National Audit Office

HM Treasury

Financing PFI projects in the credit crisis and the Treasury's response

Appendices Four and Five

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Contents

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Appendix Four

Case studies

Case A London & Home Counties

Authority

Highways Agency

Investor

Connect Plus

Contractors

Construction JV: Balfour Beatty 50 per cent and Skanska 50 per cent; Operating & Maintenance JV Balfour Beatty 52.5 per cent, Atkins 32.5 per cent & Egis 15 per cent

Sector and rationale

A single Design Build Finance Operate project in the road transport sector

The project operates and maintains the M25 and plans to widen two sections of the M25 (sections 1 and 4) before the 2012 Olympics.

Section 1 covers the North West between the A40 (junction 16) and the A1 (junction 23). Section 4 covers the North East between the M11 (junction 27) and the A13 (junction 30).

The original business case included two further sections, which form optional additions to the final contract.

30 year cost

£3.4 billion (present value, up from £2.7 billion before the banking crisis)

Amount of capital investment

£1.1 billion

Amount of Equity

£200 million as shareholder loans (and £1,000 shareholder equity)

Amount of Senior Debt (Funders)

£1,108.7 million (£708.7 million of senior bank loans and £400 million European Investment Bank loan). The loans cover capital investment, working capital and provision towards interest payments.

Interest Rate Margins

2.5 – 3.5 per cent

Other significant terms affecting the raising of finance and/or risk transfer to senior lenders

Lenders required a unitary charge that, subject to performance, would provide the borrower in each period with a cash flow at the level of 1.4 times the amount of loan interest and principal payable.

The loans were scheduled to be paid off in full 42 months before the end of the concession (increased from six months).

The Highways Agency's advisers estimated that the overall impact of this change was an extra £55 million.

Lenders, acting on technical advice, also required that additional contingency be added to the estimated price in various ways that added a further £123 million (March 2009 estimate).

Extent of change

The results set out at i) below were calculated using a model based on a PFI project with senior debt of £190 million and other terms and conditions taken from the sample of projects described in Appendix One.

i) Previous project

The unitary charge would be 6 per cent higher than for the Future Strategic Tanker Aircraft project (which had closed when underlying interest rates were about one per cent higher).

ii) Preferred Bidder Stage

The M25 unitary charge, mostly attributable to financing, increased by between £0.6 billion (excluding de-risking measures) to £0.7 billion (including increased labour inflation and reserve accounts).

iii) Other benchmarking

Private sector regulated utilities

The difference between average market prices for debt issued by utilities and UK Government debt (gilts) peaked at 3.2 per cent in December 2008, but by September 2009 this debt was being priced at 1.8 per cent more than gilts.

Target Financial Close February 2008

Actual Financial Close 20 May 2009

Case B London

Authority

London Borough of Newham

Investor

Newham Learning Partnership

Contractors

Laing O'Rourke

Sector and rationale

The building of two PFI financed and two traditionally financed secondary schools

In 2003, the Department for Children Schools and Families announced the Building Schools for the Future (BSF) programme. BSF aims to renew all 3,500 English secondary schools over the 15 year period 2005 – 2020, subject to future public spending decisions.

BSF provides educational and also recreational social environments that support modern teaching and learning methods and the local community.

This is the first of six Newham project phases.

30 year cost

£193 million (£80 million present value)

Amount of capital investment

£69 million

Amount of Equity

£5.9 million (in various forms) 12.7 per cent blended internal rate of return

Amount of Senior Debt (Funder)

The Aviva funding structure (£55 million) for this project was akin to a bond type funding solution rather than the long-term senior debt structure of other schools deals.

Interest Rate Margins

1.8 per cent

Other significant terms affecting the raising of finance and/or risk transfer to senior lenders

Funding for the Newham project was originally to be provided by Dexia, the French Belgian bank which withdrew in early December 2008. No replacement bank lender came forward.

The Authority considered a short term switch from PFI to Design and Build with an option to move back (or "flip"). For budgetary reasons, Newham was the only such arrangement that went ahead, although some schools projects, scheduled for Spring 2009, did not close until the summer as a result of this.

Grant funded financial close took place in January 2009, with PFI close taking place five months later in June 2009 after the life assurance company, Aviva, had stepped in. The extra costs for Newham involved both direct costs and advisory and legal fees, though the lower interest rate more than compensated for this.

Extent of change

The scope of the project was largely unchanged at Financial Close from that proposed at Outline Business Case.

i) Previous project

At the Final Business Case stage Newham estimated that the PFI procurement saved £38.5 million compared to it's estimate of a shadow bid. However the timing of PFI funding to the project changed.

ii) Preferred Bidder Stage

An Early Works Agreement provided flexibility and enabled the Authority to meet the school opening timetable.

iii) Other benchmarking

The Authority commissioned Rathbones, the investment adviser, to provide the appropriate gilt against which pricing would take place. The benchmark gilt used was the Treasury 4.25 per cent 2027 gilt. A rate of 4.26 per cent was included within the Commercial Close Financial Model, being the actual gilt rate at that date.

The fixed funding rate of 6.2 per cent came in below commercial bank rates. Many schools deals are refinanced once construction work is completed, but Aviva's deal is unlikely to be refinanced because compensating the fund manager would offset any reduction in financing costs.

Target Financial Close Summer 2008

Actual Financial Close June 2009

Case C Barnsley

Authority

Barnsley Metropolitan Council

Investor

Barnsley Partnership for Learning

Contractors

Laing O'Rourke

Sector and rationale

The building of three PFI financed and two traditionally financed secondary schools

The Barnsley schools project forms the first phase of three BSF phases in Barnsley.

This phase plans to provide 10 schools in the Barnsley area, as part of the BSF programme.

30 year cost

£304 million (£130 million present value)

Amount of capital investment

£111 million

Amount of Equity

£9.4 million (in various forms) 13 per cent blended internal rate of return

Amount of Senior Debt (Funders)

The senior debt financing (£78 million) is provided by Nationwide Building Society, Nord/LB Bank (£39.5 million) and European Investment Bank (EIB) (£38.5 million).

Interest Rate Margins

Commercial loan margin 2.55 per cent,

EIB loan margin 0.4 per cent

Other significant terms affecting the raising of finance and/or risk transfer to senior lenders

Partnerships for Schools approached EIB, as a potential source of finance for schools projects struggling to complete deals, in late 2008. EIB had previously jointly provided senior debt for a BSF project in Newcastle, as a one-off deal, which closed in July 2007.

EIB approved funding of £300 million for BSF projects from March 2009 – enough finance to cover around 25 to 30 individual schools. This funding covers half the debt required and is aimed at larger deals with a cut-off set at around £70 million (from all sources of funds). EIB faces competing calls on its resources, thus setting a minimum deal size which affects the rate of closing deals.

EIB has subsequently provided joint finance to three schools projects reaching financial close, of which Barnsley was the first.

Extent of change

i) Previous project

At Final Business Case stage, 16 March 2009, Barnsley estimated that the procurement saved £68.6 million compared to its estimate of a shadow bid. The Council confirmed that there had been no material changes in the scope of works from that set out in the Outline Business Case "which might have led to an increase in cost of 25 per cent or more, over and above the original cost, including estimates of optimism bias".

ii) Preferred Bidder Stage

There had also been no significant delay (i.e. in the order of nine to twelve months) or market failure (e.g. competition reduced to one bidder) and the Council therefore confirmed that "in its view a further quantitative analysis exercise is not necessary".

iii) Other benchmarking

The all-in rate of 7.32 per cent for Barnsley was representative of other school projects reaching financial close in summer 2009. Refer to Figure 10 on page 23 of the published report.

Barnsley's Average Debt Service Cover Ratio was competitive being 1.17 per cent.

Target Financial Close Autumn 2008

Actual Financial Close July 2009

NOTE

1 Technical terms used above, such as Average Debt Service Cover Ratio, are explained in the Glossary on page 34 of the published report.

Case D Greater Manchester

Authority

Greater Manchester Waste Disposal Authority

Investors

1 Viridor Laing (Greater Manchester) Limited:

- Viridor Waste Management Limited – 50 per cent
- John Laing Infrastructure Limited – 50 per cent

2 Ineos Runcorn (TPS) Limited:

- Ineos Chlor Ltd – 60 per cent
- Viridor Waste Management Limited – 20 per cent
- John Laing Infrastructure Limited – 20 per cent

Sector and rationale

Waste collection and recycling, including providing feedstock to generate electricity

The Authority is the largest waste authority in England, accounting for 5 per cent of national waste.

The Contract is a 25 year Recycling and Waste Management Contract with a £631 million construction programme, creating a waste-fired thermal power station and a network of 36 recycling facilities across 23 sites.

The contract is worth £3.8 billion to Viridor over its term. All facilities will be completed by 2012 and will reduce local waste diverted to landfill by 75 per cent.

30 year cost

£5.1 billion (nominal)

Amount of capital investment

£1.1 billion

Amount of Equity

£584 million

Interest Rate Margins

Construction:	3.25 per cent
Completion to Year 9:	3.35 per cent
Years 9 to 15:	3.70 per cent
Years 15 to 21:	3.95 per cent
Year 21+	4.50 per cent

Other factors affecting the Authority's risk

The Authority is obliged by measures originating from the EU Landfill Directive to reduce the amount of waste going into landfill, to 50 per cent of 1995 levels, by 2013 or face a, yet to be specified, penalty regime under the directive.

In addition the remaining waste must be pre-sorted into various categories.

Extent of change

The amount of credit support the Department for Environment, Food and Rural Affairs accorded to this project, as a result of the banking crisis, was increased from £109.5 million to £124.5 million.

In January 2007, the second stage review by Partnerships UK commented "It is also apparent from the bids received, that the Authority's original cost assumptions were excessively conservative, hence the considerable affordability headroom".

Other benchmarking

Riverside Waste: A 22 year pre crisis deal originally priced with a margin of 2 per cent. Despite flexing margins to 2.75 per cent and a cash sweep[1] at year 10 this deal was not successfully syndicated at the same time as Greater Manchester was reaching financial close.

Boreas: A £325 million project financing closed in October 2009 with a 15 year loan having margins starting at 3 per cent to year five rising to 3.25 per cent to year 8 and 3.75 per cent thereafter. There is a cash sweep at year nine.

Target Financial Close Spring 2008

Actual Financial Close 8 April 2009

NOTE

1 A cash sweep prioritises immediate repayment to lenders over distributions to shareholders.

Appendix Five

Modelling the costs and benefits of starting over

1 This is an illustrative approach to modelling the costs of abandoning a PFI procurement in order to find the tipping point at which the benefits of 'starting over' could outweigh the costs involved. The stage reached in the procurement process will be a key variable, as costs rise after the notice in the Official Journal of the European Union (OJEU notice).

2 A preliminary identification of costs follows for two distinct cases:

Case (A) A large PFI project with 'one-off' characteristics

Case (B) A project in a programme or series of projects (e.g. Local Education Partnership or Local Improvement Finance Trust schemes)

3 Benefits that modify/mitigate the apparent extra cost of finance when continuing with PFI projects – common to Case (A) and (B)

a The 70 per cent or applicable share of the public sector of refinancing gains (to be modelled at various time intervals).

b The macroeconomic benefits from starting 'shovel ready' projects as soon as possible. The Treasury guidance issued in August 2009 treats relevant projects that have issued an OJEU notice as having selected the PFI delivery mechanism, subject to Final Business Case tests of value for money.

4 Costs of 'starting over' that are common to Case (A) and (B)

a Any contractually committed reimbursement of bidders' costs, excluding overhead and profit.

b Cost of delay in re-bidding (ascertainable costs only) after applying any mitigants, such as paying for enabling works during the re-bidding period.

c Risk of higher financing charges from shrinking the PFI banking market, during what may subsequently prove to have been a temporary crisis. This cost could be estimated by analogy to the impact on financing charges of regulatory risk. This cost may be mitigated by short market memory and a possible trend to lower margins as competition increases after the UK emerges from the recession.

5 Variable 'starting over' costs that differ between Case (A) and Case (B)

a Out of pocket costs of holding a new competition.

b In-house staff costs of holding a new competition.

c Bidders' costs of new competition (if available within bid budgets).

d Cost of project specific financial penalties, such as EU penalties for continuing waste disposal using landfill sites.

e Cost of extending current operating and maintenance arrangements.

f Cost, including delay cost (if additional) in renewing planning approvals.

g Cost of changes in market conditions, such as the earnings index and indices relevant to specialised or long lead procurement items.

6 'Soft' costs, in the sense of 'hard to quantify' starting over costs that are likely to differ between Case (A) and Case (B)

a Loss of key project personnel, their corporate knowledge and expertise and the more general loss of staff caused by timing and uncertainty over some employment terms, for example pension rights, when transferring to the private sector.

b Cost of delay in re-bidding, such as 'loss of benefits' for delay period which might extend to a full academic year in the case of a school. For a detailed example of a benefits foregone and cancellation costs incurred calculation see Figure 19, *The Channel Tunnel Rail Link* – HC 302 published March 2001. Delay would require a proportionate calculation.

c The emerging 'preferred bidder' has secured an information advantage and may not be challenged by losing bidders (loss of competitive tension) especially in Case (A).

d Reduced risk transfer from changing the form of procurement may not be fully compensated by bidders lowering the risk premium.

7 Benefits from 'starting over' that may modify/mitigate the cost findings

a Most of the 'due diligence' benefits may be retained, reducing the real impact of reimbursing all the costs incurred at 4.a above.

b In Case (B), the Local Education Partnership or other joint venture may already have paid for and as a consequence own the preliminary and detailed design work.