

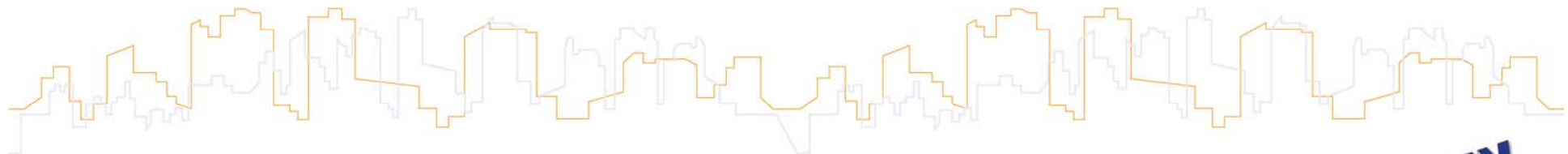


LCI-UK Summit 2014

Lean and the law-integrating lean with contractual collaboration under Two Stage Open Book

30 October 2014

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Co-author of the TPC2005 contract

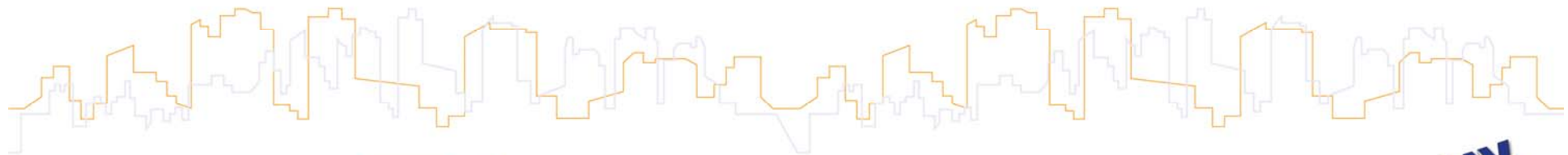




Two Stage Open Book

How does it fit with lean?

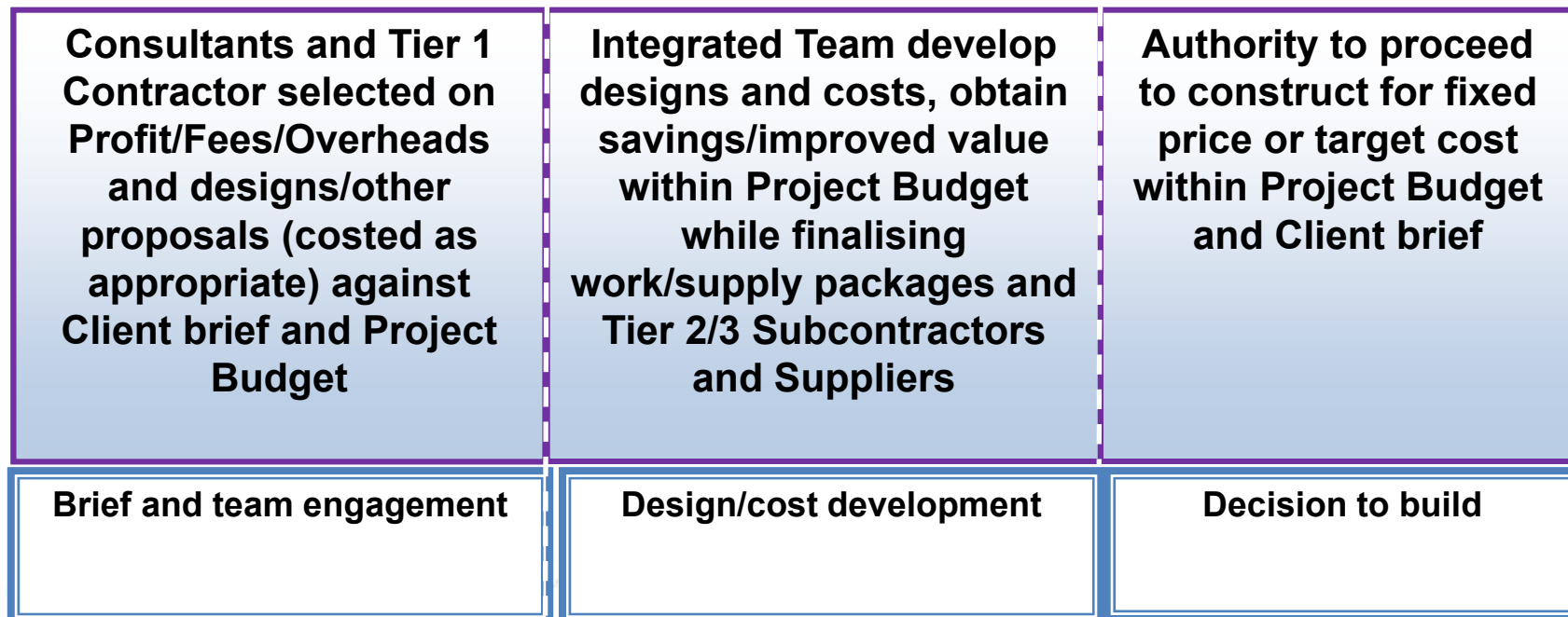
- “Two Stage Open Book”-government endorsement of client-led EU compliant system to develop cost savings and other improved value, through early contractor/subcontractor/supplier contributions
- Programmed build up of integrated team to ensure Integrated Project Delivery and informed agreement of lean approach by all parties
- Prospective team members invited to bid against outline brief and cost benchmark
- Team selection on demonstrable capability, including improved value, plus profit/fees /overheads and other demonstrable costs
- Team members are conditionally appointed to work up design proposals, open book costs , construction phase programme and final supply chain against clear deadlines
- Team members unconditionally appointed when agreed price and clear risk profile are approved by the client





Two Stage Open Book- early integration to reduce risks and improve outcomes

- Supply chain involved early, beyond just constructability review
- Minimum waste of time/effort through clarity of timetable/interfaces
- Enterprise planning to avoid negotiation or delay while moving from incomplete to complete information

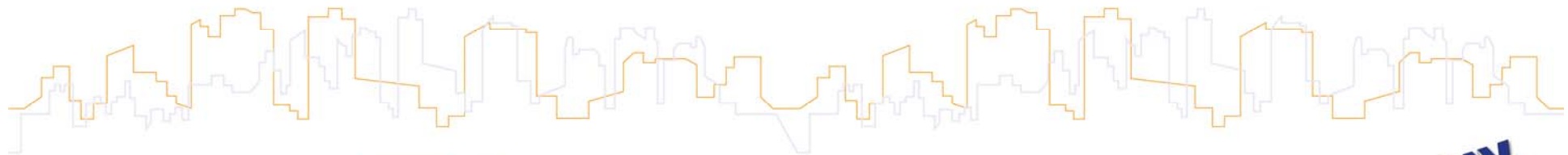




Supply Chain Collaboration

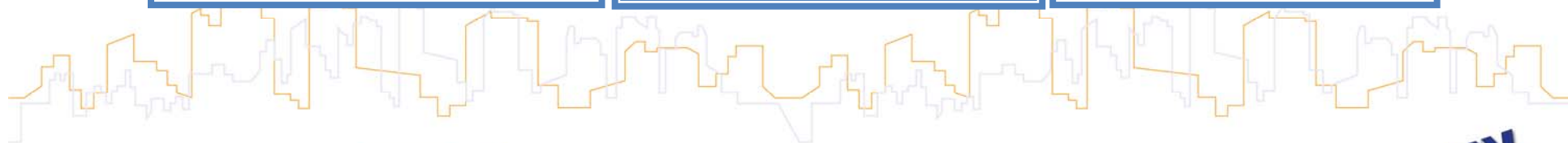
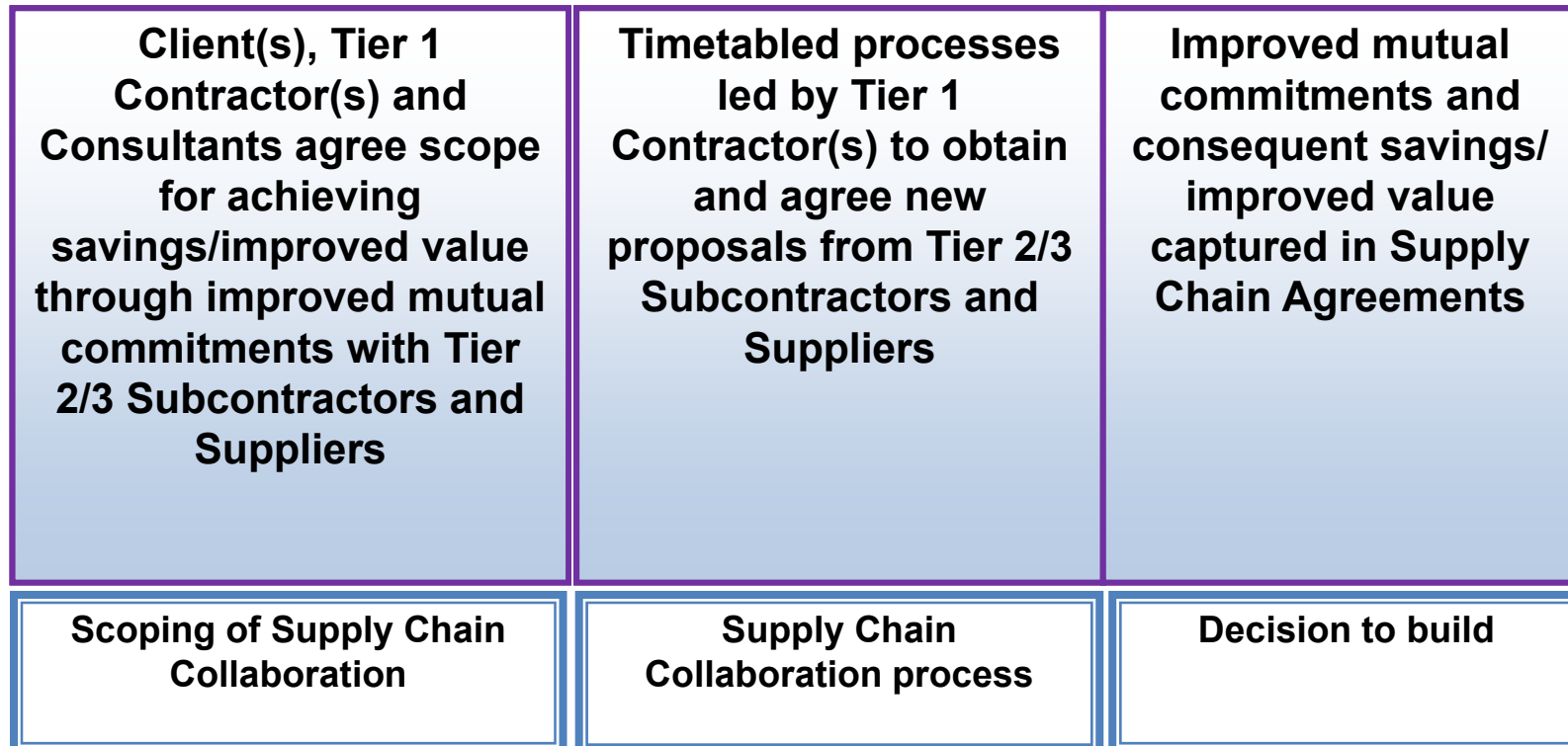
How does it fit with lean?

- A client-led EU compliant system to develop cost savings and other improved value under an existing alliance or other long-term contract
- Improvement of lean Integrated Project Delivery by joint review of existing relationships
- One or more clients with one or more main contractors review existing subcontractor/supplier commitments, costs and other value
- Supply chain review processes are agreed against clear deadlines, using open book costs and separate profit/fees/overheads
- Subcontractors/suppliers are offered improved client/main contractor commitments in return for agreed savings and other improved value
- New mutual commitments are recorded in new main contractor/subcontractor/supplier agreements





Supply Chain Collaboration- joint programmed systems to achieve agreed performance improvements





Hackney Homes and Homes for Haringey (SCMG) Trial Project – £200m housing refurbishment programme



Key project features:

- | | |
|---|--|
| <ul style="list-style-type: none">• Early joint appointment of comprehensive range of SME Tier 2 and Tier 3 supply chain members• Substantial savings achieved firstly at main contractor procurement (16%), and secondly through joint working with Tier 1 and Tier 2/Tier 3 supply chain members (14%) | <ul style="list-style-type: none">• 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, with Building Lives Training Academy |
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Two Stage Open Book Trial Projects





Ministry of Justice, Cookham Wood Trial Project - £20m new build Young Offenders Institution



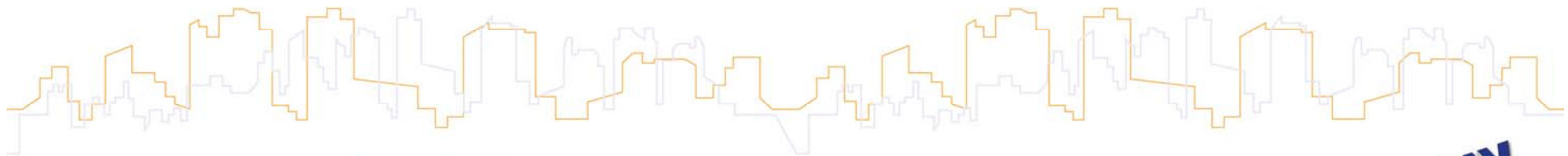
Key project features:

- | | |
|---|---|
| <ul style="list-style-type: none">• Two Stage Open Book under PPC2000• Substantial capital cost savings (20%)• Prospective operational cost savings• Improved programme certainty and time savings | <ul style="list-style-type: none">• Innovative design solutions using BIM• BIM contributions captured in PPC Partnering Timetable, Service Schedules and multi-party IPR licence |
|---|---|



Two Stage Open Book, Lean and BIM

- Ministry of Justice Cookham Wood – first UK Government Trial Project using BIM Level 2
- Two Stage Open Book enabled early development of BIM models by main contractor/subcontractors/suppliers
- BIM data drops set out in contractual hub created by PPC2000 Partnering Timetable and Service Schedules
- No BIM contract amendments or separate BIM Protocol
- Improved exchange of information through BIM and Two Stage Open Book contributed to identification and agreement of 20% cost savings
- BIM also enabled improved maintenance and operation proposals and regular liaison with the Cookham Wood YOI Governor





Surrey County Council Project Horizon- £100m highway repair and improvement programme



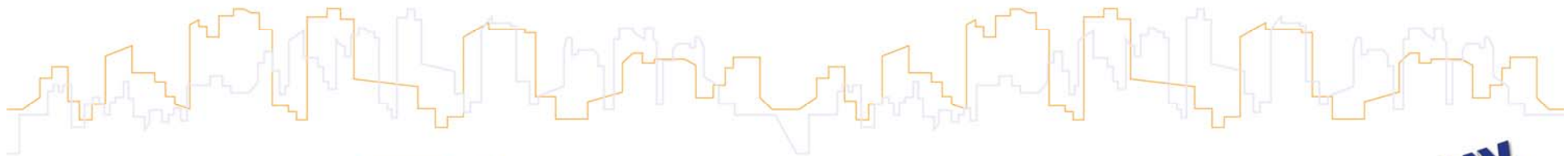
Key project features:

- | | |
|--|---|
| <ul style="list-style-type: none">• Two Stage Open Book and Supply Chain Collaboration• Substantial cost savings, firstly at main contractor procurement (16%) and secondly through joint working with Tier 1 and Tier 2/3 supply chain members (15%) | <ul style="list-style-type: none">• Collaboration and integration of the full team• Innovations and improved sustainability• Improved warranties• Contributions to the local economy• Improved employment and skills outputs• Development of Intelligent Client capability |
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Where do the savings come from?

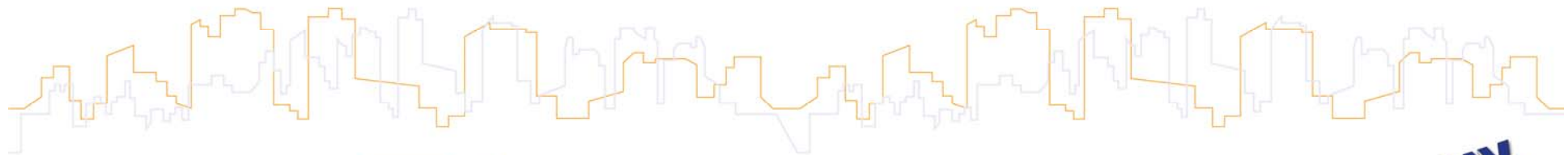
- Savings offered by Tier 2/3 Subcontractors/ Suppliers in return for improved efficiency by the Client/Tier 1 Contractor through Supply Chain Collaboration on Surrey Project Horizon:
 - Involved in developing continuity of work – 2%
 - Agreed minimum annual value of work – 5%
 - Agreed minimum size of individual Works Orders – 2%
 - Prompt payment by Tier 1 Contractor – 1%
 - Availability of storage facilities in Client depot – 2%





What is improved value?

- Improved value offered by Tier 2/3 Subcontractors/ Suppliers in return for improved efficiency by Client/Tier 1 Contractor through Supply Chain Collaboration on Surrey Project Horizon:
 - Better quality control through joint risk assessments
 - Time savings through lean programming
 - Whole life value, including new ten year warranty for material and pavement design
 - Innovation to increase recycling and reduce landfill
 - Better communication with stakeholders to agree access and diversions-first ever complimentary letters from residents
 - Local apprenticeships under CITB Client-Based Approach





Other Two Stage Open Book and Supply Chain Collaboration Trial Projects



Liverpool City Council/
SCAPE – Archbishop Beck
School under NEC3



Ministry of Justice, North Wales Prison (also trialling Building Information Modelling) under PPC2000



Capital and Reactive
Alliance Programme
under TPC2005



Connect Plus- M25
Framework (with
particular emphasis on
the Intelligent Client)
under NEC3



King's/Cabinet Office Guidance on Two Stage Open Book and Supply Chain Collaboration

- New Guidance by reference to measured cause and effect and lessons learned on Trial Projects
- Launched by Vince Cable 2nd July 2014 at Government Construction Summit and available to download free of charge
- Peter Hansford, Government Chief Construction Adviser – *“These models encompass principles of early supplier engagement, transparency of cost, integrated team working and collaborative working”*. *“Their adoption will contribute considerably to the reductions in the cost of construction that both Government and industry are seeking.”*
- Nick Hurd MP, then Ministry for Civil Society – *“The construction industry is a vital driver for growth sustaining thousands of SMEs”* and the new guidance *“will build on the excellent trial projects – which have made average savings of 14 to 20% by applying these models – and should be followed closely to help drive innovation and eliminate waste from the process”*



Further information

- Professor David Mosey PhD, Director, Centre of Construction Law and Dispute Resolution: +44 (0) 207 848 1661; david.mosey@kcl.ac.uk
- Supply Chain Management Group (SCMG) Trial Project Case Study
(<https://www.gov.uk/government/publications/procurement-trial-case-study-social-housing-refurbishment>)
- Surrey County Council: Project Horizon highways maintenance
(<https://www.gov.uk/government/publications/procurement-trial-case-study-report-highways-maintenance>)
- Ministry of Justice: Cookham Wood Prison
(<https://www.gov.uk/government/publications/procurement-trial-case-study-cookham-wood-prison>)
- Two Stage Open Book Guidance
(<https://www.gov.uk/government/publications/two-stage-open-book>)
- Arup Report 2008
(http://publications.arup.com/Publications/A/Annual_and_Corporate_Reports/Annual_Report_2008.aspx)
- PPC website (<http://www.ppc2000.co.uk/>)