewer problems with the practical side of construction in partnering projects and that those which did arise were easier to resolve. Quality was perceived to be better with respect to meeting the client's requirements but there were still issues with respect to budget control, programming, risks, financial responsibility for design/specification changes and use of contingency allowances.

It must be emphasized that the AMP is not a fixed sum. Because the design is not complete when the AMP is agreed and ideas are still being developed as the project proceeds, the AMP can change. There is a clear perception with clients and designers that risk generally lies with the client with the result that the AMP always increases and the project programme is always extended. There is an issue concerning how this integrates with the spirit of partnering where the emphasis should be on the parties to find solutions jointly to minimize cost. There is also an issue with defining whether changes to the project or the occurrence of risk events should result in changes to the AMP or whether they are already included in the AMP. In terms of changes, the general rule seems to be that trivia are ignored but the definition of what constitutes 'trivia' is not clear and this leads to uncertainty on the part of the different parties, especially the client. In addition, the AMP generally includes a 5% contingency allowance. However, it is unclear whether this is to allow for risks attributable to the client, or the contractor, or both.

Overall, the view is that if the money available is enough then there will be no major problems. Latham (1993) explained that, "where the money payable is inadequate, vital trust will be absent and the project will always suffer through lack of teamwork and adversarial attitudes." Facilitators on the projects studied were of the view that there would be a major issue if a project went seriously wrong financially, and that this would inevitably lead to a protracted contractual dispute.

Key roles

Role of the facilitator

CIC (2005) states that, "once the selection panel has been assembled a coordinator should be nominated", this being the facilitator who is responsible for the smooth running of the project throughout its duration.

The facilitator should be knowledgeable about the partnering process and experienced in the field of construction. CIC (2005) notes that the facilitator is the coordinator of the workshops between the various parties involved. The ECI (1997) further note that his activity is only a passive one and that the facilitator is there only to facilitate discourse. OGC (2003) describes the facilitator as responsible for bringing the parties together and leading workshops "to set out the principles, attitudes and ideas that will characterize the arrangement". The facilitator is involved primarily after the selection of the preferred contractor although on many occasions, as was the situation in the cases studied, the facilitator can be a member of the contractor selection panel.

The role and the skills required of a facilitator was one of the major issues creating confusion among those involved in the partnering arrangement. From the facilitators' point of view, it was debatable whether he/she should be a project manager or a facilitator and they found it difficult to differentiate between these roles. Neither of the facilitators interviewed had received training on what the role should involve and where their authority and responsibility lies. This created confusion, not only for the facilitator, but also for the rest of the team.

Also in the cases studied, the other parties had an expectation that the facilitator would function as an independent adjudicator and were critical if this did not appear to be the case. Facilitators saw their role variously as a form of 'hands off' project manager to guide the project along or as a 'chairman of a board' who listened to everyone's views before coming to a decision on their behalf. None of these concepts of the role seems to conform to the theory. This reinforces the issue in respect of the need for training for facilitators as to the nature of their role and in the social skills required to carry it out.

ROLE OF THE CLIENT

Black *et al.* (2000) and the ECI (1997) state that one of the main factors in introducing partnering successfully is to ensure that the senior management in the client's firm is committed to the process. Egan (1998) recommends more involvement from the

client, recognizing that its absence may exacerbate the misunderstandings that cause disputes. ECI (1997) suggests the role of a 'champion' in the client organization to ensure that each member of the staff is familiar, and is in favour of, the adoption of partnering. The Champion is not necessarily a construction professional, but will know partnering intimately and will also take part in the 'social training' of the partnering team members. However, it is important that the changes involved in adopting partnering are 'deep enough', otherwise partnering will not take root (Bresnen and Marshall 2000). In essence, the client should be more involved in the construction process in order to encourage trust between the various parties in the partnering team (NAO 2001). As has been noted, it is the client who will accrue the greatest benefit from this process and it is important, therefore, for the client to be fully conversant with forward thinking and innovative partnering procedures.

The clients in the case studies were involved in the process throughout. However, the nature of that involvement was not to the extent suggested as desirable by the literature. In the pre-AMP phase, the clients' main aim was to ensure that design changes did not have adverse operational consequences, e.g. changes to heating systems, security systems, etc. During the construction phase, the client attended the partnering meetings for the same reason and to be familiar with project progress and cost. However, beyond this, the management of the process was conducted by the facilitator and the professional services. There is an issue here in relation to the extent of client involvement and the possibility of the facilitator being appointed by the client, although there were reservations that the client would not have sufficient technical knowledge or experience of the construction process to fulfil this role.

ROLE OF THE CLIENT'S QUANTITY SURVEYOR

The role of the client's quantity surveyor in relation to value for money became apparent as an issue within the partnering arrangements studied. In traditional contracting, the bill of quantities is a form of assurance to the client that a certain level of value is being achieved. With partnering, the early involvement of the contractor means that the project will not be fully billed and therefore the negotiation of the AMP takes place without complete information, thereby creating additional risk. Theoretically, the contractor's prices should be transparent and the client's quantity surveyor should be able to trust them. Nevertheless, there was a perception by clients and designers that this trust could be misplaced and that the client's quantity surveyor should question the contractor's prices more thoroughly to ensure value for money. There is an issue about the extent to which this may undermine the spirit of partnering, however.

CONCLUSIONS AND RECOMMENDATIONS

This paper has investigated the issues associated with the implementation of partnering agreements within local authorities in Scotland. Ultimately, the objective must be to have satisfied clients and in all the cases studied clients considered that partnering was beneficial, particularly on difficult projects. Practical problems during the construction phase are easier to solve and the ability to finalize the costs quickly on completion is particularly welcome within the local authority environment. It is also possible to moderate potentially higher prices when the construction sector is busy. Furthermore, the construction phase of projects is also generally perceived as better. However, there are still substantial issues with the form of partnering adopted

which, if not addressed, may be sufficient to result in it falling from favour. These issues relate predominantly to financial arrangements, design and training.

The negotiation of the AMP had the clear potential to undermine the spirit of partnering and this was closely connected with the perception by clients and designers that the quality of design would be eroded unless they took a firm stance at this stage. Again, this does not seem to correspond with the collaborative philosophy of partnering, but accountability constraints on government bodies need to be considered. Once the AMP has been agreed, there is a lack of clarity as to the precise extent of what is included in it and when a change to the project should result in a change to the AMP. Clients have the clear perception that they are carrying all of the financial risk. Nevertheless, they are positive about the value of partnering in general terms but are less so about the control of the cost element. In particular, it is difficult to reconcile the role of the client's quantity surveyor during negotiation of the AMP with the philosophy of partnering. Partnering should be a collaboration and prices submitted by a contractor should be transparent. However, there is a perception that a lack of indepth examination of these prices may result in reduced cost control.

There is a lack of ongoing training for all parties and training for the important role of facilitator is absent. This is a particularly important issue because the facilitator has little real power and depends on social skills to achieve results.

Whilst the clients are involved throughout the process their role tends to be to ensure that design changes do not impair the operational effectiveness of the finished project and to monitor overall cost. There is a debate around the issue of clients adopting a greater leadership role in the partnering process to the extent of providing a 'partnering champion' or even taking on the role of facilitator.

Ultimately, there is a question as to whether the existence of the issues identified suggests that the arrangements in the cases studied do not, in fact, amount to true partnering.

It is submitted that if partnering is to continue as a preferred procurement route then consideration should be given to abandoning payment of the contractor by means of a fixed AMP. A true partnering philosophy of collaboration to achieve best value should be followed. Significant training would be required to achieve this. Alternatively, if the constraints on the local authority do not allow full partnering, then consideration could be given to using a form of management contracting. This would allow useful early input from a contractor without the perceived erosion of design quality and would also maintain a transparent competitive element for the work itself.

REFERENCES

- Abudayyeh, O (1994) Partnering: A team building approach to quality construction management. J. Manage. Eng., **10**(6), 26–9.
- Baxendale, T and Greaves, D (1997) Competitive partnering: a link between contractor and sub-contractor. *In: Procurement: A Key to Innovation*, CIB Proceedings, Publication 203, 8–21.
- Black, C, Akintoye, A and Fitzgerald, E (2000) An analysis of success factors and benefits of partnering in construction. *Int. J. Proj. Manage.*, **18**(6), 423–34.
- Bresnen, M and Marshall, N (2000) Partnering in Construction: A critical review of issues, problems and dilemmas. *Construction Management and Economics*, **18**, 229–37.

- Cartlidge, D (2002) *New Aspects of Quantity Surveying Practice*. Oxford: Butterworth Heinemann.
- Construction Industry Council (CIC) (2005) Selecting the Team. London: CIC.
- Critchlow, J (1998) *Making Partnering Work in the Construction Industry*. Oxford: Chandos Publishing Limited.
- Drexler, J A Jr and Larson, E W (2000) Partnering: why project owner-contractor relationships change. *Journal of Construction Engineering and Management*, **July/August**, 293–97.
- Egan, Sir J (1998) Rethinking Construction. London: HMSO.
- Emmerson, Sir H GCB, KVCO (1962) Survey of Problems before the Construction Industries. London: HMSO.
- European Construction Institute (ECI) (1997) *Partnering in the Public Sector*. Loughborough: European Construction Institute.
- Fisher, N and Green, S (2001) Partnering and the UK Construction Industry: The First Ten Years – A Review of the Literature. *In*: Appendix A, National Audit Office (NAO), *Modernising Construction*. London: The Stationery Office.
- Latham, Sir M (1993) Trust and Money". Interim Report. London: HMSO, p. 15.
- Latham, Sir M (1994) Constructing the Team. London: HMSO.
- Ng, S T, Rose, T M, Mak, M and Chen, S E (2002) Problematic issues associated with project partnering the contractor perspective. *International Journal of Project Management*, **20**, 437–49.
- National Audit Office (NAO) (2001) *Modernising Construction*. London: The Stationery Office.
- The Office of Government Commerce (OGC) (2003) *Effective Partnering: An Overview for Customers and Suppliers*. OGC.
- Sanders, S R and Moore, M M (1992) Perceptions on partnering in the public sector. *Proj. Mgmt. J.*, **22**(4), 13–19.
- Scottish Executive (2004) Client Pack: Construction Works Procurement Guidance. Available online: http://www.scotland.gov.uk/Publications/2004/06/19384/37505 (accessed 29 November 2006).
- Simon, Sir E (1944) The Placing and Management of Building Contracts. London: HMSO.