



Trial project: Supply Chain Management Group (SCMG)	New delivery model / procurement route: Two Stage Open Book under PPC2000
Cost savings achieved: 14% (in addition to 16.5% achieved through procurement)	
Other key benefits achieved: Time and cost control, end user satisfaction, reduced defects, reduced waste to landfill and carbon emissions, improved employment and skills outputs	

Trial report sequence:	Kick off meeting	Brief / Team Engagement	Decision to Build	Build and Occupy
Cost saving basis:	Outline saving aspiration	Challenging cost target	Award Cost	Outturn Cost

Trial project details	
Project title	Supply Chain Management Group (SCMG)
Clients	Hackney Homes and Homes for Haringey
Project value	Hackney Homes £110.6m and Homes for Haringey £91.5m
Form of project	Capital housing refurbishment programmes
Main contractors	Mulalley, Keepmoat, Mansell, Lakehouse, Lovell, Wates
Lead designer	Main contractors as above
Key suppliers	Mace Veka Bauder Sovereign Grotargetedup Birchcroft



Executive summary:

Hackney Homes and Homes for Haringey as members of the Supply Chain Management Group (SCMG) have used Two Stage Open Book to demonstrate a breakthrough that will enable public sector clients to deal directly with Tier 2/3 subcontractors and manufacturers, working with Tier 1 contractors, to build up fully integrated working relationships.

SCMG has created a multi-client, multi-contractor team engaged on housing refurbishment that has worked with a wide range of SME subcontractors and manufacturers under a standardised system of costing and long-term engagement that has created major savings and significant qualitative benefits.

The SCMG relationships and structures are sustained by training and support to embed a collaborative culture. Both Hackney Homes and Homes for Haringey re-procured their Tier 1 contractors during the Trial Project Case Study period, and demonstrated significant savings in the procurement process itself and in the outturn costs / rates.



Project summary

Hackney Homes and Homes for Haringey, working through the Supply Chain Management Group (SCMG), procured a range of Tier 1 contractors on a Two Stage Open Book basis, with whom they then worked jointly to select and support a team of Tier 2 and Tier 3 supply chain members for the delivery of a long-term programme of housing improvement and refurbishment works. Through the SCMG systems, new lines of client contact are established with Tier 2 and Tier 3 supply chain members at an early stage in the preconstruction process so that they can make maximum contributions to design, resident consultation, surveying and programming and can work in conjunction with the client and Tier 1 contractors.

Joint working has been established across the boroughs of Hackney and Haringey, together with a shared employment and skills resource at the Building Lives Training Academy, plus shared Tier 2 and Tier 3 supply chain members serving both boroughs.

Project time line

- Selection of Tier 1 contractors under Two Stage Open Book through framework/alliance procurement and PPC2000 standard form of contract, 2009 (Haringey) and 2010 (Hackney)
- Joint working through SCMG by Hackney and Haringey and their group of Tier 1 contractors, 2010-2013 to build up integrated teams and joint supply chains
- Establishment of Tier 2 and Tier 3 supply chains under Two Stage Open Book Supply Chain Agreements in accordance with SCMG processes, 2010-2013
- Annual programmes of work agreed with Tier 1 contractors and Tier 2/3 subcontractors/suppliers and ordered on a Two Stage Open Book basis under PPC2000 Sectional Commencement Agreements (2010-2013)
- Homes for Haringey re-procurement completed December 2013
- SCMG annual review completed March 2014
- Hackney Homes re-procurement completed June 2014

Key project features

- Early appointment of Tier 1 contractors under PPC2000
- Early joint appointment of comprehensive range of SME Tier 2 and Tier 3 supply chain members
- Substantial savings achieved firstly at main contractor procurement, and secondly through joint working with Tier 1 and Tier 2/Tier 3 supply chain members
- Reduced waste through lean programming, value engineering and rationalisation of specifications
- Substantial time savings through new pricing and mobilisation systems
- New opportunities for SME subcontractors and suppliers, and substantial employment and skills improvements
- Improved quality control and increased resident satisfaction

Client objectives and vision

SCMG is a consortium of clients formed pursuant to the HCA's National Change Agent initiative that sought new savings and efficiencies in housing procurement.

Hackney Homes and Homes for Haringey developed their expertise in Two Stage Open Book Involvement through their use of the two stage PPC2000 form of contract under previous frameworks. They had gained the confidence needed to work more closely with Tier 1 main contractors and obtain direct access to Tier 2 and Tier 3 subcontractors and suppliers, so as to understand their needs and drivers and to create the integrated teams that would enable substantial savings and efficiencies.

Hackney Homes and Homes for Haringey as members of SCMG shared a vision of how to deliver their strategic housing programmes, developing the SCMG systems to be available to other public sector clients. SCMG have a strategic plan to make their Two Stage Open Book approach easily accessible both on new build and refurbishment works.

Client objectives on their own programmes are to combine cost savings with reduced risk, clear programming and improved quality. They also focus on ways to benefit the local economy, including through improved employment and skills commitments, while meeting the demands



and deadlines of a substantial capital programme.

New procurement techniques and processes

The SCMG Two Stage Open Book processes comprise:

- Identification of work packages, meeting with all Tier 1 contractors to secure names of likely Tier 2/3 suppliers/subcontractors plus agreement of a lead Tier 1 contractor for each package
- Meeting with all identified suppliers/subcontractors and gleaning experience/testing robustness of previously priced schedules of rates/identification of improvements to specifications
- Open-book tendering by lead Tier 1 contractor on behalf of other contractors (facilitated by SCMG) among identified suppliers/subcontractors to establish costs against simple pricing matrix by reference to optimum number of suppliers/subcontractors required
- Assessment of tender returns to eliminate higher priced tenders, then averaging of the remaining tender prices to agree a stable basis for long-term Tier 2/3 appointments
- Further reviews by selected subcontractors/suppliers with clients and Tier 1 contractors to identify quality improvements achievable within agreed prices

The agreed procurement route combines Two Stage Open Book with programmed systems of Supply Chain Management. Tier 1 contractors were selected by Hackney Homes and Homes for Haringey using alliance/framework agreements and the standard form PPC2000 Partnering Contract which incorporate contractual processes for joint working with suppliers and subcontractors.

Through these systems the SCMG clients, Tier 1 contractors and a wide range of predominantly SME Tier 2/3 subcontractors and suppliers and manufacturers have worked collaboratively as integrated teams to deliver cost savings, improved employment and skills outputs, extended warranties and more sustainable solutions. The full range of Tier 2/Tier 3 subcontractors and suppliers brought into the SCMG system covers 30 disciplines, namely asbestos removal/surveys, brickwork, central heating manufacture and installation, concrete

manufacture and installation, decoration, electrical works, fire doors, general building works, hoists, insulation manufacture and installation, kitchen and bathroom manufacture and installation, lateral mains, metalwork, multi-disciplinary design, PV panels, roofing manufacture and installation, roofing pipework, scaffolding, surveys, waste disposal, windows manufacture and installation and window repairs.

Other interventions include effective frameworks, development of intelligent client capacity and lean working under a combination of alliances/frameworks and SCMG Supply Chain Agreements.

The PPC2000 form of Project Partnering Contract describes and underpins the Two Stage Open Book approach adopted by SCMG, including the programmed design, risk management, costing and progressing activities undertaken during the early conditional appointment of an integrated team to seek additional savings and improved value. PPC2000 has been used with minimum amendments to the published form and with no liquidated damages, retentions, general liability caps or performance bonds.

Early contractor involvement activities follow the timetabled processes set out in PPC2000 to obtain the best results from early engagement of the supply chain by means of Two Stage Open Book. After Tier 1 contractors are conditionally engaged, they work up project proposals in conjunction with the clients on an open-book basis and (with SCMG support) go to the market for Tier 2 and Tier 3 selecting them on fully transparent criteria. Over the course of the programme the clients gain insight and understanding as to the implications and value of client interventions, choices and decisions. This assists Hackney Homes and Homes for Haringey in becoming intelligent clients and encourages Tier 1 contractors to share knowledge through the supply chain, focusing on driving out unnecessary cost and risk rather than on any commercial "gaming" over price and the scope of works included.

Cost targets and savings

Hackney Homes and Homes for Haringey, through SCMG, targeted achievement of substantial cost savings benchmarked against comparable costs incurred by Hackney Homes working with a range of four contractors on its previous Phase II programme of comparable works and using 2009/2010 rates adjusted to reflect inflation.



The cost savings achieved include **16.5%** by Hackney on its 2010 framework/alliance procurement, plus further savings averaging **14%** achieved by Homes for Haringey and Hackney Homes through the application of the SCMG processes from 2010 to 2013. Overall savings equate to an average of 31%, achieved through reduced contractor costs (reflected in the alliance/framework procurement), reduced Tier 2/Tier 3 costs offered in return for clarification of work throughput, improved client briefs and simplification of pricing under basket rates, greater visibility of the forward pipeline of work and establishment of common Supply Chain Agreements securing prompt payment and an open forum for resolution of problems.

Percentage saving: 14% (in addition to 16.5% achieved through procurement)

The outturn of the Homes for Haringey and Hackney Homes procurements during the Trial Project Case Study period showed that savings created through the SCMG processes were sustained even in a rising market. In addition, the SCMG Annual Review completed March 2014 demonstrated an average price rise in SCMG rates of 1% which is substantially below the tender price inflation forecasts provided by a range of five independent consultants.

Analysis of the Homes for Haringey and Hackney Homes tender processes revealed that consultant costs incurred by both clients during the course of their procurements were substantially reduced by reason of the pre-existing SCMG data and documentation. Independent confirmation was also provided by a sample Tier 1 contractor, Keepmoat, to explain how their own bid costs on a procurement supported by Two Stage Open Book under SCMG were far lower than the bid costs they incurred under a comparable single stage procurement, specifically £719 per £1 million of turnover (under SCMG) as against £4,808 per £1 million of turnover (under the comparable traditional bid).

Additional benefits

Other targets captured in KPIs by Hackney Homes and Homes for Haringey include:

- Predictability of time and cost
- Client/resident satisfaction
- Defects
- Waste to landfill and carbon emissions
- Employment and skills achievements and local spend

- Leasehold matters - early settlement of service charge notices - AMPs fully validated at commencement - no major variations / additional costs / re-measures

Other benefits achieved include the use of Two Stage Open Book to ensure improved certainty and better value by means of the Tier 1 contractors and the Tier 2 and Tier 3 subcontractors and suppliers being appointed in sufficient time to participate in the following pre-build activities:

- Surveys
- Resident choice
- Design development
- Value engineering
- Improved build activities
- Improved build programming
- Improved risk management

Qualitative benefits

Examples of the qualitative benefits achieved as a result of early involvement of both Tier 1 and Tier 2/3 supply chain members include:

- Transparent and shared development of standard specifications and basket rates, leading to more efficient pricing and better value
- Reduced risks, cost savings and time savings through accelerated constructor/supply chain briefing process
- Subcontractor/supplier innovations in proposed new materials and development of specifications, such as future-proofing green roofs at no additional cost and upgrading windows from Grade C to Grade A at no additional cost
- Improved quality control through manufacturers attendance on site
- Exchange of best practice between specialist competitors
- Availability of extended warranties above industry standards, managed by suppliers/installers, such as windows warranted for 30 years
- Improved repairs and maintenance through, for example, self-cleaning glass on high-rise blocks
- Time savings, such as through quicker build-up of prices leading to earlier start on site and reduced client/consultant time/costs
- More sustainable solutions including



external wall insulation

- Additional employment and skills opportunities for individuals, for example 46 new apprenticeships over the first 18 months of the Hackney programme

Local benefits

SCMG specifically targeted the development of opportunities for local Tier 2/3 subcontractors and suppliers, building up a pipeline of work for Tier 2/3 subcontractors and suppliers across 30 different disciplines.

In addition, Hackney Homes and Homes for Haringey supported establishment of the Building Lives Training Academy where apprentices who have got NVQ Level 1 are engaged by constructors/specialists according to demand of ongoing work so as to achieve NVQ Level 2 after 15/18 months.

The first year results from the Building Lives Training Academy confirmed 29 apprentices graduating in May 2014.

Cultural benefits

SCMG joint working has resulted in an increased level of confidence in the relationship between client and supply chain. This is enabling all members of the programme to operate at higher levels of productivity and performance.

Overall assessment

The SCMG systems have demonstrated a breakthrough in enabling public sector clients to deal directly with key subcontractors and suppliers so as to ensure they build up fully integrated working relationships. A multi-client, multi-contractor team has engaged with a wide range of SME subcontractors and suppliers under a standardised system.

The new relationships and structures are without prejudice to the Tier 1 contractors' design and build warranty, their responsibility for programme deadlines and their agreement of a maximum price prior to start on site. Working together, the team have jointly implemented preconstruction works such as surveys, value engineering, resident consultation and programming that have ensured accurate calculation of time and cost, effective risk reduction and enabling of innovation.

The SCMG systems are easily replicable by any local authorities or housing associations under new procurements and also under current frameworks and long term contracts that contain processes for continuous improvement under PPC2000 or equivalent. Roll out of the SCMG approach across housing projects and other construction/engineering sectors can be implemented immediately without delays or costs of new EU procurements by the relevant public sector clients. The model trialled by SCMG can be adopted now to achieve cost savings in line with the Government Construction Strategy expectations.

The systems created by SCMG provide for an annual cycle of works to be the basis for:

- Identifying and agreeing opportunities for savings
- Simplifying Tier 2 supplier and subcontractor engagement and support
- Ensuring prompt payment from Tier 1 Contractors to Tier 2/3 Subcontractors and Suppliers
- Resolving potential disputes with the benefit of full cost and time information plus the motive to retain long term relationships

The assessment of the Trial Project Support Group is that the SCMG Trial Project has achieved significant savings and added value through the use of Two Stage Open Book combined with systematic supply chain management.

During the year April 2013 to March 2014, the Trial Project team (with the Project Mentor and the Academic Partner) monitored and analysed the SCMG systems in practice, including through detailed consultation with individual supply chain members and through a full day event attended by Tier 1 contractors and Tier 2/3 subcontractors and suppliers supported by their independent written submissions. The feedback obtained was very helpful and identified how the SCMG systems had led to:

- "planned and confirmed turnover, cash flow certainty, direct communication between all parties from client to resident" (Sovereign - windows and doors).
- "The use of local resources and labour from the areas we are working in helps break the barriers sometimes felt between local residents and the client or



constructor" (Dendale - kitchens and bathrooms).

- "Everyone is more than happy to help each other out to get the works complete at the same time, keeping the tenants informed and happy" (Masher Bros - kitchens and bathrooms).
- "I don't know of any other London borough that has managed to carry out so much work in so short a period. "The speed of which a contract can go from AMP inspection to starting on site and completion is far quicker than normal procurement practices" (Gunitite - concrete work).

Benefits were identified from new co-location initiatives undertaken by particular constructors, also through the development of new waste management solutions and the development of further extended warranties. The feedback obtained during the Trial Project period was wide-ranging and supported collaborative working at all levels of the supply chain, with new opportunities for local businesses and enhanced employment and training opportunities for local individuals.

Key lessons

The lessons learned over the course of the SCMG case study are as follows:

- There remains the scope to obtain further savings through improving the regular flow of work for suppliers/ subcontractors over an annual cycle, and a 3% additional discount has been offered by subcontractors and suppliers for any work which is started and completed within the first 3 months of the financial year
- In view of the changes in Tier 1 contractor personnel, particularly following the Homes for Haringey and Hackney Homes re-procurements, there is a need for consistent leadership and additional training of staff in order to maintain a clear understanding of the SCMG model and to ensure the preservation and development of a collaborative culture.

Miscellaneous

Authors:

- This case study has been produced by Professor David Mosey of Trowers & Hamlins LLP/ Kings' College London

Centre of Construction Law as Project Mentor, working in conjunction with Rob Garvey of University of Westminster as Academic Partner

Key contributors include:

- Hackney Homes, Homes for Haringey, Keepmoat, Mace, Mulalley, Veka, Bauder, Sovereign Group and Birchcroft

Background: Trial Projects programme

The Government Construction Strategy aims to change the relationship between clients and the entire supply chain within the industry. The trial projects perform a central role in delivering the Strategy's sustainable 15-20% reduction in costs and are currently testing three new procurement models (Cost-Led Procurement; Integrated Project Insurance; Two Stage Open Book) that were proposed by industry and developed by a joint task group. Case study reports are therefore an output of monitoring the progress and outcomes of the trial projects. They are produced at four stages: Kick-off Meeting; Brief/Term Engagement; Decision to Build; Build and Occupy. Other case study reports can be found at:

<https://www.gov.uk/government/publications/government-construction-strategy-trial-projects>

Project contacts

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SUPPLY CHAIN MANAGEMENT GROUP TWO STAGE OPEN BOOK

1

CONSORTIUM AGREEMENT

HACKNEY HOMES/HOMES FOR HARINGEY/OTHER PUBLIC SECTOR CLIENTS



2

ALLIANCE AND FRAMEWORK AGREEMENTS WITH TIER 1 CONTRACTORS UNDER TWO STAGE OPEN BOOK

HACKNEY HOMES, LAKEHOUSE, MANSELL, MULALLEY HOMES FOR HARINGEY, APOLLO, LOVELL, WATES



4

PROJECT CONTRACTS (PPC2000) UNDER TWO STAGE OPEN BOOK

HACKNEY/HARINGEY AND EACH TIER 1 CONTRACTOR GOVERNING PRECONSTRUCTION AND CONSTRUCTION

5

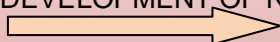
CONSISTENT PROJECT ORDERS AND PPC2000 SECTIONAL COMMENCEMENT AGREEMENTS INCLUDING INVOLVEMENT IN PRECONSTRUCTION ACTIVITIES

EACH CONSTRUCTOR AND EACH TIER 2/3 SUPPLY CHAIN MEMBER

3

LONG-TERM SUPPLY CHAIN AGREEMENTS WITH SAVINGS, INNOVATIONS AND EMPLOYMENT/SKILLS COMMITMENTS FACILITATED BY SCMG WITH TIER 2/3 SUPPLY CHAIN MEMBERS

TIER 1 CONTRACTORS AND SUBCONTRACTORS, SUPPLIERS AND SUB-CONSULTANTS COVERING 30 DIFFERENT WORK TYPES, INCLUDING DEVELOPMENT OF NEW CLIENT AND TIER 2/3 RELATIONSHIPS





How the reported savings were achieved

Strategic context		Client	Collaborative	Supply chain
Aggregation of demand	Yes	SCMG combining Hackney and Haringey Frameworks		
Significant committed spend	Yes	£200 million		
Standardised procurement / streamlined approval processes	Yes		Joint supply chain management	
Lean programming	Yes		Agreed time savings under PPC2000 systems	
Client cost data base	Yes	Published benchmarks		
Performance management	Yes		Framework performance initiatives	
Common new delivery model characteristics deployed		Client	Collaborative	Supply chain
Challenging cost target / open book	Yes	Savings measured under Open Book		
Affordable standardised output / outcome requirement	Yes		Creation of standard specifications and costs	
Early contractor involvement	Yes		Tier 1 contractor and Tier 2/3 supply chain members	
Lower tier engagement: fully integrated supply chain	Yes		Long-term Supply Chain Agreements	
Lower tier engagement: innovation encouraged / achieved	Yes			Numerous qualitative and community benefits
Standard form of contract with minimum amendments	Yes	PPC2000		
Effectively led change in team behaviours and practices	Yes	SCMG training and support		
Two Stage Open Book characteristics deployed		Client	Collaborative	Supply chain
First stage selection of integrated team on open book basis and ability to deliver savings / project objectives	Yes	Hackney and Haringey open-book frameworks		
Joint work of integrated team (incl. Tier 1 and lower tier contractors) on design, risk management, reduced costs under early appointments	Yes		SCMG relationships supported significant savings and improved value	
Approval to construct on basis of demonstrable ability of team to achieved targeted costs and progress against project objectives	Yes	Client precondition	PPC2000 Sectional Commencement Agreements	



Other cross cutting initiatives deployed		Client	Collaborative	Supply chain
Building Information Modelling				
Procurement Routemap				
Government Soft Landings				
Project Bank Accounts				