

# PUBLIC PRIVATE PARTNERSHIPS UK CASE STUDIES



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## IFSL's PPP EXPORT GROUP

These case studies have been supplied by IFSL members to illustrate the practical aspects of a number of contracts under the Private Finance Initiative (PFI) in the UK.

IFSL is taking a leading role in the promotion of PPP around the world through its PPP Export Group, chaired by Dr Tim Stone of KPMG. Working with central government and the private sector, IFSL has run seminars for over 60 countries. It also organises meetings and visit programmes for overseas officials visiting London who come to find out more about the UK's experience and expertise in PFI/PPP.

IFSL has also produced two other reports related to Public Private Partnerships and PFI that can be downloaded from IFSL's website:

*Public Private Partnerships: UK expertise for International Markets* This report sets out to clarify misunderstanding surrounding the PFI process, to explain the role of advisers, to highlight UK expertise and to draw attention to the scope of market opportunity around the world. This report has been translated into 12 languages, all of which are posted on the IFSL website.

*PFI in the UK: Progress and Performance* This report, as the title indicates, sets out the evidence for how PFI has progressed and performed.

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## MORAY COAST WASTEWATER PFI PROJECT - MacRoberts

### **Background**

The Moray Coast Wastewater PFI Project, with capital costs of around £75m, was the last of the recent wastewater projects to be signed in Scotland. It was also the last PFI project to be promoted by the North of Scotland Water Authority (NoSWA) which has since been superseded by the new statutory body, Scottish Water. The Moray project involves the construction and maintenance of three sewage treatment plants, a sludge dryer, twenty pumping stations, two new long sea outfalls and a network of pipelines more than 47 km long. Situated in the north-east of Scotland, the Moray coast is an area of high natural beauty with farmland, fishing and a dolphin population to be protected. The interests of the Scottish Environment Protection Agency, the Food and Environment Protection Agency, Scottish National Heritage, the Crown Estate Commissioners, harbour authorities, Aberdeenshire Council, Moray Council and local communities and businesses had to be taken into account in the design of the Project.

The requirement for major additional capital investment in the Scottish Water industry was principally driven by European legislation arising from environmental concerns aimed to standardise the treatment of wastewater across the European Union. The Scottish Regulations to implement this directive set a date deadline for the provision of treatment levels dependent on the size of the population equivalent of an agglomeration and of the area into which the wastewater of that agglomeration discharge. i.e agglomerations with a population equivalent of between 10,000 and 15,000 are to have secondary treatment standards by 31 December 2005 whereas agglomerations with a population equivalent of less than 10,000 discharging into coastal waters are to have to have appropriate treatment by that date.

Although the catchment area for the Moray project has a total population of approximately 70,000 this is largely made up of small agglomerations spread across a relatively large geographical area. NoSWA chose to promote this project after it has promoted other projects serving larger agglomerations of Aberdeen, Dundee, Fort William and Inverness.

The Authority advertised the project in OJEC in December 1998. Following pre-qualification three consortia were selected to tender. The Catchment consortium, made up of International Water Limited, awg Project Investments and United Utilities, already awarded the concession on the Highland and Tay wastewater PFI projects, was awarded preferred bidder status on the Moray project in April 2000 and signed as concessionaire in June 2001.

### **Contract Structure**

The contractual structure was typical PFI. The concession agreement between NoSWA and Catchment was to design, build, own, finance, operate and maintain the three schemes which comprised the project and also to take over, operate and maintain certain existing facilities. Catchment then entered into sub-contracts with its construction contractor (Morrison-Bechtel JV "MBJV") its operating contractor (United Utilities Moray Limited "UUML") and its sludge recycling operator (Snowie Limited), and of course financing arrangements with its funder (Abbey National Treasury Services).

Of particular note to this project was not only that it comprised three separate geographical schemes but that it also had three (non-scheme related) stages of construction and contract.

The first of these stages was for advance construction work. The Authority entered into a Pre-Contract Development Agreement prior to financial close with the consortium members and in turn the consortium members entered into a sub-contract with the construction contractor. The need for these advance agreements arose due to the timing required for the construction and commissioning programme to ensure that the statutory deadline would be achieved. These agreements allowed the parties to progress the application for detailed planning permission and to allow the sub-sea works (directional drilling from the shore) for the long sea outfalls to be carried out by Van Oord (the specialist outfall contractor) within the necessary weather window.

The second stage was award of the concession agreement by NoSWA to Catchment Moray Limited and financial close of the PFI project. This superseded the existing Pre-Contract Development Agreement and governs the whole project dealing with the Authority's requirements for the construction and the operational period. During the course of negotiations it became evident that detailed planning permission for the entire Schemes would not be available prior to the time of concession award. Provision was made in the Concession Agreement on how the parties would deal with obtaining planning permission, the necessary land rights and how possible permutations would be treated.

Those parts of the Schemes which did not have planning permission at the time of concession award, generally related to smaller outlying communities, were known as the "2003 Parts". These became the third stage and were put in place once they had planning permission, by way of variation to the Concession Agreement, a year after financial close.

#### **Payment Mechanism**

The Concessionaire receives payment for treatment of wastewater and sludge, including sludge imported by the Authority from outwith the catchment area. Payment is based on daily samples of treated effluent taken at each of the three Schemes, compliance with the sampling regime being a pre-condition to payment, and takes into account the standard achieved and the percentage reduction that the treatment achieved. There is a separate rate for treatment and disposal of sludge.

Revenue share arrangements are in place between NoSWA and Catchment, to be determined on an annual basis. The benefit of any refinancing or rescue refinancing is also to be shared with the Authority.

#### **Funding**

Senior debt funding for the project was provided by Abbey National Treasury Services plc. Funding took the form of a separate fixed interest facility for each of the three distinguishable parts of the scheme, with associated standby, equity bridge and working capital facilities. Unusually, therefore, there was no requirement for an external swap, with interest rate hedging being taken internally by Abbey. Junior funding, using pinpoint equity and loan notes, was provided by the consortium members.

#### **Risk Transfer**

The risk of constructing and commissioning the works within the required time period was transferred to the private sector along with the operational period risk of an increase or decrease in wastewater flows during the 30 year concession period. The flow and load risk in this project was accentuated by the nature of the trade discharges within the catchment areas which, although relatively few in number, include high effluent discharges such as a distillery and food processing plants. The risk of providing treatment plants capable of achieving the treatment standards for these dischargers was taken by the private sector which also accepted the risk of bal-

ancing this with the impact on flow rates in the event that one of these industrial users either left the catchment area or a new industrial user began discharging into the scheme. The risk of obtaining the planning permission and associated land rights for the 2003 Parts was retained by the Authority.

#### **Lessons Learnt**

As the Moray project was the third PFI project entered into between the Authority and the Concessionaire, and the Concessionaire and its sub-contractors, the Parties were able to streamline certain elements of the process at both contractual and technical level.

On the contractual side, clearly all parties and their advisors had learnt lessons since the first contract was signed in December 1996 but they recognised the advantage of retaining what had been an accepted position on the previous transactions to concentrate negotiations on the issues specific to the Moray project and dealing with recently introduced legislation.

Learning from previous experiences has been particularly successful on the technical side so far. During the construction and commissioning phases, it has been clear that the parties, relying on past experiences have gleaned a greater understanding of each other's proposals and requirements and are more alive to divert potential issues before they arise. Mechanical completion has already taken place and performance tests are currently under way so we can hope to see cleaner waters in the Moray Firth in the near future.

Note: MacRoberts acted for the Catchment consortium on the project. Abbey National were advised by Linklaters and NoSWA were advised by Allen & Overy.

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### **FUTURE STRATEGIC TANKER AIRCRAFT - KPMG**

#### **Background / History**

The scope of the Future Strategic Tanker Aircraft (FSTA) project is to replace the current aging fleet of RAF Air to Air Refuelling (AAR) tanker aircraft. The current fleet comprises 22 VC10 and 9 L1011 Tristar aircraft. The VC10s are scheduled to be withdrawn from service by 2009 and the Tristars by 2011.

#### **Reasons for the Project / Need for change identified**

As is common with many other military assets, the AAR tanker fleet size has been determined by the anticipated wartime need. Consequently, in peacetime the aircraft are not heavily utilised and a significant proportion of the fleet are effectively 'surplus'. While some of the surplus capacity is taken up by using the aircraft for transport purposes, the aircraft have a far lower utilisation level when compared to civilian operators.

The PFI approach has been adopted on the principle that if a 'commercial' operator of the aircraft were to manage the fleet, any 'surplus' capacity could be used to undertake third party revenue work, thus reducing the cost of the AAR fleet to the Ministry of Defence (MoD). It is also thought that the introduction of commercial fleet management expertise and maintenance practices will result in cost benefits arising from greater efficiency.

**Structure of Contract**

The FSTA deal will consist of:

**Aircraft Services**, comprising:

- The provision of 'available' aircraft for military use, where either the nature of the cargo or destination means that a military crew must fly the mission. The bidder will supply an appropriately maintained, configured and functional aircraft to the MoD at the aircraft's main operating base. The aircraft will then be flown by RAF aircrew (or reservists) with some of the groundcrew also being RAF personnel.
- The provision of air charter services where the nature of the work is such that it could, in theory, be carried out by any civilian air charterer. The aircraft used are likely to be kept in civilian specification and will be flown by the operators own personnel.

**Training Services**, the operator will supply all training in support of the service, with the exception of some military specific training. Although the cost of training its own personnel will be subsumed within the cost of the aircraft services, the operator will also be required to provide training to RAF personnel.

**Crewing Services** - the MoD will require the operator to provide a pool of qualified personnel (particularly pilots) from its own organisation who will be 'sponsored reserves'.

**Funding**

The size of the funding requirement for FSTA of between £2.5bn and £3bn will be challenging for the funding market, both in terms of capacity and the innovative nature of the deal, which will involve considerable third party revenue risk.

In developing the contract an approach has been adopted to ensure the contractor, and consequently the funders, will not be exposed to 'military' risks such as war and conflict. The contractor will, however, be exposed to considerable demand risk on third party revenue. In some respects FSTA will combine the features of a project finance and a start-up airline and funders, will consequently, need to understand the risks attaching to both.

**Payment Mechanism**

Payment for the provision of available aircraft will consist of a daily charge for making the aircraft available at an agreed location with an additional hourly charge for actual use. This structure recognises that the MoD often requires available capability rather than flights.

Payment for the air charter services will be made on the same basis as normal air charter and prices will be regularly 'benchmarked with the market'. In theory this part of the service should be the same as the provision of services to third parties, with the exception that the customer is the MoD.

Payment for the training services will be made on either a 'fee per course basis' or if appropriate for simulators use, on an hourly basis.

Payment for the crewing services will be provided as a retainer to cover training and retention costs.

**Opportunities for innovation / improvement to infrastructure**

The FSTA project offers considerable scope for innovation, both in source, design and delivery of the service and its assets. In addition, it is likely to provide a significant increase in capability for the RAF and give rise to knock-on advances in terms of the way in which the tanker force delivers services to its customers - the front-line fighter squadrons and the Defence Transport Movements Agency.

**Value for Money**

The FSTA PFI project offers the MoD increased value for money with the main mechanism being the ability for the service provider to undertake commercial freight activity at times of low utilisation by MoD, with the additional revenue being used to reduce the cost of the overall service to the MoD. In addition the introduction of commercial fleet management and maintenance practices should not only result in a cost saving to the MoD, but increased efficiency, availability and capability. Additional value for money will also be demonstrated by the ability to exploit civilian pool of spares and improved supply chain management.

Incorporating all of the above, it is expected that the deal will significantly reduce the cost of the service to the MoD, whilst providing increased capability.

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**ACCOMMODATION PROJECT - HOME OFFICE - Norton Rose**
**The Project Background/History**

The Home Office Central London Accommodation Strategy (know as "HOCLAS") project was a Private Finance Initiative project for the new £311 million Central London headquarters for the Home Office ( the "Authority") to be located on the site of the former offices of the Department of the Environment and a linked (although separate) residential and retail development. The existing buildings, known as the "Three Ugly Sisters" and popularly regarded as one of the worst examples of 1960s office architecture, are to be demolished. The new building has been designed by renowned architect Sir Terry Farrell.

**Reasons for the Project/need for change identified**

The project came about through the desire of the Home Office to find an appropriate and cost effective solution to meet its long term office space needs in Central London (at a time when staff were scattered across 6 separate buildings around Westminster and staff numbers as well as the importance of the Home Office were rising). Bidders were requested to provide modern, flexible accommodation options.

**Ownership Structure**

The successful bidder (the "Project Company") is a special purpose company set up by two Shareholders/ Sponsors:

- (a) HSBC Infrastructure Limited ("HSBCIL"); and
- (b) Bouygues UP Limited and Ecovert FM Limited.

**Structure of the Contract**

The Project Company entered into a project agreement with the Authority for a term of approximately 29 years under which it agreed to:

- (a) Redevelop the site of the former offices of the Department of the Environment by:
  - Demolishing the existing buildings on the site; and then
  - Constructing new buildings for occupation by the Authority (the "Building") on

part of the site (the "Office Site") and structural works to the basement on the balance of the site (the "Residential Site");

- (b) Move certain assets and equipment of the Authority (and its staff) into the Building (know as the "decant"); and
- (c) Provide building management and support services (the "Services") to the Authority in relation to the Building for the remainder of the term of the agreement.

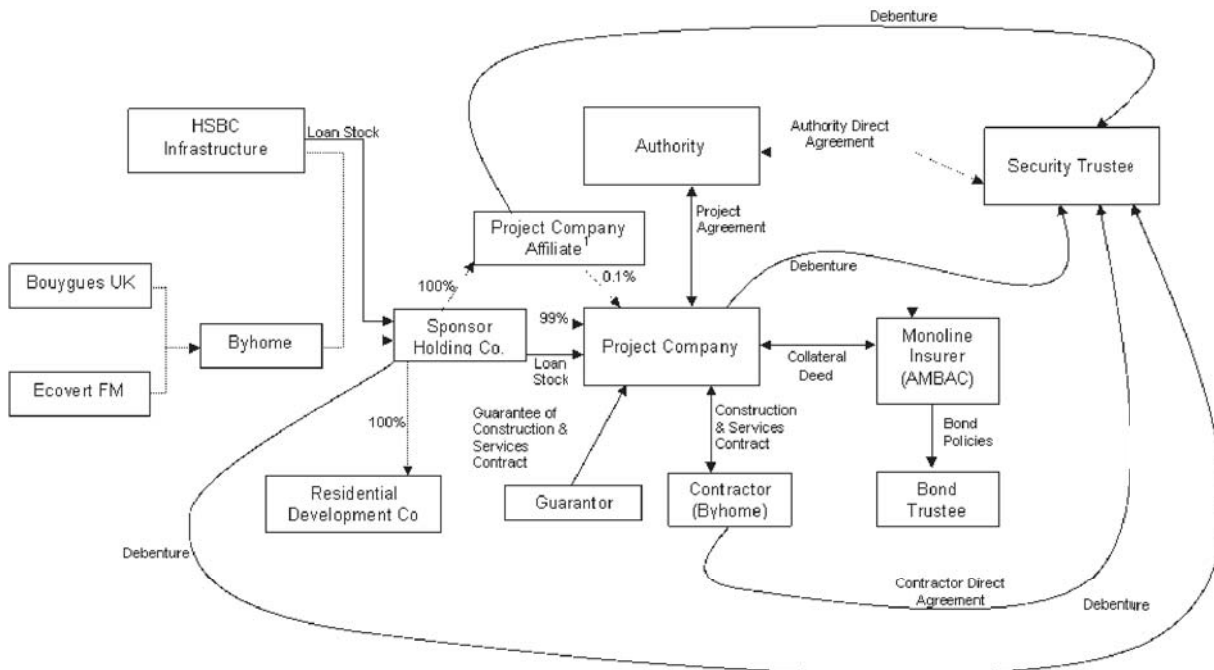
The Project Company entered into a largely "back to back" single sub-contract (the "Construction and Services Contract") with a company set up by Bouygues UP Limited and Ecovert FM Limited (the "Contractor"), transferring almost all of the construction and operation risk to the Contractor. The obligations of the Contractor under the Construction and Services Contract are guaranteed under a guarantee from Bouygues Construction S.A. (the "Contractor Guarantee"). If the Contractor fails to meet its obligations under the Construction and Services Contract, the Project Company will be able to call upon the Contractor Guarantee.

The development of a residential and retail complex on the Residential Site (beyond the basement works) is to be performed by a separate company (initially a sister company to the Project Company) and is separately financed.

**Funding**

The main source of finance for the project is two bond issues. HSBCIL will subscribe for the major part of subordinated loan stock to be issued by the Project Company and each shareholder has contributed an amount of share capital.

One bond issue was index-linked and the other was fixed rate. The index-linked bonds included some variation bonds to allow for changes in the project. This is the first time that a public bond issue for a PFI project in the United Kingdom has used a dual tranche structure. Both tranches of bonds were wrapped by a monoline insurer, AMBAC, and were rated AAA by Standard & Poor's and Aaa by Moody's. The bond issue is listed on the London Stock Exchange.



<sup>1</sup> Existing solely for the purpose of holding the minimum number of shares in a PLC. This is a wholly owned subsidiary of Sponsor Holding Co.

**Payment Mechanism**

From the date the Building is independently certified as being "ready for occupation", the Authority will commence making payments to the Project Company based on the availability of the accommodation and the provision of the Services (subject to a deduction regime based on performance failures).

**Risk Transfer**

One of the significant features of the financing of the project is that the fixed rate bondholders have assumed residual value risk of the Office Site. At the end of the concession period the Authority can elect to vacate the Building leaving the remaining term of the long term lease of the Office Site with the Project Company. Alternatively it may purchase the remaining term of the lease for the lower of the open market value of the lease and £X (a set amount). The Project Company will redeem the fixed rate bonds from the proceeds of the sale of the Building or, if the Authority elects to purchase the lease, from a payment at the end of the concession period. There are valuation and reserving mechanisms giving the fixed rate bondholders certain protections.

**Lessons Learned**

From its initial invitation to negotiate (1997), the project underwent a number of transformations ultimately evolving into the form reached at financial close (March 2002). Part of this process involved a request for further "best and final offers" from 3 bidders. While this inevitably delayed the project, it allowed the project to be refocused ultimately delivering improvements in design, price, deliverability and financing. Negotiations from selection of preferred bidder (September 2000) until financial close (approximately 18 months later) do appear unusually long, but it is not so surprising given the number and complexity of issues resolved during those negotiations.

Arteos consortium is the provider and operator of a new British Embassy in Berlin, which was handed over in June 2000. After a two year procurement process, the Foreign and Commonwealth Office, advised by DLA (team led by partner Mark Swindell) and Greenwich NatWest, signed a 30 year contract for the six story building, which provides a total of 9,000 square metres of floor space for the 125 staff located there.

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**BERLIN EMBASSY - DLA****History**

Following the reunification of Germany, the German Government moved from Bonn to its pre-war location in Berlin in January 2000, with most major embassies also making the move. The UK Government already has an ideally located site, at 71-2 Wilhelmstrasse, close to the Brandenburg gate and at the heart of the new administrative area being developed in former East Berlin. The site housed the pre-war British Embassy which had been demolished by allied bombing raids in 1945 and had fortuitously remained in British Government ownership.

**Procurement**

The Estate Strategy Unit (ESU) of the Foreign and Commonwealth Office (FCO) has overall responsibility for a wide range of embassies, consulates and related property throughout the world and was well used to conventional procurement by way of construction or acquisition of existing freehold/leasehold equivalent premises and there was the inevitable debate as to whether conventional or PFI procure-

ment should be the chosen route for this prestigious project.

A feasibility study was undertaken in late 1995 by Schal International in conjunction with DLA and Chesterton Consulting. It was clear from this that the PFI route was a realistic one, with considerable interest shown by potential bidders. Expressions of interest were sought by an advertisement in OJEC (the Official Journal of the European Communities) in November 1995, with the final decision to proceed along the PFI route being made during 1996.

It was at this time that the FCO team came together, made up of DLA, Chesterton, Greenwich NatWest and Schal International all appointed as consultants and coordinated by ESU. A detailed Invitation to Negotiate (ITN) was then issued to three short listed bidders in December 1996. These were the ultimately successful Arteos consortium led by Bilfinger & Berger, a German construction group with Johnson Controls International and Dresdner Bank Group; the Embassy Partnerships consortium led by Kajima (the Japanese construction group) with Innisfree (the UP PFI Investment Fund) and a consortium led by Norwest Holst (the UP contractor) with Campenon Bernard (the French construction company, both part of the Generale Des Eaux Group) and backed by the Charterhouse PFI fund.

### **Design**

An unusual aspect of the project was that the FCO, prior to deciding on the PFI route, had held a design competition for the Berlin Embassy and had already been working with the successful architects, Michael Wilford and Partners, in further developing the winning design. Final adherence to the design was not a requirement of the procurement process but, in the event, the short listed bidders all opted to base their bids on the further development of the initial design.

The continuation of the Michael Wilford design gave rise to the need for the assignment and novation of design rights in favour of the preferred bidders, so that they could then move on to work up their detailed design proposals for the project. This aspect, involving detailed negotiations between the architects, Whitby & Bird the engineers and the preferred bidder, did have the effect of adding to the procurement timetable. Contracts were finally exchanged between the FCO and Arteos for the PFI project as a whole on 23 June 1998.

### **Structure of contract and finance**

The unique feature of this project was that it would be for the development of a facility outside the UP and consequently questions of governing law and conflict of laws arose. It was decided at an early stage that the project agreement would be an English law contract.

In parallel with this the underlying property interest was the grant by the FCO of a German law building lease. While the jurisdiction of the German Courts in relation to the building lease cannot be entirely excluded, both the project agreement and building lease have been structured so as to place virtually exclusive reliance on dispute resolution procedures, should problems arise in the future.

The building lease is for a term of 62 years. Once construction was complete, the first 30 years of FCO occupation benefit from a fixed unitary payment, subject to variation by way of indexation in respect of hard and soft facilities management (FM) services and the impact of the Performance Payment Mechanism (PPM). The PPM is based on a staged response to defaults arising, including unlimited progressive impact on the whole of the unitary payment in the unlikely case of a fundamental default. After the first 30 years of occupation, the contract allows

for the FCO's continued occupation on a market tested basis.

Project and financial advice to Arteos was provided by Dresdner Kleinwort Benson, with Bilfinger & Berger providing the majority of the equity and a 25 year bank debt facility provided by the Dresdner Bank Group. The total funding amount was in the region of DM70m. The bank debt has been swapped into fixed rate for the duration of the facility. It was a challenge for all parties involved to complete a transaction in a foreign jurisdiction with a different legal system and no precedent for the PFI concept.

### **Risk transfer**

The potential for residual value after the initial 30 year period encouraged Arteos to accept the level of risk transfer necessary for a PFI project. A wide range of risk is borne by Arteos and its sub-contractors, including construction and life cycle maintenance of the building and a range of other areas of risk. An example of how this works in practice is a recent incident of civil unrest outside the Embassy which resulted in damage to the building. All repairs were carried out by Arteos, at their cost and without the need to involve the FCO other than in the programming of the work.

Arteos is responsible for procuring the supply of utilities (electricity, water, etc) and is taking risk on the energy efficiency of the embassy. Arteos will also procure tertiary services (catering, cleaning, etc) and the PPM will apply to such sub-contracted services. There is a requirement to regularly re-tender these services to ensure the FCO's changing needs are met cost effectively.

### **Lessons learnt**

The successful conclusion of the project agreement has shown that, despite the potential complexities, a structure can be found which enables a UP law contract structure for the design, build, financing and operation of a facility overseas. This structure may well be capable of use by other governments in the EU and further afield.

The project timetable was demanding. While there were inevitably some delays, the preparation of detailed contract documentation at an early stage (issued to bidders at ITN stage) allowed bidders to submit more comprehensive bids than might otherwise have been the case and thus reduced the time (and cost) spent at preferred partner stage.

There were some delays in handover of the facility. Some extensions of time were granted and liquidated damages for delay also became payable. As regards other issues arising from delays, the risk transfer in the project agreement proved resilient in favour of the FCO and enabled the FCO to negotiate amendments to the project agreement with Arteos which were favourable to the FCO and which also enabled the FCO to obtain handover within a timescale which matched its operational needs.

### **Contract Summary**

PFI agreement for new British Embassy in Berlin

- Signed 23 June 1998 for completion Spring 2000.
- UP Government (FCO) has 30 years occupation rights with a further 30 year option during which Operator has residual value benefit after which site and facility revert to Government.

- Wide range of non-diplomatic services can be provided by operator with flexible change mechanisms.
- Fixed Unitary Payment (UP) throughout the full 30 years, subject to:
  - indexation for hard and soft FM;
  - periodic benchmarking/re-tendering of soft FM provision;
  - performance payment mechanism (PPM) providing for staged response to FM default;
  - PPM has potential impact on whole of UP.
- Project agreement governed by UP law - structured so as to accommodate a wide range of German law and taxation issues.
- Disputes resolution provisions aim to exclude Courts of either jurisdiction, with a flexible range of expert/alternative dispute resolution/arbitration mechanisms.

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### AFFORDABLE HOUSING - TROWERS & HAMLINS

#### **Introduction**

For many years the UK has faced major problems in providing sufficient decent accommodation for those who are unable to compete for housing to own or rent on the open market. In some areas there is simply insufficient housing available and in many there has been a historic underinvestment in existing municipal stock leading to a serious deterioration in the physical condition of the accommodation.

The Government has sought to address these issues through a variety of structures involving the private sector rather than simply by allowing more public money to be invested directly by local housing authorities in their own stock. This paper looks at some of the options which may be of particular relevance to other countries faced with some of the same difficulties.

#### **Types of Affordable Housing**

In the UK affordable housing is provided to those who need it in one of two ways. The most common route is via the provision of housing for rent. The individual or family will be granted a tenancy of their home. They will be obliged to pay rent which will be less than the open market rent. It will be set at a level to be affordable to those in low paid employment. For those who are not employed the State meets the rent liability through a subsidy to the tenant. As long as tenants adhere to the terms of the tenancy agreement they will have security of tenure ie the landlord will not be able to remove them from their home. The responsibility for repair and insurance of the dwelling rests with the landlord who must fund the costs from the rental income it receives.

The second route is via what is known as shared ownership. This is a form of home ownership as the name suggests. In this case the individual or family is granted a long lease of their home, typically 99 or 125 years. They pay a premium on the grant of the lease equivalent to a percentage of the value of the property. They fund that themselves via a normal residential mortgage. They pay a rent to their landlord on the percentage of the property they have not acquired. The rent is set at a level which is lower than the costs that the shared owner would have had to meet had he or she borrowed those funds in the conventional way. The shared owner has the right to acquire the rest of the equity in the property over time. The purchase

price for future shares is based on the then market value of the property. As the shared owner's equity stake increases, so their liability to pay rent reduces. Responsibility for repair and insurance of the dwelling lie with the shared owner.

### **Delivering New Affordable Housing**

In the previous section we outlined the two principal ways in which affordable housing is provided in the UK. Both require subsidy to bridge the gap between the cost of delivering the housing and the amounts the tenant or shared owner is paying to the landlord.

For many years the UK has benefited from the existence of a large number of "not for profit" organisations whose purpose is to deliver affordable housing to those in need. The term "not for profit" indicates that such organisations do not distribute profits to shareholders but rather reinvest any profits made in delivering their corporate objectives. Prior to 1988 such organisations were funded almost entirely by the State via grants and loans and were not major providers. Until that time the major investment in new affordable housing was via local municipal housing authorities.

In 1988 the Government introduced a new approach. There was a shift away from local municipal housing authorities as the providers of new affordable housing in favour of the not for profit sector. In addition the manner in which that sector was funded changed. The State no longer provided all the funding required. Since 1988 these private bodies have been eligible for grants from Government to meet part of their costs, but the remainder has to be met from finance raised privately. To protect the investment by Government, entities who wish to receive grants must register with and be regulated by, a state body, the Housing Corporation. They are then known as registered social landlords or RSLs.

This public private partnership approach has been very successful. The RSL sector has developed rapidly. Virtually all new affordable housing since 1988 has been procured via RSLs. As indicated above the mix of capital grants from Government and private loans has enabled RSLs to become the UK's principal providers of new affordable housing. In recent years the Government has looked at an alternative means of provision via a PFI structure.

Such arrangements do not depend on capital grants from Government and are entirely privately financed. Essentially a contract is entered into between a local municipal housing authority and a private provider. The agreement provides for dwellings to be built, owned, financed and managed by the private provider. The local municipal housing authority will have the right to require the private provider to house individuals and families referred to it by the authority. In return for doing so the private provider will receive a fee from the authority which, as in other PFI arrangements, is performance related. In addition to the fee, the private provider will receive rent from the tenants it has housed at the authority's direction. The arrangement is likely to have a life of 25 or 30 years.

This PFI option is still in its infancy but, in principle, could be used for any project. The private provider could be any type of organisation with the relevant expertise. The contract between the local housing authority and the provider governs the way the project is managed so there need be no reliance on the independent regulation of the Housing Corporation.

**Tackling housing stock renewal/refurbishment**

Most local municipal housing authorities in the UK are faced with the problem of deteriorating housing stock as a consequence of a lack of investment going back many years. The Government has resisted giving funds to authorities to enable them to bring the housing back into good repair and instead has encouraged investment from the private sector.

There are two principal ways in which such investment is introduced. The first and most common was introduced in 1988. It involves the authority transferring the housing stock to an RSL which then raises private funds secured against the property. The price at which the property transfers is determined by looking at the value of the rents generated from the property less the costs of carrying out the necessary repairs and improvements and the costs of managing the stock. This can lead to a nil or a negative value in certain cases resulting in a need for financial or other support from the authority or the Government to make the transfer "bankable".

This investment option has been very successful. Since 1988 over 900,000 dwellings have been transferred from local municipal housing authorities to RSLs. In the last few years the Government has looked at PFI as an alternative to the transfer option. In a PFI transaction the housing stock remains owned by the local municipal housing authority. A private provider undertakes, in a 25 or 30 year Agreement, to refurbish and then manage and maintain the stock. The necessary investment is raised by the private provider. The authority pays a performance based fee to the private provider out of which the provider services debt, meets its contractual obligations in terms of the stock and repays its investors.

**Conclusion**

Through the public private partnership options outlined in this paper the UK has sought to tackle the difficulties it faces in terms of the need for new affordable housing and the underinvestment in existing municipal housing. It has been very successful. Over £26 billion of private finance has been invested in the affordable housing sector since 1988 through a wide variety of funding structures, from simple bilateral loans to issues of publicly quoted loan stock.

Lenders and investors in the sector see RSLs as being financially very robust, largely because of the existence of the regulation of the Housing Corporation. This has led to RSLs being able to raise private finance at very favourable rates.

The application of PFI to the affordable housing sector is still at a relatively early stage of development largely because the existing public private partnership model of investment via RSLs has worked so well. There are some particular technical and regulatory issues which make the application of a PFI solution challenging. These largely derive from the level of statutory protection afforded to tenants of local municipal housing authorities. In other jurisdictions, which do not have such a highly regulated sector, the PFI solution may well be an attractive option.

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## GLASGOW HOUSING ASSOCIATION - Trowers & Hamlins

### **Background**

The transfer of the ownership and management of the City of Glasgow's entire housing stock to a newly created not for profit vehicle Glasgow Housing Association ("GHA"), was the biggest and most ambitious such venture to have been undertaken in the UK. Its aim was to tackle significant structural and social problems in one of Europe's most deprived areas engendered by a prolonged lack of public investment in the housing stock in the City. The following statistics underline the extent of the problem:

- *Increasing debt burden:* Between 1979-1999, the debt burden of Glasgow City Council ("GCC") had increased by 250%, with its housing debt totalling some £900m;
- *Rising rents:* Between 1983-1999, rent per unit had increased by 131% in real terms;
- *Smaller stock:* Between 1979-1999, GCC's housing stock numbers had fallen by 46% from 174,000 to 94,000;
- *Falling investment:* Between 1989-1999, capital investment per unit had fallen by 23% in real terms and the investment requirement in 1999 in GCC's housing was £1.6bn.
- *Poor conditions:* The proportion of GCC's houses suffering from dampness was 25% higher than the Scottish average and lack of central heating in those properties was twice the national average; almost 60% of the housing had no double glazing - 20% higher than the Scottish average; and over 80% of the housing did not meet current electrical standards.

### **Project Objectives**

- To secure investment in the houses - approximately 81,000 units at the point of transfer and create a more effective housing system.
- To tackle GCC's housing debt and achieve value for money for the public purse.
- To contribute to area/community regeneration and promote community control and ownership.
- To achieve excellent standards of design construction management and maintenance and full modernisation of all of the houses with a long-term life.
- To provide more stable and affordable rents for tenants, with new opportunities for low cost home ownership and improvements to existing owner-occupied stock.
- To ensure continuity of employment for public sector employees.

### **Project Structure**

Conventional PFI structures were not appropriate to deliver the Project objectives. An initial transfer of ownership and management of all 81,000 units to a single, specially created, not for profit vehicle, with a requirement for delegation of management responsibility in the short term to a network of up to 70 tenant-led management vehicles and with a medium to long-term objective of devolution of ownership to such bodies within ten years of the original transfer date.

This meant that the structure and all project and funding documentation had to anticipate and be flexible enough to facilitate and accommodate secondary transfer arrangements to an unknown number of new purchasers, of an unknown number of units over an unknown period (subject to a ten year longstop date).

### Structure of GHA

The new body is an Industrial and Provident Society ("IPS") registered in Scotland with the Financial Services Authority (a regulatory body). It is also a Registered Social Landlord ("RSL") (a body regulated by Communities Scotland, an Executive Agency of The Scottish Ministers). This means that GHA's objects, powers, internal regime, and operations have to fall within prescribed criteria. The management of the organisation is undertaken by the organisation's Management Committee, which comprises a tenant majority and is to be constituted from different representative groups, comprising tenants, local authority nominees and representatives of the independent sector.

### Structure of Contract

The contractual structure was similar to that of a business transfer agreement but underpinned by a large number of ancillary agreements enduring, in some cases, for up to forty years after the original transfer date. A one-off purchase price was paid for the stock. The ancillary agreements were wide-ranging and included:

- Construction and maintenance contracts necessary to deliver just under £200m initial stock investment. The projected overall capital investment in the project is £4bn over 30 years;
- Financial clawback agreements intended to ensure that the public sector was not deprived of any windfall gains generated by GHA;
- Agreements to ensure that GHA assisted GCC in the ongoing delivery of a number of its statutory functions which would otherwise be prejudiced by the disposal of its housing stock;
- Regeneration and land use agreements; and
- Indemnities allocating risk between the parties and funders in a situation where the scale of the undertaking rendered a conventional due diligence exercise impracticable and prohibitively expensive.

### Devolution Of Management To Communities

The structure of the transaction is designed to allow for the devolution of responsibility for management, and eventually ownership of all or some of the property, to a community level. The management agreement between GHA and each LHO will define:

- The range of services to be delivered by each LHO and by GHA;
- The performance standards to be achieved by each LHO and by GHA;
- How GHA can monitor the LHO's performance; and
- What steps the LHO and GHA can take if their respective performances fall below acceptable levels

A key principle underpinning the LHO network is that an LHO must be structured in such a way as to give GHA tenants from the area in which it operates control over the way in which it provides management services. The management of the stock by the network of LHOs delivers the Scottish Executive policy requirement of community empowerment and avoids concerns that GCC was being replaced as landlord by a similarly large, but private, body.

### Devolution Of Ownership To Communities

The concept of second stage transfer was intrinsic to the Project, the main objective being to maximise the potential for local control and accountability in accordance with the Scottish Executive's community empowerment policy.

It is anticipated that an annual transfer plan will be developed to promote and deliver second stage transfers on a sustainable and phased basis. This is subject to the wishes of the tenants concerned and the financial implications for GHA and the LHO. It is crucial that any second stage transfer should not compromise GHA's financial obligations, the interests of its remaining tenants or its Business Plan. The effect of second stage transfer should be financially neutral.

### **Funding**

On transfer, the Government paid off the whole of Glasgow's existing housing debt. Sources of funding for GHA included a £725m syndicated loan from UK and European banks, which included a £150m facility from the EIB, together with a suite of grants provided by the Scottish Executive. The integration of extensive secured and repayable grant funding with private sector finance and EIB funding resulted in complex security trust and inter-creditor arrangements.

The funding structure is specifically designed to facilitate second stage transfers. In addition, the project structure was specifically designed to achieve a substantial VAT saving in the order of £250m, which was critical to the financing of the Project, and the robustness of the business plan being funded. Complex indemnity arrangements underpinned this structure

### **Risk Transfer**

Unlike a conventional PFI transaction in which the majority of risk lies with the private sector, a broader concept of risk sharing between the sectors was adopted. This was largely driven by the fact that for political reasons, there could be no departure from a prescribed purchase price. This factor, combined with the scale of the Project and the sensitivities of GHA's Business Plan, meant that a more collective approach to risk share was taken.

In addition, the Project was one of great political sensitivity both in national and local terms. The perceived "privatisation" of GCC's housing was highly emotive and there was a concerted politically driven effort from some quarters to halt the progress of the Project by whatever means. Given the scale of the contractual liabilities being entered into by GHA, the risk of post-completion reduction (the transaction being set aside on any successful judicial review action), was not one which could be shouldered by GHA alone and steps were taken to ensure that this risk was shared.

Risk share was therefore broadly allocated as follows:

Income stream risk - GHA

Construction Risk - GHA

Due diligence risk - GCC

VAT risk - Scottish Executive/GHA

Legal Challenge risk - Scottish Executive

Unlike conventional PFI projects, which on the whole take place against a wholly commercially backdrop, the critical social and political focus and demands of the Project meant that a formulaic approach to risk allocation was unworkable.

### **Lessons learnt**

Whilst exercises of this type (although not of this scale nor ambition) have been widely undertaken in England since 1988, the Project was a comparatively new departure in Scotland and the level of doctrinal opposition to the exercise and the resulting procedural challenges were a hindrance to progress. These are events which are not capable of being project managed or factored in to a delivery pro-

gramme but arise in sensitive political areas such as State housing. In addition, the complexity of the Project as it developed on the ground inevitably meant that all stakeholders had to be prepared to exercise flexibility in terms of delivering the Project in a manner as consistent as possible with the original political vision for the Project set out in the 1999 Framework Agreement.

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**GLoucestershire County Council Waste Management PFI PROJECT – RSM Robson Rhodes LLP**

**Background**

Like all waste disposal authorities in the UK, Gloucestershire County Council has been faced with the challenge of meeting Government targets for waste recycling and composting. These have meant that Gloucestershire could no longer dispose of its waste by landfill. A number of other pressures also pushed towards radical changes and these included:

- National targets for the recovery of energy from waste
- The Landfill Directive limiting the amount of biodegradable municipal waste – BMW that can be sent to landfill
- Potential rises in the rate of landfill tax (at that time Landfill Allowance Trading schemes – LATS, where not devised yet)
- Government policy on waste minimisation

Furthermore, The County was not only facing significant rises in the rate of the landfill tax but also challenging Government targets for waste reduction. The later would be monitored, as part of the Best Value process and Local Authorities would have to:

- Recognise that reducing household waste arising was a priority
- Set challenging targets for reduction backed up by action plans
- Prove to auditors and inspectors that the targets set are challenging
- Demonstrate continuous improvement

It was recognised by both disposal and collection authorities that in order to meet these radical challenges, a coordinated response was required. The existing collection and disposal techniques were inadequate, and significant investment in new technologies would be required.

Gloucestershire's 574, 000 people produce a total of 256,000 tonnes of waste annually, equivalent to 0.44 tonnes per head, and rising at a rate of 3% per annum. 84% of the waste was disposed of in landfill sites and only 16% was recycled. Landfill tax was set initially at £12 per tonne but was set to rise by £2 per annum until 2010. The current waste disposal and civic amenity sites were carried out under two contracts and managed by two different waste management companies, both of which due to expire by mid 2002.

In order to achieve those goals, the County submitted successfully an Outline Business Case – OBC, for £23M of PFI credits from DEFRA, in the 2003/04 financial year to fund the development of the capital infrastructure required to provide recycling and composting facilities in Gloucestershire, to include:

- Two Materials Recycling Facilities – MRF
- One Windrow composting facility
- Six tunnel composting facilities

This investment would provide Gloucestershire County Council with an environmentally sustainable and affordable solution to waste disposal for the next twenty-five years. The OBC consolidated the evaluation of the options that were identified during the development of the County's Municipal Waste Strategy and the Memorandum of Understanding regarding collection and disposal techniques that has been developed with the local District Councils.

### **Contract Structure**

The contractual structure was typically PFI. A business case was developed to meet "Best Value For Money" criteria. Detailed financial models were also developed to appraise the technical and financial viability of seven options designed to respond to the implementation of national waste targets; from those options, one "preferred option" was identified and supported the business case – OBC, submitted to DEFRA for PFI credits award.

The first stage of the procurement strategy was for the County to appoint a technical advisor who did appraise the choice of technology in each option with basic costs to constitute an expression of interest (EoI) to seek DEFRA approval for the launch of a full procurement strategy starting by the production of an OBC.

RSM Robson Rhodes was appointed as a financial and procurement advisor, tasked to review the financial viability of each technical option (although RSM does not vet technical/engineer designs) and to identify the preferred option on which the business case would be built. The procurement and financial advice process managed by RSM would follow several steps.

RSM advised the County on the scope of the potential project, in terms of identification, analysis and quantification of risk relating to the timescale, technology choice, method of funding, overall estimated costs/price, legal, financial, technical and political issues likely to affect the project and the bankability of the options. This was followed by a review, pricing and appraisal of all options and selection of the preferred waste management option, including a Best Practical Environmental Option - BPEO for each option.

In order to identify and to strengthen one preferred option, each option was assessed through a Financial Model designed and linked to a waste flow chart in order to determine the level of facilities required to process the waste, the use of various technologies, treatment methodologies and market opportunities for the sales of residuals.

All financial models for each option were constantly up dated and supported by a Waste Flow Chart aimed at identifying the type, size and costs of waste treatment plants necessary to achieve the Councils' strategy. This waste flow chart was fed into the financial model. The waste flow chart also predicted over twenty-five years the level of recycling/composting and recovery levels. To support recycling tonnage projections, a sensitivity analysis based on Monte Carlo system showing recycling level improvement was also used.

Each option was based on Value for Money against the Public Sector Comparator. A Public Sector Comparator was constructed to evaluate the value for money of contracting with the private sector as opposed to completing the project internally. This was based on the same financial model used for the preferred option, with the following differences:

- Removal of corporation tax payable;
- Removal of financing costs, in line with Treasury Guidance;
- Removal of private sector profit;
- Add back the value of risks that would be transferred to the private sector as part of a PFI project;
- Identification of key risks passed to the Private Sector, including the cost of building and operating the new facilities, the future electricity and recycling sales from a Value Recovery Technology – VRT such as a Waste to Energy Plant and recycling facilities, and the functioning of the new facilities;
- Comparison of Public versus Private Sector funding of the preferred option.

### **Calculation of the PFI Credit**

The capital investment in the scheme was identified within the financial models and used as the basis for calculating the PFI Credit, and discounted back using the appropriate discount rate recommended by the Treasury. The calculation included the capital costs of the all recycling facilities required and the Value Recovery Technology - VRTs maintenance costs over the life of the project. The affordability of the project was assessed through the reviewed of the joint annual revenue budget for waste disposal, increased by inflation each year to provide high quality facilities for the next twenty-five years.

An affordability analysis was provided identifying that the Councils had insufficient capital resources to fund the facilities required for the preferred option, and a Public Private Partnership (PPP) without the support from DEFRA in the form of PFI Credits would leave an affordability gap after 25 years. Further Financial Sensitivity Analysis was made. An assessment on “The Value for Money and Affordability” based on various assumptions was provided. These assumptions were varied to test the sensitivity of the assessment.

Key variables to be tested included: inflation, internal rate of return; waste growth and reduction; interest rates (senior and subdebt); construction costs; operating costs; reduction in value of electricity sales; and changes in value of recyclables.

### **Market Interest**

RSM tested the likely levels of Market Interest in this project through a Market Interest Questionnaire. This was sent to most of the key Waste Management companies currently operating within the UK. The responses were analysed and used for the choice of the preferred option.

### **Compliance with various criteria**

The project was assessed against various criteria including those set out by PRG and DEFRA. It also had to meet the technical requirements of a PFI transaction.

The final stage of the procurement process was a financial evaluation of bids involving testing of the financial assumptions and risk evaluation. There was also testing of the value for money aspects of the financing which involved detailed negotiation until selection of the preferred bidder and project financial close.

### **Lessons Learnt**

Procurement in the waste management industry is a high profile process. 12 to 16 OBCs are submitted to DEFRA each year. In average no more than 5 to 7 waste management companies are able to respond to PFI/PPP projects with a capacity to absorb 2 PFI/PPP projects per annum, thus leaving between 2 to 6 projects without sponsors. This stresses the importance of an early market survey designed at sens-

ing the level of interest from the industry and identifying potential bidders. Early liaisons with Government's assessor bodies such as 4ps or PUK are also essential in order to get guidance and support on the project.

Counties are the waste disposal authorities and therefore have responsibility for designing and implementing all waste management procurement strategies. However, they are not the only entities involved in such projects, as Boroughs and Districts are deemed as collection authorities and have a role in delivering targets. Their commitments must be firmly anchored through a Memorandum of Understanding – MoU in which all local authorities engage themselves solemnly in participating successfully to an OBC, delivering targets and implementation of a long-term contract. Such engagement must constantly be challenged and motivated by the procurement and financial advisor to maintain project cohesion.

Advisors must be multi-skilled and often be able to offer “one stop shop” services to clients. Advisors such as RSM have moved from purely being financial advisors to offer technical, commercial and procurement advice through multi skilled and sector focused teams.

The UK's waste management infrastructure is in great need of improvement over the next decade if it wants to meet the EU Landfill Directive and Government Targets. The funding for such needs in infrastructure will mainly be sourced from the Private Finance Initiative, although local authorities can also make use of alternative funding mechanisms such as existing capital resources and revenue resources, prudential borrowing and other grant funding.

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