Department for Work and Pensions

Consultation

Revision of the annuity factors employed by the Financial Assistance Scheme

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	London
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Website	www.dwp.gov.uk/fas
Date	xx March 2008

Dear Sir or Madam

Revision of the annuity factors employed by the Financial Assistance Scheme

The Government announced substantial reforms to the Financial Assistance Scheme on 17 December 2007 which included payment at 90% of accrued pension from the later of scheme normal retirement age (NRA) and age 60 and the inclusion of some schemes with solvent employers.

The reforms announced in December are being introduced in phases. Our priority is to ensure that eligible members receive payment at 90% and from NRA as soon as possible. Draft regulations to achieve this aim, subject to separate consultation, are being published at the same time as this consultation exercise. Further details of those draft regulations and the reforms announced on 17 December can be found on the FAS website: http://www.dwp.gov.uk/fas; or on the Department's website at: www.dwp.gov.uk/publications/dwp/2008/FinancialAssistanceScheme(MiscellaneousAmendments)Regulations2008.pdf

Implementation of these initial changes provides a suitable opportunity to review the annuity factors that are currently employed to approximate annual rates of pension that could be secured by cash sums when FAS payments are determined in certain circumstances (for example where members may have taken a lump sum as part of their scheme benefit). This consultation document seeks views on the proposed revision of these factors.

The factors we are proposing in this consultation will lead to lower rates of approximated pension than the factors currently employed and thus lead to higher assistance payments.

When the changes to make FAS payments at 90% from NRA are applied operationally any beneficiaries already assessed for FAS payments will be reassessed. Where annuity factors have been used in the calculation of a member's FAS entitlement, the revised factors will be used in that reassessment.

Members will be paid the difference between their new entitlement and what they have already received, in addition to receiving reassessed payments going forward. We intend to apply the revised factors in this way because operational considerations make it more efficient for us to do so at the same time as we make the changes associated with paying 90% from NRA.

The reforms to the FAS announced in December 2007 will mean that annuity factors are likely to be required in an additional range of circumstances (for example, in relation to providing lump sums to members). We will be consulting further on these aspects as part of the process to put in place further parts of the package of improvements to FAS. In the meantime we welcome initial views on whether the basis of the revised factors described in this consultation might also be appropriate for these additional functions as well as for converting cash sums into pensions for the purposes of determining current FAS payment entitlements.

Target audience
The consultation is technical in nature and is primarily aimed at pension industry professionals and others with an interest in defined benefit occupational pension schemes. However, views from the wider public are also welcome.

Where can I find the consultation document?
The consultation document is available on the Department's website at: www.dwp.gov.uk/publications/dwp/2008/revision-of-annuity-factors-in-FAS.pdf or alternatively the FAS website: http://www.dwp.gov.uk/fas.

How can people respond to this consultation?
The consultation period begins on 06 March 2008 and runs until 18 April 2008.

The use of the annuity factors in the determination of FAS payments is provided for in legislation (specifically in Schedule 2 to the FAS Regulations 2005/1986, further detail on relevant legislation is provided in the consultation document itself). However the detail of the operation of the factors and the factors themselves are not contained in legislation and consultation on the factors is not required by statute. A consultation period of six weeks is in line with departmental best practice in relation to limited technical consultations.

We would be grateful for your comments on any of the points covered by the regulations. Please ensure that your response reaches us by the closing date.

Please send consultation responses to:

Financial Assistance Scheme Consultation
Department for Work and Pensions
Private Pensions Policy
Adelphi
3rd Floor
1-11 John Adam Street

London
WC2N 6HT
E-mail - fas-responses@dwp.gsi.gov.uk

This consultation applies best practice from the Cabinet Office Code of Practice on consultation.

If you have questions about the proposals in this consultation, please write or e-mail them to the above addresses.

When responding, please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of a larger organisation please make it clear who the organisation represents and (where applicable) how the views of members were assembled.

A list of those to whom this document has been sent is attached. If you have any suggestions of others who may wish to be involved in this process, please contact us.

All information contained in your response, including personal information, may be subject to publication or disclosure if requested under the Freedom of Information Act 2000. By providing personal information for the purpose of the public consultation exercise, it is understood that you consent to its disclosure and publication. If this is not the case, you should limit any personal information which is provided, or remove it completely. If you want the information in your response to the consultation to be kept confidential, you should explain why as part of your response, although we cannot guarantee to do this. We cannot guarantee confidentiality of electronic responses even if your IT system claims it automatically.

If you want to find out more about the general principles of Freedom of Information and how it is applied within DWP, please contact:

Charles Cushing
Department for Work and Pensions, Adjudication and Constitutional Issues,
Information Policy Division,
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More information about the Freedom of Information Act can be found on the website of the Ministry of Justice.

What will we do after the consultation?
A summary of responses (including the next steps to be taken) will be published online (and linked from the same web page as above). Paper copies will be available on request.

We value your feedback on how well we consult. If you have any comments on the process of this consultation (as opposed to the issues raised) please contact our Consultation Coordinator:

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Britannia House,
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Hull
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Email: roger.pugh@dwp.gsi.gov.uk

Yours faithfully

Mike Le Brun

Head of Policy and Legislation - Financial Assistance Scheme

Copied to:

Age Concern
Amicus
Association of British Insurers
Association of Consulting Actuaries
Association of Pension Lawyers
Auditing Practices Board
Board for Actuarial Standards
British Chambers of Commerce
Community the Union
Confederation of British Industry
Department for Business,
Enterprise & Regulatory Reform
Engineering Employers' Federation
Federation of Small Businesses
Financial Services Authority
GMB Union
Help the Aged
HM Treasury (MOCOP)
Independent Pensions Research
Group
HM Revenue & Customs
Institute of Chartered Accountants in
England and Wales
Institute of Chartered Accountants in
Scotland
Institute of Directors
Institute of Payroll and Pensions
Management
Investment Management Association
National Association of Pension Funds

National Consumer Council
National Pensioners' Convention
The Pensions Advisory Service
Pensions Action Group
Pensions Ombudsman
Pension Protection Fund
Pensions Regulator
Regulatory Impact Unit
SAGA
Social Security Policy and Legislation
Division, DSD, Northern Ireland
Small Business Service
T&G Union
The Association of Corporate Trustees
The Faculty of Actuaries
The Institute of Actuaries
The Law Society
The Law Society of Scotland
The Pensions Management Institute
The Scottish Executive
The Society of Pension Consultants
The Welsh Assembly
Trades Union Congress
UNISON

We have also sent copies of the
consultation document to private
individuals who have expressed an
interest in participating in the
consultation exercise

REVISION OF THE ANNUITY FACTORS EMPLOYED BY THE FINANCIAL ASSISTANCE SCHEME

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Background and Proposals

The need for factors

1. In general, FAS assistance is calculated as a top up to the "actual pension" that a member is deemed to receive as a result of their service within a qualifying pension scheme. So if a member receives all of their scheme benefits by way of a pension payment then that pension payment is deducted from 80% of their 'expected pension' to provide their rate of assistance.

2. "Actual pension" is a term defined in paragraph 2 of Schedule 2 to the FAS Regulations as the annual rate of annuity which has been, can be or could have been purchased for the beneficiary as at a particular date with the assets available. The FAS Regulations also explain how the annual rate of annuity that has been, can be or could have been purchased for a member is to be determined. This depends on the circumstances of the member and the information available.

3. In most current cases, the trustees, managers or advisers of the pension scheme can tell the FAS scheme manager the appropriate annual rate of annuity. However, there are circumstances in which the rate is not known, even though the scheme member has received some benefit or payment from his or her scheme. In particular, the member may have received a lump sum, either instead of or as well as a pension from their scheme assets (which may be an 'interim pension' paid during wind-up, or a pension paid by way of annuity secured at the end of wind-up).

4. In other cases, where scheme assets or the annuity that could be secured with them were small, members may have had their entire rights in their pension schemes extinguished in return for a lump sum payment called trivial commutation or 'winding-up lump sum'. Some other members may have had their scheme assets transferred to the National Insurance Fund in return for full or partial elimination of the deduction from their state additional pension (SERPS/S2P) relating to contracted-out membership in their schemes. In other cases members may have taken transfer payments from their schemes. In all such cases the full rate of annuity that members could have secured with the assets allocated to them at the end of wind-up may be unknown.

5. In circumstances such as these, where it is not possible to determine the annual rate of annuity on the basis of the information available, the FAS scheme manager must determine that rate "on the basis of the sum which would discharge the liability of the scheme to the beneficiary and to such other matters as he considers relevant" (paragraph 2(4) of Schedule 2 to the FAS Regulations). The annuity factors are some of the "other matters" which are then used to make such determinations.

6. Annuity factors are also used in the determination of initial payments (paid to eligible beneficiaries whilst schemes are still winding up) where members have taken a lump sum either instead of or as well as an 'interim pension' from their scheme. The annuity factors are additionally used in relation to initial payments where members have taken 'provisional transfers' during wind-up that may then be topped up by a further transfer amount at the end of wind-up. Paragraph 10(a) of Schedule 2 of the FAS Regulations modifies paragraph 2 of Schedule 2 for initial payments so that it provides that where the "annual rate of [interim] pension…was determined following commutation…[it] shall be redetermined on the basis that there was no such commutation"; and "where the scheme manager is satisfied that it is not possible for him to determine the annual rate of [interim] pension … he shall determine the annual rate of pension on the basis of that portion of the assets of the qualifying pension scheme … provisionally allocated to the member … and such other matters as the scheme manager considers relevant".

The factors used since 2005

7. The April 2005 consultation on the 2005 FAS Regulations included reference to the use of factors, and set out a proposed actuarial basis for the factors to be adopted. The proposed basis substantially followed that set out by the Pension Protection Fund for valuations carried out under sections 143 and 179 of the Pensions Act 2004 at the time. No responses to the consultation exercise suggested use of a different basis for the factors. The required factors were calculated by the Government Actuary's Department (GAD). They have been used by the FAS Operational Unit (FAS OU) in the calculation of assistance from 2005 onwards.

Reviewing the factors

8. The substantial reforms to FAS arising from the Government's commitments announced on 17 December 2007 to pay assistance to qualifying members to 90% levels, provides a suitable opportunity to review the factors.

9. This review is taking place alongside the wider reform of the FAS. Consultation on draft regulations providing for some of the announced extensions is taking place at the same time as this consultation exercise, but the period of written consultation on those draft regulations will be for a shorter period of time than the consultation period for the annuity factors. The shorter consultation period for the draft regulations should help to ensure that the regulations can be implemented at the earliest possible opportunity, after the due process of parliamentary approval.

10. The 2005 consultation exercise suggested that the factors should seek to "approximate fairly closely deferred annuity rates". For those over

pension age, it said that immediate annuity rates should be relevant. We intend that the revised factors should be calculated on the same understanding. In particular, it is proposed that revised factors should be based on:

> the rate of pension which could be secured by bulk annuity purchases, taking into account:
  - no indexation of the annuity once in payment, and revaluation in deferment in line with increases in RPI capped at 5% a year (with the cap applied cumulatively over the whole period of deferment);
  - 50% survivors' benefits (based on a definition of survivor typically used in FAS scheme rules, i.e. to include financially dependent/interdependent survivors);
  - 5 year guaranteed death benefit; and
  - payment from scheme normal retirement age (NRA).

11. These requirements have been followed in the illustrative factors which GAD has calculated for DWP. Hence there are different deferred annuity factors for those below scheme NRA for different scheme NRAs.

12. These design constraints are only a little different from those used in deriving the factors used since 2005. The factors need to reflect the rates of pension which can be secured by bulk annuity purchase. Insurance companies selling annuities generally hold government bonds (gilts) and other similar assets. Therefore changes in the yield on gilts can often affect the price of annuities and thus the rate of pension which can be secured with an annuity from the given lump sum used to purchase it. As a consequence it is appropriate to adopt factors which vary over time in line with changes in the yields available in the market on gilts. Hence the factors proposed in this consultation document are, like those used since 2005, in the form of central factors based on particular yields applicable before and after scheme NRA, together with "market value adjustment" factors ('MVAs') designed to take into account market conditions on the effective date of the calculation.

13. Factors which allowed for pensions to survivors calculated in 2005 were very similar for men and women, the factors for women being very slightly higher than those for men. Hence it was decided to use uni-sex factors based on those calculated for women. It is proposed to retain this approach, though assumptions for men are given below as well. The use of female factors for men results in the 'actual pension' being very slightly less, and the FAS assistance very slightly more, than if male factors were used.

The assumptions used to calculate the central factors quoted

14. Details of the assumptions used to calculate prices by insurance companies selling annuities and deferred annuities are not readily available. The market is limited (though it has more participants than a few years ago), and competition between market participants on the basis of price means that details of assumptions used are not in the public domain. Increasing awareness of the likelihood and magnitude of future improvements in longevity may have served to increase prices in recent years, while increased competition may have decreased prices. However, there is no single "right answer" as to the assumptions to use. This consultation document invites respondents to comment on the proposals set out in **annex A**.

15. The proposals are based on work by PricewaterhouseCoopers (PwC) when they peer-reviewed the updated model of the financing of FAS that DWP commissioned from GAD in 2007. PwC suggested a basis as an approximation of buy-out costs which was adopted by DWP and GAD in modelling FAS finances. Some details of the assumptions were given in the peer review report published by DWP in December 2007 (http://www.dwp.gov.uk/lifeevent/penret/penreform/fas/pwc-validation-report.pdf). Given this, it seems sensible to propose that the same assumptions for the factors should be used by the FAS OU in practice. These assumptions are contained in **annex A** to this document.

16. The proposed assumptions include reference to longevity tables: relevant background on projecting pensioner mortality is provided in **annex B**.

The new factors

17. Examples of central factors calculated on the proposed basis, together with factors calculated on the current basis are provided at **annex C** The new factors are higher than the existing factors in all cases, and hence, for a given lump sum taken from the pension scheme, imply a lower rate of 'actual pension' taken into account in the calculation of FAS assistance. At age 65, the proposed new central factor, based on an immediate annuity, is 17.27, while the existing central factor is 14.83. For a person aged 55 and with an NRA of 65, the proposed new central factor, based on a deferred annuity, is 15.49, while the existing central factor is 13.00.

Market value adjustments

18. It is proposed that the same market value adjustment factors as have been used since 2005 with the existing factors remain in use with the new factors. For completeness, the adjustment factors are set out in **annex D** to this paper, together with brief instructions as to their use.

Examples of the effect of changing the factors

19. Examples of the effects of changing the factors based on typical circumstances in which they might be used to assess a member's FAS entitlement are provided at **annex E**. All the examples demonstrate a reduction in the calculated amount of 'actual pension'. A lower level of 'actual pension' would lead to an increase in the level of FAS entitlement.

Application of revised factors

20. It should be noted that we intend to apply revised factors to all members (and in relation to any survivors) when FAS is reassessed at 90% from NRA, including any members to whom payments have already been made. Members will be reassessed on the basis of entitlement to 90% from the later of NRA (capped at age 60) and 14 May 2004 when FAS was first announced. It should be noted that whereas FAS cannot be paid from below age 60, even when the NRA is below 60, an NRA below 60 may be used to determine the "actual pension" or "interim pension" in relation to cash sums taken by members whose NRA is below 60. This helps to ensure a reasonable approximation of the annuity rate which could alternatively have been secured for the member using the cash sum.

21. Where annuity factors have been used in the calculation of a member's FAS entitlement, the new factors will be used in that reassessment. Members will be paid the difference between their new entitlement and what they have already received, in addition to receiving reassessed payments going forward. We intend to apply the revised factors in this way because operational considerations make it more efficient for us to do so at the same time as we make the changes associated with paying 90% from NRA. We do not expect to take this approach in respect of any changes resulting from future reviews of the operation of actuarial factors. Any such changes would be applied solely to future payments.

Future use of actuarial factors by the FAS

22. Ministers announced a significant extension to the FAS on 17 December 2007 following the Young review undertaken into the alternative use of the residual assets in qualifying pension schemes.

23. The Young review concluded that to provide a guaranteed benefit level, the best value would come from Government absorbing all the available residual assets in the schemes and then making the associated payments as they fall due.

24. In relation to the members for whom assets are taken in FAS will no longer make top-up payments but will take on responsibility for all payments. In some cases this will mean that actuarial factors will be used in an additional range of circumstances. These might include:

- Commutation of assistance payments into lump sums (subject to a member's share of their scheme's fund and any restrictions on the commutation of Guaranteed Minimum Pension rights).
- Assessing the value of a scheme member's share of scheme assets against their headline FAS entitlement. Taking in all of the residual assets in qualifying schemes will mean in some cases taking over assets that would otherwise be used to purchase fully funded pensions, or pensions above the 90% FAS level. We intend to ensure that the legal entitlements of such members are met by FAS payments. In order to identify such members we will need to establish the rate of headline pension that could have been secured for them by way of annuity purchase by their scheme. We intend to use actuarial factors to identify such members. We may also consider using actuarial factors to set the level of pension the member will receive (with appropriate FAS survivor benefits).

25. In addition, some members in ill health and unable to work will be able to apply for early payments from FAS. Those payments will be subject to actuarial reduction. We could employ these revised factors as the basis for devising relevant early retirement factors that will apply in such cases.

26. We will be consulting further on these aspects as part of the process to put in place the remaining parts of the package of improvements to FAS. But we welcome initial views on whether the basis of the revised factors described in this consultation might also be appropriate for these functions as well as for converting cash sums into pensions for the purposes of determining current FAS payment entitlements.

PROPOSED ASSUMPTIONS

	Proposed basis	Current FAS OU factors for comparison
Longevity		
Base table – males*	PMA92	PMA92
Age-rating – males*	none	none
Projection – males*	long cohort	medium cohort
Underpin – males*	2.0% a year	none
Base table – females	PFA92	PFA92
Age-rating – females	none	none
Projection – females	long cohort	medium cohort
Underpin – females	2.0% a year	None
Notes	For the factors, (deferred) annuity figures for 2007 are used	For the factors, (deferred) annuity figures for 2012 are used
Other demographic		
Proportion married and age disparities	90% of males, 80% of females at NRA or earlier death. Husbands 3 years older than wives	90% of males, 80% of females at NRA or earlier death. Husbands 3 years older than wives
Guarantee	5 year guaranteed death benefit	No guaranteed death benefit
Financial	Under both bases factors are calculated on "central" yields both before and after retirement, and MVAs are used to allow for actual market conditions on "as at" date of calculation	
Annual yield before retirement	Central rate of 2.0% with margin of -0.5%	Central rate of 2.0% with margin of -0.5%
Annual yield after retirement	Central rate of 4.5% with margin of -0.5%	Central rate of 4.5%, no margin
Expenses	2.0% (so divide factors calculated without expenses by 0.98)	None in factors

* not used, as uni-sex factors based on female annuity figures proposed/adopted

Notes

1. The above table shows that the proposed FAS annuity factors assume mortality improvements in line with the 'long cohort' projections under the '92 series' tables produced by the Continuous Mortality Investigation (CMI) of the UK actuarial profession, subject to an underpin of 2% a year (see **Annex B** for further explanation).

2. On 14 February 2008 the Pension Protection Fund (PPF) issued a consultation document proposing a revised actuarial basis for pension scheme valuations under sections 143 and 179 of the Pensions Act 2004 (http://www.pensionprotectionfund.org.uk/news-details.htm?id=6297). Such valuations are used, respectively, to determine whether the Board of the Pension Protection Fund should assume responsibility for a scheme and to set and calculate the risk-based pension protection levy. In each case, the valuation compares the scheme's assets with the estimated cost of purchasing insurance company annuities providing benefits at the PPF compensation level. However, for this purpose the PPF deliberately errs on the side of optimism: in other words, the PPF estimated cost of annuity purchase is somewhat less than the actual cost might be. Such an approach is adopted in order to mitigate the risk of the PPF Board assuming responsibility for a scheme which could, in fact, secure benefits with an insurance company at least at the PPF compensation level.

3. In last month's consultation document, the PPF proposed, in the light of recent developments in the annuity market, that the mortality improvements assumed for valuations under sections 143 and 179 of the Pensions Act 2004, which are currently in line with the 'medium cohort' projections under the '92 series' tables produced by the CMI, should be adjusted by the introduction of an underpin of 1.0% a year.

4. The proposed FAS annuity factors therefore assume stronger future improvements in mortality than implied by the PPF's approach, all other things being equal (in other words, use of the FAS factors results in a lower notional annuity rate and therefore a higher award of assistance). However, this is considered reasonable having regard to the PPF's approach as outlined above.

5. On 18 February 2008, the Pensions Regulator published for consultation a draft statement on the regulation of defined benefit pension schemes (http://www.thepensionsregulator.gov.uk/pdf/LongevityConsultationDocument.pdf) that proposed a new approach to looking at mortality improvement assumptions in the context of the scheme funding provisions of Part 3 of the Pensions Act 2004; it stated that, in the context of recovery plans submitted to the Regulator:

> mortality improvement assumptions that appeared to be weaker than the 'long cohort' projections under the CMI '92 series' tables would attract further scrutiny and dialogue with the trustees where appropriate; and

> assumptions which assumed that the rate of improvement tended towards zero, and did not have some form of underpin, would also attract further scrutiny.

6. These proposals by the Regulator relate specifically to schemes' technical provisions in the scheme funding context, rather than the generally higher cost of purchasing insurance company annuities. However, the proposed

mortality improvement assumptions for the FAS annuity factors are consistent with these proposals and, as expected, imply stronger future improvements in mortality than those which might attract scrutiny by the Regulator.

PROJECTING PENSIONER MORTALITY

1. Data on the mortality of pensioners of occupational pension schemes is gathered by insurance companies and some pension schemes. These data are passed to the Continuous Mortality Investigation (CMI) of the UK actuarial profession for analysis.

2. Standard mortality tables have been produced by the CMI for many years, which reflect both currently observed mortality and an allowance for future improvements. The '92 series' pensioner tables, published in 1999, were derived from information on those receiving annuities from life insurance companies whose benefits derived from occupational pensions – that is, people who had been members of occupational pension schemes where the liability for making the pension payments had been transferred to an insurance company around the time of retirement or where the scheme was administered by an insurance company. The data underlying the tables were for the years 1991-1994.

3. Pensioners with larger pensions tend to live longer than those with smaller pensions. Standard tables can reflect this by considering 'amounts' of pension rather than 'lives' in deriving mortality rates. In the 'amounts' tables, age-specific mortality rates at each age are an average weighted by pension amounts. Tables based on the deaths of pensioners with no weightings are termed 'lives' tables. The PMA92 tables cover males (M) and amounts (A) and the PFA92 table females (F) and amounts.

4. When considering future longevity, two aspects are important. One is the base table of mortality rates: currently observed mortality. The other aspect is the projection of future mortality improvements applied to the base table. Although the base data for the '92 series' tables relate to the years 1991-1994, various methods are used to project rates forward from 1992 to the (future) period under consideration. These projection methods generally produce what is known as a "two-way table", whereby the mortality rate depends both on age and the year in which the age is attained.

5. With such a table, the "year of use" approach incorporates changes in projected future mortality rates into calculations at different rates for different cohorts (that is, groups of people with different years of birth). For example, the "year of use" approach starting from 2008 calculates the life expectancy for a 65-year old in 2008 using the mortality rate for a 65-year old in 2008, the mortality rate for a 66-year old in 2009 and so on.

6. Analysis of the mortality of the UK population data suggests that those born between 1925 and 1945 have experienced higher rates of

mortality improvement than those born either side of that period. This is often referred to as a 'cohort effect'. Similar effects have been noted in the CMI data. As a result, the initial method used for projecting longevity improvements in the '92 series' tables has generally been replaced by approaches that take account of these "cohort effects". Three additional projections were produced in December 2002 – the short cohort (sc), medium cohort (mc) and long cohort (lc) projections. These incorporate higher rates of mortality improvement than the original '92 series' table for certain cohorts which are assumed to tail off, back to those assumed in the original '92 series' tables, by 2010, 2020 and 2040 respectively.

7. The '92 series' tables (including the cohort projections) all assume that mortality improvements will tend towards zero over the long term. A number of commentators have suggested that it is appropriate to adjust projected mortality improvement rates so that rates at each age improve each year by at least a minimum factor over the long term – for example underpins of 1.0%, 1.5% or 2.0% a year (the rates of improvement over the short term, where the cohort applies, are generally higher than this at most ages).

8. Other possible assumptions include taking a percentage of the mortality rates or the use of age adjustments or "age-ratings", whereby the mortality rate assumed for a person aged X in the year is the rate in the table or projection for someone aged X+D, say. These allow for the possibility that the base table mortality rates are too high or too low, though the associated projection is thought to be reasonable.

9. In August 2006 the Continuous Mortality Investigation issued a new set of tables, the '00 series', based on data for the years 1999-2002. In light of a range of views about which projection method was most appropriate for use and the increasing uncertainty surrounding projections, the CMI did not consider it appropriate to offer any standard projections to accompany the '00 series' tables. It is therefore for actuaries and other users of the tables to derive a suitable projection to allow for longevity improvements appropriate to the particular context. One method which has been used in practice is to apply the '92 series' cohort projections, often with the addition of underpins of the type described in paragraph 7.

10. For the '00 series' tables, pensioners were divided between those who retired at normal pension age and those who retired early (possibly on ill-health grounds), so three tables were produced - PNxy00 for normal retirements, PExy00 for early retirements and PCxy00 for the combined experience.

11. The CMI is also working on an investigation into the mortality of members of self-administered pension schemes (SAPSs). First results from this study were made publicly available in January 2008. It would appear that the mortality of members of such SAPSs was higher than

that of insured schemes. However, pending the conclusion of this study, most pension schemes continue to base mortality assumptions on the '92' or '00' series tables, with appropriate adjustment to reflect past and future mortality improvements.

EXAMPLE FACTORS

Examples of central factors on the proposed basis, with factors on the current basis (and with no guarantee period)

Age last Basis birthday	Proposed basis	Current FAS OU factors
	Guarantee as shown	No guarantee
Immediate annuities		
80 (no guarantee)	10.75	9.16
75 (no guarantee)	13.16	11.22
70 (no guarantee)	15.32	13.13
65 (5 yr guarantee where applicable)	17.27	14.83
60 (5 yr guarantee where applicable)	18.89	16.31
55 (5 yr guarantee where applicable)	20.29	17.55
50 (5 yr guarantee where applicable)	21.45	18.59
Deferred annuities (NRA = 65, with 5 yr guarantee from that age where applicable)		
60	16.44	13.97
55	15.49	13.00
50	14.63	12.12
45	13.83	11.30
40	13.07	10.54
35	12.34	9.83
30	11.63	9.15
25	10.96	8.52
20	10.31	7.93

THE MARKET VALUE ADJUSTMENT (MVA) ELEMENT OF THE ANNUITY FACTOR

1. The annuity factor to be used to derive a rate of "actual pension" from a lump sum is:
a) in the case of a pensioner member or a survivor
    ➢ a central annuity factor dependent on the individual's age[1]
        o times
    ➢ a market level adjustment based on conventional gilt yields on the date of the calculation (note that this is not dependent on the member's term to normal retirement age (NRA))
b) in the case of a deferred (non-pensioner) member
    ➢ a central annuity factor, dependent on the individual's age and NRA
        o times
    ➢ a market level adjustment based on conventional gilt yields on the date of the calculation (the same one as for pensioners)
        o times
    ➢ a market level adjustment based on index-linked gilt yields on the date of the calculation and on the individual's term to NRA (interpolated from table 2 appended below)

The market level adjustment based on conventional gilt yields shall be the index number shown in the second column of table 1 appended below, opposite the range of yields shown in the first column of that table in which falls the annualised yield compiled by the FTSE Actuaries' Government 10 year Fixed Interest Index on the relevant date[2].

The market level adjustment based on index-linked yields shall be:

$[(X - \text{yield } A_1) \times \text{market adjustment } B_2] + [(\text{yield } A_2 - X) \times \text{market adjustment } B_1]$
all divided by: $(\text{yield } A_2 - \text{yield } A_1)$

where:
▪ X is 50% of the sum of the FTSE UK Gilts Indices Index-Linked annualised Real yields[3] over 15 years on the certification date assuming:
    i) 5% inflation and
    ii) 0% inflation

▪ yield is the lower (A_1) and higher (A_2) of the % yields in row 1 of table 2 within which half-percentage range X falls

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[1] The age of the individual is the age attained by the individual at the last birthday before the date that the lump sum, transfer or trivial commutation was taken.
[2] FTSE UK Gilts Indices are printed daily in the Financial Times. These indices are not held for publication by the DWP.
[3] As above

- market adjustment is the market adjustment for the lower and higher yield in row 1 of table 2 (B_1 for yield A_1) and (B_2 for yield A_2) for the relevant term to NRA of the beneficiary taken from column 1 of table 2.

- For any dates where the yield is not available the yield for the nearest preceding date is used

The FAS market level adjustment factor for non-pensioners based on index-linked gilt yields is dependent on the term to NRA of the individual as well as the financial data on index-linked gilt yields. The table would be unfeasibly large if it were to have the level of breakdown into individual factors for different levels of financial data as for the conventional gilt yield table. Instead a table is used, which for each number of years to a member's NRA gives the market level adjustment factors applying at certain key yields (every half percentage point 1.0%, 1.5%, etc.). We interpolate between the factors relating to the key yields given immediately above and below the actual yield looked up, based on that actual yield.

Worked example of the market level adjustment factor

A transfer was taken on Friday 13th May 2005. The yields as shown in the Financial Times on Saturday 14th May are as follows:
FTSE UK Gilts Indices Index-Linked annualised Real yields over 15 years assuming:
  a) 5% inflation   1.45%
  b) 0% inflation   1.59%
The average of these is 1.52%. Let us assume that the relevant table was constructed so that the market level adjustment factors shown were:

	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%
Term to NRA -1	1.60	1.28	1.00	0.78	0.61	0.50	0.39	0.30	0.25
Term to NRA	1.55	1.25	1.00	0.80	0.65	0.53	0.43	0.35	0.30
Term to NRA +1	1.48	1.22	1.00	0.82	0.68	0.57	0.48	0.40	0.33

Then to derive the factor we would interpolate between 1.25 (the value at the relevant age when the yield was 1.50% exactly) and 1.00 (the value at the relevant age when the yield was 2.00% exactly). The market adjustment factor required would be:
((1.52% - 1.50%) x 1.00 + (2.00% - 1.52%) x 1.25) / (2.00% - 1.50%) = 1.24

Table 1 Conventional Gilt MVA

Yield B	Factor	Yield B	Factor	Yield B	Factor	Yield B	Factor
2.00% to 2.04%	1.33	3.05% to 3.11%	1.17	4.36% to 4.45%	1.01	6.08% to 6.19%	0.85
2.05% to 2.10%	1.32	3.12% to 3.18%	1.16	4.46% to 4.54%	1.00	6.20% to 6.32%	0.84
2.11% to 2.16%	1.31	3.19% to 3.26%	1.15	4.55% to 4.64%	0.99	6.33% to 6.45%	0.83
2.17% to 2.22%	1.30	3.27% to 3.34%	1.14	4.65% to 4.74%	0.98	6.46% to 6.59%	0.82
2.23% to 2.29%	1.29	3.35% to 3.42%	1.13	4.75% to 4.84%	0.97	6.60% to 6.72%	0.81
2.30% to 2.35%	1.28	3.43% to 3.49%	1.12	4.85% to 4.94%	0.96	6.73% to 6.86%	0.80
2.36% to 2.42%	1.27	3.50% to 3.57%	1.11	4.95% to 5.04%	0.95	6.87% to 7.00%	0.79
2.43% to 2.48%	1.26	3.58% to 3.66%	1.10	5.05% to 5.15%	0.94	7.01% to 7.15%	0.78
2.49% to 2.55%	1.25	3.67% to 3.74%	1.09	5.16% to 5.26%	0.93	7.16% to 7.30%	0.77
2.56% to 2.61%	1.24	3.75% to 3.82%	1.08	5.27% to 5.37%	0.92	7.31% to 7.45%	0.76
2.62% to 2.68%	1.23	3.83% to 3.91%	1.07	5.38% to 5.48%	0.91	7.46% to 7.61%	0.75
2.69% to 2.75%	1.22	3.92% to 3.99%	1.06	5.49% to 5.59%	0.90	7.62% to 7.77%	0.74
2.76% to 2.82%	1.21	4.00% to 4.08%	1.05	5.60% to 5.71%	0.89	7.78% to 7.93%	0.73
2.83% to 2.89%	1.20	4.09% to 4.17%	1.04	5.72% to 5.83%	0.88	7.94% to 8.00%	0.72
2.90% to 2.96%	1.19	4.18% to 4.26%	1.03	5.84% to 5.95%	0.87		
2.97% to 3.04%	1.18	4.27% to 4.35%	1.02	5.96% to 6.07%	0.86		

Yield B should be determined daily as the annualised yield on the FTSE Actuaries Government 10 year Fixed Interest Index. For any dates where the yield is not available the yield for the nearest preceding date should be used.

Table 2 Index-linked Gilt MVA

Years from NRA	Yield A								
	0.00%	0.50%	1.00%	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%
19-20	147.25%	133.50%	121.25%	110.00%	100.00%	91.00%	82.75%	75.25%	68.50%
18-19	144.25%	131.50%	120.00%	109.50%	100.00%	91.25%	83.50%	76.25%	69.75%
17-18	141.50%	129.75%	118.75%	109.00%	100.00%	91.75%	84.25%	77.50%	71.25%
16-17	138.75%	127.75%	117.75%	108.50%	100.00%	92.25%	85.00%	78.50%	72.50%
15-16	136.00%	125.75%	116.50%	108.00%	100.00%	92.75%	86.00%	79.75%	74.00%
14-15	133.25%	124.00%	115.50%	107.50%	100.00%	93.25%	86.75%	81.00%	75.50%
13-14	130.75%	122.25%	114.25%	106.75%	100.00%	93.50%	87.75%	82.00%	77.00%
12-13	128.25%	120.25%	113.00%	106.25%	100.00%	94.00%	88.50%	83.25%	78.50%
11-12	125.50%	118.50%	112.00%	105.75%	100.00%	94.50%	89.50%	84.50%	80.00%
10-11	123.25%	116.75%	111.00%	105.25%	100.00%	95.00%	90.25%	85.75%	81.50%
9-10	120.75%	115.25%	109.75%	104.75%	100.00%	95.50%	91.25%	87.00%	83.25%
8-9	118.25%	113.50%	108.75%	104.25%	100.00%	96.00%	92.00%	88.25%	84.75%
7-8	116.00%	111.75%	107.75%	103.75%	100.00%	96.50%	93.00%	89.50%	86.50%
6-7	113.75%	110.25%	106.75%	103.25%	100.00%	96.75%	93.75%	91.00%	88.25%
5-6	111.50%	108.50%	105.50%	102.75%	100.00%	97.25%	94.75%	92.25%	89.75%
4-5	109.25%	107.00%	104.50%	102.25%	100.00%	97.75%	95.75%	93.75%	91.50%
3-4	107.25%	105.25%	103.50%	101.75%	100.00%	98.25%	96.75%	95.00%	93.50%
2-3	105.00%	103.75%	102.50%	101.25%	100.00%	98.75%	97.50%	96.50%	95.25%
1-2	103.00%	102.25%	101.50%	100.75%	100.00%	99.25%	98.50%	97.75%	97.00%
0-1	101.00%	100.75%	100.50%	100.25%	100.00%	99.75%	99.50%	99.25%	99.00%

Yield A should be determined daily as 50% of the sum of the FTSE Actuaries Government Securities Index-Linked annualised Real Yields over 15 years assuming:
a) 5% inflation; and b) 0% inflation
For any dates where yields are not available the yields for the nearest preceding date should be used.

IMPACT OF ANNUITY FACTORS – CASE STUDIES

The following examples set out some potential scenarios where the annuity factors might be used. They highlight the impact upon the deemed "actual" pensions of using the proposed revised factors compared to those currently in use by the Financial Assistance Scheme Operational Unit.

Please note that rounded numbers have been used throughout, however the details of each calculation are provided in brackets.

1. Member transfer (male)

A male took a transfer from his scheme of £75,000 on 29 August 2003, his NRA is 65. He was 60 at the time the transfer was taken.

On 29 August 2003 the relevant yields were:

	semi-annual	annualised	MVA
FTSE Actuaries Government 10 year Fixed Interest Index.	4.64%	4.69%	0.98
Average of FTSE Actuaries Government Securities Index-Linked annualised real yields over 15 years assuming 0% and 5% inflation	2.10%	2.11%	Between 4 and 5 years to NRA: [(2.11 – 2.00) x 0.9775 + (2.50 – 2.11) x 1.00] / (2.50 – 2.00) = 0.99505

Using the current factors his transfer is converted (as at 29 August 2003) into a rate of pension of **£5,510** (75,000 / (13.97 x 0.98 x 0.99505) = 5,505).

This compares to a rate of pension provided by application of the proposed revised factors of around **£4,680** (75,000 / (16.44 x 0.98 x 0.99505) = 4,678), a reduction of around **15%**.

2. Member transfer (female)

A female member takes a transfer of £17,500 on 27 September 2007. She has an NRA of 60. On 27 September 2007, she was 50 years old.

On 27 September 2007 the relevant yields were:

	semi-annual	annualised	MVA
FTSE Actuaries Government 10 year Fixed Interest Index.	5.06%	5.12%	0.94
Average of FTSE Actuaries Government Securities Index-Linked annualised real yields over 15 years assuming 0% and 5% inflation	1.26%	1.26%	Between 9 and 10 years to NRA: [(1.26 − 1.00) x 1.0475 + (1.50 − 1.26) x 1.0975] / (1.50 − 1.00) = 1.0715

The transfer would be converted by the FAS Operational Unit, using the current factors, into a notional annuity of **£1,210** (17,500 / (14.31 x 0.94 x 1.0715) = 1,214

This compares to **£1,030** (17,500 / (16.90 x 0.94 x 1.0715) = 1,028) using the proposed revised factors, a reduction of around **15%**

3. Lump sum (male using typical buyout commutation terms)

On retiring on 21 May 2004 at age 65 a male member gave up around £1,500 of his pension to receive a lump sum of around £28,000. The lump sum was converted to pension by the member's scheme on the basis of contemporary bulk buy out rates, allowing for some indexation.

On 21 May 2004 the relevant yield was:

	semi-annual	annualised	MVA
FTSE Actuaries Government 10 year Fixed Interest Index.	5.15%	5.22%	0.93

This lump sum was converted by the FAS Operational Unit (as at 21 May 2004) into a notional pension of around **£2,030** (28,000 / (14.83 x 0.93) = 2,030).

The proposed revised factors would have converted the member's lump sum into a pension of **£1,740** (28,000 / (17.27 x 0.93) = 1,743), a reduction of around **14%**.

4. Lump sum (male using illustrative scheme commutation terms)

Also retiring on 21 May 2004 at age 65, before scheme wind-up was triggered, a male member gave up around £3,000 of his pension to receive a lump sum of around £45,000. The lump sum was calculated by the member's scheme using a scheme commutation factor stating that £1 of pension provides £15 of lump sum.

On 21 May 2004 the relevant yield was:

	semi-annual	annualised	MVA
FTSE Actuaries Government 10 year Fixed Interest Index.	5.15%	5.22%	0.93

This lump sum was converted by the FAS Operational Unit (as at 21 May 2004) into a notional pension of around **£3,260** (45,000 / (14.83 x 0.93) = 3,263).

The proposed revised factors would have converted the member's lump sum into a pension of **£2,800** (45,000 / (17.27 x 0.93) = 2,802), a reduction of around **14%**.

5. Lump sum (female)

On retiring on 13 April 2006 at age 60 a female member received a lump sum of around £35,000.

On 13 April 2006 the relevant yield was:

	semi-annual	annualised	MVA
FTSE Actuaries Government 10 year Fixed Interest Index.	4.54%	4.59%	0.99

The lump sum was converted by FAS (as at her retirement date) into a notional annuity of **£2,170** (35,000/ (16.31 x 0.99) = 2,168)

The proposed revised factors would have converted the member's lump sum into a pension of **£1,870** (= 35,000 / (18.89 x 0.99) = 1,872), a reduction of around **14%**

6. Trivial commutation (male under normal retirement age)

At the end of wind up on 19 October 2005 a male member aged 61 with scheme NRA 63 received a trivial commutation lump sum from his scheme of £11,500 in full and final settlement of his liabilities.

On 19 October 2005 the relevant yield was:

	semi-annual	annualised	MVA
FTSE Actuaries Government 10 year Fixed Interest Index.	4.37%	4.42%	1.01
Average of FTSE Actuaries Government Securities Index-Linked annualised real yields over 15 years assuming 0% and 5% inflation	1.35%	1.35%	Between 1 and 2 years to NRA: $[(1.35 - 1.00) \times 1.0075 + (1.50 - 1.35) \times 1.0150] / (1.50 - 1.00) = 1.00975$

Using the current factors to convert this lump sum back into a rate of pension in order to assess entitlement to FAS assistance his scheme pension amount would be assessed as **£740** (= 11,500 / (15.24 x 1.01 x 1.00975) = 740)

Using the proposed revised factors to reassess the amount of scheme pension gives **£640** (= 11,500 / (17.75 x 1.01 x 1.00975) = 635), a reduction of around **14%.**

7. Trivial commutation (female over normal retirement age)

At the end of scheme wind up on 15 January 2008 a female member aged 69 received a trivial commutation lump sum from her scheme of £2,500.

On 15 January 2008 the relevant yield was:

	semi-annual	annualised	MVA
FTSE Actuaries Government 10 year Fixed Interest Index.	4.29%	4.34%	1.02

Using the current factors to convert this lump sum back into a rate of pension **£180** (= 2,500 / (13.49 x 1.02) = 182) would be taken into the calculation of FAS assistance as her 'actual' scheme pension.

Using the proposed revised factors this amount would decrease to **£160** (= 2,500 / 15.73 x 1.02 = 156), a reduction of around **11%.**