

# ANNEX GUIDANCE NOTE

## CALCULATION OF THE AUTHORITY'S SHARE OF A REFINANCING GAIN

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### I.1 INTRODUCTION

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**I.1.1** Clause 35.6 of the model clauses on Refinancing set out in Section 35.8 provides that:

“The Authority and the Contractor will negotiate in good faith to agree the basis and method of calculation of the Refinancing Gain and payment of the Authority’s share of the Refinancing Gain (taking into account how the Authority has elected to receive its share of the Refinancing Gain...). If the parties fail to agree the basis and method of calculation of the Refinancing Gain or the payment of the Authority’s share, the dispute shall be determined in accordance with Clause 27 (Dispute Resolution).”

**I.1.2** This Guidance Note is therefore intended to assist Authorities and their financial advisers in negotiating and agreeing the calculation of the Refinancing Gain,<sup>1</sup> if and when this occurs, and the way in which the Authority’s share of the Refinancing Gain is paid.

**I.1.3** A series of inter-related steps have to be carried out for this purpose, as discussed in detail in this Guidance Note; a possible timetable for this procedure is set out in the Annex.

### I.2 REQUIRED DATA AND PROJECTIONS

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**I.2.1** In order to carry out the various calculations, the following information and data are needed from the Contractor:

- The base case financial model with projections which were originally used to calculate the Unitary Charge, adjusted for any changes in the project structure and funding (e.g. Authority Changes) which have taken place since Financial Close;
- Details of the actual timing and amounts of the investment of equity and shareholder subordinated debt from Financial Close to date (and estimated to the Refinancing date);<sup>2</sup>
- Information on the actual cash flow of the Contractor from Financial Close to date (and estimated to the Refinancing date), set out under the same headings as the base case financial model;
- Details of the actual timing and amounts of Distributions to Relevant Persons from Financial Close to date (and estimated to the Refinancing date);
- A pre-refinancing financial model with projections for the cash flow of the Contractor from the estimated Refinancing date to the end of the Contract, including projected Distributions,<sup>3</sup> before taking the Refinancing into account;
- Term sheet or other relevant information on the terms of the Refinancing;

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<sup>1</sup> Capitalised terms used in this Guidance Note are as used in Section 35.

<sup>2</sup> These figures should be on the basis of cash investments, not commitments.

<sup>3</sup> Unless there is some clear reason to the contrary, the assumption should be made that all surplus cash flow is paid out not less than 6-monthly as Distributions, to avoid under-estimation of the Equity IRR.

- A post-refinancing financial model with projections for the cash flow of the Contractor from the estimated Refinancing date to the end of the Contract, including projected Distributions, after taking the Refinancing into account;
- A calculation of the Refinancing Gain based on the above;
- Information on the assumptions for the projections in the pre- and post-refinancing financial models.

**1.2.2** If a Contractor believes that a proposed Refinancing is not a Qualifying Refinancing but there are grounds for doubt on this, the Contractor should seek confirmation from the Authority that it is not a Qualifying Refinancing prior to proceeding, in case this assessment subsequently proves mistaken.

## 1.3 CALCULATING THE REFINANCING GAIN

**1.3.1** Two calculations have to be carried out – before and after the Refinancing is taken into account – covering the period from the Refinancing date to the end of the Contract term. The two new financial models required for this purpose (which form part of the information package set out in Section 2 above) are referred to herein as the pre-refinancing and post-refinancing models.

**1.3.2** Apart from the effect of the Refinancing itself, all other assumptions and formulae used in these two models should be identical.<sup>4</sup> The original base case financial model – as updated for any changes in the Project since then (such as Authority Changes or Changes in Law) – can be used, with appropriate structural adaptation,<sup>5</sup> for this purpose. However the assumptions in the new projections should be updated from the base case, based on the actual performance of the project to date, and macroeconomic assumptions such as inflation<sup>6</sup> and interest rates will also need to be updated.<sup>7</sup>

**1.3.3** The Refinancing Gain is then calculated as:

- The Net Present Value (NPV) of the Distributions shown in the post-refinancing model<sup>8</sup>

*minus*

- The NPV of the Distributions shown in the pre-refinancing model

<sup>4</sup> The Authority and its financial advisers should review the assumptions carefully to ensure that projected Distributions are not being reduced or slowed down unnecessarily.

<sup>5</sup> As the calculation only covers the cash flow from the date of the Refinancing, historical figures are irrelevant for this calculation; however they are needed to check that the Threshold Equity IRR has been exceeded (cf. section 0 below).

<sup>6</sup> It is usually preferable to use nominal figures (i.e. including projected inflation) rather than real figures (i.e. ignoring inflation) for these projections, as there are likely to be items in the projections such as debt service, tax depreciation, etc. which are not affected by inflation.

<sup>7</sup> One simple way of doing this is to use the same assumptions as the lenders providing the refinanced Senior Debt; however care should be taken to ensure that these assumptions are not unduly conservative, and therefore show an unduly low rate of Distributions.

<sup>8</sup> Typical patterns of changes in Distributions are:

- a single increased Distribution immediately after the Refinancing, because additional Senior Debt has been raised which is used to prepay shareholder subordinated debt, followed by decreases in Distributions as more cash flow is required to service the higher level of Senior Debt;
- a series of increased Distributions in the early years after the Refinancing because debt repayments have been delayed by lengthening the term of the Senior Debt, followed by later decreases in Distributions as more cash flow is required to service the higher level of Senior Debt outstanding;
- a series of increased Distributions because the Senior Debt interest rate is reduced; (Obviously several of these effects may be combined together in a single Refinancing).

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**I.3.4** The calculations of Distributions in the financial models should be consistent with the definition in the Contract – i.e. including not just dividends or junior debt service, but also any other element falling into the definition of Distributions.

**I.3.5** The NPV calculation is carried out on the cash flows each period<sup>9</sup> from the Refinancing date to the final date of the Contract, which are then discounted at the Threshold Equity IRR<sup>10</sup> to produce the NPV.<sup>11</sup>

**I.3.6** The difference between the NPV of the pre- and post-Refinancing cash flows is the Refinancing Gain, subject to any deduction needed to meet the Threshold Equity IRR.

## **I.4 COMPARING AGAINST THE THRESHOLD EQUITY IRR**

**I.4.1** The Authority is only entitled to share in the Refinancing Gain if the Contractor is projected to achieve the original base case Equity IRR – the Threshold Equity IRR – before taking the Refinancing Gain into account.

**I.4.2** To calculate whether this hurdle has been crossed, an updated Equity IRR projection (the Pre-Refinancing Equity IRR) should be calculated for the whole life of the Project, taking into account:

- Timing and amounts of the original investments of equity and shareholder subordinated debt;
- Distributions received by Relevant Persons up to the Refinancing date;
- Projected Distributions as shown in the pre-refinancing model.

**I.4.3** If the Pre-Refinancing Equity IRR is greater than the Threshold Equity IRR, the Authority is entitled to its 50% share of the Refinancing Gain.

**I.4.4** If this is not the case a calculation should be carried out to find the notional amount which, if received by investors as at the Refinancing date, would increase the Pre-Refinancing Equity IRR to the Threshold Equity IRR. This should be deducted from the Refinancing Gain; the Authority is then entitled to receive its 50% share of any remaining balance of the Refinancing Gain.

**I.4.5** Payment of any such notional “catch-up” sum should be deducted from the increases in future projected Distributions before allowing for payment of the Authority’s share as set out in 5.

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<sup>9</sup> Usually six-monthly.

<sup>10</sup> I.e. the base case post-tax nominal equity IRR (cf. Section 35.5.2).

<sup>11</sup> It might be thought that, rather than discounting the two Distributions streams to their respective NPVs and then calculating the difference, it would be simpler just to divide the differences as they occur, and pay half to the Contractor and half to the Authority. However, as discussed in footnote 8, refinancings may, e.g., produce an initial positive cash gain, followed by decreases in Distributions. In such cases if this simple division method were used, it would mean that the Authority would receive an initial cash sum significantly larger than 50% of the Refinancing Gain, and then have to make increased Unitary Charge payments in future. In effect the Authority would be borrowing surplus cash from the investors and paying it back – at the Contractor’s cost of debt – through the higher Unitary Charges, which is clearly inappropriate.

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## **I.5 PAYMENT OF THE AUTHORITY'S SHARE**

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**I.5.1** An Authority may opt to take its share of the Refinancing Gain either as a cash lump sum at the time of the Refinancing and/or by a reduced Unitary Charge. Alternatively, an Authority may opt, having discussed the matter with its sponsoring department or PFU, to receive its share of a Refinancing Gain through an increased scope of services.<sup>12</sup>

**I.5.2** As discussed above, the Refinancing Gain is not necessarily an amount of cash which is available immediately after the Refinancing, and the Authority should not expect to get its share any faster than the investors in the Contractor. This means that no more than 50% of each projected increase in Distributions<sup>13</sup> should be paid to the Authority, which therefore determines the maximum speed with which the Authority's share of the Refinancing Gain can be paid.

**(a) Lump-sum option**

If the Refinancing involves raising a significant amount of new Senior Debt, and thus pre-payment of shareholder subordinated debt, this is likely to lead to a large initial Distribution equal to the amount of new debt which is being raised, followed by reduced Distributions for the remaining term of the Contract caused by the increase in Senior Debt service. In such a case the Authority may opt to take its share of the Refinancing Gain out of this first Distribution. The Authority is entitled to take up to 50% of the first Distribution as the lump-sum payment.

If payment of the Authority's share cannot be fully satisfied out its share of up to 50% of the first Distribution, payment of the balance should be made by reductions in the Unitary Charge, as otherwise the Authority would be taking a long-term credit risk on the performance of the Contractor.

**(b) Unitary Charge reduction option**

If new debt is not being raised, the benefit of the Refinancing – e.g. from an extension of the debt maturity or a reduction in the interest rate – generally accrues over a longer period and it is generally more appropriate to take out the Authority's share of the Refinancing Gain over the remaining term of the Contract as a reduction in the Unitary Charge.<sup>14</sup>

If payment is not being made out of the first Distribution as discussed in (a), under most circumstances a reduction to the Unitary Charge spread evenly over the remaining term of the Contract is the most straightforward approach, although a faster reduction schedule could be agreed, within the limit of 50% of projected Distribution increases set out above. The requirements of the Refinancing itself – e.g. for debt cover ratios – should also be taken into account in considering the schedule of payments to the Authority.

Payment of the Refinancing Gain by way of a reduction in the Unitary Charge gives the Contractor a further tax benefit – i.e. its corporation tax bill goes down because its income goes down – which has not been taken into account in the calculations set out above. A further iterative calculation should therefore be included in the post-refinancing financial model to ensure that the calculations are performed on a post-tax basis consistent with the use of a post-tax discount rate.<sup>15</sup>

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<sup>12</sup> Subject to suitable value for money tests and the application of any relevant procurement procedures.

<sup>13</sup> Subject to the payment of any "catch-up" sum to meet the Threshold Equity IRR (cf. Section 4 above).

<sup>14</sup> Cf. Section 5(c) below.

<sup>15</sup> Cf. Section 35.5.2.

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Once calculated at the time of the Refinancing, any lump-sum payment or reduction in the Unitary Charge should not be contingent on the performance of the Contractor. If this were not the case the Authority would in effect become an equity investor in the project, without any of the controls or protections which normally accrue to an equity investor.

The Authority is also entitled to payment of interest where its share of the Refinancing Gain is not being paid immediately after the Refinancing date. As the Refinancing Gain was calculated by discounting at the base case Equity IRR<sup>16</sup> it might be thought that the same rate should be used to accrue interest on any deferred payment of the Refinancing Gain. However this does not reflect the fact that the Authority has a fixed claim for a lump-sum payment, or the Unitary Charge reduction is already committed, and therefore the Authority is less at risk than the Contractor. Therefore a lower interest rate – e.g. similar to that for Senior Debt, based on the gilt or swap rate for the average life of the period of reduction in Unitary Charges, plus x% – should be used for this purpose. This interest rate should also be included in the calculations of the reduced Unitary Charge amounts, to produce a level schedule of reductions.

### (c) Whether to choose Lump Sum or Unitary Charge Reduction?

It should be noted that the Unitary Charge reduction option may be less attractive to an Authority than a lump-sum payment where a lump sum is available because:

- It will tend to produce a lower Refinancing Gain, as reductions in the Unitary Charge will reduce debt cover ratios, and hence reduce the amount of new debt that can be raised. This means that the lump sum may be more attractive even where the interest rate on Unitary Charge deferral is above the public-sector discount rate.
- The interest rate earned on deferring payment via a Unitary Charge reduction is lower than the discount rate used to calculate the lump sum.
- The contractor will probably pay out to its shareholders the portion of the lump sum which would have been paid to the Authority, thus in effect allowing them to borrow this sum from the Authority and pay it back via lower distributions as a result of the reduced Unitary Charges.
- It leaves the Authority at risk that later cash-flow problems prevent payment of its share of the Refinancing Gain.

Balanced against this is the fact that a Unitary Charge reduction should lead to the Contractor becoming less highly geared through a refinancing than would otherwise have been the case, if the refinancing had been predicated solely on lump sum payments, where a lower gearing may be something favoured by the Authority. There may also be budgetary issues which lead to an Authority favouring a Unitary Charge reduction over a lump sum payment.

## 1.6 FINAL CALCULATION AND PAYMENT

**1.6.1** Although Authority consent for the Refinancing must be given, and the method and basis for the calculations of the payment of the Authority's share of the Refinancing Gain must be agreed, before the Refinancing takes place, the final calculation cannot be completed until after the Refinancing because the exact amount of the Refinancing Gain will depend on factors such as the final costs of the Refinancing and the interest rates fixed on the Refinancing date.

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<sup>16</sup> Cf. Section (7) below.

## ANNEX I – Timetable

A possible timetable for the process at the time of a Qualifying Refinancing is as follows:

Section <sup>§</sup>	Timing*	Action
	RD – XX BD	Contractor approaches Authority with an outline proposal for a Refinancing; the parties agree the basis on which the Authority will be compensated for its costs, including costs of advisers, if the Refinancing does not proceed. (Cost recovery where the Refinancing does proceed is dealt with in Clause 35.7 of the model provision in HM Treasury’s Standardisation PFI Contracts).
2	RD – 30 BD	Contractor provides information on the Refinancing and a projection of the Refinancing Gain.
3	RD – 20 BD	The Authority reviews the terms for the Refinancing and agrees the way in which the Contractor’s estimate of the amount of the Refinancing Gain is calculated.
4	RD – 20 BD	The Authority checks whether the estimated Pre-Refinancing Equity IRR exceeds the Threshold (base case) Equity IRR, and hence whether a deduction from the amount of the Refinancing Gain to achieve the Threshold Equity IRR is required before the Authority’s 50% share is paid.
5	RD – 20 BD	The Authority decides whether its share of the Refinancing Gain should be paid in one sum immediately after the Refinancing, by reduction in the Unitary Charge over the remaining project life, or by a combination of the two.
5(b)	RD – 15 BD	In the latter cases, the Authority and the Contractor agree the revised Unitary Charge schedule.
	RD – 10 BD	Authority final consent to the Refinancing. (This may be subject to review of any further changes in documentation).
	RD	Financial Close for the Refinancing is achieved by the Contractor.
6	RD + 15 BD	Final calculation and payment of the Authority’s share of the Refinancing Gain.

§ Refers to Section numbers in the text above.

\* RD = Refinancing date; BD = business days.

This timetable is inevitably no more than indicative, as the circumstances of each transaction will be different, but it is a reasonable timescale for the decisions which the Authority has to take at various stages of the refinancing process in order to ensure that the refinancing process can proceed smoothly.

# ANNEX 2 GUIDANCE NOTE

## THE USE OF INTERNAL RATES OF RETURN IN PFI PROJECTS

### 2.1 INTRODUCTION

**2.1.1** The Internal Rate of Return (IRR) is most commonly used in PFI Contracts as a measure of the rate of return expected to be earned by private sector capital in the project, and is thus the basis for:

- calculation of the Unitary Charge at Financial Close
- recalculation of the Unitary Charge to take account of capital expenditure resulting from Compensation Events, Authority Changes and Qualifying Changes in Law, where this expenditure is being financed by the Contractor (cf. Section 5.2.3.5)
- calculation of compensation for Authority Default/Voluntary Termination (cf. Sections 20.1.3/20.5)
- calculation of the Estimated Fair Value of the Contract, on Contractor Default (cf. Section 20.9)
- calculation of the Refinancing Gain to be shared with the Authority (cf. Section 35)

**2.1.2** It is therefore fundamental to the negotiations, and Authorities should take care to understand thoroughly the definitions, methodology for calculation and correct usage of IRRs in PFI Contracts.

### 2.2 THE IRR CALCULATION

**2.2.1** The IRR is defined mathematically as the discount rate which, when applied to discount a series of cash outflows followed by cash inflows, returns a net present value (NPV) of zero. The most intuitive way of understanding the meaning of the IRR is to think of it as the equivalent constant interest rate at which a given series of cash outflows must be invested in order for the investor to earn a given series of cash inflows as income. It is in this sense a measure of the underlying return the private sector expects to achieve by investing in the project.

**2.2.2** Thus in the table below Investment A, of 1,000, produces cash flows of 1,350 over the next 5 years. The IRR of this investment is 12.08%, i.e. as shown in the NPV column when each of the cash flows is discounted at 12.08% per annum the NPV of all of them is zero.

End Year	Investment A		Investment B	
	Cash flow	NPV @ 12.08%	Cash flow	NPV @ 9.94%
0	-1,000	-1,000	-1,000	-1,000
1	340	303	200	182
2	305	243	235	194
3	270	192	270	203
4	235	149	305	209
5	200	113	340	212
<b>Total</b>	<b>350</b>	<b>0</b>	<b>350</b>	<b>0</b>

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**2.2.3** IRR calculations are highly sensitive to the timing of cash flows: as can be seen by comparing Investments A and B in the above table. Both are investments of 1,000 which each produce a net cash flow of 1,350 over 5 years, but different IRRs (9.94% in the case of Investment B) because of the different timings of these cash flows.

**2.2.4** The IRR calculation is most properly applied in situations where a project produces negative cash flow (outflows) in the beginning, followed by positive cash flow (inflows) in later years. This is typical of most PFI projects, where large construction costs are incurred by the Contractor early on, followed by cash inflows in the form of surpluses from operations. In cases where positive and negative cash flows alternate with each other, the IRR will not be uniquely determinate and is unlikely to be the appropriate measure.

**2.2.5** The Authority should be aware that IRRs are generally not a reliable alternative to NPV-based calculations for the measurement of the value of an investment. For example, two projects with the same IRR but different concession periods (e.g. 15 and 25 years) will have very different NPVs at all discount rates except the IRR. The widespread use of IRRs in PFI projects reflects the generally even pattern of year-on-year operational cash flows in such projects. However, if a project has an uneven cash flow profile, the Authority should exercise great caution in using an IRR as the basis of valuing investment in the project.

## 2.3 TYPES OF IRRS IN PFI PROJECTS

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**2.3.1** IRRs can be calculated for different cash flow streams of a project, depending upon:

**2.3.2** which category of investor the IRR is being calculated for;

- whether inflation is or is not included in the underlying cash flows;
- whether tax is or is not included in the underlying cash flows

**2.3.3** **Category of Investor:** The **Project IRR** represents the weighted average cost of capital for a project. It is usually calculated from all of the non-financing project cash flows, including capital costs, operating and maintenance costs, revenues and working capital adjustments. The **Equity IRR** represents the return to investors after taking account of Senior Debt service. For tax and accounting reasons investors typically provide a mixture of share capital (equity) and Junior Debt: in which case the IRR calculation takes into account all payments received on both equity and Junior Debt, *i.e.* not just dividends, but also interest and capital repayments on the Junior Debt. This is known as the **Blended Equity IRR**.

**2.3.4** **Inflation:** Where the cash flows are in real terms, *i.e.* based on constant prices,<sup>1</sup> the IRR calculation based on these is known as the **Real IRR**. Where cash flows are in nominal terms, *i.e.* are based on current prices,<sup>2</sup> the IRR calculation based on these is known as the **Nominal IRR**.

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<sup>1</sup> Prices are “constant” when they are expressed by reference to a particular consistent (and usually historic) date. Hence, if sums of money arising after the year 2000 are all to be expressed in “2000 prices” (*i.e.* “constant” prices as at the year 2000), then each sum of money must be deflated (using RPI) back to 2000 to strip out the effects of inflation (*i.e.* RPI) on general prices in the economy in the intervening years. Typical constant price items in a PFI cash flow would include the Unitary Charge to the extent it is indexed by RPI. Such items have to be indexed by the projected rate of inflation (RPI) to produce a cash flow in nominal terms.

<sup>2</sup> Prices are “current” when they are expressed by reference to the purchasing power of the time period to which they relate. Hence, a sum of money arising in the year 2010 will be assumed to be expressed in 2010 current prices – *i.e.* nominal terms (sometimes referred to as “money of the day”) unless otherwise stated. It naturally follows, therefore, that a price which is fixed in nominal terms across more than one time period will reduce in real terms by the effect of inflation (RPI) during the intervening time periods. Typical fixed nominal price items in a PFI project cash flow would include a fixed-price turnkey construction contract, or the unindexed element of a Unitary Charge. Such items have to be deflated by the projected rate of inflation (RPI) to produce a cash flow in real terms.

**2.3.5** Taxation: IRR calculations may be done on a pre- or post-tax basis. In either case, the taxation taken into account should only be the tax paid by the SPV, not tax suffered by investors on the payments received from the SPV. Investors may order their tax affairs so as to pay more or less tax on investments, and this is not the concern of the Authority, nor can the Authority check whether or not calculations of the investors' own taxes are correct.

**2.3.6** The table below summarises these different types of IRR calculation:

		Category of Investor	
		All investors (Senior + Junior Debt + Equity)	Junior Debt + Equity
Constant prices	Tax on SPV excluded	Real Pre-Tax Project IRR	Real Pre-Tax Blending Equity IRR
	Tax on SPV included	Real Post-Tax Project IRR	<i>Real Post-Tax Blending Equity IRR</i>
Current prices	Tax on SPV excluded	<i>Nominal Pre-Tax Project IRR</i>	Nominal Pre-Tax Tax Blended Equity IRR
	Tax on SPV included	Nominal Post-Tax Project IRR	<i>Nominal Post-Tax Tax Blended Equity IRR</i>

## 2.4 USING IRRS IN PFI CONTRACTS

**2.4.1** It is important that the Authority bears the following principles in mind when using IRRs in the Contract:

**2.4.2** All the cash flows used to compute the relevant IRR should relate exclusively to the investor in respect of whom the IRR is being computed. For instance, if an IRR is being computed to reflect the measure of return on the project as a whole, a Project IRR should be used whereas if it is being computed to reflect the return earned by investors in equity and Junior Debt, a Blended Equity IRR should be used.

**2.4.3** The timing of underlying cash flows used to compute IRRs (or cash flows which IRRs are used to discount) should always reflect the dates on which cash payments are made from the investors' account to the Contractor or vice versa for all historical cash flows, and should always reflect the dates when cash is available for Distributions to investors for all projected cash flows. All cash flows used to calculate IRRs in the Financial Model should be assumed to occur at the end of each relevant period.<sup>3</sup>

<sup>3</sup> Most spreadsheet programs use this methodology in the algorithms they use to compute IRRs.

**2.4.4** Inflation should be treated consistently. Real IRRs can be calculated if the underlying cash flows are expressed in constant prices, while Nominal IRRs can be computed if the underlying cash flows are expressed in current prices. Similarly, when using discount rates, cash flows in constant prices should be discounted using real discount rates, and cash flows in current prices should be discounted using nominal discount rates. Many PFI projects have Unitary Charges which are partially indexed to inflation. In such cases it is preferable to use the Nominal IRR, but if the Real IRR calculation is used the future cash flows which are *not* indexed or subject to inflation (i.e. are in current prices) should be *decreased* by the rate of inflation.

**2.4.5** In this Guidance on Standardisation of PFI Contracts, IRRs have been used as discount rates to compute compensation and termination payments or refinancing shares. The table below summarises the type of IRR and the section of the Guidance in which it is recommended for use:

Section of SoPC	Relating to	Type of IRR	Usage
20.1.3.6 and 20.5	Compensation on termination for Authority Default/ Voluntary Termination	Real Post-tax Blended Equity IRR	To calculate compensation amount for junior debt and equity holders
20.2.9	Estimated Fair Value of Contract	Nominal Pre-tax Project IRR*	To discount future Unitary Charges less costs
35	Refinancing	Nominal Post-tax Blended Equity IRR**	To compute Refinancing Gains for sharing

\* This should be adjusted for movements in underlying market interest rates as discussed in 20.2.9.9

\*\* The base case (Financial Close) calculation of this is used as the “Threshold Equity IRR” in the Refinancing provisions.

## 2.5 METHODOLOGY FOR CALCULATING IRRS

**2.5.1** IRRs are normally calculated using standard formulæ which are embedded in the software being used to model the IRR for the Project,<sup>4</sup> and most Project Agreements refer to a particular cell in the Financial Model which reflects the relevant IRR. Consequently, it is important to ensure that the underlying cash flows in the Financial Model from which the software calculates the IRR are entirely consistent with the principles intended in the PFI Contract.

<sup>4</sup> The software used in the calculation of an IRR in the Financial Model should be specified in the Contract as different spreadsheet programs may generate different values an IRR because of the differences in the algorithms used in different software.

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**2.5.2** The calculation of equity cash inflows going into an IRR calculation should reflect all actual or projected cash available for distributions to investors, once Senior Debt service and covenant requirements have been satisfied. In the case of the Blended Equity IRR calculation used for calculation of Refinancing Gains, Distributions to investors should include the elements set out in Section 35.7 (Refinancing).

**2.5.3** The calculation of cash outflows is relatively straightforward in most IRR calculations. It reflects the amounts invested (in cash or kind) by investors into the project, timed according to the date on which the investment amount was transferred into the control of the Contractor. The Authority should ensure that this approach is followed throughout the Contract and in the Financial Model. An IRR calculated on this basis is referred to as an IRR calculated on a “Cash-on-Cash” basis, and is invariably the most accurate measure of return available to the Authority.

**2.5.4** In some instances, particularly in negotiations relating to refinancing, investors may suggest a different method for estimating cash outflows. In this method, outflows are timed not on the date when investment amounts are transferred to the control of the Contractor, but the date on which the investment amounts are committed to (but not necessarily transferred to or drawn down by) the Contractor. The former is usually an earlier date than the latter, and the effect of this is to reduce the IRR compared to the Cash-on-Cash basis. An IRR calculated on this basis is usually referred to as an IRR calculated on a “Cash-on-Commitments” basis.

**2.5.5** The most common justification provided by bidders for the use of Cash-on-Commitment IRRs is that Senior Lenders typically require the investors to commit funding to the project (through a letter of credit or otherwise), which can be accelerated at any time. As a result, investors are required to “lock up” funds to meet this commitment on the date they are committed, and it is argued that they are as good as invested in the project on that date.

**2.5.6** As this is a hybrid measure of return on investment it is not one which can be recognised as providing a meaningful financial measure of return on investment, unless a suitable adjustment is also made for the return which can be earned by investors on capital committed but undrawn. This adjustment is normally effected by crediting a notional deposit rate on the undrawn funds as a distribution to the providers or equity or Junior Debt.<sup>5</sup>

**2.5.7** A Cash-on-Cash calculation is always preferable, but if the Authority agrees to a Cash-on-Commitment IRR methodology, it must ensure that the methodology is applied consistently, and its limitations recognised. This is especially relevant should a refinancing occur.

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<sup>5</sup> More correctly, it is the opportunity cost of capital rather than a deposit rate which should be credited back in this way, but this is difficult to assess, so market practice has been to credit the deposit rate.



# ANNEX 3 GUIDANCE NOTE

## CORPORATE FINANCE – PROVISIONS FOR COMPENSATION ON TERMINATION

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**3.1** Section 32.1.4 of SoPC 3 refers to corporately financed projects. Guidance on suitable compensation on termination provisions for corporately financed projects is set out below.

(a) Authority Default/Voluntary Termination

The NPV of:

- Future Unitary Charges as shown in the Base Case

*minus*

- Future operating costs and capital expenditures as shown in the Base Case where operating costs include the provision for corporate overhead costs made in the Base Case.

Discounted at the [Nominal/Real\*] Pre-Tax Base Case Project IRR

[\* depending on whether the Base Case is in current or constant prices, but nominal is preferable]

*plus*

Redundancy costs (as per SoPC)

*plus*

Sub-contractor breakage costs (as per SoPC)

No finance breakage costs are payable.

(b) Contractor default

The standard SoPC provisions can be applied.

(c) *Force majeure*

As follows:

- Base Case capital costs as set out in the Base Case model

*minus*

- Recoveries of capital to the date of termination as calculated (in nominal cash terms) from: (a) total Unitary Charges paid to date; less (b) operating costs and capital expenditures incurred to date as shown in the Base Case (where operating costs include the provision for corporate overhead costs made in the Base Case)

*plus*

Redundancy costs (as per SoPC)

*plus*

Sub-contractor breakage costs (as per SoPC)

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(c) Corrupt Gifts

Zero compensation.

(d) Breach of Refinancing Provisions

Where a deal is genuinely corporately financed from the outset, then the Refinancing provisions of SoPC do not apply. However, if the project is subsequently restructured from being genuinely corporate financed to being either project financed or a hybrid, then this will inevitably require the consent of the Authority at the time and this consent should only be given if the Refinancing provisions of SoPC (including this provision for breach) are introduced into the Project Agreement at the time of the restructuring.

It should be noted that the Permitted Borrowing concept is not suitable for application to corporately financed projects.

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**4.1 PERMITTED BORROWING**

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**4.1.1** Following discussions with public and private sector bodies on the definition of Permitted Borrowing in Section 21.3 of SoPC, HM Treasury has amended this definition. Sub-paragraph (b) of the definition of Permitted Borrowing formerly allowed re-schedulings and additional advances under Senior Finance Agreements made during any Step-in Period to count as additional Permitted Borrowings, up to a maximum of 10% of the original Senior Debt Amount. Senior Lenders expressed a desire to be able to reschedule and advance additional Permitted Borrowings, without having to obtain prior consent from the Authority, when a project was in need of rescue finance but without having to step in.

**4.1.2** New provisions have now been drafted under which a new largely unfettered Additional Permitted Borrowing right is given to Senior Lenders instead of the former paragraph (b) of the definition of Permitted Borrowing (which required Banks to “step in” to the project agreement if they wanted to secure protection for their additional lending without having to get Authority consent). This will apply during the construction period as well as the operational period and is not subject to any precondition as to breach of project financial ratios. Distributions made while such Additional Permitted Borrowing was outstanding would reduce the amount payable to Senior Debt in various circumstances (and it may be that Senior Debt would therefore cash collateralise any such amount which would otherwise have been distributed until the Additional Permitted Borrowing is fully covered).<sup>1</sup>

**4.1.3** This is a relaxation of the former position and offers an enhanced ability for Senior Lenders to take remedial action where projects are in need of rescue. There is a new requirement in the Direct Agreement for the Authority to be notified of any such Additional Permitted Borrowing, and the reasons for it, and to be notified, on an ongoing basis, of distributions then made. In addition there are a number of concomitant changes to the termination provisions. The principal ones are set out below.

**4.1.4** Following the making of any Additional Permitted Borrowing if the project terminates early on the grounds of Authority Voluntary Termination or Authority Default, the following will apply:

- (a) the senior debt, plus the Additional Permitted Borrowings less any Distribution made will be paid to the Senior Banks (the “Revised Senior Debt Termination Amount”). The Senior Banks will be protected even if the Revised Senior Debt Termination Amount exceeds the aggregate amount which would have been payable (to both debt and equity) had no Additional Permitted Borrowing been made (the “Original Aggregate Compensation Amount”).
- (b) If the Revised Senior Debt Termination Amount is greater than the Original Aggregate Compensation Amount, the Equity will receive no termination payment.

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<sup>1</sup> If no Distributions are made during this period but monies are kept in reserved accounts, the Permitted Borrowings will not be reduced, however the amount of the Senior Debt payable by the Authority on an early termination of the project is reduced, under sub-paragraph (b) (i) of the definition of Senior Debt. It will be a matter for the Senior Lenders and the Equity to decide whether surplus funds are used to repay Senior Debt, or are distributed or reserved.

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(c) If the Original Aggregate Compensation Amount is greater than the Revised Senior Debt Termination Amount, the Equity will, broadly, be paid the excess.<sup>2</sup>

**4.1.5** If, following the making of any such Additional Permitted Borrowing, the project terminates early on the grounds of force majeure the same principles apply.

**4.1.6** On a termination for Corrupt Gifts or Breach of Refinancing Provisions, the New Senior Debt Termination Amount will be payable to Senior Banks (and no payment will be made to Equity).

**4.1.7** The amount of the Additional Permitted Borrowing which may be lent in this way is 10% of initial principal commitment, reducing to 5% at such time as the initial principal senior debt is 50% paid down.

**4.1.8** Senior Lenders, of course, remain able to advance new monies to Project Companies with the express consent of the Authority, but this new Additional Permitted Borrowing provision will offer senior lenders significantly increased extra flexibility to rescue projects in difficulty without having to come to the Authority for prior consent. Authorities should not give their consent to other increases to their liabilities on termination under paragraph 21.3(a) until such time as the Contractors/Senior Lenders have exhausted their rights to put more money into the project by way of Permitted Borrowing.

**4.1.9** The relevant parts of Guidance which contain these new provisions are as follows : Section 21.3 (Certainty of Compensation Payment Amounts), Section 1.8 (Interpretation), Section 20 (Early Termination), Section 30.5.1 paragraph 10 (Direct Agreement).

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<sup>2</sup> But out of the total termination payment, the amount attributable to the senior banks will be increased and the amount attributable to the equity will be decreased, in order to reflect the increased debt levels. This follows the logic that applies to ordinary monthly payments of unitary charge. These do not increase following any Permitted Borrowing (although, as between the senior banks and the equity, the equity's share of them may decrease).