

Improving PFI through collaborative working

Executive summary

Be is the leading independent built environment supply chain body whose 100 or so members embrace the whole demand and supply chain from corporate and public sector clients to developers, facilities managers, contractors, consultants, specialists and product suppliers, including most of the major construction firms engaged in PFI consortia. We are a think tank focussed on practical delivery, with a vision of integrated provision of built environment solutions through collaborative working.

PFI is a key mechanism for procuring UK public services. It is undoubtedly effective, having better aligned the remuneration of the supply chain with the value that the demand chain seeks from its facilities, and it is increasingly a good example of Be's vision in action. Be has produced this paper as a basis for dialogue with HM Treasury and other decision makers to seek to improve the current PFI process still further. It also aims to provide advice to our member firms to apply collaborative working better within PFI projects and to provide further substantive evidence that collaborative working reliably delivers better value-for-money in all respects.

The key principles of collaborative working are:

- Early involvement of the supply chain,
- Selection by value,
- Performance measurement enabling continuous improvement,
- Common processes and tools,
- Long-term supply chain relationships,
- Commercial arrangements that support the above.

The paper draws on our members' experiences and those of our Collaborative Working Centre to assess the success of PFI in delivering against these principles and to identify a number of opportunities and potential benefits from adopting collaborative working more explicitly. Based on this, the ideal PFI process should consist of the following:

- Identify and develop a business need based on outcome measures;
- appoint the best team capable of predictably delivering those outcome measures;
- agree a target unitary payment;
- value engineer with pain-gain share to arrive at an optimum solution;
- deliver and operate the solution with continuous improvement over the period.

The crucial area for improvement is to find a way within EU and HM Treasury rules to select the best team, rather than a worked-up solution, much earlier in the process and on the basis of quality criteria and a much more sophisticated Public Sector Comparator.

Drawing on Be and others' work, it is possible to develop a new set of metrics for this purpose. Be would welcome the opportunity to work with HM Treasury and others to this end, perhaps through a joint task group or research project. A demonstration project would also be helpful to compare the historic approach with collaborative working – HM Treasury's own new building, of whom the occupants of the second half are Customs & Excise, is an interesting example of some of the benefits.

Be - Collaborating for the Built Environment

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“Improving PFI through collaborative working”

1 Objectives

There have been a number of reports on the success or otherwise so far of PFI¹ (see Annex). The majority are from the National Audit Office and focus on value for money for the government client based on reviews of capital costs and early operational costs.

All the signs are that the UK government are committed to a huge investment programme by means of PFI, which currently accounts for about 10% of investment. It has grown in importance around the world, and this report seeks to ensure that the UK can maintain a lead in this area.

In Be's view PFI is an effective procurement route. This paper seeks to show the potential benefits of adopting the key principles of collaborative working within the process. Therefore, the objectives of this paper are defined by its target audiences:

- Recommendations for further discussion with HM Treasury and other government decision makers on how further to improve value-for-money delivered through PFI;
- Guidance to Be members on how best to implement collaborative working within the current PFI framework to improve the process.

2 About Be

Be is the leading independently-funded supply chain body in the UK whose 100 or so members embrace the whole demand and supply chain from corporate and public sector clients to developers, facilities managers, contractors, consultants, specialists and product suppliers, including most of the construction firms engaged in PFI consortia. We are a think tank focussed on practical delivery. Our holistic vision is of built environment solution providers delivering through collaborative working.

2.1 Built environment solutions

The modern construction industry has to create value, for customers, society and suppliers. Value is the excess of benefits over costs, so it is increased by raising benefit and by reducing cost. Value thus means a better product and a better process. Be focuses on both these strands:

- Raising benefit value by understanding how it is added for customers and society, through the entire value chain of the built environment;
- Reducing costs and negative impacts in delivering that value by effective collaborative working throughout the demand and supply chain.

Others have picked up on aspects of this theme, for example the Royal Academy of Engineering report², which suggested that the ratio of capital : operational³ : core staff costs over 20 years (not

¹ Note that this report is limited to PFI, currently defined by Government as ‘Where the public sector contracts to purchase quality services with defined outputs on a long-term basis from the private sector and including maintaining or constructing the necessary infrastructure so as to take advantage of private sector management skills incentivised by having private finance at risk’. PPP is wider in scope, encompassing any procurement of a service and provision or management of supporting assets over a term, and is potentially more collaborative by nature.

² The long-term costs of owning and using buildings. Evans, Haryott, Haste and Jones. The Royal Academy of Engineering, 1998.

³ Operational costs include all facilities costs, e.g. heat, light, power, cleaning, security etc

discounted) of an office block might be 1 : 5 : 200. Be has extended this model to 0.1 : 1 : 5 : 200 : 250, suggesting that design costs would typically be 0.1, and most significantly of all, the value created by those staff could be anywhere in the region of 250 to 2,500+. Thus the gearing of benefit to design input could be 2,500 – 25,000 : 1, suggesting that reducing design effort could destroy the opportunity for huge amounts of added value in the core activity of the organisation.

2.2 Collaborative working

'Collaborative working' is Be's umbrella term for working together in a seamless team for common objectives that deliver benefit to all. It is defined in terms of the following principles:

- Committed leadership focussed on maintaining the vision, needs, people, and benefits for all.
- Values which empower people, share learning, communicate openly, and foster trust in a no-blame culture.
- Processes and commercial arrangements with the following critical success factors:
 - Early involvement of the supply chain,
 - Selection by value,
 - Performance measurement enabling continuous improvement,
 - Common processes and tools,
 - Long-term supply chain relationships,
 - Commercial arrangements that support the above.

The best examples of collaborative working in practice include the MOD's Defence Estates' *Building Down Barriers* projects, GlaxoWellcome's *Fusion* projects, and recent clients of CWC, the Collaborative Working Centre of Be, which include Portsmouth City Council and Welsh Water. This paper draws on the experience of these projects, and other work by Be to provide objective evidence of the business case for collaborative working compared with the historic disintegrated approach. Further information is available from Be. The principles have also been incorporated in the Strategic Forum's forthcoming Integration Toolkit, to be launched in September 2003.

3 How does PFI currently measure up?

PFI is set to remain an important mechanism in the UK for procuring service delivery and business process re-engineering, with infrastructure (if required at all) as an enabler.

PFI is also well capable of delivering Be's vision. In principle the process consists of selecting a fully integrated provider who will understand the problem, develop potential solutions, selecting and screening to converge on an actual solution, and then deliver, operate, maintain and improve that solution as necessary over a significant period of time. This provider will be taken on up front, working hand in hand to understand the needs and deliver a solution which will provide mutual benefit in the short, medium and long term.

A number of issues remain to be addressed if this vision is to be realised. Based on member organisations' experience and the latest PPP models such as the NHS' LIFT and Procure 21, we contend that many if not all of these barriers can be overcome by addressing the critical success factors of collaborative working. The rest of this section considers how PFI is facilitating or hindering these factors, and seeks to make practical recommendations for improvement.

"PFI has in many ways transformed the way major contractors work. One of those changes is a need for contractors to co-operate more closely with service providers and facilities managers that look after and service PFI projects over the 25-30 years of their existence. We have got to understand not only our own discipline but also the FM element, and the interface between the two."

(Dermot Gleeson, Chairman Major Contractors Group. Buildina. 20 June

3.1 Early involvement

Key points:

- **PFI offers the opportunity for consortia to form integrated teams from the start. This enables the project team to understand better the clients' business drivers and end users' and other stakeholders' real needs. But the supply side often does not do this, and the client does not require it.**
- **Too many consortia are involved as bidders too far along the process, dramatically increasing abortive bid costs of the losers and reducing the value the winner can obtain from this phase. Clients need to select the team, not the solution, much earlier in the process.**
- **There remains much scope for improving clients' procurement skills at feasibility stage - business case making, budgeting etc.**
- **The client needs to select the team, not the solution, based on output or, better, outcome specifications which relate to the core service being procured or supported and a track record of producing specific, innovative, value-for-money solutions. New metrics are required (see 3.2).**

What is 'Early involvement'?

Involving specialist contractors, product suppliers and others with design ability to contribute to the process early enough to add design value. In practice, substituting a process of "confirm need – procure team – develop design – implement/operate" for the historic "perceive need – procure design team - develop design – procure construction team – implement – walk away"

Briefing and end users

Historically, PFI projects involve several consortia bidding, which may undermine the ability or willingness of clients to contribute as they should at an early stage. This restricts the design briefing – consortia in competition do not want to share their good ideas with competitors (e.g. more new schools instead of refurbishments), and clients may not feel comfortable in getting sufficiently 'close' to bidders, in a competitive situation, to optimise this process. The high cost of bidding and compressed timescale may not allow the team to integrate, unless they have worked together before. This can leave gaps when trying to finalise the specification at financial close.

The more successful PFI projects have allowed close interaction between building users and a broader range of the supply chain at an early stage in the consideration of designs. This creates better understanding of real needs, resulting in better solutions, as well as creating relationships which can help the subsequent delivery of the project. It should though be noted that some clients and end users have struggled to understand or define their requirements properly.

We believe this could be accommodated within the structures of HM Treasury guidelines and EU Procurement Regulations. A barrier seems to be that Treasury requires a firm 'budget' at the initial approval gateway, this is too often interpreted as a firm 'price'. Within LIFT the NHS has moved in this direction. One option may be to adopt better value-based award criteria. Consortia could prequalify on the assessed stability and track record of their supply chain and ability to successfully manage and deliver design-build-operate projects. Then prequalified consortia would be invited to provide an outline design and target cost submissions and be reimbursed at cost for the benefit of that process. Finally the client would select a preferred bidder from the consortium judged best able to deliver the client's requirements.

Within the current constraints, clients need to undertake a full feasibility assessment well in advance of the pre-qualification stage, using appropriate resources to identify business change opportunities and potential options, confirm output requirements (essential requirements rather than wish-lists), establish robust comprehensive budgets, and define the critical parameters of a project. Performance in this respect has improved greatly in recent times, but there is still scope for improved guidance and training in the process of developing output specifications and the management of design development. The process should draw as heavily as feasible on the

views of potential bidders – this is the time to start building collaboration. To encourage new thinking, clients should consider paying for the cost of design solutions proposed by the consortia bidding in stage 1 (in return for a licence to use the intellectual property in such designs, even if the client chooses an alternative solution provider).

Clients should encourage an informed, collaborative approach with bidders from pre-qualification onwards, notwithstanding competitive tendering. The process needs to engage all stakeholders, especially end users (clinicians, teachers etc), to search for 'win-win' solutions where the supply side can better understand the 'core business processes' and hence enable innovation and quality of the product. Procedures such as those used widely by experienced PFI procurers to establish end-user groups as part of the brief definition prior to selection of preferred bidder help clarify scope and thereby reduce the risk of abortive bid effort and cost.

Experience in MOD's Building Down Barriers project showed that early involvement of the users created true 'ownership' of the facility when it was delivered and there were few 'bad surprises'. This points to the management of expectations as a key skill required by the supply side - the development of realisable project standards at an early stage ensures that schedules of accommodation will reflect buildable design based on affordable solutions. However, the current PFI process restricts the scope for this sort of early involvement. Design development takes place within a competitive environment and in practice useful dialogue with users is restricted until preferred bidder stage. As a result, the opposite outcome may be achieved - if users' preferred solution is not chosen, perhaps on financial grounds, then they feel disenfranchised leading to severe problems for successful consortia.

Bid costs

This is the most common criticism from the supply side. The number of bidders involved at each stage has reportedly been streamlined from e.g. 6-4-2 to 5-2, and batching helps, but there are still 4-5 consortia put together bids for the early stages and at least 2, often 3, developing virtually a completed design where people are confident of the costs and on which a price can be agreed before the 'winner' is chosen. The result is two sets of abortive costs – and designs - with further substantial expenditure after preferred bidder selection still at some risk. All these costs have to be recovered from the PFI client sector sooner or later.

There are many other causes of high bid costs, many of which are referred to in other sections of this report. All point to the need for collaborative working. If the team were selected on a concept plus collaborative working skills, it would allow a proper integrated team (including the client, who in the current environment is pulled between 2-3 bidders) to develop the design, as opposed to the client seeking to select the solution rather than the team to deliver the solution.

These improvements would require the public sector client to work collaboratively with bidders. They would yield better defined projects with an earlier appreciation of likely outturn costs which would better equip the client to assess the PFI route against the Public Sector Comparator.

As already suggested, one option might be to reimburse (at a pre-agreed level) certain design and other bid costs in order to encourage best value proposals, whilst reserving to the client intellectual property rights in such proposals. Another option would see the public sector client engage a supply chain experienced in that sector as its client advisor, helping it to integrate and develop the business need and devise a firm target cost and set of requirements that will give the client the confidence to select a preferred bidder and proceed to contract award at RIBA Stage C (concept design). Undertaking the role of client advisor in this instance would preclude that supply chain from bidding for that particular project, to avoid any conflict of interest.

The 'batching' of PFI projects (see also 3.6) now developed by NHS will also reduce bidding costs, insofar as the bids are based on designing the first of three projects, with a separate 'funding competition' after award of the framework agreement for the batch.

3.2 Selection by value

Key points:

- Clients need to continue to develop alternative techniques for assessing value-for-money rather than pricing a detailed design. New metrics are required for selecting the best team, backed by e.g. pain-gain share and open book accounting.
- The industry needs to improve its ability to derive a robust early target price by which they are prepared to stand.
- Whole life costing has improved as a result of PFI but this needs to extend beyond operating costs ('5') to the core service costs ('200').

What is 'Selection by value'?

Substituting mechanisms and data reflecting world-class performance levels for sequential lowest price tendering through the supply chain.

Alternative mechanisms for assessing value-for-money

As already noted, much waste arises in PFI from developing several designs to an advanced stage before selecting a preferred bidder. The cause is the desire to establish a price-based measure of best value, rather than trusting a preferred and skilled team to deliver a solution within the affordable budget and incentivising them through pain-gain share and open book accounting. To enable this the supply side needs to improve clients' confidence that this approach will not lead to 'soft' target costs where the supply side then finds it all too easy to make cost savings. To this end clients – and supply side - need to be aware of benchmarks for best-in-class.

Teams, including facility designers and operators, should be selected on their ability to understand the client's and end users' business drivers and assess the potential value of different solutions – including non-build options. An eventual facility design is the output, not the driver. New metrics are required for this selection process, Be is well placed to assist in this, drawing on its members' experience of the private sector and overseas provision (e.g. American health providers' standard practice is to appoint the team early).

This does not just reduce bidders' costs and resources, the current process puts a huge burden on the client to provide appropriate and equal access to end users for all bidders and to review all the proposals. Clients strive to keep the bids within a predefined set of parameters so that one scheme can be compared objectively with another, obstructing creative dialogue and innovation.

Whole life costs

PFI is probably the main reason that awareness and expertise in whole life costs has developed in construction, understanding the balance between capital, life cycle and operating costs. Encouragingly, service providers are starting to come to the fore in PFI consortia, but there is still a long way to go - as demonstrated by reports during our study that NPV figures or PFI unitary payments tend to have capital cost as the largest element. But crucially, with a few exceptions (e.g. prisons), consideration has only got as far as operating costs ('5') in the 1 : 5 : 200 ratio.

In many PFI contracts capital cost has tended to dominate thinking, and the previous Treasury discount rate of 6% (now improved to 3.5%) did not help. In fact the process should work in completely the reverse direction: consideration of the core business need (the '200') to identify what is affordable in operation (the '5') and then the capital asset expenditure (the '1') affordable to deliver the other two figures. (Note that this is not a PFI-specific criticism, it applies to almost all procurement processes at the current time.)

Public sector comparator

The '200 : 5 : 1' process has often not been possible because the client advisory team has adopted previous operating costs to produce a public sector comparator. If little or nothing has previously been spent on maintenance of an expensive facility, that has tended to be replicated

as the solution sought in the bid documents. The result is a mis-match between the historical low public sector comparator and an often aspirational design brief, and the resulting iterations to balance the two can involve major quality compromises. This reinforces the need to select the delivery team rather than a solution based on what can be seriously flawed assumptions.

In turn the supply side needs to improve its prediction of whole life performance and costs, by developing industry-accepted benchmarks for whole-life costs and less expensive cost estimating approaches based on business process flows, operations and concepts - rather than e.g. preparing and pricing RIBA stage C/D designs.

Design quality

Design quality is now seen as an essential element by PFI clients. Almost by definition, it is affected positively by proper consideration of whole life costs. It is no longer reasonable to 'build cheap and maintain frequently' – good design means optimal functionality, as HM Treasury has acknowledged. However, designing and delivering better value built solutions requires early engagement with, and quality inputs from, designers, installers and operators – design is a role carried out throughout the supply chain

Designer births

The National Childbirth Trust (NCT) is calling on Whitehall to set building quality standards for the design of labour wards. This follows its survey of 2000 women across the UK which showed that nine out of ten of them thought good design of maternity units made giving birth more comfortable. Furthermore, the NCT claims that well-designed surroundings also increase the likelihood of 'normal' births - those which don't require any medical intervention.

(Buildina, 20 June 2003)

Brief-making and project objectives

The switch to output specifications has allowed a better focus on the best way to deliver what is actually needed. Being less prescriptive has allowed real innovation on some projects. As PFI has developed, the ability to specify real needs has improved considerably and public sector clients have been able to promote design quality by making it clear that this is an important factor in selection. For instance, in NHS PFIs the working relationship between healthcare planner and architect is critical in developing the brief into concept design proposals.

The prisons sector is reported by Be members as an example of good practice that has developed with experience of the process. HM Prisons is now seen as a better more focussed client with repeat 'products' which is procuring a full operational service which enables good design to affect operation. Critically, prisons contain a high degree of repeatable and therefore standardised or commoditised service delivery, in terms of both construction and operation.

NHS Estates is also improving – it has five different approaches including non-PFI approaches (e.g. DTCs, Procure 21) which embody many of the principles we are advocating. For example, its performance specification for DTCs refers to "Final Consultant Episodes" and its unitary charge for the five-year contracts is related to the cost per FCE).

It should also be noted that the use of output specification in the current process has been a key contributory factor to one of the principal weaknesses of the process, that of bid costs. The popular view amongst bidding designers is that the initial competitive bid on any scheme should be based upon minimum content compliance. The perceived understanding is that the detail of what the project sponsors and users actually require will only be identified and designed during the preferred bidder 'negotiations'. This was the cause not only of poor design quality at initial bid stage and a perception that good (added) design costs money, but also one of the government's more significant criticisms of PFI - that project costs too often rise post-selection of the preferred bidder. Some improvement is evident in the last year or so, but the introduction of collaborative working techniques would undoubtedly help clients to improve 'change-control' and would be facilitated by adopting the revised approach to procurement proposed above.

3.3 Performance measurement enabling continuous improvement.

Key points:

- The lack of effective outcome measures relating to core service prevents ultimate value being delivered.
- The grouping of projects ('batching') or the use of standing supply chains enables targets for improvement on successive projects.

What is 'Performance measurement enabling continuous improvement'?

Systematic benchmarking of the process and outcomes as a basis for setting targets for continuous improvement.

Predictability of capital cost and time

The public sector has benefited greatly in terms of predictability of cost and time post-award⁴, due to contractors being able to freeze design and then implement it. But predictability of cost between selection of preferred bidder and final award was reported by the NAO in February as poor, as much design effort is only applied at this stage and identifies new information or requirements. This is the fault of both client and supply side, neither having done enough thinking earlier in the process – when the supply chain was still 'at risk'. Performance in this respect has undoubtedly improved.

Quality in practice

Design outcomes from the early PFI projects were regarded by CABE and others as disappointing, reflecting the immaturity of the approaches outlined above. The relative importance of design in the process has now been increased, but several factors remain to be addressed:

- the design period is compressed, so there is little opportunity for sufficient iterations of the design process;
- design is carried out 'at risk' – and thus design input is limited;
- clients have too often accepted that proposed designs are adequate to meet their needs and have not pushed for improvements;
- clients feel constrained by competitive tendering to avoid influencing design to optimise business processes until too late in the process, e.g. after Preferred Bidder stage, when changes inevitably increase the price.

Project outcomes

It is too early to say whether building users have a better outcome than from other procurement routes, especially in the longer term, and thus it is too early to assess overall value-for-money.

Some predict it will be regular properly-funded maintenance that will see the greatest gain through proper evaluation of, and provision for, operational and maintenance costs. However, some consortia have allowed low figures for this work, to some extent due to the client advisors not understanding what maintenance will be necessary and accepting a low provision based on a flawed public sector comparator.

To deliver the 'Be vision' of buildings that add real value for clients' end-users, ultimate outcome measures are required. These could start to incentivise added value for the user (e.g. schools: "ensure the proper education of all children between the ages of 3 and 18"). Under the current PFI process government has not asked the supply side what it could add to their real objective. Some further work to improve current research with end users (e.g. CABE, DQIs, Be) might be required.

⁴ PFI: Construction Performance. NAO, February 2003.

3.4 Common processes and tools

Key points:

- There remains much potential to reduce procurement costs and time by increased use of standardised contracts and specifications.
- There is much scope for better adoption of shared systems to eliminate duplication and thus reduce cost. Clients could include this as a selection criterion. (The establishment of standing supply chains provide the longer-term incentive to invest in such systems.)
- 'Batching' of similar projects into single procurement offerings brings with it economies of scale.

What are 'Common processes and tools'?

Single processes across the whole integrated delivery team, e.g. project workshops, no duplication of roles on customer and supplier side, project extranets, co-location.

Standardisation of the process

The greater standardisation of requirement is a major benefit to bidders and clients alike. Standardisation reduces bidding/procuring time and cost, enabling the participants to focus more on delivering value. Government needs to continue to co-ordinate the sharing of knowledge between government procurers, allowing new procurers to learn from others' experience. Such knowledge management should extend to greater standardisation of the commercial contract terms for the umbrella project agreement as well as for the finance and service level contracts.

Greater standardisation of components and design for off-site assembly or prefabrication can also be facilitated, particularly where long-term relationships exist in the supply chain and production set-up costs can be offset.

Shared systems

The potential for e.g. project extranets has not been exploited to date. Such systems provide secure access for all project parties to a single document storage system avoiding much duplication of administration, paperwork etc and also providing a rigorous 'audit' of who accesses which information when.

SPVs with a 30-year concession period could be managing their information more holistically with cost and performance benefits. At present they pass their operational liabilities onto the lead contractor and the FM provider with consequent integration issues. But with the new IT systems it is possible to pass design and construction information 'as built' to the operators and users of the facility⁵.

⁵ A major new research programme led by Be into 'ICT-enabled collaborative working' seeks to demonstrate this and other applications.

3.5 Long-term supply chain relationships

Key points:

- Engaging the supply chain should be given even more emphasis in selection.
- Grouping or batching provides continuity of the supply chain and an opportunity for early involvement on the later projects.

Existing supply chains

If the bidding group so wishes, as many do, they can draw together an integrated team of designers and specialists to develop design, construction and operation proposals from the start (preferably well in advance of Expression of Interest) and to examine in depth the opportunities to re-shape the business and solve the business problem in a different way.

However, many still do 're-select' the team – the attitude is endemic in much of the supply side. Also, teams fall out - design development costs money and can lead to arguments about whether iterations were developmental or mistakes – or change during the project. Individuals (and their experience) can be much more important than the companies that employ them. But delays in the process make it difficult for key individuals to be kept together without productive work.

The client can take a key role here. MOD's Prime Contracts (not PFI) insist that the second and third level suppliers are engaged up front, they must be part of the team that is interviewed during the selection process. NHS Estates' Procure 21 selection process requires robust evidence of the supply chain management process. A similar focus on collaboration should be promoted during the selection process for PFI projects – the client could even seek to pre-qualify teams for future collaborative and PFI projects.

If the bidding consortium is pursuing a series of projects in the same sector, as many tend to, it can choose to operate with the same supply chain, giving real opportunities for continuous improvement and value-added solutions through early involvement. Investment of resources can be justified for the longer term benefits.

A practical barrier may arise in one-off specialist projects or in regions where there are a limited number of suppliers (e.g. Scotland, Wales, East Anglia) where supply chain specialists and suppliers may seek to keep their options open until the preferred bidder is known. Most major players will also work in particular sectors with partners that complement their capability, but often have different partners – not infrequently competitors – in other sectors.

'Batching'

"Batching" is intended to deliver greater efficiency by procuring a batch of individual projects from one SPV from which the supply chain below can reap benefits from continuity - provided that there is sufficient capacity to work on all projects within the batch. Although at an early stage this will increase the potential for collaboration. It should also mean that the client will be part of the integrated team from an earlier stage on the later projects, so allowing the business drivers to be fully understood and developed. For this it is important that there is a fast feedback loop so that learning can be implemented from project to project.

For the supply side, such "deal flow" is becoming a valuable criterion in securing finance and the quality resources required to deliver such projects effectively. Increasingly the more successful projects are those where consortia have stayed together.

What are 'Long-term supply chain relationships'?

Standing supply chains which work together regularly and have improved by measuring and learning from repeating processes together. This also significantly reduces transaction costs.

3.6 Supportive commercial arrangements

Key points:

- All parties need to improve still further their management of risk (rather than risk transfer).
- Supply side profitability needs to be better understood and discussed openly.
- Adversarial behaviour is endemic in many parts of the industry, and outside the SPV (e.g. further down the supply chain) there is little in PFI which inherently promotes better teamwork.
- Flexibility in (meeting) future requirements is one of the biggest challenges facing PFI. A collaborative approach over the term of the contract is more likely to result in co-operation if the business need changes.

What are 'Supportive commercial arrangements'?

Mechanisms for risk allocation, payment, etc that align the objectives of all parties so that the best outcome for all lies in delivering superior value for clients through collaboration. Modern contractual and payment mechanisms include ring-fenced profits, target cost contracts, pain-gain share, open book accounting.

Risk management

Risk management, both by clearer allocation of risk, and greater focus from contractors, has improved considerably. However, risk is not well understood, either by the client bodies who see it as something to be transferred at a cost, by the SPVs who often pass it on down the supply chain, or indeed by other parties, e.g. design consultants.

In the past Government saw risk transfer as a cornerstone of PFI. Thus PFI has focussed on risk abdication rather than collaborative risk management, risk transfer not benefit creation, and the requirement for non-recourse finance has equated to pain-share not pain-and-gain share. The declared aim of transferring all operational risk to the private sector has resulted in the bidding teams pricing risks over which they have no effective control. Public sector clients should seek to understand the private sector's price for carrying a risk over which the client has control and then judge whether that represents good value.

The approach to risk must be consistent with all allocations of responsibilities and liabilities and must consider risks realistically in the light of the long-term nature of PFI. Clients should adopt the key principle of collaborative risk management: having designed out as much risk as possible, that the party best able to manage the risk economically should do so. Recent government statements appear to recognise this, and the latest OGC guidance is much improved - but it does not go far enough. Collective management of risks gives the best opportunity to mitigate their effect, but only if managed well. All parties need to understand the nature of risks in the context of a long-term contract and avoid the artificial transfer or 'hiding' of risks which the recipient cannot truly control or price. Risk is at the centre of all major undertakings and should be openly discussed and entered on shared risk registers - the idea promoted in Be's collaborative contract and already a feature of good PFI projects.

Profitability

Contractors have reported improved profitability in spite of the increased risks. The supply chain involved in the operation of the built facility have also seen the benefit of stable, long-term income streams, encouraging a shift from the historical short-term, "build and walk away" approach.

There is room for greater openness on profitability between government and private sector/supply side, for all to better understand the delicate balance of risk and profitability. The recent NAO report⁶ referred to reports of construction firms making losses as "evidence of risk transfer working". But a 'win-lose' scenario is not sustainable. A higher degree of reward for the supply side has historically provided the springboard for collaboration.

⁶ PFI: Construction Performance, NAO, February 2003

Incentivisation to reduce adversarial behaviour

The cultural change is far from complete, but the clarity of risk allocation and better management of risks such as the design interface has led to a less adversarial environment. In particular there is evidence of a greater degree of teamwork between the client, lead contractor and FM provider to deliver the project. However, only the more progressive lead contractors have promulgated e.g. ring-fencing of profits and pain-gain share sufficiently down the supply chain and equitably across all parties (consultants, trade contractors, purchasing materials etc) irrespective of whether these firms are part of the SPV. This can lead to confrontation down the chain. Clients need to ensure that the incentives for all parties, in the SPV and the rest of the supply chain, are aligned with beneficial outcomes for the client, otherwise value will not flow in the chain. This would be best addressed if clients began to select fully integrated supply chains. Further reductions in adversarial behaviour could be achieved by linking the profits of all players to the performance of the asset over the full period of the concession, rather than just the performance of a party while they are active on e.g. a particular capital element.

Flexibility

How to determine what we will need in the future is a major issue— who can predict what healthcare needs will be in say 10 years' time, never mind over a 25 year contract? The key is designing for flexibility. A recent Nuffield/RIBA conference⁷ proposed procuring hospitals in two stages – 'shell and core' with a flexible fit-out specification to follow later to incorporate the latest equipment. Better briefing skills are required – and contract drafting will need to avoid either constraining this future flexibility or constraining risk to the point where it is no longer off balance sheet (where that is a key requirement - see Financial Issues below).

Greater standardisation can co-exist with flexibility, provided the template for the standard is not overly prescriptive and leaves room for project-specific changes and foreseeable issues where end-user requirements may change. The recent initiative within NHS PFI schemes to source six generic designs capable of being replicated nationally is an interesting example. With a sensible degree of built-in flexibility, such models could also add significant value.

Other legal issues

In principle the legal aspects of PFI deals should be straightforward – the contract is only there to support the desired structure, collaborative or otherwise. However, legal fees are undoubtedly high⁸ due in part to the complex nature of the service agreements and the number of different parties involved. This is partially addressed in instances where the same lawyer acts for the SPV and the financier. It could be better addressed by the alignment of interests in standing consortia with pre-agreed plans as to the sharing of risk, responsibilities and rewards.

Although most PFI schemes talk of teamwork, the actual contract with the project company (SPV) is not collaborative, with a focus on penalties and bulk transfer of risk. As discussed above, it is proving difficult for clients to get some bidders to incentivise their supply chains consistently with shared objectives, in order to encourage full collaboration. Similarly, an 'unthinking' contractual approach by clients can ride rough-shod over collaborative incentives. There is the opportunity for integration and collaboration within the private sector team, and often they work well with the ultimate client, but this is due more to personal choice rather than the terms of the contract.

As mentioned above, a challenge for the lawyers in future will be to prevent the contract constraining the flexibility of the future service required. Currently, the risk of user demand is retained by the public sector client. However, obsolescence (e.g. in IT equipment) is borne by the

⁷ ref?

⁸ ref Colin Harding article in *Building*

SPV. Beyond this, there should be flexibility built into the contract arrangements to allow for both parties to cater more effectively for changing needs and performance enhancements.

There should also undoubtedly be far greater standardisation of PFI documents at all levels, gained through intelligent adoption of best practice standards but built on a collaborative framework. Whilst there will always be some project-specific differences, the scope for using these exceptions to re-invent market-tested risk and reward terms must be strongly curtailed.

Financial issues

Non-recourse finance

This report has limited its scope strictly to PFI - a deal usually involving “non-recourse finance” for an SPV which has no assets. Thus all the foregoing arguments for change have to cater for the concern of financiers. Equally, the financial models on which project finance is predicated must be able to accommodate the impact of risk/reward scenarios. It is recognised that financiers need certainty of outcome, and Be and others need to provide the evidence that collaborative working can deliver better than the historic approach in this respect.

However, recent government statements that PFI is no longer about ‘off-balance sheet accounting’ (e.g. a government spokesperson recently stated that 57% of PFI is on-balance-sheet⁹) offer hope of a change of attitude.

There is some precedent for gain-sharing, emanating from the refinancing of PFI debt that has occurred after completion of the construction phase. The market currently views this as the phase most at risk of cost escalation, with the result that the debt becomes less costly if re-financed following construction completion. In this scenario, the public and private sides seek to agree in advance how that gain should be shared. There is nothing to prevent risk/reward schemes being agreed up-front in the project agreement with the risk being focused around a target cost.

Equity and incentivisation

The number of projects where an integrated supply chain has an equity stake varies widely. This can be a significant driver for improvement if a significant return for the consortia partners is from the operation of the facility, and such alignment of interests can only increase the motivation of the supply chain to address whole life costs and performance properly.

Open book

There is a perception that closer relationships between the private sector and the public sector carry an increased risk of fraudulent behaviour, or simply of excessive profits for the private sector. These can be prevented by open book arrangements and by third party audits, rather than by the previous insistence on arms-length dealing and lowest price award.

Insurance

The current insurance regime in the construction industry does not encourage openness about risk, and the different classes of insurance (e.g. contractors’ all risks, designers’ professional indemnity) are often positively divisive. A more supportive insurance regime is required, and there is much to be said for project-based insurance. This incentivises risk sharing and collaboration. Recent trends have made this class of insurance relatively expensive, but the market may change especially if more project insurance policies are written, and clients should consider carefully the wider impacts on value-for money.

⁹ PFI Congress, June

4 Conclusions and recommendations

We find much to praise in PFI. The process has better aligned the remuneration of the supply chain with the value that the demand chain seeks from its facilities.

We believe a number of improvements can be made to the process to improve value-for-money through collaborative working. We thus make the following recommendations to HM Treasury and government departments:

- The process should be improved to consist of the following:
 - Identify and develop a business need;
 - appoint the best team (not a worked-up solution) using award criteria focussed on evidence of predictability of outcome measures;
 - agree a target cost ('unitary payment');
 - value engineer with pain-gain share to arrive at an optimum solution;
 - deliver and operate the solution with continuous improvement over the period.
- Factors to be addressed to realise this vision include:
 - A new set of metrics for selecting the best team;
 - Improve guidance on realistic Public Sector Comparators especially for operational costs;
 - Better provision for flexibility in service in future years;
 - Further improve collaborative risk management skills;
 - Co-ordinate the sharing of experience and knowledge between public sector clients;
 - Review operational costs of PFI contracts;
 - Further standardise contract documentation and pricing methods, with strictly limited project-specific amendments allowed.

Be would welcome the opportunity to meet with HM Treasury officials and other interested parties to progress these ideas. The priority is to find a way within EU and HM Treasury rules to select the best team, rather than a worked-up solution, much earlier in the process and on the basis of quality criteria and a much more sophisticated Public Sector Comparator.

For their part the supply side needs to pre-empt a likely public sector view that it is too easy in collaborative working for a team selected early without a priced-up design to take unfair advantage of the client. There is an appropriate balance for the client between early involvement (and reducing bid costs) and necessary due diligence. The supply side needs to demonstrate that it can be trusted if this is going to be acceptable as a selection route. There is no time like the present to start providing the proof! Thus, irrespective of the extent to which government clients are improving, Be members should:

- Implement collaborative working.
- Focus on end users and their outcome measures.
- Demonstrate more openness on supply side measures of PFI performance – profitability etc.
- Develop long-term supply chain relationships irrespective of client behaviour.
- Provide more evidence of the business case for clients of early selection on concept plus collaborative working skills plus cost benchmarks, target costing and pain-gain share.

Be would welcome the opportunity to work with HM Treasury and others to address these recommendations, perhaps through a joint task group or research project. A demonstration project would also be helpful to compare the historic approach with collaborative working – HM Treasury's own new building, of whom the occupants of the second half are Customs & Excise, is an interesting example of some of the benefits.

The approach we are promoting, like every other approach under test, will only deliver sustained value if it is adopted with the philosophy of mutual involvement, trust and benefit at its core - a

message many people say they have understood on both demand and supply sides, but actions suggest otherwise.

Next steps

This report benefited from consultation with Be members and debate by the Be Council in July. We now intend to:

- use the report as a basis for discussion with a wider community of stakeholders, in particular HM Treasury, other government clients and financiers;
- disseminate the report to Be members, and selected others in the industry, to encourage their adoption of better practice within the current PFI (and PPP) framework;
- advance the argument further, e.g. through more detailed research in partnership with HM Treasury, or through a demonstration project to compare the historic approach with collaborative working (HM Treasury's own new building, of whom the occupants of the second half are Customs & Excise, is cited as an interesting example of the benefits that a repeat team can deliver).

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Annex. Acknowledgements and work by other bodies

In December 2002 the Be Council debated PFI/PPP procurement and decided to develop a learned position founded on collaborative working. Be is very grateful to the following senior people from leading Be member organisations (see Annex) who formed a task group to prepare this paper for further discussion with stakeholders, particularly HM Treasury:

Jonathan Hosie, Hammonds (Chair)
Richard Griffin, Shepard Robson
Richard Harriott, Arup
Tanya Love/Bruce Turnbull,
FaulknerBrowns
Sandy Mackay, Building
Performance Group

Andrew Morris, Richard Rogers
Partnership
Mike Pocock, Balfour Beatty
John Thornely, Army Estates
Organisation
Don Ward, Be
Nick Wylie, Bovis Lend Lease

We took as much account as possible of existing and previous work by other bodies. We are grateful to the following from whom we obtained further details:

National Audit Office and Audit Commission

There are many government reports on PFI/PPP, the recommended process (OGC) and its success or otherwise (NAO etc). The most recent Audit Commission report was on the value-for-money of the early schools PPP projects, the most recent NAO report was 'PFI: Construction Performance' (ISBN 0102920141). The list of NAO Reports on PFI/PPP is at http://www.nao.gov.uk/publications/vfmsublist/vfm_ppp.htm.

Office of Government Commerce/HM Treasury

OGC have transferred responsibility for PFI back to HM Treasury with effect from April 1, led by Geoffrey Spence who is responsible directly to the Chancellor. The unit has a team of six, likely to increase to 11 following a current internal budget review – several have transferred from OGC. There is much OGC guidance at <http://www.ogc.gov.uk> and <http://pfi.ogc.gov.uk>.

CIC, CABB, MCG

From the industry viewpoint, probably the best report is the Construction Industry Council's "The role of cost savings and innovation in PFI projects" (ISBN 07277 2879 2) on a study designed to test the proposition that PFI will yield value for money by stimulating innovation. It surveyed the people responsible for managing the purchasing, design, building and operating of PFI projects and assessed the extent to which cost saving improved value for money. We are also aware of on-going work by CIC's Public Sector Procurement Panel in this area.

The Commission for Architecture and the Built Environment has published excellent guidance on how to ensure design quality in PFI projects.

The Major Contractors Group lobbies government to improve the PFI process, it has tended to focus on bid costs and duration.