Seminar on Integrated Teamworking

Update from UK on the “Business Case” and innovative developments in procurement, contract and insurance of potential relevance to “RIVANS”

by

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Consultant to the Office of Government Commerce, UK Treasury
A Champion for Integration for the Strategic Forum for UK Construction

6 February 2009
Integration of a fragmented industry

The most successful enterprises do not fragment their operations – they work back from the customer’s needs and focus on the product and the value it delivers to the customer.

The process and production team are then integrated to deliver value to the customer efficiently and eliminate waste in all its forms”

Rethinking Construction (1998)
“...savings of up to £2.6 billion may be possible if good practice, including partnering and early development of an integrated project team, was applied across all the public sector”.

The NAO Report ‘Improving public service through construction’ 2005
The power of integration and collaboration

Integration and collaboration, with:

- Team selection on VFM
- Aligned financial interests
- Integrated project insurance
- Project bank account
- Integration Agreement/Toolkit

Safer projects

Better logistics

Happier clients

Better sustainability

Better built facilities

Lean construction
"The fragmentation of the construction industry has contributed to its poor performance."

“Integrated working... creates an environment that encourages investment in capacity and innovation..."

...progress in adopting integrated working has been slow. We welcome the new targets for the period 2008 to 2012.”

House of Commons Business & Enterprise 9th Report
Construction Matters, July 2008

* See “Profiting from Integration” at “www.strategicforum.org.uk”
The Challenge: Early Involvement for All

At which stage of the project do you assemble your team and relevant supply chain partner?

Designs for tendering

Source: CCG Survey
Summary of data

• Consultants and Main Contractors are most commonly brought into the project team at Project Inception whereas Specialist Contractors and Product Suppliers are most commonly brought into the project team at the Design stage.

• Early involvement is seen as the key factor to success regarding working with Consultants and Main Contractors whereas Selection on Best Value is seen as the key success criteria for working with Specialist Contractors and Product Suppliers.

• Benchmarking and Project Reviews are carried out for the majority of projects (70% and 80% respectively).

Survey Report for Construction Clients’ Group
by Constructing Excellence
The Business Case for Integrated Collaborative working

Premise:

The better you are integrated and the more collaboratively you work, the better the outcomes will be for the project and all those associated with it.

Cause and effect
# Maturity Matrix: Measuring the Cause

**Integrated Collaborative Working Maturity Measures**

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Level 1</th>
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<td><strong>Selection By Value</strong></td>
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<td>Client Side sets strategy</td>
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<td>All parties appointed sequentially</td>
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**A 360° Tool**
- Applied to the core team
- Core team includes key suppliers and manufacturers etc.
- Views should be collected by independent intermediary
- Levels are the average of all responses
- Maturity is the aggregate of the attribute scores
Success Matrix: Measuring the Effect

- A 360° Tool
- Team collectively agree priorities (weighting) at the beginning
- Maximum attribute weighting is 30% & minimum 5%
- Minimum weighting for Safety and Sustainability are 10%
- Success & sustainability criteria are project specific
- All other criteria are industry standard
- Results should ideally be collected by an independent intermediary
- Performance is the average of responses converted via the CE KPI Calculator to an industry comparator
- Overall score is the sum of weighted performance to provide an overall percentage
The Results: 6 Case Studies

The Projects:

**Andover North Site:** Following success of the MOD Building Down Barriers pilot programme, Andover was the first Defence Estates stand alone Prime Contact to be let.


**Bristol Blood Clinic:** A P21 project providing the largest blood processing centre in the world.

**Frome Victoria Hospital:** Somerset Primary Care Trust and Laing O’Rourke worked together from inception to deliver the first community hospital to combine private & NHS care.

**Malmesbury Care Home:** An 80 bed care home and day care centre in Wiltshire.

**Whitecross High School:** A single secondary school PFI Project in Hereford with substantial environmental credentials, led by Stepnell as PFI investor and main contractor.
### Historic procurement

**17 months to “start on site”**

| ACTIVITY                  | MONTH | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---------------------------|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Appoint Architect         |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Appoint Consultants       |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Concept Design            |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Tender Documentation      |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Evaluation/Negotiation    |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Redesign/Design Dev.      |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Planning                  |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Appoint Contractor        |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Mobilise/Procurement      |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Construct                 |       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
Aspirational procurement

10 months to “start on site”

Over 6 months early

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<thead>
<tr>
<th>ACTIVITY</th>
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<tr>
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<tr>
<td>Appoint Architect</td>
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<td>Appoint Consultants</td>
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<td>Appoint Contractors</td>
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<td>Concept Design</td>
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<td>Design Development</td>
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<td>Agree Cost Plan</td>
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What innovations are in place or underway in UK to implement Integration and facilitate Collaboration?

- **Early involvement**  ) “Selecting the Team” under
- **Selection by Value**  ) “Modern Procurement” methods

- **Common Processes** - “Integration Toolkit”

- **Long Term Relationships** – Framework Agreements

- **Performance Measurement** – Measurable “Success Criteria”

- **Modern Commercial Arrangements** – *Integration Agreement*
  - Project Bank Account
  - Gain-share/pain-share
  - Integrated Project Insurance,
Selection by “lowest cost tendering” – What does the UK National Audit Office say?

“Experience has shown that acceptance of the lowest price bid does not provide value for money in either the final cost of construction or the through life and operational costs”

Modernising Construction 2001
Article 53 – Contract award criteria

Either most economically advantageous tender from the point of view of the contracting authority – criteria such as

• quality,
• price,
• technical merit,
• aesthetic and functional characteristics,
• running costs,
• cost-effectiveness,
• after-sales service and technical assistance,
• delivery date and delivery period or period for completion,

or

• the lowest price only.
“Selecting the Team”

“Selecting the Team will be of great assistance, not only to clients and their advisers who are embarking on integrated team working for the first time, but will also serve as a standard methodology for those who are more experienced”

Sir John Egan

“Using a carefully selected integrated team will enhance a project in many ways. A key factor to the success of any project is getting the brief right, and a well chosen team is better able to develop a brief that meets the client’s needs.”

Peter Rogers

“Picking the right players is the key to building any successful team. Simple as it seems, the process is not just about selecting the best available for each role. It is about getting the right blend to form the team best suited to undertake the particular job in hand.”

NB “Selecting the Team” is freely accessible at www.strategicforum.org.uk under “Reports”
Figure 1: Selecting the Team Process Diagram
Modern Procurement

ACTORS

Client Team + Integration Facilitator

Advisory Team (incl. End User, Relevant Specialist + Cost Adviser)

Core Team: Client Team + IF Consultants, contractors, specialists, key suppliers + FM

Client Team + IF with Advisory Team

Client

PROCESS

Needs of project ▼

Success criteria + priority ▼

Selection Criteria + weighting ▼

Appointment of Core Team ▼

Development of design solutions + cost plans ▼

Approval of recommended design solution + cost plan

DELIVERING VFM

Agreement in principle to integrate/collaborate ▼

“Select the Team” best suited to give initial advice ▼

“Select the Team” best suited to deliver project ▼

Prioritise best design solution + cost plan ▼

Evaluate design solution + cost plan against objective benchmarks ▼

Invest in the project
Integration Facilitation Activities

- Process Review: Method & Approach & IPI Pros & Cons
- Performance Review: Compliance with Brief & Value (Success) Criteria, Identification of Learning & Improvements for Next Project.
- Team ‘Maintenance’: Induction of New Members, Stocktake Performance & Collaborative Culture, Coach & Support.
- New Member Selection & Induction. Team Development, Solution Screening, Barriers to Success.
- Strategic Brief Review: Confirm Brief Clarity, Brainstorm Potential Solutions, Execution planning.
- Team Selection. Quick Start Workshop: Understand Need, Value (Success) Criteria, Strategic Brief Format, Culture & Behaviours, Roles & Responsibilities, Next Steps.
Common Processes –
the challenge of the Integration Toolkit

- Outcomes that better meet your needs, delighting your clients, customers and end users
- Delivery that is 25% – 40% faster than your competitors with 11% – 30% less capital required
- Improved profitability, reduced operating costs and more sustainable outcomes
- Significantly improved predictability of programme, price and quality
- To work in a safer environment where empowered people are open, honest and realistic and go home feeling trusted, valued and fulfilled

Visit www.strategicforum.org.uk, “Integration Toolkit” and click on spanner
IPT Workbook 3

Core team: create and screen strategic solutions

At a glance

3.1 Form the core team
3.2 Select and appoint appropriate alliances/partners
3.3 Select internal partners
3.4 Agree core values and principles
3.5 Define rules and responsibilities
3.6 Agree processes to resolve issues
3.7 Agree remuneration strategy
3.8 Appoint partners

4.1 Inform the team
4.2 Interactive development of the strategic brief - collectively explore the business needs to enable clarification of the project objectives
4.3 Feedback objectives - to confirm understanding
4.4 Create a robust precedence-based decision-making process for the development of strategic solutions
4.5 Identify strategic solutions
4.6 Managing expectations
4.7 Reconfirm selection and prioritisation of value criteria
4.8 Identify potential solutions
4.9 Screen solutions against value
4.10 Determine which solutions to take forward

Workbook
Long Term Relationships – “Framework Agreements”

“An agreement between one or more contracting authorities and one or more economic operators, the purpose of which is to establish the terms governing contracts to be awarded during a given period, in particular with regard to price and, where appropriate, the quantity envisaged”

EU Directive 2004/18/EC Article 1(5)

“The parties to the framework agreement shall be chosen by applying the award criteria set in accordance with Article 53”

EU Directive 2004/18/EC Article 32
“The overriding principle in guiding the parties in the operation of this agreement is their agreement to work together with the supply chain and any NHS Client (and any Professional Advisers appointed by any NHS Client) in a co-operative and collaborative manner to achieve the overriding objective acting in good faith and in the spirit of mutual trust and respect”

clause 3.1
NHS Procure 21 Framework principles

- Early involvement of key members of the project team
- Target cost approach.. with pain/gain incentivisation
- Continuous improvement targets
- Share information/best practice – use of IT
- Long-term relationships
- Key performance indicators
- Standardise processes
- Use of NEC contract on schemes
- Open-book accounting
- No guarantee of work
Frameworks – the benefits

- Sound award criteria (other than lowest price)
- They permit “long-term” relationships (4 years)
- The “Principal Supply Chain Partner” has every opportunity to “co-operate and collaborate” with the rest of the supply chain
- The ECC contract chosen (Option C under P21) encourages pro-active and collaborative conduct
Frameworks – the problems

• They only open the door to good practice; if the parties don’t work at it, inefficiency can abound

• If the PSCP abuses his position and applies lowest cost tendering to the supply chain, the benefits will be lost

• Large frameworks for “bundled projects” can result in local SME’s not getting their proper share of the work, resulting in low standards and excess inflation
Examples of “the Virtual Company” – Teamworking/Integration/Collaboration

- British Airports Authority – Heathrow Terminal 5
- Defence Logistics Organisation – Andover (North Site)

See also “Partnering in Europe – Incentive based alliencing for projects” ISBN 072772965 - 9
How the various T5 documents fit together

**The document:**

- **T5 Agreement**
  (also referred to as Delivery Team Handbook)
- **Supplemental Agreement**
- **Functional Execution Plan**
- **Sub Project Execution Plan**
- **Work Package Execution Plan**

**What it is:**

- The terms and conditions everybody working on T5 is bound by.
- The detail of the agreement which is signed by the suppliers. It defines the work the suppliers are doing on T5.
- The support required to enable projects to deliver.
- The team’s plan of work.
- This is the breakdown of work by supplier (combines preliminaries, specifications & drawings).

**Supporting documents**

Commercial Policy
Programme Handbook
Core Processes and Procedures
Industrial Relations Policy
BAA Terminal 5: “The T5 Agreement” – 3 “values”

**Commitment**
- Being seen to do what we say
- Challenging targets
- Value-focused
- Managing the supply chain
- Enabling processes and solutions

**Teamwork**
- Fully inclusive teams
- Integrated
- Co-located
- Share responsibility
- Share success
- Outcome (not problem) focused
- Helping and supporting
- Enabling individuals
- Managers as enablers
- Fully empowered
- Trained
- Celebrate achievements
- Leading by example

**Trust**
- Partnering
- Co-operation
- Meaning what we say
- Respect
- Selected on merit
- Treating our workforce as customers
MOD Andover North Site – the “Virtual Company”-

- Aligning objectives
- The Project Charter
- Single Project PII
- The Integrated Project Agreement
- Core Team share in Risks and Rewards
- Project Bank Account
- Technology tools
The Andover Core Team

Prime Solutions

Client ANSR/DE

FM

PM/QS

Bucknall

SEC

Construct Facility 1

Structural Engineer

Construct Facility 2

Services Engineer

M&E Services

Hyder

Infrastructure Design

URS

HLP/Halcrow

Percy Thomas

Thomas Vale

Pearce

Bucknall

Urs

M&M

Percy Thomas

Thomas Vale

Engineer

Prime Solutions

ANSR/HLP/Halcrow

Services

Engineer

SEC

FM

ARCHITECT

Bucknall

PM/QS

Thomas

Vale

Construct

Facility 2

Construct

Facility 1
Identifying Needs, Evolving Solutions

- Integrated team workshops throughout design & construction
- Potential solutions assessed utilising Balanced Score Card Reviews
- Balanced Score Card Reviews:
  - Capital Cost
  - Whole life Cost
  - Risk
  - Programme
  - Aesthetic
  - Health & Safety
  - Environment
Performance Measurement

- Success Criteria must be “bought into” by the whole Integrated Team

- Measurement: 360° to cater for different personal perspectives and positions

- Comparison of two projects where varying involvement of the supply chain caused commensurate variation in performance
Performance Measurement

“Key performance indicators”

DLO Andover

Best demonstration project
Success Matrix: Measuring the Effect

- A 360° Tool
- Team collectively agree priorities (weighting) at the beginning
- Maximum attribute weighting is 30% & minimum 5%
- Minimum weighting for Safety and Sustainability are 10%
- Success & sustainability criteria are project specific
- All other criteria are industry standard
- Results should ideally be collected by an independent intermediary
- Performance is the average of responses converted via the CE KPI Calculator to an industry comparator
- Overall score is the sum of weighted performance to provide an overall percentage

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<tr>
<th>Attribute</th>
<th>Weighting</th>
<th>Project Performance</th>
<th>Score</th>
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<td>Success Criteria 2 (e.g. Flexibility)</td>
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<td>Success Criteria 3 (e.g. Whole life cost)</td>
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<td>Sustainability Criteria (e.g. Waste / energy)</td>
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<td>Predictability Time</td>
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Whitecross High School, Hereford
Report from the Integration Task Group to the SffC

- 900 Place Secondary School
- PFI Procurement Route
- Contractor acting as investor and D&C Contractor
- Time to manage delivery and supply chain risks
- Emphasis on whole life costs
- Extensive use of LEAN practices
Care Home, Malmesbury
Malmesbury

- 80 bed Care Home
- Developer led Procurement Route
- Poor control of initial delivery risk
- Very little time to manage supply chain risks
- Extensive variations
Lessons learnt

– The results appear to correlate with expectations, though it is important to understand anomalies.
– Success measures were consistent between the client and principal supply chain partners. Supply chain measures were not so well aligned.
– Parties generally needed assistance in completing the matrices and using the CE calculator. Further induction/advice required by Constructing Excellence.
The Results: 6 Case Studies

The Projects:

**Andover North Site:** Following success of the MOD Building Down Barriers pilot programme, Andover was the first Defence Estates stand alone Prime Contact to be let.


**Bristol Blood Clinic:** A P21 project providing the largest blood processing centre in the world.

**Frome Victoria Hospital:** Somerset Primary Care Trust and Laing O’Rourke worked together from inception to deliver the first community hospital to combine private & NHS care.

**Malmesbury Care Home:** An 80 bed care home and day care centre in Wiltshire.

**Whitecross High School:** A single secondary school PFI Project in Hereford with substantial environmental credentials, led by Stepnell as PFI investor and main contractor.
Modern Commercial Arrangements

• ECC Contract Option endorsed by UK Government, with Options C or E used on public sector “modern” contracts

• “Model Form of Agreement for an Integrated Project Team” (multi-party) at www.strategicforum.org.uk “Integration Toolkit” IPT workbook 3.2

• Project Bank Account:
  - “Fair Payment Charter
  - Comparative payment cycles (Traditional / FPC/ PBA)
  - Savings compared to traditional base case
Model ‘Fair Payment’ Charter

Fair and transparent payment practices are an essential underpinning to achieving successful integrated working on construction projects. In working with each other in good faith and in a spirit of mutual trust and respect, we agree that by 1st January 2008 we will meet the ‘Fair Payment’ commitments set out below:

- Companies have the right to receive correct full payment as and when due. Deliberate late payment or unjustifiable withholding of payment is ethically not acceptable.
- ‘Fair Payment’ will apply equally between the client and lead contractor and throughout the supply chain.
- The process will be transparent in order that members of the supply chain have certainty of how much and when they will be paid.
- Companies will consider, where appropriate, operating relevant contracts on an open book basis.
- The correct payment will represent the work properly carried out, or products supplied, in accordance with the contract. Any client arrangements for retention will be replicated on the same contract terms throughout the supply chain. Any withholding of payment due to defects or non-delivery will be proportionate and demonstrably justified in line with arrangements made at the time of contract.
- To ensure effective and equitable cash flow for all those involved, all contracts will provide for regular payments and have payment periods not exceeding 30 days.
- In order to avoid payment delays, the client and all supply chain members will agree payment procedures at the outset of their contracts. Payment will be through electronic BACS transfer and will apply throughout the supply chain.
- Monitoring and auditing and problem resolution procedures will be agreed between the parties.

We the undersigned agree that this Charter is not intended to be a legally binding document and not used in construing any contractual commitment.

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1 The Charter sets out the values and arrangements relating to payment practices consistent with Integrated working.
2 The Model Charter is flexible to allow for adaptation and can either be a standalone document or part of a wider partnership charter. In either case it is not intended to be legally binding.
3 An introduction period is to allow time for clients and contractors to modify their business systems and procedures.
4 The client would sign the Charter at the outset. Contractors and suppliers subsequently engaged would be expected to sign the Charter before appointment.
## Savings compared to base case:

<table>
<thead>
<tr>
<th></th>
<th>Option A: Improved 'Fair Payment' Process</th>
<th>Option B: Using Project Bank Accounts¹</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-contract (total of all sub-contracts)</strong></td>
<td></td>
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</tr>
<tr>
<td>Reduction for cash collection</td>
<td>-0.1%</td>
<td>-0.1%</td>
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<tr>
<td>Reduction for cash flow risk certainty</td>
<td>-0.8%</td>
<td>-2.1%</td>
</tr>
<tr>
<td>Reduction for trade indemnity insurance</td>
<td>0%</td>
<td>-0.2%</td>
</tr>
<tr>
<td><strong>Lead contract</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduction for cash collection</td>
<td>-0.1%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Reduction for cash flow risk certainty</td>
<td>-0.5%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>Increased profit to offset loss of cash flow benefit</td>
<td>+0.5%</td>
<td>+1%</td>
</tr>
<tr>
<td><strong>Total impact on project</strong></td>
<td>-1%</td>
<td>-2.5%</td>
</tr>
</tbody>
</table>

### Typical traditional payment cycle (base case)

<table>
<thead>
<tr>
<th>Valuation date</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
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<tbody>
<tr>
<td><strong>Lead contractor</strong></td>
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<td>S/C prepare applications</td>
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<td>Lead contractor assembles application</td>
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<tr>
<td>O25 certification (allowed up to 7 days)</td>
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<td>Arch certification (allowed up to 7 days)</td>
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<td>Client payment period</td>
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<tr>
<td><strong>1 &amp; 2nd tier supply chain</strong></td>
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<tr>
<td>Lead contractor checks applications</td>
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<tr>
<td>Payment to supply chain</td>
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<tr>
<td>Contractor paid 35 days after valuation (assuming 21 day client payment and 7 days each for O25 valuation and certification)</td>
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</table>

 nghiêmlich, die Zahlung an die Lieferantenebene erfolgt, wenn die Zahlung an den Lieferanten anfallig ist. Der Zahlungstermin beträgt 42 Tage nach der Bewertungszeit (obwohl die Zahlung erst nach der Zertifizierung erfolgen kann).
### Example payment cycle

#### Lead contractor
- S/C prepare applications
- Lead contractor assembles application
- QS certification
- Arch certification
- Client payment period

#### 1 & 2nd tier supply chain
- S/C prepare applications
- Lead contractor checks applications
- Payment to supply chain

Contractor paid 21 days after valuation (assuming 14 day client payment and 7 days for BOTH QS valuation and certification).

---

### Example using Project Bank Account

#### Lead contractor
- S/C prepare applications
- Lead contractor assembles application
- QS certification
- Contract administrator certification
- Client payment period to PBA
- Payment from PBA

Assumed 14 days would be optimum

#### 1 & 2nd tier supply chain
- S/C prepare applications
- Lead contractor checks applications
- Payment to supply chain

Supply chain payment at same time as lead contractor

18 days improvement compared to base case
Gain-share / Pain-share

• To align interests of client and integrated team by gearing to performance against success criteria

• Client and all key members of team critical to delivery of success criteria must share

• Allocations must be the same for pain-share as gain-share

• Allocations must be agreed by balancing party’s critical importance against financial capacity
Creating the ‘Virtual Company’ Approach

Partnering Environment - A Culture of Collaboration

- Ring Fenced Margins
- Share Risks & Rewards
- Incentivise Whole Supply Chain

Team Focus - A Lean Approach

- Improve Quality
- Optimise Through Life Cost
- Focus on Innovation
- Attack Waste, Improve Efficiency

Martyn Davis - INLCICID Seminar 2009
Developing the ‘Virtual Company’ Approach Pain/Gain Sharing Model

The WHOLE Core Team have agreed shares of the benefits/pain of Cost under-runs and over-runs across the whole project, not for individual parts.

No one party has a majority.
But what happened when we hit a real problem?

- Traditionally:
  ‘problems’ are seen as ‘opportunities’ for claims where nobody wins (except the lawyers)!

- On the Andover project:
  - Emergency meeting of the Joint Steering Committee called
  - All discussions centred on ‘what is right for the project’.
  - Team solution took 20 minutes!!!
  - Everyone won, (except the lawyers)!
  - QED!
The Client’s View of Team Achievements

- Collocation – Virtual/Real
- Collaborative Working
- Open & constructive approach by both Client and Partners
- On Time
- On Budget
- No Claims!
- Meeting the Strategic Brief

Result – Client Satisfaction…..
Integrated (Project + Insurance)

- The team must be integrated, and show its commitment to collaboration by a “no blame/no claim” agreement (except for fraud)

- Team gain-share (profit) is geared to how successfully the project objectives are delivered; shares are pre-determined

- Team pain-share equals the excess under the financial loss insurance; therefore each party’s loss is limited to its similarly pre-determined share

- Insurers waive rights of subrogation against all insured under the policy
A “Virtual Company” – full integration of the project team

Client

Financial alignment to Client’s success criteria

Integrated Project Team

Principal Supply Chain Partner

+ Consultants, Specialists and Suppliers

+ FM
The Insurance Industry’s Silos

Professional Indemnity

Was risk caused by design of Consultants/Specialists or product design/manufacture?

Contract All Risks/3rd Party

Was risk due to Consultant’s design or caused by Specialists?

Product Liability

Was risk due to product design/manufacture or installation?

Issues e.g.

Rights of subrogation
Who done it?

X ? per Project
Project professional indemnity insurance

- Covering Clients, Consultants, Contractors and their supply chains
- Loss, not culprit, has to be demonstrated
- Rights of subrogation waived
- Can sit alongside project All Risks insurance
- Positive effects on behaviours and performance
- DLO Andover and Heathrow Terminal 5 had Project CAR and PI Insurance, and both benefitted
- But T5 partners, despite minimal financial impact, were reluctant to disclose failures, and so delayed claims
Project Insurance
What does the UK National Audit Office say?

“Departments should ….seek opportunities to pursue the case for project-wide insurance

• not only to reduce costs through bulk buying,

• but also to align behaviours with the principles of integrated team working.

Departments should, however, assess the costs and benefits of such approaches and whether they have sufficient capability to manage the associated risks”

Improving public services through better construction 2005
A move from families of individual Risk Insurances to one “Integrated Project Insurance”, also covering Financial Loss over the agreed Cost Plan.

To cover all members of the Integrated Project Team including Client, and funders.

No blame: Rights of subrogation waived. Demonstrate loss, not culprit.
A “Virtual Company” + an Insurance Panel - a partnership in Risk Management

Client

Financial alignment to Client’s success criteria

Integrated Project Team
Principal Supply Chain Partner + Consultants, Specialists and Suppliers + FM

Insurance Panel
Lead Underwriter + supporting insurers

Independent Risk Assurance (Technical + Financial)

A new “partnership”
The rationale for Independent Risk Assurance

<table>
<thead>
<tr>
<th>Technical</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Belgian “technical control” as operated collaboratively by SECO underpins the performance of Integrated Teams</td>
<td>• This is similar to the “due diligence” carried out by Cost Advisers for banks intending to lend</td>
</tr>
<tr>
<td>• Safety is addressed integrally with the critical design and planning stages</td>
<td>• Insurers must know that the cost plan has adequate allowance for the risks involved</td>
</tr>
<tr>
<td>• Latent defects premiums typically reduce by 30%</td>
<td>• Under an “integration agreement” all parties undertake transparency</td>
</tr>
</tbody>
</table>
The Target Cost Model

- **Advisory Team**
- **Core Team**
- **IPT Confirmed**
- **IPI Agreed**
- **Gain Share**
- **Pain Share**

**COST**

- **Initial Budget Based on Industry Norms**
- **Feasibility and Outline Design** (Conversion of the ‘Problem’ into the ‘Solution’) **Solution & Target Cost Agreed** **Detailed Design and Implementation** **Final Account**

**TIME**

Courtesy of Visionality Ltd
Testing Integrated Project Insurance in practice

- Radical innovations have to be proven in practice!

- HM Government has agreed to 10 pilot projects over several years at £10m - £20m each

- A Panel of insurers, led by Norwich Union and Royal & Sun Alliance, has agreed in principle to IPI; brokers are Griffiths & Armour and Tysers

- Development and piloting of IPI is controlled by a “Product Team” steering group

- Progress with the pilot programme is slow despite support from Government (Treasury, PSCCF and Select Committee)

- Will the Recession help or hinder?
Feedback on first pilot project

- A mental health facility for older persons

- Principal Supply Chain Partner: Laing O’Rourke
  - "Building Constructive relationships" strategy has established supply chain of consultants and specialists for Health Projects

- Prioritisation of Success Criteria – recognised all must benefit

- Value creation workshop – savings in work content (eg balconies!) and process improvements (eg avoidance of re-bidding) facilitated

- Specialists in supply chain needed confidence-building

- Habit must be challenged at each stage, so as to cut out wasted time and money; role of seconded research graduate agreed
Prioritised Success Criteria – who benefits?

1. Improved H&S during delivery and operation
2. We make a profit – that is everyone gets the appropriate level of income and expenditure
3. Safe environment
4. NEAT – sustainability and energy costs
5. Design to ensure staff monitoring of clients
6. Value for money
7. Cost certainty – GMP & CE not exceeded
8. Minimal / zero defects at handover
9. Collective team success – e.g. infection control and other issues are addressed
10. Designed and built for safe operation and maintenance
11. Flexible / future proof
12. Patient experience improved
13. Staff experience / recruitment / retention improved
Prioritised Success Criteria – who benefits?

1. Improved H&S during delivery and operation  [Safety]
2. We make a profit – that is everyone gets the appropriate level of income and expenditure  [Team benefit]
3. Safe environment
4. NEAT – sustainability and energy costs  [Client benefit]
5. Design to ensure staff monitoring of clients
6. Value for money
7. Cost certainty – GMP & CE not exceeded
8. Minimal / zero defects at handover
9. Collective team success – e.g. infection control and other issues are addressed
10. Designed and built for safe operation and maintenance
11. Flexible / future proof
12. Patient experience improved
13. Staff experience / recruitment / retention improved
Benefits of IPI – behavioural and legal (1)

• Liberates the whole team from the need for protective behaviours

• The “Joint and Several Liability” problem is avoided.

• Collateral Warranties – a huge aggravation for little advantage – become redundant

• IPI cover survives the insolvency of any member of the team, and any resultant financial loss will be covered [NB this should facilitate partnering with local SMEs]

• Legal, forensic and management costs in re-living projects embroiled in “whodunnit?” litigation should be avoided

• Limits each partner’s potential loss to their share of the pain-share

• Expected to cost no more than the 2½% cost of traditional insurances throughout the supply chain (no longer required)
Benefits from IPI - efficiency and performance (2)

The IPT can dispense with

- Processes orientated around each team member’s silo
- Protective contractual documents
- Separate systems (in favour of common platforms)
- Specifications and drawings prepared by consultants to obtain tenders which have the effect of creating divides down the supply chain
- Protective and non-productive letter-writing
- Notification, preparation and pursuit of claims, or defences against claims

*This is Latham’s 30%, still to be applied to 80% = 24%!*