

The Actuarial Profession

Technical Memorandum

TM1: Statutory Money Purchase Illustrations

Version 1.2

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TM1: Statutory Illustrations of Money Purchase Benefits

Version 1.2

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History

Version	Effective from
1.0	06.04.03
1.1	05.04.05
1.2	01.11.06 (see section 1.4 for transitional arrangements)

This edition of version 1.2 was issued in December 2006 to amend paragraph 11.2.2 and is intended to replace earlier copies of this version.

ADOPTED BY BAS ON 06.04.07

Defined terms

Term	Defined in paragraph
Annual benefit statement	2.7
Annuity rate	7.5
Asset value	17.1
Current fund	8.1
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Part 1 INTRODUCTION & OVERVIEW

1 Introduction

1.1 Overall aim

1.1.1 The overall aim is to provide illustrations of pension benefits on a broadly consistent basis across various types of money purchase pension provision.

This is intended to assist individuals to assess in broad terms

- the adequacy of their pension arrangements
- the extent to which they need to make further provision
- the significant uncertainties involved in using *Illustrations* of benefits.

1.1.2 The intention is that an *Illustration* will show the amount of pension that might be payable when a *Member* retires, in terms of today's prices. It assumes that

- where regular money purchase contributions are being paid, that these will continue to the *Retirement date*
- the pension at retirement will subsequently increase in line with the Retail Prices Index (*RPI*), so that its purchasing power is maintained.

1.1.3 The *Illustrations* are not fully tailored to individual circumstances. A *Member's* actual pension may differ significantly from the amount illustrated because future experience may differ from the assumptions made and the *Member's* individual circumstances may not be reflected in the calculations (see paragraph 4.5).

1.2 Coverage, and definitions of *Member* and *Scheme*

1.2.1 For *Scheme (statement) years* ending on or after 6 April 2003, the requirement to provide an *Illustration* applies to any pension arrangement that is required to issue an *Annual benefit statement* under the *Legislation* (see paragraphs 2.1 and 2.2), and so may apply to an investor or member with money purchase benefits in any of a wide range of individual and occupational pension arrangements, such as:

- Stakeholder pensions
- personal pensions
- money purchase occupational pension schemes (also referred to as "defined contribution" schemes), including additional voluntary contribution arrangements (AVCs)
- defined benefit occupational pension schemes (including AVCs)
- benefits "bought-out" from occupational pension schemes, where the relevant contract is in the name of the trustees rather than the *Member*
- free-standing AVCs (FSAVCs).

Where the *Legislation* applies, the relevant pension arrangement is referred to in this *Technical Memorandum* as the *Scheme* and the investor or member concerned is referred to as the *Member*. Except in certain specified circumstances, *Illustrations* are required irrespective of whether or not money purchase contributions in respect of the *Member* will be paid into the *Scheme* in future.

Note: our understanding at the date of issue of this Technical Memorandum is that the *Legislation* does not cover some money purchase arrangements, such as “retirement annuities” or benefits under contracts or arrangements which are not registered pension schemes; in any case of doubt *Providers* should obtain appropriate advice.

1.3 Definitions of *Illustration* and *Provider*

1.3.1 *Illustration*

Throughout this *Technical Memorandum*, the term *Illustration* means an illustration for the purposes of Section 113 of the Pension Schemes Act 1993.

Notes:

- “*Illustration*” refers to the amount of pension calculated in accordance with the Technical Memorandum, and not to the accompanying material required by the *Legislation* or to any other illustrations not required under the *Legislation*
- the question of the provision of *Illustrations* by alternative methods (such as electronically, or by posting on a website) is a matter for the relevant legislation.

1.3.2 *Provider*

The *Legislation* places various responsibilities in relation to *Illustrations* on the trustees or managers of the *Scheme*. The trustees or managers may appoint third parties such as advisers, insurance companies or software houses to produce and/or issue *Illustrations* on their behalf. For simplicity, in this *Technical memorandum* “*Provider*” is used to refer to the trustees or managers, or anyone preparing an *Illustration* on their behalf.

1.4 Effective date and transitional arrangements

1.4.1 TM1 version 1.2 comes into effect on 1 November 2006.

1.4.2 However, to ease transition from version 1.1 to version 1.2, paragraph 11.2.2 of version 1.1 may be used, where appropriate, for any illustration dates in the period to 5 April 2007.

2 About the *Legislation* and the *Technical Memorandum*

2.1 Relevant Legislation or Authority

At the date at which the Secretary of State approved this version of the *Technical Memorandum* (see paragraph 2.3.2), the main legislation on *Illustrations* of money purchase pensions in Great Britain was:

- (a) Pension Schemes Act 1993 (c.48) Section 113.
- (b) The Personal Pension Schemes (Disclosure of Information) Regulations 1987. SI 1987/1110.
- (c) The Occupational Pension Schemes (Disclosure of Information) Regulations 1996. SI 1996/1655.
- (d) The Stakeholder Pension Schemes Regulations 2000. SI 2000/1403
- (e) The Occupational and Personal Pension Schemes (Disclosure of Information) Amendment Regulations 2002. SI 2002/1383.

Northern Ireland has its own body of law relating to pensions and, in relation to Northern Ireland, references to the Great Britain legislation contained in this *Technical Memorandum* should be read as including references to the corresponding Northern Ireland legislation. Appendix C shows Northern Ireland legislation corresponding to the Great Britain legislation mentioned in this *Technical Memorandum*. Except as indicated in the table in Appendix C there is no difference in the numbering of the provisions mentioned in this *Technical Memorandum*.

2.2 Definition of *Legislation*

The items listed in paragraph 2.1 are referred to in this *Technical Memorandum* as the *Legislation*.

2.3 The *Technical Memorandum*

2.3.1 The *Legislation* provides that *Illustrations* must be produced in accordance with guidance prepared by a prescribed body and approved by the Secretary of State for Work and Pensions and by the Department for Social Development in Northern Ireland. The Board for Actuarial Standards has been appointed as the prescribed body, and this *Technical Memorandum* forms that guidance.

2.3.2 This version of the *Technical Memorandum* was approved by the Secretary of State under Section 113 of the Pension Schemes Act 1993 on 13.10.06 (and subsequently on 21.12.06 for paragraph 11.2.2) and by the Department for Social Development in Northern Ireland under Section 109 of the Pension Schemes (Northern Ireland) Act 1993 on 13.10.06 (and subsequently on 21.12.06 for paragraph 11.2.2).

- 2.3.3 This version of the *Technical Memorandum* will remain in force unless and until
- it is withdrawn by the Secretary of State or by the Department for Social Development in Northern Ireland
- or
- a revised version is approved by the Secretary of State or by the Department for Social Development in Northern Ireland
- or
- the legislation is amended in this regard.

2.4 **The relationship between this *Technical Memorandum* and the relevant legislation**

2.4.1 Care has been taken to ensure the accuracy of references to the *Legislation*. However, it is the responsibility of the *Provider* to verify these and to comply with the *Legislation* and the version of this *Technical Memorandum* relevant at the time of producing an *Illustration*.

2.4.2 This *Technical Memorandum* does not replace or amend the *Legislation*. **If it appears that any matter in this *Technical Memorandum* conflicts with any provision of the *Legislation*, or any other relevant legislation, then the latter will prevail.**

2.5 **Obtaining this *Technical Memorandum***

This *Technical Memorandum* is published on The Board for Actuarial Standards' website <http://www.frc.org.uk/bas/actuarial/index.cfm>.

2.6 **Future changes to the *Technical Memorandum***

The Board for Actuarial Standards will review this *Technical Memorandum* each year (or more frequently if appropriate). Where necessary, they will make recommendations for changes to the Department for Work and Pensions (*DWP*). It is possible that the methods and assumptions used will be amended as a result. In particular, it is likely that some of the assumptions in Appendix D will need to be changed from time to time, and ***Providers are strongly advised to take account of the possibility of changes in these assumptions when devising systems to produce *Illustrations*.***

Note: it is intended that any proposed changes (other than those to the items in Appendix D) would be accompanied by consultation with interested parties which would take into account any systems implications relating to such changes.

2.7 **Definitions of *Annual benefit statement* and *Scheme (statement) year***

Annual benefit statements are the annual benefit statements required by the *Legislation*. *Scheme (statement) year* is the period specified for the purpose of providing an *Annual benefit statement*.

3 Other illustrations

3.1 FSA Illustrations

Members of personal pension *Schemes* (other than Stakeholder pensions – see paragraph 3.2) will have had illustrations under Financial Services Authority (FSA) Rules. At the date of issue of this Technical Memorandum, the FSA require such illustrations to be expressed in projected money terms and they are not directly comparable with *Illustrations* produced on the basis set out in this *Technical Memorandum*.

Note: although the basis set out in this *Technical Memorandum* involves making calculations in projected money terms (that is, allowing for a degree of future price inflation), the results are then converted into “today’s prices”, with the intention that the amount of pension illustrated can be considered in terms of today’s purchasing power. This method was chosen in order to offer flexibility and provide a process which would enable consistent and reconcilable figures to be produced for other situations.

3.2 Illustrations for Stakeholder pensions

Members who take out a Stakeholder pension may receive explanatory material which will include an illustration of the possible benefits from their future contributions in terms of “today’s prices”. From April 2003, these *Members* will also receive *Illustrations* as at the *Illustration dates* in each year, on the basis set out in this *Technical Memorandum*.

4 General

4.1 Hybrid benefits

4.1.1 In some circumstances, *Illustrations* are required for the money purchase part of *Hybrid benefits* under occupational pension schemes. These are benefits which are calculated as the greater of

- the amount produced by reference to a defined benefit formula and
- the amount produced by reference to a money purchase formula.

Notes:

- *Providers* are free to decide whether or not to provide a separate illustration of the benefits which might be produced on the defined benefit formula, subject to any regulations relating to the disclosure of such information
- where in the opinion of the *Provider* the amount produced by reference to the money purchase formula is not likely to affect the amount received by the *Member* under the *Scheme*, then no *Illustration* is required under the *Legislation*.

4.1.2 In some occupational pension schemes, separate parts of a *Member's* benefits are calculated

- by reference to a defined benefit formula and
- on a money purchase formula or a *Hybrid benefit* formula.

In such cases, where an *Illustration* is to be provided in respect of the benefits on a money purchase formula or a *Hybrid benefit* formula, this amount of pension benefit must be shown separately from any illustration of the benefits calculated on the defined benefit formula.

Note: for example, a *Scheme* might provide the *Member* with defined benefits for pensionable service and also provide the *Member* with money purchase benefits in respect of an earlier amount transferred-in from another arrangement and/or with a money purchase Additional Voluntary Contribution (AVC) arrangement.

4.2 Cases where *Illustrations* are not required

The *Legislation* does not require an *Illustration* to be provided for a *Member*

- (a) where the *Member*
- has already started to draw a pension (including cases where a pension has started in respect of one or more of a group of phased retirement benefits)
- or
- has already started income drawdown

- (b) where the *Specified date* is not more than 2 years prior to the *Member's Retirement date*. However, where the *Member* advises a date for late retirement, *Providers* should consider whether that later date has become, or should be specified as, the *Retirement date* and an *Illustration* provided using that date.
- (c) where, on the first *Illustration date* falling after 5th April 2003,
- the *Current fund* is below a set amount (which was £5,000 at the date this *Technical Memorandum* was issued)
- and
- no money purchase contributions have been made since 5 April 2003
- and
- no future money purchase contributions are expected

Note: where this provision applies,

- no *Illustration* will be required in any future year unless a further contribution or a contracted-out rebate or a transfer value has been made to the *Scheme* by the *Member* or on the *Member's* behalf in respect of money purchase benefits
- an *Illustration* would not be required in a future year solely because the *Current fund* then exceeded the set amount.

- (d) where provision (c) does not apply and
- no contributions (including transfers of pension rights or pension credit rights) have been made to the *Scheme* by the *Member* or on the *Member's* behalf in respect of money purchase benefits since the *Illustration date* to which the last *Illustration* relates
- and
- the *Member* has previously been advised that no further *Illustrations* will be provided unless further money purchase contributions are made
- and
- the *Current fund* on which the last *Illustration* was based was less than a set amount (which was £5,000 at the date this *Technical Memorandum* was issued).

Note: where this provision applies, an *Illustration* would not be required in a future year solely because the *Current fund* then exceeded the set amount.

- (e) where the *Specified date* is before 6 April 2003
- (f) for a *Hybrid benefit*, in the circumstances set out in paragraph 4.1.1.

Note:

- where one of the provisions in (a)-(f) above applies but a *Provider* voluntarily issues an illustration on the basis set out in this *Technical Memorandum*, the *Legislation* provides that it must be treated as an *Illustration* (that is, it must be calculated in the same way, and be provided with the same accompanying information, except for the statement in paragraph A2.1.2). Providing an *Illustration* within 2 years of a *Member's Retirement date* would be particularly helpful in cases where the *Member* is unlikely to receive any other illustrations, or any individual advice, in this period. Where an *Illustration* is given voluntarily, *Providers* are of course free to issue other illustrations on different bases, subject to any other regulations which may apply.
- for the purposes of the provisions in (a)-(f) above, a *Scheme* which is an occupational pension scheme and which provides additional money purchase benefits by virtue of the payment by the *Member* of voluntary contributions shall be regarded as a separate *Scheme* from any other part of that *Scheme*.

4.3 Timing

- 4.3.1 The *Illustration* has to be provided within the period which is prescribed for the provision of the *Annual benefit statement*.

Note: depending on the type of *Scheme* involved, this prescribed period may be either 3 months or 12 months after the end of the *Scheme (statement) year*.

4.4 Reasons for the basis chosen

- 4.4.1 The intention is to provide *Members* with a broad indication of the level of benefits to be expected from their current levels of pension provision and future contributions. Whatever standard assumptions are chosen for *Illustrations*, they are unlikely to be borne out in practice, either in general or for particular individuals (see paragraph 4.5). See also the Note to paragraph 3.1.
- 4.4.2 For younger *Members* a set of stable "long-term" assumptions is more appropriate than a set linked to current market conditions, which would be likely to produce more volatile results from year to year.
- 4.4.3 In normal circumstances an *Illustration* for a *Member* close to retirement should be expected to bear some relationship to what the *Member* will actually receive on retirement. Although in practice there may still be significant variations between the standard assumptions and what actually occurs, a set of assumptions related to current "market conditions" would be appropriate for such *Members*.

4.4.4 The basis chosen combines these two approaches. The assumptions relating to the period before retirement are based on long-term assumptions, which nevertheless will need to be reviewed by the Board for Actuarial Standards on a regular basis (see paragraph 2.6). The assumptions relating to the cost of purchasing annuities at retirement are based on conditions on a particular date, and are likely to vary significantly from one *Illustration date* to the next. For a *Member* retiring in the near future, variations in the rate at which the fund accumulates up to retirement may have less effect than variations in the cost of purchasing an annuity at retirement. This does not necessarily mean that an *Illustration* for a *Member* close to retirement will be more accurate than any earlier *Illustrations* provided to the *Member*, because there are still likely to be differences between the assumptions made and the actual experience (particularly in relation to the cost of purchasing annuities at retirement).

4.5 **Variability of *Illustrations* and actual outcomes**

4.5.1 Standard assumptions are used in producing the *Illustrations*, and these are unlikely to be borne out in practice. Individual *Members'* actual pensions may therefore differ significantly from the amounts illustrated. For example, the actual experience in respect of

- the investment return on the assets
- the amount of contributions actually paid
- the cost of purchasing pensions at retirement
- the levels of pension increases and spouse's or civil partner's benefits (if any) included in the eventual pension

may differ significantly from the assumptions made.

4.5.2 The basis set out in this *Technical Memorandum* and the *Illustrations* arising from it are not intended

- to be individual financial advice
- or
- for use in comparing the merits of particular forms of pension provision (such as comparing benefits from defined benefit and defined contribution occupational pension arrangements, comparing different fund choices, or considering the terms for contracting-out of State pension benefits).

Note: it is hoped that illustrations will help identify situations where members should be seeking further advice and information based on their individual circumstances.

4.6 Current fund and Future contributions

4.6.1 The *Illustration* takes account of the *Current fund*, which is the amount already invested in respect of the *Member*. At the discretion of the *Provider*, certain amounts due at or before the *Illustration date*, but which had not been received by that date, can also be included.

4.6.2 The *Illustration* also takes account of any *Future contributions*. These are money purchase contributions which will be made in future by the *Member*, or for the *Member's* benefit, on the assumption that the current contribution arrangements continue. Future "one-off" contributions are excluded unless in practice they form part of a regular series of such payments which are expected to continue until the *Member's Retirement date*.

Note: in many cases, *Future contributions* will be a level amount each year or will be linked to the *Member's* earnings, but a variety of other arrangements are possible.

4.6.3 Where contributions in respect of a *Member* are linked to his or her earnings, the assumptions set out in Part 3 require allowance for earnings (and hence for contributions) to increase in future.

4.6.4 *Illustrations* must also assume that the *Member's* contracted-out status as at the *Illustration date* relevant to the *Scheme* will continue to *Retirement date*, or State pension age if earlier. However, *Providers* who wish to do so may take account of any subsequent decision by the *Member* to change contracted-out status. (See paragraph 19.)

4.7 Spouse's or civil partner's pension

Providers cannot predict whether a *Member* will eventually be married or be in civil partnership at retirement and, if so, what provision will be chosen by the *Member* for the spouse or civil partner. The calculations will normally assume that a 50% civil partner's pension (where the *Scheme* records indicate that the member is in a civil partnership) or a 50% spouse's pension (in all other cases, irrespective of whether the member is currently married or not) is provided. See paragraph 12.1 for details of the permitted alternative assumptions on marital or civil partner status.

4.8 The information to be provided to *Members*

4.8.1 Appendix A gives details of the information that must accompany *Illustrations* to *Members*. Where the *Illustration* is provided separately from the *Annual benefit statement*, some information will also be needed in order to identify the *Member*. The objective is to keep to a minimum the information provided and to make it as easy as possible for most *Members* to understand, leaving those who require more information to request it. *Providers* can provide further information automatically if they wish; however, too much detail may have the effect of reducing the impact and/or intelligibility of the basic information.

4.8.2 Where

- a *Member* has more than one money purchase fund and/or contract and
 - two or more of those funds and/or contracts have the same *Retirement date*, then, subject to the *Legislation* relating to the disclosure of such information, it is a matter for *Providers* to decide whether
 - to provide the *Member* with a single combined *Illustration* for these funds and/or contracts
- or
- to provide separate *Illustrations* for each.

Part 2 METHOD

5 Definitions of *Specified date*, *Illustration date* and *Retirement date*

5.1 The *Specified date* is the date the fund is valued for the purpose of the Disclosure of Information regulations. It is referred to in paragraph 4.2.

5.2 The *Illustration date* is the date specified by the *Provider* as the date by reference to which amounts are calculated for the purpose of the *Illustration*.

Notes:

- the *Illustration date* will normally be the *Specified date* (for an occupational pension *Scheme*, this will normally be the last day of the *Scheme's* administrative year)
- the *Illustration date* does not have to be the same date as the date to which the *Annual benefit statement* relates.

5.3 *Retirement date* means

- (a) a date which the *Member* has specified to the *Provider*, if this date is acceptable to the *Provider*; or
- (b) where no acceptable date has been specified by the *Member*, a date specified by the *Provider*.

Note: among other things, this is intended to enable a *Provider* to use a single *Retirement Date* for a group of phased retirement benefits, if the *Provider* so wishes.

5.4 If in a particular case

- no retirement date is known
- or
- the retirement date specified is after State pension age for the *Member*, then *Providers* should consider using as the *Retirement date* the date on which the *Member* reaches State pension age.

5.5 A *Member* may have a variety of funds and/or contracts within a *Scheme*; for the avoidance of doubt, a *Member* may have more than one *Retirement date* for projections of different funds and/or contracts.

6 Method - general

6.1 The way in which calculations are carried out

Where a different approach can be taken to the calculations of an *Illustration* without affecting the result, *Providers* are free to do so, even though a particular approach is specified in this *Technical Memorandum*.

Note: for example, this may apply to the order in which calculations are carried out; a particular instance might be that two or more of the individual amounts referred to in paragraph 7.1 as at a particular date could be combined before accumulating the result from that date to the *Retirement date* as provided in paragraph 7.2, rather than accumulating each such item separately.

6.2 Precision required in calculations

6.2.1 Where this *Technical Memorandum* sets out precise methods and assumptions to be used to carry out calculations, these must be followed. Where discretion is given to *Providers*, they must use reasonable efforts to ensure that any assumptions or approximations produce appropriate results for each *Member*.

6.3 Rounding of results

In order to avoid the appearance of spurious precision, the final pension figure to be quoted in an *Illustration* must be shown in whole £s, rounded down to 3 significant figures. Where *Providers* so wish

- where the result is under £1,000 and is not an exact multiple of £10, it may be rounded down to the next lower multiple of £10
- any final monthly pension of less than £10 may be shown as “less than £10 each month” or “less than £120 each year”.

Note: for example, a monthly pension of £98.76 could be quoted as £98 or £90, and monthly pensions of £1,298.76 and £11,198.76 would be quoted as £1,290 and £11,100 respectively.

6.4 *Scheme (statement) years* which are not a period of 12 months

Where a *Scheme (statement) year* is not a period of 12 months, appropriate adjustments to the calculations must be made.

6.5 Equivalent rates for part-years

Where annual rates are specified in Part 3, the equivalent rates for part of a year should be calculated as the appropriate root of the annual rate, not as an arithmetic proportion (that is, the monthly rate equivalent to 2.5% per annum is approximately 0.00206 ($=1.025^{1/12}-1$) and not 0.00208 ($= 0.025/12$)).

6.6 Calculating the period between two dates

Where it is necessary to calculate the period between two dates for the purpose of the calculations in Part 3, the period must be calculated to an exact number of months with any parts of a month being ignored, or more accurately (for example, by taking the exact number of days involved). Similarly, where contributions will continue for part of a year (such as the period between the end of the *Scheme (statement) year* next before the *Retirement date* and the *Retirement date*), then *Illustrations* must include allowance for such contributions for an exact number of months with any parts of a month being ignored, or more accurately (for example, where appropriate by taking the exact number of days involved).

6.7 “With-profits” funds (including with-profits deferred annuity contracts)

Where the *Member’s Current fund* is invested in a “with-profits” fund (including a with-profits deferred annuity contract), the *Provider* should make best efforts to provide an *Illustration* in a manner consistent with this *Technical Memorandum* and with the insurer’s bonus policy, with such alterations to the methods and assumptions as are required to do so. In particular,

- where appropriate the *Provider* may base the calculations on an asset value which differs from the *Asset value* otherwise required by this *Technical Memorandum*
- the *Provider* may disclose an amount for the *Member’s Current fund* which is consistent with the information which the *Member* is accustomed to receiving, even if this differs from the *Asset value* which has been used as the basis of the *Illustration* provided (see paragraph A2.8).

7 Determining the amount of pension to be illustrated

7.1 The *Nominal accumulated fund*

The *Nominal accumulated fund* is the sum of:

- (a) the accumulated *Current fund* (see paragraph 8), if any
- (b) the accumulated *Future contributions* (see paragraph 9), if any
- (c) the accumulated amount of any tax relief expected to be reclaimed and credited to the *Scheme* for the benefit of the *Member* in respect of *Future contributions* (see paragraph 18)
- (d) the accumulated amount of any contracted-out rebates expected to be received by the *Scheme* for the benefit of the *Member* in respect of future periods of contracted-out employment (see paragraph 19 and Appendix B)

reduced by

- (e) where the terms of the *Scheme* require such amounts to be deducted from *Future contributions* or the *Current fund*, the accumulated amount of any charges or expenses (see paragraph 16)
- (f) where the terms of the *Scheme* require such costs to be deducted from *Future contributions* or the *Current fund*, the accumulated amount of the costs of any risk benefits on death, sickness or critical illness (see paragraph 10). These benefits are referred to as *Risk benefits*.

7.2 Accumulating the elements of the *Nominal accumulated fund* to the *Retirement date*

Each individual amount of each element ((a)-(f)) of the *Nominal accumulated fund* must be accumulated from the relevant date to the *Retirement date* at the rate of accumulation laid down in paragraphs 15.1 and D3. The relevant dates are

- for the *Current fund* (see paragraph 7.1(a)), the *Illustration date*
- for each individual payment of *Future contributions*, tax relief or contracted-out rebates (see paragraph 7.1(b), (c) and (d)), the date on which the payment is due to be received by the *Scheme*
- for each individual payment of charges or expenses or cost of Risk benefits (see paragraph 7.1(e) and (f)), the date on which the payment is due to be paid.

Where the exact relevant date in relation to an amount under paragraph 7.1(b)-(f) is unknown, a reasonable assessment must be used.

Where the total *Nominal accumulated fund* is less than zero, zero must be used instead.

7.3 Other assumptions

Where any other assumptions have to be made in calculating the pension to be illustrated, they must be such as to ensure that the value of the *Nominal accumulated fund* (and hence the *Real accumulated fund* and the illustrated pension) is fair and reasonable.

Note: examples might include the valuation basis of property assets and the treatment of contributions where the payment record is not complete.

7.4 Converting the *Nominal accumulated fund* to a *Real accumulated fund*

The *Nominal accumulated fund* must be converted to a *Real accumulated fund*. This must be done by dividing it by a factor calculated by compounding the rate of increase in *RPI* specified in paragraph D2.1 over the period from the *Illustration date* to the *Retirement date*.

7.5 The amount of pension to be illustrated

The amount of pension to be illustrated is the amount produced by dividing the *Real accumulated fund* by the relevant *Annuity rate*. The *Annuity rate* is the value of a pension of £1 a year at the *Retirement date*. It must be calculated using the annual interest rates, inflation, mortality, expenses and any other relevant assumptions laid down in Part 3 and Appendix D.

8 **Current fund**

8.1 **Definition of Current fund**

8.1.1 Subject to paragraph 8.1.2, *Current fund* is defined as the relevant assets of the *Scheme* in relation to the *Member's* money purchase benefits at the *Illustration date* (see paragraphs 4.8.2 and 17).

8.1.2 In order to give an *Illustration* which accurately reflects the true position at the *Illustration date*, it is preferable to include in the *Current fund*

- (a) an allowance for any money purchase contributions due but unpaid as at the *Illustration date*
- (b) an allowance for any recovery of tax due to but not received by the *Scheme* at the *Illustration date* (see paragraph 18)
- (c) an allowance for any contracted-out rebates due to but not received by the *Scheme* at the *Illustration date* (see paragraph 19).

However, a *Provider* who so wishes may omit one or more of these items from the *Current fund*, provided that

- where there are *Future contributions* in respect of the *Member*, any items due but unpaid which have been omitted from the *Current fund* are treated as *Future contributions*, unless it is agreed that these amounts will be waived
- where there are no *Future contributions* in respect of the *Member*, the *Provider* should consider making reference in the information accompanying the *Illustration* to the items omitted from the *Current fund* (unless the amounts are negligible – see below).

Where the actual amounts specified in (a), (b) or (c) above are not known, a reasonable assessment of the amount(s) must be used.

Where the amounts specified in (a), (b) or (c) above are negligible, in that their inclusion is unlikely to change the rounded result (see paragraphs 6.2 and 6.3), *Providers* may omit them; no reference to the omission is needed in the material accompanying the *Illustration*.

See also paragraphs 6.7, 8.2 B2.3 and B3.1.

Notes:

- where amounts under (a), (b) or (c) above are included in the *Current fund*, it is not necessary to discount them for the assumed delay in receipt (also see paragraphs B2.3 and B3.1)
- where the *Member* is in receipt of income drawdown in respect of part of the assets of the *Scheme*, these assets must be omitted when establishing the amount of the *Current fund*. See however paragraph 4.2(a).

8.2 Cases involving transferred benefits

A *Member* with more than one pension arrangement covered by this *Technical Memorandum* will receive an *Illustration* from each of these arrangements. Where a transfer has been made between such arrangements, it is important that the benefits transferred are neither missed nor double-counted when the *Member* adds together the *Illustrations* provided by the two arrangements. Therefore, outgoing transfer values which have been agreed but not paid on or before the *Illustration date* must not be deducted from the *Current fund*. See also paragraph 9.2.

Note: there is a particular danger that benefits transferred may be missed or double-counted if a *Member* adds together *Illustrations* provided as at different dates; however, the information provided with the *Illustrations* should enable the *Member* to identify such situations.

9 ***Future contributions***

9.1 **Definition of *Future contributions***

9.1.1 *Future contributions* are defined as all money purchase contributions due after the *Illustration date* which the *Provider* determines to be part of a regular pre-determined series of contributions, irrespective of the formal basis on which contributions are determined. In particular,

- even if the terms of the *Scheme* describe future money purchase contributions as being “one-off” single payments; they must be included if in practice they form a series of pre-determined payments which are expected to continue until the *Member* reaches *Retirement date* or State pension age
- payments of contributions which are made after the *Illustration date* and which do not form part of a series of pre-determined payments which are expected to continue until the *Member* reaches *Retirement date* or State pension age must not be included (even if one or more such payments have been agreed before the *Illustration* is produced).

Note: in terms of the *Legislation*, in these circumstances the *Member* is not a “non-contributing member”. However, this *Technical Memorandum* requires that his or her *Future contributions* be assumed to be nil.

See also paragraphs 4.8.2 and 9.2.

Note: individual circumstances differ widely. For *Illustrations* to fulfil the overall aim set out in paragraph 1.1.1, it is important that wherever possible the effect of future contributions is included. Among the factors which *Providers* should take into account when considering whether a particular *Member* should be treated as paying *Future contributions* are

- the *Member's* expectations
- the certainty of payment.

Thus the following examples should normally be treated as paying *Future contributions*

- a *Member* of an occupational scheme paying a percentage of earnings from time to time (irrespective of whether or not the *Member* has an option to change the percentage rate of contribution at some future date); an exception to this might be a *Scheme* where contributions are a fixed percentage of earnings but typically *Members* are employed on short-term contracts and there is therefore no continuity of employment, or of contributions, from year to year
- a *Member* paying regular contributions into a personal pension or Stakeholder pension arrangement under a direct debit or standing order
- cases where it is clear from the *Provider's* records that regular payments (for example, of a particular cash amount or a percentage of earnings) are intended.

In some cases, such as the payment of the maximum non-earnings-related amount (£3,600 at the date of issue of this Technical Memorandum) into a Stakeholder pension, it may not be clear from the *Provider's* records what is intended for future years, and no *Future contributions* will be included in the *Illustration*. In such cases, in order to fulfil the overall aim set out in paragraph 1.1.1, *Providers* should consider whether it would be appropriate to provide additional information on the potential effect of future contributions, subject to any regulations which apply to such illustrations.

- 9.1.2 When producing an *Illustration*, *Providers* may if they wish ignore any information they may have about changes in the *Member's* earnings which occur after the day after the *Illustration date*.

Note: for many occupational *Schemes* where the contributions are related to *Members' earnings*, the definition of earnings provides for the amount on which contributions are based to be up-dated once a year, on the first day of the *Scheme* year. The intention is that in such cases *Providers* should be able to base any earnings-related *Future contributions* on the *Member's* earnings on the day after the *Illustration date*.

9.2 Cases involving transferred benefits

Incoming transfer values which have been agreed but are outstanding at the *Illustration date* must not be included in *Future contributions*. See also paragraph 8.2.

10 Determining *Future contributions* and the cost of *Risk benefits*

10.1 Determining the initial amounts of *Future contributions* and the cost of *Risk benefits*

10.1.1 General

Where the actual amounts of *Future contributions* and/or the cost of *Risk benefits* payable for the *Scheme (statement) year* which next follows the *Illustration date* are known, these should normally be used; otherwise, *Providers* may calculate the amounts to be used as provided in paragraph 10.1.2 and 10.1.3, or may make appropriate assumptions about the initial amounts of *Future contributions* and the cost of *Risk benefits*.

Note: paragraphs 10.1.2 and 10.1.3 set out an approach which is consistent with the rest of the assumptions used in this Technical Memorandum. This approach may not be appropriate where contributions and/or the cost of *Risk benefits* relate to the level of *Members'* earnings, and these are expected to fluctuate significantly from year to year, or the *Provider* does not have detailed information about *Members'* earnings. In such cases, the *Provider* should make appropriate estimates of the initial amounts of *Future contributions* and the cost of *Risk benefits*.

10.1.2 Cases where actual earnings-related or *RPI*-related amounts are unknown

Where

- *Future contributions*, and/or the amount(s) of *Risk benefits* and/or the cost of *Risk benefits*, are determined as a proportion of the *Member's* earnings from time to time or as an amount which increases from time to time in line with increases in the *RPI*

and

- the actual amounts of *Future contributions* and/or the cost of *Risk benefits* payable for the *Scheme (statement) year* which next follows the *Illustration date* are not known,

then, subject to paragraph 10.3, *Providers* should use the latest known amounts increased for the appropriate period at the rate specified in paragraph D2 as the appropriate rate of increase.

10.1.3 Other cases where amounts are unknown

Where

- the actual amounts of *Future contributions* and/or the cost of *Risk benefits* payable for the *Scheme (statement) year* which next follows the *Illustration date* are not known

and

- *Future contributions* and/or the cost of *Risk benefits* are calculated otherwise than in paragraph 10.1.2,

then, subject to paragraph 10.3, the annual amount for the *Scheme (statement) year* which next follows the *Illustration date* should be assumed to be the last known annual amount.

10.2 Determining *Future contributions* and the cost of *Risk benefits* for each subsequent year

10.2.1 Earnings-related or *RPI*-related cases

Where *Future contributions* and/or the amount(s) of *Risk benefits* and/or the cost of *Risk benefits* are determined

- as a proportion of the *Member's* earnings from time to time
- or
- as an amount which increases from time to time in line with increases in the *RPI*

then the annual amounts payable for the *Scheme (statement) year* which next follows the *Illustration date* (determined as provided in paragraph 10.1) must be assumed to increase each year from the *Scheme (statement) year* after the *Illustration date* to the *Retirement date* at the rate specified in paragraph D2 as the appropriate rate of increase.

Note: where *Future contributions* relate to the payment of the maximum non-earnings-related amount (£3,600 at the date of issue of this Technical Memorandum) into a Personal or Stakeholder pension, the *Provider* may assume that this amount remains fixed or that it increases each year in line with *RPI*, and should disclose what has been assumed.

10.2.2 Other cases

If *Future contributions* or the cost of *Risk benefits* are calculated otherwise than in paragraph 10.2.1, then (subject to paragraph 10.3)

- (a) the annual amount of *Future contributions* payable for the *Scheme (statement) year* which next follows the *Illustration date* (determined as provided in paragraph 10.1) must, in the absence of any *Scheme* provisions or recognised practices to the contrary, be assumed to remain unchanged until the *Retirement date*; where such contrary *Scheme* provisions or recognised practices exist, they must be allowed for.

Note: possible examples of such provisions would be contributions which are a fixed “nominal” amount (such as £50 a month, unchanging until retirement) or which increase at a fixed rate of 5% each year in the absence of a change of instructions from the *Member*.

- (b) the cost of *Risk benefits* in each future year must be assumed to increase to the *Retirement date* at the rate specified in paragraph D2.1 as the rate of increase in *RPI*.

10.3 Other aspects

Where

- the amounts of contributions payable are subject to a maximum of a fixed monetary amount or a deduction of a fixed monetary amount
- the amounts of contributions payable are age-related or term-related (for example, in accordance with an election by the *Member*)
- the last known amount of contributions and/or cost of *Risk benefits* does not relate to a period of 12 months,
- the cost of *Risk benefits* increases as the Member ages

then *Providers* must deal with the situation in an appropriate way and where appropriate should disclose what they have done. If in practice a maximum or a deduction is specified in such a way that it will, or is expected to, increase broadly in line with earnings or with State pension benefits or contribution limits, then it must be treated as increasing at the rate specified in paragraph D2 as the appropriate rate of increase (except in the circumstances covered in the note to paragraph 10.2.1).

Part 3 ASSUMPTIONS

11 Mortality

11.1 Before retirement

No allowance is to be made for mortality before retirement (other than as provided for in the calculation of the cost of any *Risk benefits*).

Note: the *Illustration* is meant to relate to those Members who survive to retirement; there is therefore normally no reason to allow for the effects of mortality before retirement, other than in the determination of the costs of *Risk benefits*. For simplicity, this approach should be applied even where the contract concerns benefits from some form of cross-subsidy from contracts issued to those who then die before retirement.

11.2 After retirement

11.2.1 The mortality of the *Member* and the *Member's* spouse or civil partner must be assumed to be in accordance with the tables specified in paragraph D1.1.

11.2.2 Where legislation requires that unisex annuity rates must apply at retirement, female mortality must be used for the *Member* (irrespective of the actual sex of the *Member*) and male mortality must be used for the *Member's* spouse or civil partner.

Note: The member's spouse or civil partner shall be assumed to be three years older than the member whether the member is male or female (except as provided in paragraph 12.2.2). Paragraph 12.2.1 should be ignored for unisex annuities.

11.2.3 In some cases, the *Scheme* will contain a guarantee of annuity terms which produces

- a higher amount of initial pension as at the *Retirement date* and/or
- a higher amount of pension in a subsequent year

than would otherwise be produced by the use of the assumptions in this *Technical Memorandum*.

In these cases, *Providers* must provide an *Illustration* based on the assumptions in this *Technical Memorandum*, taking no account of the guarantee.

Note: *Providers* are free to refer to the guarantee in the material accompanying the *Illustration* and/or (subject to any regulations which apply) to provide an additional illustration showing the effect of the guaranteed terms.

12 Spouse's or civil partner's benefit

12.1 Marital or civil partnership status and contingent spouse's or civil partner's benefit

12.1.1 Except as provided in 12.1.2 below, irrespective of the marital or civil partnership status of the *Member* at the *Illustration date*, the *Provider* must assume that the *Member* will be married at the *Retirement date* and that a contingent spouse's pension of 50% of the *Member's* pension will be provided (a contingent spouse's pension is a pension which becomes payable to a spouse on the death of the *Member*).

Note: this basis can be used even where the *Provider* is aware of the marital or civil partnership status of the *Member* at the *Illustration date*.

12.1.2 in substitution for the assumption specified in 12.1.1,

- the *Provider* may decide to use a different assumption on the basis that the *Scheme* records indicate that the *Member* is (a) neither married nor in a civil partnership or (b) is in a civil partnership
- or
- the *Provider* and the *Member* may agree to use a different assumption.

Notes:

- an appropriate spouse's pension or, if it is assumed by the *Provider* that the member is in a civil partnership, a civil partner's pension must be assumed in respect of any "protected rights" benefits
- although the *Legislation* permits the use of alternative levels of spouse's or civil partner's benefit, it is hoped that - in the interests of simplicity - *Providers* will restrict themselves to assuming spouse's or civil partner's benefits of either 50% of the *Member's* pension or nil.

12.2 Age difference between *Member* and spouse or civil partner

12.2.1 Except as provided in paragraph 12.2.2, *Providers* must assume

- for a male *Member* (other than where a male *Member* is assumed to be in civil partnership), that his wife at his *Retirement date* will be three years younger than the *Member*
- for a female *Member* (other than where a female *Member* is assumed to be in civil partnership), that her husband at her *Retirement date* will be three years older than the *Member*
- for a *Member* assumed to be in civil partnership, that his or her civil partner at *Retirement date* will be the same age as the *Member*.

12.2.2 At the *Provider's* discretion,

- the *Member* may specify the spouse's or civil partner's age to be used in the *Illustration*
- or
- the *Provider* may use the spouse's or civil partner's age as shown in the *Provider's* records.

Note: the *Provider* may wish to point out any restrictions on who may receive a spouse's or civil partner's pension under the *Scheme* (such as the exclusion of "common-law" spouses or any person who is of the same sex as the member and who is living with the member as if they were civil partners although not in civil partnership).

13 Other retirement assumptions

13.1 Payment frequency

Providers should calculate the pension illustrated to be payable monthly in advance (that is, the *Annuity rate* to be used for converting the *Real accumulated fund* to the pension to be illustrated should be based on monthly in advance payments). At the *Provider's* discretion, the amount may be disclosed as an equivalent annual or weekly amount.

13.2 Payment format

13.2.1 Some *Schemes* provide benefits, other than spouses' or civil partners' benefits, on the death of the *Member* after the pension commences (such as a guarantee that if the *Member* dies within the first five years after retirement the balance of the five years' payments will be paid). *Providers* are free to decide whether or not to allow for such benefits when calculating the *Annuity rate* (see paragraph 7.5). Spouses' and civil partners' benefits are dealt with in paragraph 12.

13.2.2 The pension illustrated must be assumed to increase annually in line with *RPI* in payment (this is the "relevant percentage" referred to in the *Legislation*). Pension increases in payment in line with *RPI* are implicitly allowed for in the rate of interest specified in paragraph 15.2 and D4.1. *Providers* must not make any allowance for any other increase assumption: see paragraph 1.1.2.

Note: many *Members* choose level (non-increasing) pensions, rather than pensions which increase in line with the *RPI*. If level pensions were assumed, *Illustrations* would be significantly higher. Level pensions may not be permissible where statutory levels of pension increase apply. In any case, the *DWP's* intention is that *Illustrations* should show results in terms of today's prices, and hence no other allowance for pension increases is appropriate in the *Illustration*. *Providers* may provide additional illustrations using different assumptions for pension increases if they so wish. *Providers* may wish to point out the implications of level pensions or pensions with increases at other rates (particularly where the rate normally applying under the *Scheme* appears likely to be in excess of inflation).

13.3 Lump sums at retirement

No allowance may be made in the *Illustration* for the payment of lump sums at retirement.

14 Rates of increase in the Retail Prices Index and in earnings

14.1 *RPI* must be assumed to increase at the rate specified in paragraph D2.1.

14.2 The *Member's* earnings must be assumed to increase at the rate specified in paragraph D2.2.

15 Accumulation rates and *Annuity rates*

15.1 Accumulation rate before retirement

- 15.1.1 Subject to paragraph 15.1.2, the annual monetary (nominal) accumulation rate to be used to calculate the constituent parts of the *Nominal accumulated fund* is the rate set out in paragraph D3.1.

Note: the basis chosen implicitly assumes that assets are invested before retirement in a mix of investments, predominantly equity-type investments. The accumulation rate chosen is believed to be a reasonable long-term assumption for such assets in conjunction with the future inflation rate assumed. Regard has been had to past experience, although such experience is not necessarily a good guide to the future. Furthermore, the variability of such returns, even over relatively long periods, means that individual *Members* may experience significantly different returns in practice. In any event, *Members'* assets may in practice not be invested (wholly or partly) in accordance with the assumptions described in this note.

- 15.1.2 Where the *Provider* expects the rate in paragraph D3.1 to overstate the investment potential of the *Member's* contract or arrangement, the *Provider* must use an appropriately reduced annual monetary (nominal) accumulation rate, consistently from year to year.

Notes:

- “consistently from year to year” does not imply that the deduction must remain fixed in circumstances where the relevant underlying conditions change;
- the intention is that, for consistency, the *Provider* should apply the same approach as under the FSA rules for new business illustrations, irrespective of whether or not the benefits concerned fall within the scope of FSA regulation
- *Providers* should consider each case in the light of its circumstances and their expectation of the investment potential over the period to *Retirement date*; however, it will definitely be appropriate to consider the use of a reduced rate in cases where the *Current fund* is invested in cash or deposit funds and either there is no discretion for a change to an alternative investment medium or there is no intention to change to another investment medium.

15.2 Interest rates to be used in calculating *Annuity rates*

Annuity rates must be calculated using the rate of interest specified in paragraph D4.1. *Providers* must determine the rate of interest applicable to each 15 February. They must then use this rate for all *Illustrations* with *Illustration dates* occurring in the following financial year (that is, from 6 April to 5 April) with the exception that the rate of interest applicable to 15 February 2005 must be used for all *Illustrations* with *Illustration dates* occurring in the period 5 April 2005 to 5 April 2006. Where in any year the information on which the rate of interest is to be based is not published on the 15th February, *Providers* must use the relevant information for the next preceding day on which such information is published).

Note: this should enable *Providers* to avoid frequent changes in the rates used.

16 Expenses

16.1 Before retirement

16.1.1 If the terms of the *Scheme* require future charges or expenses to be deducted from *Future contributions* or the *Current fund*, then

- for *Schemes* subject to the Financial Services Authority (FSA) Rules on projections, *Providers* must use charges and expenses not less than the charges and expenses required by those Rules
- for other *Schemes*, amounts not less than the actual charges or expenses of the *Member's* contract or arrangement must be used. These should include the costs of investment management, but excluding
 - any dealing costs for the underlying portfolio
 - any costs associated with routine management and servicing of existing property investments.

Notes:

- in practice this means that actual charges or expenses will normally be used; however, for the avoidance of doubt it is necessary to specifically link the requirement to the FSA Rules where these apply to the pension arrangement in question
- where using actual charges or expenses would create difficulties or extra expense for *Providers*, they can instead use higher amounts
- a rate equal to the current maximum rate for charges under Stakeholder pensions has been specified for use in those rare cases where it is not possible to identify or even reasonably estimate the charges or expenses that will apply (see paragraph 16.1.4).

16.1.2 Where future charges or expenses are related to *Future contributions*, they must be calculated by reference to the *Future contributions* projected as set out in paragraph 10.2.

16.1.3 Where future charges or expenses are related to the assets in the fund or arrangement from time to time then, using the assumptions and methods laid down in this *Technical Memorandum*, *Providers* must calculate and allow for charges or expenses up to *Retirement date* of the amounts produced by calculating a projected fund as at each annual anniversary of the *Illustration date* (or, if they so wish, more frequently), from the *Illustration date* to the *Retirement date*. *Providers* must start with the *Current fund* and allow for any *Future contributions*, tax relief, contracted-out rebates, the cost of *Risk benefits* and the relevant charges or expenses.

16.1.4 Where future charges or expenses are not known and cannot reasonably be obtained or estimated, *Providers* must use the approach set out in paragraph 16.1.3 with a charge for expenses of 1% a year of the value of the projected fund at the start of each year.

16.1.5 Future charges or expenses which relate to the *Member's* contract or arrangement but which are not deducted from *Future contributions* or from the assets under the

contract or arrangement being illustrated must be ignored for the purpose of producing the *Illustration*.

Note: this situation can arise where future charges or expenses are met by a third party, such as the *Member's* employer.

16.2 After retirement

Expenses of the amount specified in paragraph D5 must be assumed when calculating the *Annuity rate*.

Note: in practice there will be a wide variety of charges when *Members'* assets are converted to pensions at retirement. *Providers* would not normally be able to accurately predict the charges or expenses for any particular case in advance of retirement, and so a single assumption has been specified for use in every *Illustration*. The amount specified in paragraph D5 covers the costs of setting up and paying the annuity.

17 Asset value

17.1 The *Current fund* must be based on a realistic asset value on an on-going basis, as at the *Illustration date*. This *Asset value* must be the most appropriate of:

- (a) for a *Scheme* where the value of the assets relating to a *Member* is expressed as the bid value of units in a fund, the bid value of the relevant units at the *Illustration date*
- (b) for a *Scheme* where the value of the assets relating to a *Member* is expressed as a transfer value, the transfer value at the *Illustration date*
- (c) for an insured *Scheme*, the policy value on an on-going basis, determined by the insurer at the *Illustration date* (see also paragraph 6.7).

Note: this may be appropriate where the policy value on an on-going basis is higher than the transfer value available at the *Illustration date*.

- (d) for a *Scheme* in which a number of *Members* participate and where a *Member's* rights are determined as a share of the fund of assets, the value of the *Member's* share of the fund at the *Illustration date*
- (e) for a *Scheme* under which a *Member's* rights are determined as the market value of a fund of assets, a realistic assessment of the market value of the assets of the fund at the *Illustration date*.

Note: in certain circumstances a different value can be used – see paragraph 6.7.

18 Tax relief on contributions

18.1 If tax relief on contributions is reclaimed and credited to the *Scheme* for the benefit of the *Member*, tax relief at the rate expected to be reclaimed (including appropriate allowance for any known future changes to this rate) must be assumed, based on the projected *Future contributions*.

19 Contracted-out rebates

19.1 Contracting-out assumption

If the *Provider's* records show that at the *Illustration date* the *Member* was contracted-out of the State pension arrangements under the *Scheme*, the *Provider* must assume that the *Member* will remain contracted out until his or her *Retirement date*, or State pension age if earlier (see paragraph 4.6.4). *Providers* may if they so wish assume that contracted-out rebates cease on the 5th day of April which is or next precedes the *Retirement date*. *Providers* who wish to do so may take account of any decision by the *Member* after the *Illustration date* and before the issue of the *Illustration* to change contracted-out status.

Note: the assumption that the *Member* will remain contracted out may conflict with other advice received by the *Member*. However, it is specified here so that a contracted-out *Member* wishing to assess in broad terms the adequacy of his or her pension arrangements and the extent to which further provision is needed can combine the *Illustration* with information provided on State pension benefits by the *DWP* (which will be produced on the basis that the *Member* remains contracted-out until State pension age).

19.2 Determining contracting-out rebates

If

- under the *Scheme* the *Member* is contracted-out of the State pension arrangements

and

- future rebates are to be invested in the *Scheme* for the benefit of the *Member*,

then future rebates must be accumulated to the *Retirement date* (see paragraphs 7.1 and 7.2). They must be determined in accordance with Appendix B and consistently with the increases assumed in the *Member's* earnings.

For the purpose of producing the *Illustration*, account must be taken of the “cap” on contracting-out rebates (see paragraph B1.2).

APPENDIX A: INFORMATION TO ACCOMPANY THE *ILLUSTRATION*

A1 General

The *Legislation* requires that an *Illustration* must be accompanied by various statements. *Providers* may wish to provide further relevant information, either automatically or on request. Paragraph A2 sets out the information relating to the *Illustration* which is required by the *Legislation*, together with examples of further information that *Providers* should consider including. Paragraph A3 deals with the provision of further illustrations.

Notes:

- *Providers* are free to express the statements required by the *Legislation* in their own words
- *Providers* are free to devise their own statements to fit the pension arrangements involved and to consider what additional information or further illustrations (see paragraph A3) they wish to provide. It is hoped that the statements provided will as far as possible be in plain English.
- a long explanation may not be read and the impact of the illustration will then be lost. The aim is therefore to limit the amount of information which **has** to be given to the minimum needed to identify the *Member* and the *Scheme*, and to give a brief explanation of the nature of the *Illustration*. Those who require more information, or more technical details, can ask the *Provider* to provide it.
- information about the assumptions made in producing the *Illustration* could be provided by an explanatory document produced by the *Provider*, or another body, or by providing access to a copy of the *Technical Memorandum* (for example, by reference to The Actuarial Profession's website, www.actuaries.org.uk/pensions/smpi.html).

A2 Information to accompany the *Illustration*

A2.1 The nature of the *Illustration*

- A2.1.1 The *Provider* must include a statement to the effect that the information provided
- is provided only for the purposes of illustration
 - does not represent any promise or guarantee as to the amount of benefit which may be receivable by the *Member* or a beneficiary under the *Scheme*
 - should not be regarded as the only consideration by reference to which the *Member* should make decisions as to his or her pension arrangements.

Notes:

- the *Provider* should consider encouraging the *Member* to obtain further information and/or advice before taking any action on the basis of the information provided
- where the *Member* is contracted-out of the State pension arrangements, the *Provider* should consider stating that the *Illustration* is not suitable for use in making a decision on whether to contract in or out of the State pension arrangements.

- A2.1.2 The *Provider* must include a statement to the effect that the *Provider* is required by law to provide the *Illustration*.

Notes:

- *Providers* may be able to fulfil this requirement by identifying the amount illustrated as having been calculated in the manner laid down under the relevant regulations
- this requirement does not apply where a *Provider* voluntarily issues an illustration on the basis set out in this *Technical Memorandum* (see paragraph 4.2).

A2.2 Obtaining further information

The *Provider* must include a statement specifying the means by which the *Member* can obtain further information about the *Illustration*.

Note: the statement might consist of a contact address/telephone number for the trustees or manager of the *Scheme* (or for any-one who is acting on their behalf), or a reference to the *Scheme* documents already issued to the *Member*.

A2.3 Statements about assumptions

A2.3.1 General statement

The *Provider* must include a statement to the effect that the *Illustration* has been prepared using various assumptions specified in the *Legislation* and this *Technical Memorandum*.

Notes:

- this item is intended to give the *Member* an overview of the various assumptions on which the *Illustration* is based. There are also specific requirements about certain further information to be given in respect of these assumptions
- the *Provider* should consider stating that these assumptions include:
 - when the *Member* will retire
 - the way the *Member's* pension fund is invested
 - the money purchase contributions which will be paid in future
 - the investment returns until retirement and the cost of buying a pension at that time
 - that the *Member* will receive a pension that increases in line with *RPI*
 - whether or not the *Illustration* includes an allowance for a spouse's or a civil partner's pension (see paragraph 12.1)
 - where applicable, that the *Illustration* assumes that the *Member* will remain contracted-out of the State pension arrangements until State pension age or earlier *Retirement date*.

A2.3.2 Investments

The *Provider* must include a statement to the effect that certain general assumptions have been made about the nature of the investments made for the purposes of the *Member's* money purchase benefits and their likely performance, which may not correspond with the investments actually made for those purposes, or their actual performance.

A2.3.3 Illustration in real terms

The *Provider* must include a statement to the effect that the *Illustration* is expressed in today's prices. The *Provider* must also include a statement of the assumptions made about increases in the annual rate of a *Member's* pension in payment.

Note: where the *Scheme* does not provide for a pension which increases in line with *RPI*, the *Provider* should consider including a statement to this effect and/or an indication of how the *Member* could use the fund to purchase an RPI-linked pension, where possible.

A2.3.4 The actual amount of any pension payable

The *Provider* must include a statement to the effect that the actual amount of any pension payable to the *Member* or a beneficiary under the *Scheme* will depend on considerations, including the actual performance of investments and the cost of buying an annuity at the time the pension becomes payable, which may be different from the assumptions made for the purpose of providing the *Illustration*.

Note: the *Provider* should consider making it clear that the *Member's* eventual pension may differ significantly from the *Illustration*, because it will depend on what actually happens in practice, which may differ significantly from the assumptions made.

A2.3.5 Future contributions

Where the *Illustration* includes *Future contributions*, the *Provider* must include a statement specifying the assumptions made in relation to future contributions to the *Scheme* by the *Member* or on the *Member's* behalf (see paragraph 9).

Notes:

- where appropriate, the *Provider* could make reference to *Scheme* documents already issued to the *Member*, rather than setting out full details in the information accompanying the *Illustration*. Where this is done, it may be sufficient to state that contributions will continue at the current rate rather than specifying the rate concerned – however, a more detailed explanation may be needed where, for example, contributions are related to age or service or depend to some extent on *Member* choice)
- the *Provider* must specify the assumptions made in relation to the future growth of contributions, either in relation to the contributions themselves or, where the *Illustration* includes *Future contributions* which are related to future earnings, in relation to the future growth of earnings. The *Provider* should consider stating either the initial amount of contributions, or the earnings on which contributions are based, as appropriate.
- where the *Illustration* includes *Future contributions* which are related to future earnings, the *Provider* should consider including a statement that, although in practice earnings in general have grown faster than prices, earnings progression for any particular individual may differ markedly from both price and earnings inflation
- if contributions are fixed in nominal terms, the *Provider* should consider including an explanation that this represents a reducing real rate of contribution in relation to the assumption made about future increases in *RPI*
- where appropriate, the *Provider* must state that the *Illustration* includes tax relief in respect of *Future contributions* which is expected to be reclaimed and credited to the *Scheme* for the benefit of the *Member* (see paragraph 18)
- where no *Future contributions* have been included in the *Illustration*, this must be stated.

A2.3.6 Contracted-out rebates

Where appropriate, the *Provider* must state that the *Illustration* assumes that the *Member* will remain contracted out until his or her *Retirement date* (see paragraph 19).

A2.3.7 Spouse's and civil partner's pensions

The *Provider* must include a statement of the assumptions made about the payment of a pension to the spouse or civil partner of a *Member*, or otherwise.

Note: where the *Illustration* includes an allowance for a contingent spouse's or civil partner's pension (see paragraph 12.1), the *Provider* must state this, and should also include either

- the age of the *Member's* spouse or civil partner at the *Illustration date*
- or
- the difference in the ages of the *Member* and the *Member's* spouse or civil partner,

as used in the calculations. The *Provider* should also consider stating whether the details of the spouse or civil partner have been assumed by the *Provider*, have been taken from the *Provider's* records or have been specified by the *Member*, or making general reference to what has been assumed.

A2.3.8 Other assumptions

The *Provider* should consider giving details of the other assumptions specified in this *Technical Memorandum*, and any other assumptions which have been made by the *Provider*, such as assumptions relating to

- charges or expenses
- the rate used for accumulating the existing fund and the *Future contributions* (see paragraph 15)
- the interest rate used in calculating the *Annuity rate* used to convert the *Member's* projected fund into pension.

A2.4 Relevant dates

The *Provider* must state the *Retirement date* and *Illustration date* used in the calculation.

A2.5 Provision of subsequent *Illustrations*

Where the *Provider* is providing an *Illustration* but does not intend to provide subsequent *Illustrations* unless further payments are received (because the *Legislation* does not require such *Illustrations* to be provided; see paragraph 4.2), the *Provider* must include a statement notifying the *Member* that this is the case.

A2.6 Identifying the *Member* and the *Scheme*

The *Provider* should consider what information is needed to identify the *Member* and the *Scheme* concerned - possible items include:

- the *Member's* name
- the *Member's* National Insurance Number
- the *Member's* date of birth
- the name of the *Scheme* and, where the *Illustration* is shown as a single total amount for more than one fund and/or contracts with the same *Retirement date* (see paragraph 4.8.2), sufficient information for the *Member* to be able to identify which funds and/or contracts have been included in the *Illustration*

A2.7 Frequency of payment of pensions

Where the amount of pension illustrated is expressed as an amount payable monthly (see paragraph 13.1), but the *Scheme* provides that a pension can only be paid less frequently than monthly, the *Provider* should consider giving an explanation of this.

A2.8 *Current fund*

The *Provider* should consider stating the value of the *Member's Current fund* and, where this has been estimated, a statement to this effect. Where the *Current fund* is invested in a "with-profits" fund or a deferred annuity contract, the *Provider* may disclose an amount for the *Current fund* which is consistent with the information to which the *Member* is accustomed to receiving, even if this differs from the *Asset value* which has been used as the basis of the *Illustration* provided (see paragraph 6.7). Where this is the case, the *Provider* should consider giving an explanation or definition of the amount which has been disclosed.

Notes:

- the *Member* will receive a statement of the value of the current fund as part of the *Annual benefit statement*. This may have been calculated as at a different date than value of the *Current fund* used in the *Illustration* (which will be calculated as at the *Illustration date*). Even where these dates coincide, the *Current fund* may have been adjusted as provided in paragraph 8.1.2 (a)-(c). Where these values differ, the *Provider* is not required to quote the *Current fund*, but may wish to do so with a suitable explanation
- where the *Provider* has omitted one or more of the items mentioned in paragraph 8.1.2 (a)-(c) from the *Current fund*, and there are no *Future contributions* in respect of the *Member*, the *Provider* should consider including an appropriate explanation of this, unless the amount(s) concerned are negligible.

A2.9 Contracted-out benefits

- A2.9.1 The *Provider* should consider stating the amounts paid in the *Scheme (statement) year* by the government as contracting-out rebates, together with any explanation needed.
- A2.9.2 The *Provider* should consider giving an explanation of the reasons why a *Member* may be advised to contract back into the State earnings-related pension arrangements at some stage, even though the *Illustration* has been produced on the basis that the *Member* remains contracted-out until retirement or State pension age.
- A2.9.3 Where the *Member's* benefits consist of a money-purchase benefit underpinned by an amount under the Guaranteed Minimum Pension provisions of the State pension arrangements (GMP), the *Provider* should consider including either
- a comment to the effect that the actual benefit would not be less than the GMP, without giving any further details
- or
- an explanation of the GMP underpin
- or
- an accompanying illustration of the amount of pension in respect of the GMP.

A2.10 Death benefits (other than spouses' or civil partners' pensions)

- A2.10.1 Where the pension illustrated includes an allowance for a benefit on death of the *Member* after retirement, other than a spouse's or civil partner's pension, the *Provider* should consider giving an explanation of this (see paragraph 13.2.1).
- A2.10.2 The *Provider* should consider giving details of death benefits before retirement and any death benefits after retirement not taken into account in the calculation of the *Illustration*.

A2.11 Tax relief

The *Provider* should consider stating the amounts paid in the *Scheme (statement year)* by the government as tax relief, together with any explanation needed (for example, that the amount of tax relief shown may omit any higher rate relief received direct by the *Member* rather than being invested directly into the pension arrangement).

A2.12 Investments

Where a *Member* has a range of investment choices within the arrangement, the *Provider* should consider giving an explanation of the different characteristics (as regards both risk and return) of alternative future investment strategies.

A2.13 Guarantees

The *Provider* should consider giving a description of any guarantees which may apply, such as guaranteed annuity rate(s).

A2.14 Transfers

Where

- a transfer of part or all of a *Member's* benefits from one arrangement to another was in hand at the *Illustration date*

or

- a transfer value has been received in respect of the *Member* in the year preceding the *Illustration date*,

the *Provider* should consider giving a warning about possible double-counting or omissions if *Illustrations* from the two arrangements produced on different dates are added together.

A2.15 Pensions debit or earmarking orders

Where relevant, the *Provider* should consider stating that the benefits are subject to a pensions debit or earmarking order.

A3. The provision of further illustrations

A3.1 Further illustrations may be provided, either together with or separately from the *Illustration*.

Note: for example, illustrations may be provided which

- show the effect of further contributions or various specimen rates of contributions (this may be particularly appropriate where there are no *Future contributions* included in the *Illustration*)
- reflect more closely the *Member's* actual circumstances (for example, the *Member's* target retirement date where this differs from the *Retirement Date*)
- reflect more closely the terms of the *Scheme*
- provide a measure of the sensitivity of results to changes in one or more of the assumptions (for example, the effect of a 1% per annum variation on investment return or the interest rate used in calculating the *Annuity rate*)
- provide additional information on the potential results (for example, the use of stochastic illustrations to illustrate the relationship between risk and return).

A3.2 If more than one illustration is provided by the *Provider* to the *Member*, it must be made clear to the *Member* which is the *Illustration*.

A3.3 For the avoidance of doubt, the basis set out in this *Technical Memorandum* is not intended to constrain the bases or methods that may be used to provide other illustrations to *Members*.

Note; there may of course be other constraints on what can be provided, such as FSA rules for FSA-regulated firms.

A3.4 Where additional illustrations are provided (either together with or separately from the *Illustration*), *Providers* should consider explaining why additional illustrative figures have been given; reference back to the purpose of the *Illustration* may be relevant in this connection. *Providers* should also consider making the *Member* aware that the various illustrations are alternatives and should not be added together.

APPENDIX B: PROJECTED CONTRACTED-OUT REBATES FOR TAX YEARS 2012-13 AND LATER

B1 General

- B1.1 For the purposes of paragraph 19, the amount of National Insurance contracted-out rebates for Appropriate Personal Pensions (APPs) and Contracted-out Money Purchase Schemes (COMPS) should be calculated by multiplying an age- and year-specific rebate rate, expressed as a percentage of relevant earnings, by the amount of relevant earnings. Relevant earnings in a year are earnings between the annualised Lower Earnings Limit (or Qualifying Earnings Factor (QEF)) and the annualised Upper Earnings Limit (UEL). This Appendix describes how to determine both the relevant earnings and the rebate rate as a percentage of relevant earnings for years 2012-13 and later. For APPs the rate of rebate as a percentage of relevant earnings differs for three different accrual rate bands under the State Second Pension (S2P) – paragraph B2.1 describes how this affects the calculation of rebate amounts. The estimation of future earnings for the purpose of the estimation of future rebates should be consistent with that used for the estimation of other future contributions (see paragraph 10).
- B1.2 Where age-related rebate rates (as a percentage of relevant earnings) have been specified for the relevant financial year in Orders made under the Pension Schemes Act 1993, *Providers* must use these rates. These include allowance for different rates of rebates to apply to different bands of earnings for rebates for APPs. For years beyond those covered by the most recent Order (2012-13 and later), figures for rebate rates as a percentage of relevant earnings for all relevant future years should be obtained from the Government Actuary's Department (GAD) website, at www.gad.gov.uk. These figures assume that the "cap" on rebates, which will apply for tax years 2007-08 to 2011-12 inclusive, will remain in force after April 2012. Where calculations are being made in respect of APPs, the rebate rates found on the GAD website are those applying to earnings in Band 3 of S2P and appropriate multiples of the rates should be used for earnings in other bands (see paragraph B2.1).

B2 Rebates for Appropriate Personal Pensions (APPs)

B2.1 Different rebate rates in different accrual rate bands

Accrual rates for the State Second Pension differ for three bands of earnings. These accrual rates are in turn reflected by the rebates for APPs which apply to earnings in each band. The three bands are:

Band 1: from the annualised Lower Earnings Limit (or the Qualifying Earnings Factor (QEF)) to the Low Earnings Threshold (LET) (£10,800 a year in 2002-2003 terms)

Accrual rate in Band 1: twice the accrual rate that would have applied under SERPS

Band 2: from the LET to (3 x LET – 2 x QEF)

Accrual rate in Band 2: half the accrual rate that would have applied under SERPS - the rebate rate as a percentage of relevant earnings in Band 2 should be rounded to 2 decimal places

Band 3: from (3 x LET – 2 x QEF) to the annualised Upper Earnings Limit (UEL)

Accrual rate in Band 3: the accrual rate that would have applied under SERPS.

B2.2 Determination of relevant earnings

The LET should be assumed to increase each year in line with the increases assumed in the *Member's* earnings. The QEF and the UEL should be assumed to increase each year in line with the increases assumed in the *RPI*. The bottom of band 3 is defined to equal (3 x LET - 2 x QEF). To obtain the QEF, the LET and the UEL and the bottom of Band 3 for the calculation of an amount of rebate in any tax year it is necessary first to obtain the latest figures officially specified, and then to increase them to the year in question in line with the assumed increases (see paragraphs 10.2.1, 14.2 and D). The figures for each tax year are generally specified in the Social Security (Contributions)(Re-rating and National Insurance Funds Payments) Order and in the Social Security Pensions (Low Earnings Threshold) Order published around three months before the start of the tax year.

B2.3 Timing of rebate payment

Rebates for APPs should be assumed to be paid by the National Insurance Contributions Office into the *Member's* fund in the middle of the tax year following the year of earnings to which they relate.

B2.4 Tax relief element paid along with contracted-out rebate

Allowance should be made for the payment of notional tax relief on the employee's share of the rebate for APPs. This is calculated as

$1.6\% \times (\text{basic rate of income tax} / 1 - \text{basic rate of income tax}) \times \text{relevant earnings}$

and is paid with the rebate. This should be based on the current basic rate of income tax. While the basic rate of income tax should be used in this context for all *Members* of APPs, regardless of their actual marginal rates of income tax, *Providers* should, in accordance with paragraph 18.1, take into account any known changes in the basic rate of income tax.

B2.5 Example

(Note that the example sets out the principles to be applied, albeit that the contracted-out rebates for 2007-08 to 2011-2012 have now been published and the figures on the GAD website for later years have been accordingly amended and differ from those in the example)

Calculation of the amount of the contracted-out rebate in 2012-13 for a *Member* of an APP aged 40 on the last day of the preceding tax year (that is, at 5 April 2012), who is projected to earn £27,000 in the year 2002-03.

Calculation of relevant earnings by band of S2P accrual

Projection of QEF, LET, UEL and bottom of Band 3 for 2012-13

LEL in 2002-03: £75 a week, so QEF in 2002-03 is £3,900 a year (= £75 x 52)
Hence QEF in 2012-13 can be projected as $£3,900 \times 1.025^{10} = £4,992$ a year

LET in 2002-03: £10,800 a year
Hence LET in 2012-13 can be projected as $£10,800 \times 1.025^{10} = £13,825$ a year

Hence bottom of Band 3 in 2012-13 is $(3 \times \text{LET} - 2 \times \text{QEF}) = £31,491$ a year
(= $3 \times £13,825 - 2 \times £4,992$)

UEL in 2002-03: £585 a week or £30,420 a year (= £585 x 52)
Hence UEL in 2012-13 can be projected as $£30,420 \times 1.025^{10} = £38,940$ a year

Projection of earnings for 2012-13

£27,000 in 2002-03 earnings terms, thus projected as $£34,562 (= £27,000 \times 1.025^{10})$ in 2012-13. The person's earnings fall into all three bands.

Calculation of rebate

The rebate rate applicable to Band 3 earnings is 5.3% (from the GAD website). The amount of the rebate is therefore

Band 1: $2 \times 5.3\% \times (£13,825 - £4,992)$	=	£936
Band 2: $\frac{1}{2} \times 5.3\% \times (£31,491 - £13,825)$	=	£468
Band 3: $5.3\% \times (£34,562 - £31,491)$	=	£163
Total:	=	£1,567

Note: the percentage for Band 2 is taken to 2 decimal places (see paragraph B2.1).

This amount should be assumed to be paid into the *Member's* fund in the middle of the tax year following the one to which it relates – that is, in this case, at the end of September 2013.

The tax relief element would be

$$1.6\% \times (0.22 / 0.78) \times (£34,562 - £4,992) = £133$$

This amount should also be assumed to be paid into the *Member's* fund at the end of September 2013.

B3 Rebates for Contracted-out Money Purchase Schemes (COMPS)

B3.1 Timing of rebate payment

Part of the rebate for COMPS is paid after the end of the tax year by the National Insurance Contributions Office direct to the *Scheme*. The other part should be assumed to be paid into the *Scheme* during the year on a uniform monthly basis. The amount paid into the *Scheme* during the year should be assumed to be (for the 2006-07 tax year – the figure will vary for future tax years) 2.6% of relevant earnings, and the amount payable after the end of the tax year should be calculated as:

(Total rebate rate (obtained from the GAD website) - 2.6%) x relevant earnings

The amount payable after the end of the tax year should be assumed to be paid in the middle of the tax year following the tax year of earnings to which they relate.

B3.2 Calculation of relevant earnings

The calculation of relevant earnings and of the Qualifying Earnings Factor and Upper Earnings Limit should follow that for the calculation for *Members* of APPs as set out in section B2 above.

B3.3 Example

(Note that the example sets out the principles to be applied, albeit that the contracted-out rebates for 2007-08 to 2011-2012 have now been published and the figures on the GAD website for later years have been accordingly amended and differ from those in the example)

Calculation of the amount of the contracted-out rebate based on earnings in 2012-13 for a *Member* of a COMPS aged 40 on the last day of the preceding tax year (that is, at 5 April 2012), who is projected to earn £27,000 in the year 2002-03.

Projection of relevant earnings

Projection of LEL (QEF) and UEL for 2012-13

LEL in 2002-03: £75 a week, so QEF in 2002-03 is £3,900 a year (= £75 x 52)
Hence QEF in 2012-13 can be projected as £3,900 x 1.025¹⁰ = £4,992 a year

UEL in 2002-03: £585 a week or £30,420 a year (= £585 x 52)
Hence UEL in 2012-13 can be projected as £30,420 x 1.025¹⁰ = £38,940 a year

Projection of earnings for 2012-13

£27,000 in 2002-03 earnings terms, thus projected as £34,562 (= £27,000 x 1.025¹⁰) in 2012-13.

Calculation of rebate

Rebate rate as a percentage of relevant earnings, obtained from the GAD website, is 4.2% of relevant earnings.

The amount of the rebate is therefore:

(a) part paid in 2012-13

$$2.6\% \times (£34,562 - £4,992) = £769; \text{ and}$$

(b) excess over "in year" part, paid at mid point of 2013-14, that is, at the end of September 2013:

$$1.6\% \times (£34,562 - £4,992) = £473.$$

APPENDIX C: NORTHERN IRELAND LEGISLATION

Pension Schemes Act 1993 (c.48)

Section 1
Section 113

The Personal Pension Schemes (Disclosure of Information) Regulations 1987. SI 1987/1110

The Occupational Pension Schemes (Disclosure of Information) Regulations 1996. SI 1996/1655

The Stakeholder Pension Schemes Regulations 2000. SI 2000/1403

The Occupational and Personal Pension Schemes (Disclosure of Information) Amendment Regulations 2002. SI 2002/1383

Pension Schemes (Northern Ireland) Act 1993 (c.49)

Section 1
Section 109

The Personal Pension Schemes (Disclosure of Information) Regulations (Northern Ireland) 1987. SR 1987 No. 288

The Occupational Pension Schemes (Disclosure of Information) Regulations (Northern Ireland) 1997. SR 1997 No. 98

The Stakeholder Pension Schemes Regulations (Northern Ireland) 2000. SR 2000 No. 262

The Occupational and Personal Pension Schemes (Disclosure of Information) (Amendment) Regulations (Northern Ireland) 2002. SR 2002 No. 410

APPENDIX D: ASSUMPTIONS

D1 Mortality after retirement

- D1.1 The mortality tables used in respect of the *Member* and the *Member's* spouse or civil partner shall be PMA92 (for males) and PFA92 (for females), as appropriate, in each case with the medium cohort mortality improvement rates. These mortality tables are published by The Actuarial Profession; they show mortality rates for each future year. For each individual, the set of mortality rates used shall be those applicable to that individual's year of birth.

D2 Rates of increase in the Retail Prices Index and earnings

- D2.1 *RPI* must be assumed to increase at 2.5% per annum compound.

- D2.2 Earnings (including any earnings-related indices such as National Average Earnings) must be assumed to increase at 2.5% per annum compound.

Note: it is generally expected that, in the medium to long term, earnings inflation will run ahead of price inflation. However, assuming a rate of earnings inflation higher than the rate of price inflation would add extra complexity to the calculations involved. Furthermore, the benefits derived from a money purchase arrangement where contributions are related to earnings will depend upon the pattern of earnings increases throughout each individual's career. In practice, different *Members* will experience a wide variety of patterns of earnings: this is one of the reasons why individual *Member's* actual pensions may differ significantly from the amounts illustrated (see paragraph 4.5).

D3 Accumulation rate before retirement

- D3.1 The maximum annual accumulation rate is a monetary (nominal) annual rate of 7.0% compound. See paragraph 15.1.2 for the circumstances in which a lower rate should be used.

D4 *Annuity rate*

D4.1 The *Annuity rate* must be calculated on the basis of annual interest equal to 50% of the sum of the FTSE Actuaries Government Securities Index-Linked Real Yields over 5 years assuming

- (a) 5% inflation
- and
- (b) 0% inflation

minus 0.5%

The interest rate must be rounded to the nearest multiple of 0.2%. *Providers* should round down interest rates which are an intermediate exact multiple of 0.1%.

The *Annuity rate* may be calculated by appropriately interpolating from annuity rates based on integral rates of interest.

Note: the published interest rates are convertible half-yearly but this should be ignored for the purpose of deriving the interest rate to be used.

D5 *Expenses at retirement*

Providers must assume expenses of 4% of the value of the annuity at retirement when calculating the *Annuity rate* (see paragraph 16.2).