

Government Construction Strategy

Delivering Value, Fair Payment and Health, Safety and Occupational Health

A report to Government
by Task Group 2 – Standards and
Lean Supply Chain

1. EXECUTIVE SUMMARY

- 1.1 A key driver of progressive efficiency savings, stable cash flow, site safety and occupational health at work is the existence of a funded and committed programme led by a competent client body.
- 1.2 Statistics available on public websites show that leading edge clients with programme management capability embedded within them as a core skill have been able to manage their supply chains to drive out costs of 15-25% over a five year control period, with savings of a further 10-20% in the subsequent period. Fuller details are given in chapter 2.
- 1.3 Such a programme enables the formation of stable supply chains based on the certainty of future work over a defined period, providing that specified outputs are achieved. This enables at least some equipment to be remunerated over the life of the programme, thus reducing the need for sub-contracting. It also enables investment in new processes and technologies to be justified.
- 1.4 A competent client body has programme management capability as a strategic skill. Programme management capability has a number of elements but includes the commercial skills required to:-
 - Identify the supply chain behaviour required in a given situation;
 - Develop the model which best incentivises that behaviour;
 - Develop the contract form which best articulates that model, and;
 - Ensures that the client has available the full spectrum of capability required to manage the chosen model, including information, processes, systems and relational maturity.

The final bullet point above is crucial. Sensible commercial strategies for a given situation have failed before now because the client body, although it could identify what needed to be done, did not think to ask itself whether it had either the capability or the capacity to do it with the knowledge and resources available to it. Key to any progress along the journey to an efficient, safe and solvent supply chain is therefore the development and embedding of programme management and commercial capability into the client body.

- 1.5 Stability and surety of cash flow is key to minimising avoidable insolvency of small and medium enterprises (SMEs), through building sustainable supply chains and reducing costs.. The Task Group believes that the Project Bank Account (PBA) initiative should be encouraged, but that a group should be set up to monitor their impacts on all of tier 1 suppliers, lower tier suppliers, insurers and bondholders in order to ensure that all their implications are understood and incorporated into the roll out programme. We set out our thinking in Section 3.

- 1.6 The Task Group has observed that contractors' facilities management divisions have greater focus on occupational health than is typical in construction businesses. The Task Group considers it likely that the continuity and stability of the teams, which flows from the continuity and stability of the work, is the major contributor to this difference in performance. While achieving the same level of continuity and stability in construction as in FM is more challenging, a number of construction clients have demonstrated that it can be achieved. The Task Group makes recommendations as to initiatives that could be taken in certain circumstances.
- 1.7 The Client's influence over construction health and safety practice has been demonstrated on recent large projects for example TWA, Welsh Water, T5 and most recently the Olympics 'Big Build' phase. Consistent leadership of safety by the Client has led to RIDDOR AFRs falling to around 0.1 on large and stable capital programmes. The task group believes that further reductions will require cultural as well as behavioural changes and we make recommendations how the Client can lead these.
- 1.8 The Task Group believes that the continuity and stability provided by a funded programme offers an opportunity to improve the poor provision and uptake of occupational health within the construction industry and this should be accepted and led by the Client on larger projects/programmes. The recently published Olympic Park Occupational Health report should be used as the starting point for piloting further work by the Client.
- 1.9 A summary of all our recommendations is given below. We believe that the remit of the Task Group is now discharged. We recommend that two project implementation teams be set up under Cabinet Office leadership to manage the roll out of project Bank Accounts and our proposed safety initiatives across the government portfolio. These will require modified representation, although some members of the Task Group may offer to serve on one of the two groups.

SUMMARY OF RECOMMENDATIONS

Recommendations relating to delivering Value

- 1.0 Clients should undertake, in advance of the next CSR, a formal assessment both of their own and their supply chain's capability and competence to manage and deliver a programme of work collaboratively.**
- 2.0 The Major Projects Review Group (MPRG) should validate such an assessment, and once the required competency level is**

demonstrated, sponsoring departments should pilot bundled projects to be undertaken as a funded and committed programme, together with an efficiency target for the client body to meet.

- 3.0 HMT Spending and Sponsoring teams should work with government construction spending departments to consider the level of their funded programmes.**

Recommendations relating to Fair Payment

- 4.0 A PBA Implementation Group (PBAIG) be set up to:**
- a. Monitor and advice on the roll out of PBAs across the government construction portfolio.**
 - b. Review experience on early schemes where PBAs are being used and quantify actual benefits.**
 - c. The PBAIG should review, *inter alia*:**
 - i. The impact of the PBA on the bonding and insurance requirements placed by the client on the tier 1 contractor,**
 - ii. The consequence of the altered cash flows on the tier 1 contractor in terms of their ability to raise money and on the willingness of bondsmen to provide surety.**

This review should inform the Government Construction Board's future decisions regarding PBAs.

- d. While both the Single and Dual Authority models deliver the fair payment PBA requirements, the Task Group recommends that the Single Authority PBA Model should be the preferred model because it is easiest to administer and requires least client resources to operate.**

Recommendations relating to Health & Safety

- 5.0 The Task Group recommends both Clients and their supply chains support a safety leadership development programme based upon a review of Tier 1 contractors' best practice.**
- 6.0 The Task Group recommends that Clients identify and target criteria for improving supply chain H&S performance.**
- 7.0 The Task Group recommends that Clients implement appropriate and rigorous H&S assurance regimes across programmes either directly and/or through their Tier 1 contractors.**

- 8.0 The Task Group believes that persistent focus on behavioural safety approaches involving all personnel, with an emphasis on supervisors, is needed to improve the current best practice statistics.**
- 9.0 The Task Group recommend that a Health and Safety Implementation Group should be set up to oversee the rollout of these recommendations and those on Occupational Health across the government portfolio.**
- 9.0 The Task Group have identified as guidance for Clients that there are health, safety and other benefits of a directly employed workforce on appropriate programmes. This does not mean labour employed by the Client but by Tier 1, 2 or 3 contractors – labour which is employed to encourage investment in people and secondly to avoid the inherent problems arising from the use of ‘labour-masters’.**

Recommendations relating to Occupational Health

- 10.0 The Task Group recommends that the report ‘Occupational Health Provision on the Olympic Park and Athletes’ Village’, be used as the starting point for piloting further work by the Client in preparing an occupational health specification on a project/programme basis, e.g. the next fully funded programme such as High Speed 2.**
- 11.0 The Task Group recommends that Clients require Tier 1 contractors who tender for large projects or work programmes to specifically identify the scope of OH services to be provided by the Tier 1 contractor.**

2. DELIVERING VALUE

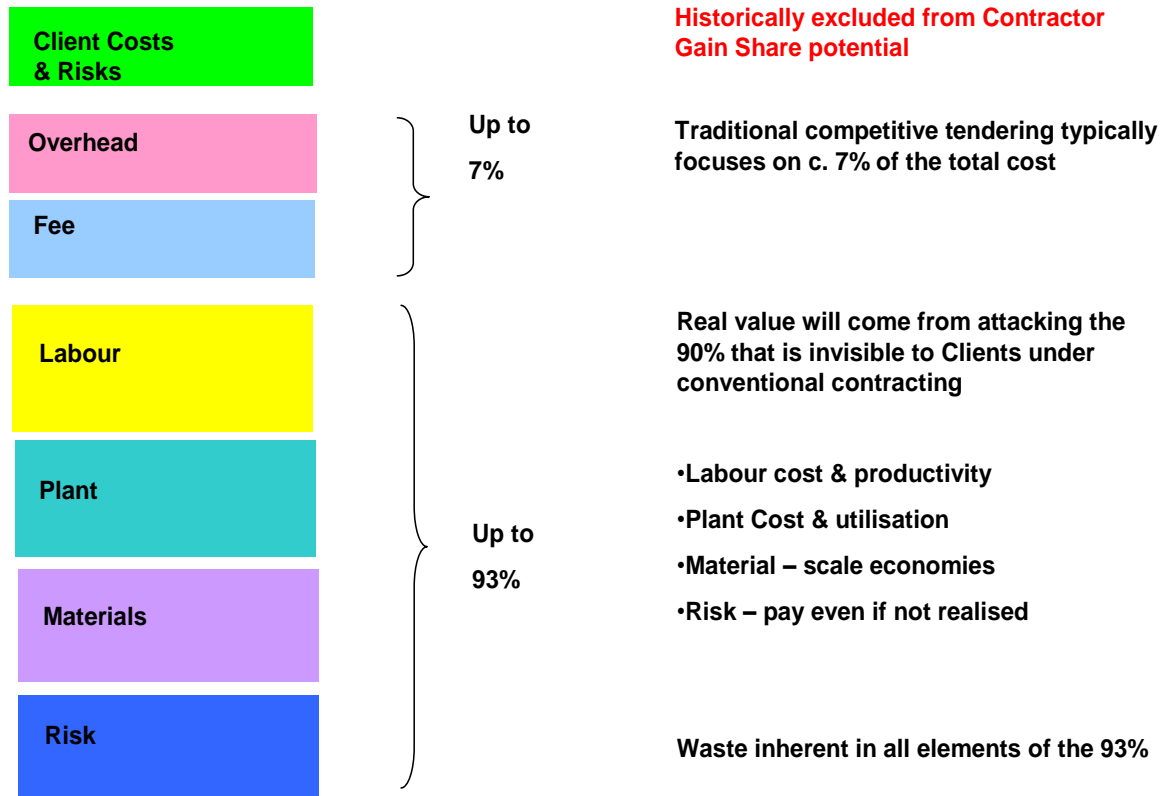
Summary

- 2.1 The highest performing client organisations have a common characteristic in that they use programme management techniques, through a fully funded programme, to drive continuous improvement and capital efficiency.
- 2.2 Projects procured on a traditional “project by project” basis through frameworks or on the open market will be less likely to deliver best practice performance due to the lack of client driven, joint efficiencies and supply side contributions. Those clients that operate exceptional performance measure their performance internally, externally as part of their regulatory obligations and against wider industry maturity models.

Key Enablers

- 2.3 There are number of basic enablers that must be in place to secure the efficiency gains offered by a funded programme:
 - Programme commitment and visibility of workload (over at least the CSR period)
 - Clarity of client role with clearly understood organisational capability and competency
 - Programme management embedded as a strategic client competence.
 - Mature and capable supply chain on board
 - Overlay of performance management system
 - Enabling commercial policy which recognises out-performance
- 2.4 Delivering value can be achieved through a performance mechanism that encourages and enables all stakeholders to be focused and aligned on the key whole life cost and value drivers. Under conventional procurement, most of the effort has been concentrated on the areas of overhead and profit, which together can make up some 7-10% of total cost. In fact, real value comes from focusing on the ~90% of cost that is invisible to clients under conventional contracting, as well as the client side costs and risks. The diagram below refers:

Understanding the flow of money and risk



- 2.5 When clients and supply chains are focused on the true cost and value drivers, programme management opens up opportunities to secure procurement economies of scale and scope as well as enabling process improvements by standardising the approach across projects within a programme.
- 2.6 However, a client body must have achieved a certain level of competence in order to be able to manage such a programme management model. Without such a capability, their default position should be to complete interim design, secure the necessary consents and permits to build and then contract individual projects. Such an approach offers fewer opportunities for efficiencies but is the safest option for a client who does not yet have the requisite skills to manage a programme.

Benefits from a funded programme

Performance Lever	What can be achieved without a funded programme	What can be accelerated by having a funded programme	What can only be secured through having a funded programme
Organisation	Reduction in client costs through adopting a lean intelligent client structure	Integration of key functions and alignment of suppliers' delivery management capability	Complete alignment and integration across the delivery programme resulting in ultra lean resourcing
Commercial	Reducing costs through competition levers and adoption of target cost mechanisms to drive project performance	Ongoing on cost reduction in client and supplier teams	Reducing cost through competition, performance and productivity levers. Introduction of Purchase to Pay, client provided insurances etc.
Supply Chain	Savings linked to those achieved through commercial negotiation.	Category management in order to aggregate and leverage purchase	Collaboration into 2 nd and 3 rd tier levels, resulting in integrated procurement and logistics managed across the programme
Process	Project gateway process and risk and value processes restricted to project delivery	Risk and value process applied across multi-projects	Common delivery process and mature performance management techniques such as EVM and Project Controls
Product / Lean	Investment in Lean at framework level in order to develop standards. Application of best practice waste management practices	Planning investments and activities to realise the benefits of lean practices and waste reduction.	Repeatable design / manufacture / installation driven top down and bottom up in the programme.

Recommendations

- 2.7 Clients should undertake, in advance of the next CSR, a formal assessment both of their own and their supply chain's capability and competence to manage and deliver a programme of work collaboratively. [DN: reference to the client maturity matrix being developed by IUK Client Working Group]**
- 2.8 The Major Projects Review Group (MPRG) should validate such an assessment, and once the required competency level is demonstrated, sponsoring departments should pilot bundled projects to be undertaken as a funded and committed programme, together with an efficiency target for the client body to meet.**
- 2.9 HMT Spending and Sponsoring teams should work with government construction spending departments to consider the level of their funded programmes.**

3 – FAIR PAYMENT

Background

- 3.1 In 2006 under the leadership of the Fair Payment Working Group, for the first time, cross-industry consensus was achieved on the matter of fair payment best practice. A cross-industry agreed Guide for implementing Fair Payment good practice, which included a Fair Payment Charter and guidance on the use of Project Bank Accounts, was produced. The Fair Payment Charter set out the principles for payment across the supply chain and was intended to ensure that nobody within the supply could take unfair advantage of their procurement position by requiring extended credit across their supply chains, or delay payment.
- 3.2 While the Fair Payment Charter has been included in the contract documentation of a number of government clients for the past three years, it has not been contractually binding and there is evidence of substantial non-compliance. The analysis by the Cabinet Office of the published accounts of government construction suppliers revealed that, on average payment periods exceeding 60 days for tier 2 suppliers were not uncommon, resulting in payment periods exceeding on average 90 days for tier 3s. The maximum payment period in the industry agreed Fair Payment Charter is 30 days. The Government Construction Board concluded that further action was required.
- 3.3 Government Construction Board agreed to move to a position where PBAs are the default on government projects and committed to a target of delivering £4bn worth of construction projects using PBAs over the next three years.

Project Bank Accounts (PBAs)

- 3.4 A PBA is ring-fenced, electronic bank account, from which payments are made directly and simultaneously by a client to members of its supply chain. The PBA accelerates payment of amounts due to tiers 1 – 3 of the supply chain, usually within 3 working days of the purchaser paying the certified value of the monthly assessment into the PBA.
- 3.5 The account is held in the names of trustees; they are likely to be the client and lead contractor (but members of the supply chain could also be trustees). The advantage of trust status is that in the case of insolvency monies in the account due for payment to the supply chain is secure and can only be paid to them.
- 3.6 PBAs are suitable for a very wide range of project values depending on the size of the supply chain and procurement model and may be suitable for small capital projects.

- 3.7 NEC3 and the Project Partnering Agreement (PPC2000) and the Joint Contracts Tribunal forms of contract have PBA provisions.

The Business Case

- 3.8 It is estimated that the potential client benefit is likely to be in the range of 1-2% of construction value for a mature PBA.

- 3.9 Also the business case justification for PBAs is that the client has far more visibility and control over the supply chain payment cycle beyond the tier 1, the expected benefits are:

3.10 To the Client

- i. Reducing the disruption, delay and additional cost to projects caused by avoidable supply chain failure triggered by cash flow shortages.
- ii. Reducing the overall cost of project delivery as tier 2 and 3 suppliers reflect accelerated payment in their price structure.
- iii. Visibility of the tier 2 and 3 supply chain identity, including a structured monthly analysis of the nature of goods/services provided and the financial position for each supplier. Over time, a supply chain map is built up.
- iv. Reduced cost of measuring payment timescales across the supply chain. A PBA, once set up, is essentially self policing whereas clauses promising to pay within specified timescales require monitoring and enforcement.

3.11 To the tier 2 and 3 suppliers

- i. Payment security at shorter timescales, enhancing their ability to secure more favourable credit terms from their banks.

3.12 To the Tier 1 contractor

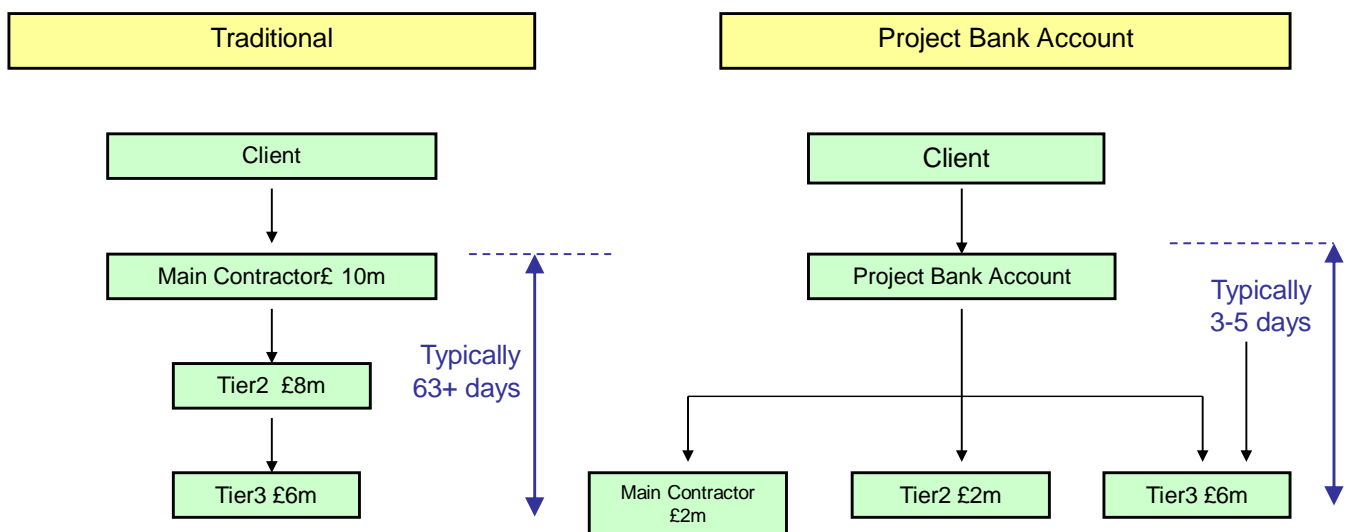
- i. The issue with the tier 1 contractors is more complex and the Task Group believes that it merits further consideration, especially as it relates to bonding and insurance requirements and the associated impact on their cost of finance may be a benefit to the tier 1 contractor.
- ii. Over time the additional security offered to the client by a PBA may mean that the client will agree to lower bonding and insurance requirements in return for the PBA and that the

bondholders will agree. These assumptions have not been proven at time of writing.

- iii. There is also a risk for the smaller tier 1 contractors in that one consequence of a PBA is that it materially alters the cash flows down the supply chain, cutting the tier 1 out of the flows to the nominated suppliers. The consequence of this is a reduction in the cash flow through the tier 1 contractor, potentially reducing the ability of the contractor to raise finance and the willingness of bondholders to provide surety.
- iv. If clients continue to require their current levels of bonding and insurance whilst reducing cash flow through tier 1s by introducing PBAs, then many smaller tier 1s may be unable to raise the bonds that they now can and the consequence may be greater consolidation toward the larger contractors. As the PBA initiative has been developed to help the SMEs, this cannot be a desirable outcome. The task group therefore recommends that especial attention is given to this issue when evaluating the early schemes.

The flows of money from the client down the supply chain is summarized in diagram 3.13 below:

3.13 Project Bank Account: Money Route Map



OGC analysis showed delay in paying tier 2 to be 34-105 days (average 63 days)

Tier 3 average payment 90 days +

Implementing PBAs

3.14 There are two approaches to implementing PBAs; these are the '*dual authority*' approach and '*single authority*' approach. They refer as to whether both the Client and Lead Contractor (Dual Authority), or only the Lead Contractor (Single Authority) instruct the bank to distribute the authorized amounts to the supply chain from the PBA – **not able to alter amounts or payees**. Both approaches offer the same level of security and payment of funds to the supply chain, albeit with a slightly different approach to transparency - these are explained further in Annex A.

Early adopters

3.15 At time of writing a number of projects using PBAs were in operation in the Highways Agency, the MoD, Crossrail and Sheffield City Council. The Ministry of Justice, Manchester City Council, Environment Agency and the wider public sector are all in the process of introducing them.

3.16 Linear infrastructure schemes tend to have a relatively low number of work packages with a relatively small number of interfaces between them. On a complex building scheme, there are likely to be many more and smaller work packages with many more interfaces between them. On such schemes, the interrelationships will be considerable and the payment flows will be correspondingly complex. While there has been some experience in non infrastructure projects, departments should be encouraged to introduce more PBAs in building type projects

3.17 Infrastructure is around 15% of new build construction in the UK, with buildings making up the bulk of the remainder. Whilst welcoming the rollout programme, the task group cautions about extrapolating from the limited early adopters, which in the majority are relatively simple linear infrastructure schemes, in areas of different work packaging strategies and with much greater cash flow complexity. The task group believes that the roll out programme should be monitored, including on non infrastructure projects to inform direction of the programme in the future.

Recommendations

3.18 **That a PBA Implementation Group (PBAIG) be set up to:**

- a. **Monitor and advice on the roll out of PBAs across the government construction portfolio.**
- b. **Review experience on early schemes where PBAs are being used and quantify actual benefits.**

3.19 The PBAIG should review, *inter alia*:

- i. The impact of the PBA on the bonding and insurance requirements placed by the client on the tier 1 contractor,**
- ii. The consequence of the altered cash flows on the tier 1 contractor in terms of their ability to raise money and on the willingness of bondsmen to provide surety.**

This review should inform the Government Construction Board's future decisions regarding PBAs.

3.20 While both the Single and Dual Authority models deliver the fair payment PBA requirements, the Task Group recommends that the Single Authority PBA Model should be the preferred model because it is easiest to administer and requires least client resources to operate.

1.0 Estimated Benefits Analysis

- i. The Cabinet Office business case analysis, using the PBA payment cycle indicates that tiers 2 and 3 will be able to reduce their prices by around 1.4% as the tier supplier 1 will no longer be able to hold the cash, the Cabinet Office assess that this will result in the tier 1 prices increasing by around 0.3%. The Fair Payment administration cost was assessed at around 0.1% – giving a net saving consequent upon introduction of the PBA of 1.1% of project value or 0.84% of the construction value. **It is important to validate these estimates in practice. It is recommended that the Implementation Group which this report recommends be charged with overseeing the roll out of PBAs across government should take responsibility for also quantifying benefits.**
- ii. It is worth noting that the net saving described above is viewed as conservative for the following reasons:
 - a. The business case was based on the contractual payment timescales covered under the Fair Payment Charter principles. The use of PBAs results in shorter timescales
 - b. The originally estimated benefit through PBAs for tiers 2/3 was assessed to be around 2.75% of construction value; this was reduced to 1.4% as 50% of SME members in the group taking part in research indicated that that they would retain for themselves the benefit accruing.
 - c. The administrative cost of payment is reduced considerably by the use of PBAs

2.0 SINGLE Authority versus DUAL Authority

1. The originally developed PBA approach was the Dual Authority method, a variant of this was subsequently developed to offer the Single Authority method. The two approaches make the operation of the PBA somewhat different, with differing procedures and resource requirements without impacting on the essence of PBAs of security and assurance of payment and transparency. The table at 3.0 below summarises the difference between the two models.

Under the Single Authority model:

- a. The T1 contractor nominates a bank to host the PBA. The client has to agree that this complies with the PBA minimum requirements set out by the Cabinet Office. A Trust Deed is set up and each nominated supplier to be paid directly from the PBA signs a Joining Deed. This creates a legal framework which protects their money in the event of tier 1 or 2 insolvency. The contractor sets up the account and arranges for the client to have direct view only access.
- b. The T1 contractor submits the monthly application, providing a breakdown of its assessment and showing the amount to be paid to each supplier. The client agrees and certifies in the usual way, paying the certified amount into the PBA in the normal way five days before distribution of the funds is due. Once certified by the client, the contractor instructs the bank to pay. The client views the account monthly to confirm that suppliers have been paid promptly and in accordance with the breakdown agreed with the client.
- c. This model leaves the current processes for contractors to submit monthly assessments and the client to certify and pay completely unchanged, without adding to the contract administration burden on the client body. The key change is that the contractor also submits a breakdown of the assessment to the client, showing the amounts due to themselves and each named supplier. Once certified by the client, it is the main contractor's bank instruction which initiates payment from the PBA to each named supplier's and the contractor's normal bank account.

Under the Dual Authority Model:

- a. The Client nominates a bank to host the PBA and the Client and contractor are joint account holders. A Trust Deed is set up and each nominated supplier to be paid directly from the PBA signs a Deed of Adherence. This creates a legal framework which protects their money in the event of tier 1 and 2 insolvency. The Client sets up the account.
- b. The T1 contractor submits the monthly application, providing a breakdown of its assessment and showing the amount to be paid to each supplier. The client agrees and certifies in the usual way, paying the certified amount into the PBA in the normal way five days before distribution of the funds is due. Once certified both the client and the T1 contractor instruct the bank to pay.

- c. As for the Single Authority model this model leaves the current processes for contractors to submit monthly assessments and the client to certify and pay completely unchanged, without adding to the contract administration burden on the client body. The key change is that the contractor also submits a breakdown of the assessment to the client, showing the amounts due to themselves and each named supplier. Once certified by the client, it is the main contractor's bank instruction which initiates payment from the PBA to each named supplier's and the contractor's normal bank account.

3.0 The differences in the two models

Differences between Dual Authority and Single Authority models

<u>Dual Authority Model</u>	<u>Single Authority Model</u>
<ul style="list-style-type: none"> – Client and contractor are joint account holders – Only client can deposit funds into PBA – Client has to authorise payment to supply chain via internet banking 	<ul style="list-style-type: none"> – Contractor is the sole account holder – Client and contractor can deposit funds into the PBA – Payment detail is agreed when head contract value is agreed. Contractor instructs bank.

4. The Task Group has considered the two models and has concluded that:-

- i. **The Dual Authority model deed of trust is simpler as the detail is contained in the contract clauses.**
- ii. **In the Single Authority model, the client avoids the governance issues and the administrative burden of having to authorise both payments into and from the PBA.**

4. HEALTH & SAFETY

- 4.1 An indicative figure of the contemporary, direct, annual cost to the State of construction accidents on public financed projects is £52M^{1, 2}. This is based on a value of orders placed in 2009/10 of approx £39.2B. This figure is provided as an indication of the scale of the cost of accidents alone. A more rigorous assessment is welcomed but for the Task Group's purpose it indicates significant potential savings to the public purse are available.
- 4.2 Over recent years, larger UK clients in partnership with the major contractors have jointly led a considerable improvement in construction safety standards on discrete projects or construction programmes with headline, RIDDOR AFR rates falling from reported industry norms of 0.3 – 0.4 to levels of around 0.1. This has been due to a noticeable shift in the safety culture on such projects, invariably led by intelligent Clients.
- 4.3 Although the principles of construction safety management are enshrined within the CDM Regulations, the motivators for excellence are missing, namely an appreciation of the effect of culture, the impact of leadership and the need to change behaviours. It is the Task group's belief that it is in these areas of the current Government Construction Standard⁴ where aspirations are set too low.
- 4.4 Reduction in the RIDDOR AFR of 0.1 is proving difficult as most of these accidents are less affected by process controls. However behind these headline figures large numbers of, potentially catastrophic and/or fatal incidents still occur on outwardly well controlled major sites. This indicates that the culture, standards, processes and procedures are fragile and the industry still requires the support of major clients to continue its improvement.
- 4.5 Until recently there has been little independent hands-on research about the effectiveness of the elements of a good construction safety culture. It is timely that the Olympics 'Big Build' phase has left a learning legacy of independent research which supports previously held, anecdotal views and identifies key areas of transferable learning where Clients can make a difference. Reference to the relevant reports is included in the supporting evidence below.
- 4.6 The Task Group believes that one of the major factors in excellent construction safety performance comes from committed client led safety leadership as has been demonstrated on recent large projects, for example, T5 and most recently the Olympics 'Big Build' phase³. Safety leadership was provided on both projects at both organisational and personal levels with Clients setting detailed, aspirational health and safety expectations and Client's representatives actively demonstrating their personal commitment at every opportunity.

- 4.7 At an organisational level, for example, many major projects operate a client led H,S & E Leadership Team comprising Tier 1 and critical lower tier suppliers. A leadership group can ensure clear vision, strategies and collective engagement as well as being a vehicle for driving shared best practice and consistency. Such Teams, if properly led and facilitated, have been shown to be major enablers of continuous improvement. There are tangible outcomes – for example the safety excellence wheel referred to below came out of the HA sponsored supply chain leadership group.
- 4.8 At a personal level Clients representatives must be seen as leaders positioning health and safety as a core value not one of a list of competing priorities and demonstrate commitment by their actions. The challenge is to provide people in leadership roles with the skills to understand their effect on people under their influence and how to affect their direction and safety behaviour. The Task Group therefore recommends both Clients and their supply chains support a safety leadership development programme based upon a review of Tier 1 contractors' best practice. Such an approach is in accord with the Procurement/Lean Client Task Group's Summary Report recommendations January 2012 for the government to roll out professional development within public sector clients and their supply chains.
- 4.9 Regulatory policy makers have shown an increasing interest in the use of supply chains to improve standards of health and safety. A recent review, however, suggests that although the potential to use supply chains in this positive way exists, in practice it is rarely exploited⁵. The existence of a funded and committed programme provides supply chain stability and the opportunity to positively improve lower tiers' H&S performance. For example the HSE have recently opened a webpage on Leadership and Worker Involvement⁶ for the benefit of construction SMEs. Clients could request Tier 1s to coach lower tiers in adopting the 10 key principles within the toolkit. *The Task Group recommends that Clients identify and target criteria for improving supply chain H&S performance.*
- 4.10 It is generally accepted that effectiveness of control and discipline is diluted in long supply chains and on large programmes the need for good industrial relations and team-working are paramount to realising success. Employers are much more inclined to invest in their own employees who will in turn display greater loyalty and provide a better and consistent health and safety culture. The Task Group have observed high risk organisations, e.g. petrol-chem prefer direct employment and that on T5 and the Olympics the ethos of a directly employed workforce was agreed (with practical exceptions) where such an approach provides the opportunity to embed cultural change as well as other programme benefits in the workforce. *The Task Group however falls short of recommending that the Client consider adopting the ethos of a directly*

employed workforce on appropriate programmes but would point out the benefits of this approach as guidance.

- 4.11 A pre-requisite to high performance in H&S is a well developed H&S management system throughout the supply chain such as found in Tier 1 and most Tier 2 contractors. Making sure such systems work effectively requires rigorous assurance. On the Olympics, for example, this was achieved by all parties, namely Tier 1 contractors, designers and CDM co-ordinators undertaking self-assurance and submitting periodic reports to the Client together with a 'light-touch' audit regime undertaken by the Client's Delivery Partner⁶. This approach was seen as an important element in the Client's understanding of contractors' commitment to H&S and provided confidence in all parties stated achievements and trust in communications at all levels, in all organisations. *The Task force recommend that Clients implement appropriate and rigorous H&S assurance regimes across programmes either directly and/or through their Tier 1 contractors.*
- 4.12 Research³ also indicates that worker involvement is an important component of health and safety culture and positive outcomes. Central to the involvement of workers has been the specification by Clients those Tier 1 contractors operate a behavioural safety programme. Linked to a 'just culture' such a programme creates an environment where everyone, including workers, can play a full part, including putting forward suggestions that improve health and safety performance. *The Task Group therefore believes that persistent focus on behavioural safety approaches involving all personnel and with an emphasis on supervisors is needed to improve the current best practice statistics.*
- 4.13 A willingness to benchmark, learn and improve have been recurring themes within organisations with the best health and safety performance. These aspects of health and safety have been captured within many models available with one striking example, the Safety Excellence Wheel shown below developed in 2011 by the Highways Agency, working with its principal contractors. It gives a simple, visual representation of an organisation's cultural maturity in eight key areas of performance with best practice statements describing excellence. The emphasis is on improvement not absolute position - with the exception that no one should be below minimum standard. The wheel has received consistently positive feedback since its introduction and is commended to clients and their supply chains.



Conclusions

- 4.14 Further advance on the current best practice AFR levels of around 0.1 will only occur if there is a consistent and persistent focus on cultural change within the industry that is Client led.
- 4.15 The Task Group believes that funded programmes offer clients the opportunity to establish and lead supply chain groups that can play a major role in the development of safety.

Recommendations

- 4.16 The Task Group recommends both Clients and their supply chains support a safety leadership development programme based upon a review of Tier 1 contractors' best practice.

- 4.17 The Task Group recommends that Clients identify and target criteria for improving supply chain H&S performance.
- 4.18 The Task Group recommend that Clients implement appropriate and rigorous H&S assurance regimes across programmes either directly and/or through their Tier 1 contractors.
- 4.19 The Task Group recommend that a Health and Safety Implementation Group should be set up to oversee the rollout of these recommendations and those on Occupational Health across the government portfolio.
- 4.20 The Task Group believes that persistent focus on behavioural safety approaches *involving all personnel, with an emphasis on supervisors*, is needed to improve the current best practice statistics.
- 4.21 The Task Group have identified as guidance for Clients that there are health, safety and other benefits of a directly employed workforce on appropriate programmes. [This does not mean labour employed by the Client but by Tier 1, 2 or 3 contractors – labour which is employed to encourage investment in people and secondly to avoid the inherent problems arising from the use of ‘labour-masters’].

References

1. HSE: Cost to Britain of workplace injuries and work related ill-health 2009/10 update.
2. Office for National Statistics, Output in the Construction Industry: February 2012 Release.
3. Learning Legacy Research Paper: ‘Leadership and Worker Involvement on the Olympic, Dec 2012.
4. Government Construction: Common Minimum Standards for procurement of the built environments in the public sector.
5. Learning Legacy Research Paper: ‘Supply chain management for health and safety’, Oct 2011.
6. [HSE Leadership and Worker Involvement toolkit](#)
7. Learning Legacy Research Paper: ‘Delivering health and safety on the development of the Olympic Park and Village, Oct 2012.

5. OCCUPATIONAL HEALTH

- 5.1 An indicative figure of the direct, annual cost to the State of construction ill-health on public financed projects is £81M^{1,2}. This is based on a value of orders placed in 2009/10 of approx £39.2B. This figure is provided as an indication of the scale of the cost of ill-health. It is not an insignificant figure and it can never fully capture the loss to victims.
- 5.2 Occupational health (OH) is about the effect of work on health and effect of health on work. Employers have a duty under the Health and Safety at Work, etc. Act 1974 to ensure, so far as is reasonably practicable, the health and safety of their employees and others affected by their work activities. Legislation made under the main Act further defines the responsibility to identify and assess risks to health from work activities, put in place measures to control these risks and provide health surveillance as appropriate.
- 5.3 Chronic ill-health risks have until recently been eclipsed by acute injury risks even though there are currently seventy times more deaths annually attributable to occupational ill-health than accidents at work³. The task Group discussed how to secure the improvement needed in the construction industry.
- 5.4 It was evident that facilities management teams have a better record of occupational health than that of their construction counterparts. The Task Group suggests that one reason for this is the continuity of work that facilities management teams enjoy when compared with construction personnel assembled to deliver single projects. Another reason suggested is the stability of the income stream for facilities contracts enabling organisations to plan expenditure and add value for their more stable workforce. With similar logic to that in para 8.10 of the Health and Safety section of this report, employers are more inclined to invest occupational health resources in their own directly employed workers.
- 5.5 The Task Group recognises that many construction contracts have neither the size nor the turnover to justify independent investment in occupational health provision which is still seen as an expensive short term cost with little appreciation of and hence little regard paid to either the long or short term benefits by decision makers who may not understand the scope and benefit of an OH service. However, larger contracts and programmes do fund initiatives that replicate those to be found in facilities management contracts. In this regard, the Task Group's attention was drawn to the recently published, final report detailing the Occupational Health Performance on the Olympic Park and Athletes' Village⁴.
- 5.6 The proposition advanced by the Task Group is around Governmental funded programmes providing greater stability and continuity of work to supply chains. Such programmes provide the opportunities to develop business cases for occupational health investment.

- 5.7 The Task Group recognises that business cases require some element of cost-benefit analysis and that assessing the benefits of any OH intervention is difficult. Immediate benefits, arising predominantly from reactive activities such as time saved through treatments (only a small percentage arising from work injury) of workers on site rather than off-site treatment are generally the focus of any cost-benefit analysis. Quantification of the benefits of preventative work that forms the prevalence of an OH services work has inherent difficulties. Reliance therefore on reactive/proactive data alone to assess the benefits of OH is likely to underestimate the potential benefits, whilst counting the full service cost. It also focuses solely on clinical inputs and does not take account of the wider, more intangible benefits of improved productivity associated with maintaining staff on site through improved health (and not having to cover for those who seek treatment), or through improved work practices achieved through better training and more awareness amongst the workforce.
- 5.8 The Olympic Park research paper does provide some interesting insights into the operation of an OH service as well as providing alternative cost benefit analyses. These indicate that the net benefits accrued from the time saved on the Park and Village by treating and assessing workers in an on-site rather than off-site facility were somewhere between £0.1 million and £30.9 million depending on the calculation used. Even a relatively conservative assessment of the benefits suggests that at least £3.3 million was saved on a project spend of £6.77B. The report also references T5's previously unpublished net benefit figure for treatments alone of £269K on a spend of £4.8B. The report suggests that more work to assess the benefits of preventative work would be a useful future research priority. It also recommended that the industry continue to develop the understanding of the benefits of OH facilities for smaller sites and that it should research the scalability of monetary benefits.
- 5.9 The Olympic report provides examples of low cost OH management interventions that contractors can introduce for themselves, together with evidence that contractors themselves had begun to recognise these benefits. These included:-
- Adapting existing practices to incorporate health as well as safety concerns;
 - Raising the profile of OH amongst the workforce;
 - Linking OH monitoring and risk assessment to ongoing work plans;
 - Integrating occupational health considerations into design decisions.
- 5.10 All of the above were found to minimise delays and offer the opportunity to implement more streamlined and less intensive work practices. The cost of occupational hygienists, when compared to the overall costs of the service, were also found to be moderate (less than 20 per cent of the

total), but this component was seen as highly valuable by contractors and a useful support in decision making and planning.

5.11 There have already been some major improvements in health provision in major construction companies including welfare facilities. There is also a cursory assessment of OH provision in the Considerate Constructors Scheme.

Conclusions

5.12 **The Task Group believes that there are overall cost benefits to be gained by providing OH services at large projects but more research is needed to understand the financial cost benefit cut-off point: beyond that point a broader view is of the criteria for OH provision is required.**

5.13 **The Task Group believes that the continuity and stability provided by a funded programme offers an opportunity to improve occupational health within the construction industry and this should be accepted and led by the Client.**

5.14 **The Task Group notes that contractors' facilities management sectors have already made considerable improvements in their own occupational health provision: the same cannot be said for the rest of the supply chain.**

Recommendations

5.15 **The Task Group recommends that the report 'Occupational Health Provision on the Olympic Park and Athletes' Village', be used as the starting point for piloting further work by the Client in preparing a occupational health specification on a project/programme basis, e.g. the next fully funded programme such as High Speed 2.**

5.16 **The Task Group recommends that Clients require Tier 1 contractors who tender for large projects or work programmes to specifically identify the scope of OH services to be provided by the Tier 1 contractor.**

References

1. HSE Cost to Britain of workplace injuries and work related ill-health 2009/10 update.
2. Office for National Statistics, Output in the Construction Industry: February 2012 Release.
3. HSE, Health and Safety Statistics: Fatal injury statistics-summary for 2010/11 / Work-related ill health and occupational disease.

4. Final report “Occupational Health Provision on the Olympic Park and Athletes’ Village”, prepared by the Institute of Employment Studies.