Value for Money

Value for Money Section 5

5.1 Introduction

Having defined the reference case, the next step is to establish the procurement route that represents the best value for money for the people of Merseyside. The approach taken here is consistent with that outlined in the HM Treasury Value for Money Assessment Guidance issued in August 2004 and in the HM Treasury Supplementary Value for Money Guidance for Waste PFIs issued in September 2005 (“Guidance”).

Therefore, this OBC assumes that DEFRA has already undertaken a Stage 1 programme level assessment for waste PFI projects as part of the Comprehensive Spending Review completed in 2004 demonstrating that waste, as an investment programme, is likely to achieve value for money under PFI. This OBC details the Stage 2 project level assessment aimed at verifying whether this initial decision to use PFI is valid for Merseyside.

The project level assessment has considered both quantitative and a qualitative factors the results of which have been interpreted in conjunction. The quantitative analysis uses a prescribed methodology and electronic spreadsheet provided by Treasury to determine whether PFI represents indicative value for money when compared to a PSC.

This section outlines the results of both the qualitative and quantitative assessment followed by a conclusion to the project level assessment for Merseyside.

5.2 Qualitative assessment

The Guidance states that PFI deals should generally be for large projects that are critical to the delivery of public services. PFI projects commit the Procuring Authority, to use the Guidance terminology, to a particular provider for some years ahead and whether the projects are successful will not just depend on cost, but also on qualitative factors that need to be considered, alongside quantitative factors, in coming to a decision on the most appropriate procurement route.

The three qualitative factors identified by the Guidance are as follows:

- **Viability** involves assessing whether there are efficiency or accountability of equity issues which demand that services are provided by Government directly rather than through PFI and the extent to which service requirements can be adequately captured in a contract-based approach with a clear specification in output terms;
- **Desirability** involves assessing the relative benefits of different procurement routes, such as incentives and risk transfer in PFI versus the Government’s lower cost of borrowing in conventional procurement and the relative advantages and disadvantages associated with a long term contractual relationship between the public and private sectors; and
- **Achievability** involves gauging the level of likely market interest and whether the public sector client would have sufficient capability to manage

the complex processes involved, as this is key to both the procurement of the services and their ongoing management and performance.

At this Stage 2 the MWP has completed a project level assessment of these qualitative factors consisting of due consideration to a series of questions designed to verify decision for proceeding with PFI. The below table summarises the Partnership's responses for each of the three qualitative factors, the full list of questions and responses is included in Appendix 5.1.

Table 5.1 Qualitative assessment summary

Qualitative factor	Summary question from the Guidance	Merseyside Partnership's considered response
Viability	Is the accounting officer satisfied that an operable contract with built in flexibility can be constructed, and that strategic and regulatory issues can be overcome?	The Authority has adopted a multi contract procurement strategy in order to provide greater flexibility in respect of managing its waste streams. The Authority is satisfied that this structure will facilitate: • Meeting the targets set out in the JMWMS; • Promoting Partnership working with the District Authorities in terms of front end Recycling and provision Infrastructure; and • Deliver the project in accordance with the prescribed Output Specification.

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Qualitative factor	Summary question from the Guidance	Merseyside Partnership's considered response
Desirability	Overall, is the accounting officer satisfied that PFI would bring sufficient benefits that would outweigh the expected higher cost of capital?	The Authority is satisfied that the benefits of PFI outweigh the expected higher cost of capital by: • Delivering whole life cycle benefits by combining asset design, construction, delivery and operation of facilities providing a central point of accountability. This is not provided by the letting of separate construction and operation contracts, a route which may be more appropriate for less complex facilities such as HWRC's and Composting Facilities. • The combination of asset delivery and provision of finance by the private sector provides greater incentive to perform and deliver the contract specification. • Long term performance risk is taken by the contractor, which, in a worst case scenario may result in contract termination. Therefore, it is the private sector investment at stake not the tax payers. • Under a PB option this additional protection may not afforded to the Authority as it is retaining lending risk and therefore the risk that the asset may not perform. Additional protection will need to be required that will have a cost impact e.g. Performance Bonds.

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Qualitative factor	Summary question from the Guidance	Merseyside Partnership's considered response
Achievability	Overall is the accounting officer satisfied that a PFI procurement programme is achievable, given client side capability and the attractiveness of the proposals to the market?	In consideration of the points above, the Authority is satisfied the procurement programme is achievable, given that : • The right level of internal and external resource and expertise has been committed to the project including a specialist advisor from the 4ps and a dedicated Procurement Director; • The project has a dedicated project management team that will following the principles of PRINCE 2 with all staff being appropriately trained; • Soft market testing undertaken with potential bidders and funders provided positive feedback with regards to the Authority's proposed procurement strategy; and • The project seeks a product and a risk sharing framework with which the private sector is familiar.

Based on the qualitative project level assessment, the Partnership believes that their waste project meets the viability, desirability and achievability requirements of the Guidance confirming the initial programme level assessment decision that PFI offers value for money. Next, the results of the quantitative assessment are discussed.

5.3 Quantitative assessment

The quantitative assessment considers how quantifiable costs and benefits of using PFI as the procurement route are likely to compare with conventional procurement through a Public Sector Comparator (PSC). This involves estimating values for the capital and operating costs attached to the project and adjusting these for any inherent optimism bias and/or specific risks as well as expected transaction costs. For the PFI option, it calculates the cost of the project if it were to be funded through private finance, adjusting relevant factors accordingly. A generic spreadsheet has been developed by Treasury to capture the values and enable sensitivity testing that, according to the Guidance, must be used as part of the project level assessment. Within the Guidance, the two procurement methods are defined as:

1. The PSC Option – Procurement through conventional approaches that use public funding (for example, letting a design and build contract for the construction of an asset, and then letting annual operating and maintenance contracts for the ongoing operation and maintenance of that asset); and

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2. The PFI Option – Procurement under the PFI which is a specific procurement methodology through which the public sector lets a DBFO contract to the private sector for the construction and whole life maintenance of an asset and/or associated service.

This section outlines the key input assumptions that have been made in using the Treasury spreadsheet, the indicative value for money results and the outcome of sensitivity analysis performed.

5.3.1 Key input assumptions

The Treasury spreadsheet contains some assumptions that have been hard wired and therefore cannot be altered, for example employment cost per employee for the PSC option is fixed to equal the amount input for the PFI option. There are, however, many project specific input assumptions to be made. A summary of the key financial input assumptions is provided below with a full listing detailed in Appendix 5.2.

All price data is real as at the planned financial close date of the project (1 April 2008).

Table 5.2 Key input assumptions

Variable	Description	MWP input assumption
Timings	The contract period is restricted to intervals between 6 and 40 years	The contract period for this project is modelled at 25 years.
Capital Expenditure (“CapEx”)	Expenditure incurred in procuring the asset. It does not cover expenditure required to maintain the asset	The initial CapEx of the project totals £381.2m over a 5 year period. The CapEx costs have been increased by 10% for the PFI, to reflect the cost of the risks borne by the private sector under a PFI transaction.
Operating Expenditure (“OpEx”)	Represents the costs incurred by the Partnership in operating the asset and or running the services that are included within the scope. Expenditure which falls outside of the scope, for example, clinical staff costs, are excluded.	The annual OpEx cost (non-employment) for the project was calculated as £15.8m. The employment costs were calculated as £2.4m. For the PFI option, the OpEx costs were increased by 5% to reflect the cost of the risks borne by the private sector.
Transaction costs	These represent the costs incurred by the private sector and the public sector, in reaching contractual agreement.	The transaction costs have been assumed at £1.0m under the PSC and £5.0m under PFI, based on the size and complexity of the procurement and costs incurred on other waste PFI projects.

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Variable	Description	MWP input assumption
Gearing	This represents the share of the total financing requirement which is funded by debt under the PFI option.	The level of senior debt as a percentage of the total project funding is 85%, based on a prudent level of gearing acceptable to the current market.

The Treasury spreadsheet accounts for the impact of uncertainty over project costs through input assumptions for Optimism Bias. Optimism Bias relates to the demonstrated and systematic tendency for project appraisers to be overly optimistic when considering project benefits and costs.

The Guidance states that there is currently little, if any, evidence to suggest that either conventional or PFI style procurement methods deal any more or less efficiently with Optimism Bias, however there is evidence that the allocation of risks achieved under a PFI contract reduces the impact of any Optimism Bias on the Procuring Authority as compared to the contractual arrangements typically resulting from a PSC option.

The Guidance explains that in accounting for Optimism Bias the Treasury spreadsheet differentiates between two key stages of the investment decision process, namely pre-Full Business Case ("FBC") and post-FBC. FBC in this instance represents the date of contract award. The pre-FBC Optimism Bias factor represents the increase in estimated costs or shortfall in estimated income between the OBC and the FBC stage. Post-FBC Optimism Bias factor represents the increase in costs or the shortfall in income between the date of contract award and the completion of the associated asset(s).

Fundamental to the internal operation of the spreadsheet is the assumption that the impact of post-FBC Optimism Bias will be greater under the PSC option.

The Treasury spreadsheet requires inputs for both pre and post-FBC Optimism Bias percentages for CapEx, Lifecycle costs, OpEx, transaction costs and third party income. These inputs are detailed in the table overleaf. Details of how the inputs were derived are provided in Appendix 5.3.

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Table 5.3 Optimism Bias input assumptions

Cost Centre	Overall Optimism Bias (%)	Pre-FBC Optimism Bias (%)	Post-FBC Optimism Bias (%)
CapEx	68.6	17.2	51.4
Lifecycle	50.0	10.0	40.0
OpEx (non employment)	25.0	5.0	20.0
Transaction	50.0	10.0	40.0
3rd Party Revenue	20.0	10.0	10.0

For example, the overall level of Optimism Bias relating to capital expenditure is 68.6%. The pre-FBC Optimism Bias of 17.2% represents the increase in costs up to the point of contract award and the post-FBC Optimism Bias of 51.4% represents the potential cost increases after contract award. As stated above, the impact of the post-FBC Optimism Bias for the Procuring Authority will be reduced by a PFI contractual structure.

5.3.2 Indicative PFI value for money results

The key outputs from the Treasury spreadsheet are the PSC NPC of the project, the PFI equivalent and the indicative PFI value for money percentage representing the percentage difference between the two. If the indicative PFI value for money percentage is positive then this indicates that the project supports the programme level assessment that value for money can be achieved through PFI. If negative, the PSC is deemed to offer better value for money.

For the base case scenario the indicative PFI value for money percentage was generated using a pre-tax Internal Rate of Return ("IRR") for the private sector of 13%. This produced an indicative PFI value for money percentage of 17.6% confirming PFI as offering the potential to deliver value for money for the project. The base case scenario results are summarised thus:

Table 5.4 Indicative PFI value for money results

	PSC NPC £M's	PFI NPC £M's
Base Case Scenario (13% pre-tax IRR)	1,145	944
Indicative PFI value for money %		17.6

5.3.3 Sensitivity analysis

The Treasury spreadsheet uses Indifference Points to demonstrate the level of change required in the value of individual inputs to erode the difference between the PSC and PFI NPCs to zero thus making the Procuring Authority indifferent between the two procurement routes. The table below sets out the Indifference Points for capital and operating expenditure for the PSC option and for the unitary charge for the PFI option.

Table 5.5 Indifference analysis

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Procurement option	Variable	Indifference points
PSC	CapEx	(25.3%)
PSC	OpEx	(66.3%)
PFI	Unitary Charge	24.4%

The analysis demonstrates that, *ceteris paribus*, the CapEx under the PSC would have to decrease by 25.3% in order for Merseyside to be indifferent between the two options. Similarly, OpEx would have to decrease by 66.3% under the PSC. Both of these are considered to be within comfortable distance of the Guidance benchmark of 5%.

Affordability constraints aside, the Unitary Charge would have to rise by 24.4% for Merseyside to be indifferent between the two procurement options. Again, this is within comfortable distance of the Guidance benchmark of 3%.

In addition to the above, additional sensitivity analysis was conducted by generating different scenarios using different input assumptions from the base case scenario to assess the impact on the indicative PFI value for money percentage. The following scenarios were assessed:

- Scenario 2 assumed a target pre-tax IRR of 18%, reflecting the potential demand for higher private sector returns.
- Scenario 3 assumes that Optimism Bias will only be applied to OpEx (employment and non-employment) costs.
- Scenario 4 assumes that Optimism Bias will only be applied to CapEx costs.

The following table illustrates the results of the indicative PFI value for money analysis for the different scenarios outlined above.

Table 5.6 Scenario analysis

Results:	Base case scenario	Scenario 2 IRR of 18 %	Scenario 3 OpEx only	Scenario 4 CapEx only
"PSC" NPC (£m)	(1,145)	(1,145)	(820)	(1,114)
"PFI" NPC (£m)	(944)	(1,012)	(924)	(910)
PFI Value for Money (%)	17.6	11.6	(12.6)	18.3
Unitary Charge (£m)	64.2	69.5	62.7	61.6

Scenario 2 simply demonstrates the relationship between higher private sector returns and PFI value for money percentage; as the PFI cost increases the PFI value for money percentage decreases. The results of scenario 3 indicate the decrease in the PFI value for money percentage resulting from the removal of uncertainty regarding the

capital expenditure costing; a negative percentage value (12.6%) value for money percentage indicates the significance of Optimism Bias relating to operating expenditure within a waste PFI project. The results of scenario 4, however, demonstrate that the Optimism Bias relating to capital expenditure is still of sufficient quantum to justify the value for money of the PFI in isolation by generating an indicative PFI value for money percentage of 18.3%.

To conclude, the results of the quantitative assessment, following the prescribed methodology provided by Treasury, verify the programme level assessment that PFI can offer value for money for this project. The sensitivity analysis conducted has provided indifference points within comfortable distance of the benchmarks as outlined in the Guidance and a look at varying scenarios has further illustrated the robust nature of the positive indicative PFI value for money percentage.

5.4 Project level assessment conclusion

The qualitative assessment produced a clear indication that in terms of viability, desirability and achievability the Partnership is well positioned to deliver PFI procurement. The quantitative assessment has produced a high indicative PFI value for money percentage of 17.6% on the base case scenario, the robustness of which has been demonstrated through sensitivity testing. Taken together these assessments have provided a clear indication that verifies the outcome of the programme level assessment that PFI can deliver value for money for Merseyside's waste project.

The Partnership notes the requirements of Stage 3 procurement level assessment, in particular those relating to market failure. Details of how the Partnership has begun to mitigate this risk through both the promotion and tailoring of the project are contained within section 7.