

Minutes from meeting with FBU

Monday 6th January 2014, 2pm, DCLG Eland House

Present: Brandon Lewis, Neil O'Connor, Chris Megainey, Peter Holland, [REDACTED]
Andy Dark, Sean Starbuck, Alan Mclean, [REDACTED] and PS/BL

<redacted as out of scope>

He [SS] suggested that the pension scheme could be configured differently, within the scheme cost ceilings, to offer firefighters more flexible options if they chose to retire earlier. He urged that the government look into this before the final decision is made. He said that their Actuary and the Government's Actuary should consult one and other.

CM highlighted the importance of HMT's view on any further changes to the scheme.

BL said he was content for these ideas to be explored with officials but he was concerned that this is where they were 9 months ago or more.

<redacted as out of scope>

SS said that they should have a couple of weeks to look at the accrual and evaluation rates with [REDACTED].

<redacted as out of scope>

Actions:

It was agreed to have another meeting at the end of January 2014 and to also schedule several meetings with officials in the meantime.

EMAIL EXCHANGE 1

From: [REDACTED]
Sent: 09 January 2014 16:38
To: [REDACTED]
Cc: 'Sean Starbuck <sean.starbuck@fbu.org.uk> (sean.starbuck@fbu.org.uk)'; [REDACTED]; Chris Megainey
Subject: RE: Firefighters' Pension Scheme 2015: alternative scheme designs

Hi [REDACTED]

Thanks, I will share these with [REDACTED] at GAD (who you met a couple of years ago at FBU HQ) and ask him to discuss with you.

On alternative design 3, I recall that HMT had an upper limit for CPI + X calculations. Can I suggest that you limit any suggestions to no more than the current highest one (which I believe is the Teachers at CPI + 1.6%)?

Thanks
[REDACTED]

Workforce, Pay and Pensions
Department for Communities and Local Government

Tel: [REDACTED]
Email: [REDACTED]@communities.gsi.gov.uk

From: [REDACTED] [mailto:[REDACTED]@firstactuarial.co.uk]
Sent: Thursday, January 09, 2014 4:23 PM
To: [REDACTED]
Cc: Sean Starbuck <sean.starbuck@fbu.org.uk> (sean.starbuck@fbu.org.uk); [REDACTED]
Subject: Firefighters' Pension Scheme 2015: alternative scheme designs

Hi [REDACTED]

Sean has asked me to share with you some of the scheme designs that First Actuarial have been working on for the Firefighters' Pension Scheme.

I have summarised these below. You will be familiar with the first two designs.

The three alternative designs below have not been put forward by the FBU and this email should not be read as such.

(1) Current "Proposed Final Agreement":

- Accrual: **1/58.7ths**
- Active CARE revaluation: **AWE**
- Reduction at age 55: Actuarially reduced with reference to **State Pension Age**
- ERFs method: Actuarial equivalent of a **deferred** pension

(2) DCLG's offer of 19 June 2013:

- Accrual: **1/59.7ths**
- Active CARE revaluation: **AWE**
- Reduction at age 55: Actuarially reduced with reference to **age 60**
- ERFs method: Actuarial equivalent of a **deferred** pension

(3) Alternative design A:

- Accrual: **1/64ths***
- Active CARE revaluation: **CPI + 2.9%**
- Reduction at age 55: Actuarially reduced with reference to **age 60**
- ERFs method: Actuarial equivalent of an **active** pension

(4) Alternative design B:

- Accrual: **1/48ths***
- Active CARE revaluation: **CPI + 0%**
- Reduction at age 55: Actuarially reduced with reference to **age 60**
- ERFs method: Actuarial equivalent of an **deferred** pension

(5) Alternative design C:

- Accrual: **1/53rds***
- Active CARE revaluation: **CPI + 0%**
- Reduction at age 55: Actuarially reduced with reference to **age 60**
- ERFs method: **Reduction of 3% a year (simple). i.e. 3% at age 59, 6% at age 58, 9% at age 57, 12% at age 56, and 15% at age 55.**

** The accrual rate used in the alternative designs have been calculated by First Actuarial so that the design falls within the Cost Ceiling. However, this will of course need to be confirmed by GAD who can carry out more accurate calculations, including the short-term and long-term tests. You may therefore want to share this email with GAD to instruct them to verify the accrual rates calculated by us above.*

I suggest you continue to liaise directly with Sean, but please feel free to email or call me (or ask somebody from GAD to email or call me) if you want clarification on any of the designs above.

Kind regards

█

█ FIA

First Actuarial LLP
Furness House, Furness Quay, Salford Quays, Manchester, M50 3XZ.

D: █ E: █ [w:www.firstactuarial.co.uk](http://www.firstactuarial.co.uk)

EMAIL EXCHANGE 2

From: █
Sent: 15 January 2014 17:39
To: █; █@gad.gov.uk'
Cc: 'Sean Starbuck <sean.starbuck@fbu.org.uk> (sean.starbuck@fbu.org.uk)'; █; Chris Megainey
Subject: RE: Firefighters Pension Scheme: Alternative Scheme Designs - 15 January 2014

█

Thanks. Please note that these can only be draft numbers as we do not have HMT agreement on the detailed assumptions to be adopted.

Thanks

█

█
Workforce, Pay and Pensions
Department for Communities and Local Government

Tel: █
Email: █@communities.gsi.gov.uk

From: [REDACTED] [mailto:[REDACTED]@firstactuarial.co.uk]
Sent: Wednesday, January 15, 2014 10:11 AM
To: [REDACTED]@gad.gov.uk'
Cc: [REDACTED] Sean Starbuck <sean.starbuck@fbu.org.uk> (sean.starbuck@fbu.org.uk);
Subject: Firefighters Pension Scheme: Alternative Scheme Designs - 15 January 2014

[REDACTED]

Just to confirm, I've summarised below the alternative scheme designs that we asked you to calculate.

The following designs are all variations on DCLG's offer of 19 June 2013 which was as follows.

DCLG's offer of 19 June 2013:

- Active CARE revaluation: **AWE**.
- Reduction at age 55: Actuarially reduced with reference to **age 60**.
- ERFs method: Actuarial equivalent of a **deferred** pension.
- Affordable accrual rate: **1/59.7ths**.

The alternative designs we discussed yesterday are as follows:

Alternative design (1):

- Active CARE revaluation: **AWE**.
- Reduction at age 55: Actuarially reduced with reference to **age 60**.
- ERFs method: Actuarial equivalent of an **active** pension.
- Affordable accrual rate: **TO BE CONFIRMED BY GAD**.

Alternative design (2):

- Active CARE revaluation: **CPI plus 0%**.
- Reduction at age 55: Actuarially reduced with reference to **age 60**.
- ERFs method: Actuarial equivalent of a **deferred** pension.
- Affordable accrual rate: **TO BE CONFIRMED BY GAD**.

Alternative design (3a):

- Active CARE revaluation: **CPI plus 1.25%**.
- Reduction at age 55: Actuarially reduced with reference to **age 60**.
- ERFs method: Actuarial equivalent of a **deferred** pension.
- Affordable accrual rate: **TO BE CONFIRMED BY GAD**.

Alternative design (3b):

- Active CARE revaluation: **CPI plus 1.25%**.
- Reduction at age 55: Actuarially reduced with reference to **age 60**.
- ERFs method: **FIXED PERCENTAGE PER YEAR EARLY (E.G. 2% A YEAR EARLY, I.E. 10% REDUCTION AT AGE 55) TO BE CONFIRMED BY GAD**.
- Affordable accrual rate: **1/55.3ths**.

Based on what you have calculated before, I suspect that you may be able to provide the first three designs fairly quickly with the fourth design (3b) taking a little longer. If you are able to share with us any calculations earlier than the others, then I would be grateful if you could provide these in advance, with the rest to follow.

Please give me a call if you have any questions on the above.

Kind regards

■

■ FIA

First Actuarial LLP
Furness House, Furness Quay, Salford Quays, Manchester, M50 3XZ.

D: ■ T: ■ E: ■ www.firstactuarial.co.uk

EMAIL EXCHANGE 3

From: ■
Sent: 27 January 2014 10:23
To: 'Sean Starbuck'; ■
Cc: Chris Megainey; ■; ■
Subject: FW: UNCLASSIFIED: Fire reform options

Dear Sean, ■

Please find attached two draft letters on the fire scheme designs that you have asked GAD to cost.

You will see that GAD have provided an accrual rate for active ERFs from age 55 with average weekly earnings revaluation. However, GAD are only able to provide an accrual rate range within 2 percentage points for the CPI/+1.25% revaluation rates with deferred ERFs from age 55 at this stage, although they are refining this number this week.

These costings are provided at the request of the FBU/First Actuarial during the consultation period and the Department has not expressed any view on their contents. You should also be aware that no further assessment has been made of the assumptions underpinning these costings, and no discussion has taken place with HMT on the design or the assumptions used.

Regards

■

■
Workforce, Pay and Pensions
Department for Communities and Local Government

Tel: ■
Email: ■@communities.gsi.gov.uk

From: [REDACTED] [mailto:[REDACTED]@gad.gov.uk]
Sent: Friday, January 24, 2014 5:53 PM
To: [REDACTED]
Cc: [REDACTED]; Fire; Ian Boonin
Subject: UNCLASSIFIED: Fire reform options

[REDACTED]

I attach two letters with accrual rates for some of the options proposed by First Actuarial/ FBU. The "active EERF" letter provides an accrual rate while the one that considers revaluation rates provides a range. We will firm up the range over the next week and also make a start on the last of the FBU options.

<redacted as out of scope>

I am out of the office on Monday and back on Tuesday. [REDACTED] is probably the best person for you talk to about this is you would like to speak to someone on Monday.

[REDACTED]

[REDACTED]
Deputy Chief Actuary
Government Actuary's Department
Finlaison House
15-17 Furnival Street
London EC4A 1AB
T [REDACTED]
F [REDACTED]
E [REDACTED]@gad.gov.uk (GSI [REDACTED]@gad.gsi.gov.uk)
W www.gov.uk/gad

EMAIL EXCHANGE 4

From: [REDACTED]
Sent: 03 February 2014 10:47
To: 'Sean Starbuck'
Cc: 'Matt Wrack'; Chris Megainey; [REDACTED]
Subject: RE: progress following EC

Hi Sean

Attached is the active ERF sensitivities. I think it's fairly self-explanatory but might be helpful if you discuss it with [REDACTED] and ask him to put it through his career profile calculator.

Yep, let's pick up on proposals etc this afternoon.

[REDACTED]

Thanks
[REDACTED]

[REDACTED]
Workforce, Pay and Pensions
Department for Communities and Local Government

Tel: [REDACTED]
Email: [REDACTED]@communities.gsi.gov.uk

From: Sean Starbuck [mailto:sean.starbuck@fbu.org.uk]
Sent: Friday, January 31, 2014 7:27 PM
To: [REDACTED]
Cc: Matt Wrack; Chris Megainey; [REDACTED]
Subject: RE: progress following EC

Hi [REDACTED]

<redacted as out of scope>

Regards
Sean

Sean Starbuck
National Officer

From: [REDACTED] [mailto:[REDACTED]@communities.gsi.gov.uk]
Sent: 31 January 2014 12:04
To: Sean Starbuck
Cc: Matt Wrack; Chris Megainey; [REDACTED]
Subject: RE: progress following EC

Hi Sean

<redacted as out of scope>

As you know, we have commissioned GAD to carry out a significant amount of actuarial work to help you consider possible options. GAD inform me that we should have the sensitivities on the active ERFs by close today or early Monday. However, as we have asked GAD to prioritise this then firming up the accrual rate for the others options will slip into early next week.

<redacted as out of scope>

Thanks
[REDACTED]

EMAIL EXCHANGE 5

From: [REDACTED]
Sent: 07 February 2014 11:13
To: [REDACTED]; 'Sean Starbuck (FBU)'
Cc: [REDACTED]; Chris Megainey; [REDACTED]; [REDACTED]
Subject: RE: Fire reform options

[REDACTED], Sean

Attached are the firmed up accrual rates from GAD for the CPI+ revaluations.

Thanks
[REDACTED]

[REDACTED]
Workforce, Pay and Pensions
Department for Communities and Local Government

Tel: [REDACTED]
Email: [REDACTED]@communities.gsi.gov.uk

EMAIL EXCHANGE 6

From: [REDACTED]
Sent: 10 March 2014 11:43
To: 'Matt Wrack'
Cc: 'Sean Starbuck'
Subject: RE: Fire pensions

Hi Matt

Please find attached the first of the next set of actuarial options from GAD.

Regards
[REDACTED]

EMAIL EXCHANGE 7

From: [REDACTED]
Sent: 19 March 2014 11:10
To: 'sean.starbuck@fbu.org.uk'; 'Matt Wrack'
Cc: [REDACTED]
Subject: GAD calculations

Sean, Matt

Please find attached a letter from GAD on the final cost variant.

Thanks
[REDACTED]



GOVERNMENT ACTUARY'S DEPARTMENT

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DRAFT

Reference:

By e-mail to [REDACTED]@communities.gsi.gov.uk

24 January 2014

Dear [REDACTED]

Costing of alternative early retirement and revaluation provisions

When we met with the FBU on 14 January, you asked me to calculate the affordable accrual rate for the scheme designs proposed by the FBU.

GAD's report 'Verification of cost of final scheme design' dated 23 May 2012¹ (the Verification Report) set out the accrual rate that could be provided within the framework of the HMT cost ceiling process on a benefit design where Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 57. The accrual rate stated was 1/58.7.

[REDACTED] draft letter of 16 May 2013, set out the corresponding accrual rate for the same proposed design as above, except that Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 55. The accrual rate stated was 1/59.7.

The accrual rates in [REDACTED] draft letter were calculated assuming that revaluation whilst in service was in line with earnings. You have asked GAD to calculate the affordable accrual rates if the in-service revaluation rates were linked to CPI and to CPI plus 1.25% a year, as requested in [REDACTED] email to me dated 15 January 2014.

This letter should be read in conjunction with the Verification Report and [REDACTED] letter of 16 May 2013, and in particular the limitations contained therein.

Results

You have asked GAD to calculate the affordable accrual rates if these alternative revaluation rates applied. Table 1 sets out the range in which the affordable accrual rates for the scheme designs described above will lie using the data, methodology and assumptions described in this letter. These accrual rates should be considered in conjunction with the limitations noted below.

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9401/2150577.pdf
Finlaison House 15-17 Furnival Street London EC4A 1AB T: +44 (0)20 7211 2600 W: www.gad.gov.uk
Direct Line: [REDACTED] Fax Number: [REDACTED] Email: [REDACTED]@gad.gov.uk

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Table 1 – Affordable accrual rates - early retirement factors with reference to age 60 on retirement from active service from age 55

Revaluation Rate	Accrual rate
earnings	1/59.7
CPI+1.25%	in the range 1/53.5 to 1/55.5
CPI	in the range 1/48 to 1/50

The accrual rates shown above are based on the benefits set out in Annex A.

The accrual rates shown above have been determined using the same approach detailed in the Verification Report including HM Treasury's instructions set out in Appendix C to the Verification Report. In particular, the accrual rate allows for the long term test and spreading of past service costs.

We would be happy to discuss the reasons why the results relate to each other the way they do.

Data, methodology and assumptions

We have used the same data, methodology and assumptions as adopted in the Verification Report, except for the changes detailed in Annex B.

Limitations

1. The affordable accrual rate is very sensitive to the assumptions and methodology used when quoted to the nearest 0.1 (which represents only about a 0.2% proportionate change in the accrual rate – and which is well within the bounds of normal actuarial approximations).
2. The data, methodology and assumptions (DMA) used in calculating the affordable accrual rate for a proposed scheme design are set by HM Treasury. The DMA underlying the new results shown in this letter have not been discussed with or agreed by HM Treasury, and nor has the proposed change in benefit design. The new figures provided are therefore provisional pending such discussion and agreement.
3. GAD's calculation of these figures does not imply approval of the proposed benefit structure by HM Treasury.
4. In the time available to produce this advice, it has not been through GAD's full quality assurance processes. As a result the figures provided are in draft and show a range of affordable accrual rates within which the final figures are likely to lie. It is anticipated that finalised figures will be available within 5 working days of the date of this letter.

Third party reliance and liability

This letter has been prepared for the Department for Communities and Local Government. I am content for the Department to release this report to third parties (including HM Treasury, other public service schemes, trades unions and parliament), provided that:

- > it is released in full along with the verification report.
- > the advice is not quoted selectively or partially,
- > GAD is identified as the source of the report, and

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> GAD is notified of such release

Third parties whose interests may differ from those of the Department for Communities and Local Government should be encouraged to seek their own actuarial advice where appropriate.

This letter has been prepared for the Department for Communities and Local Government for the purpose of assisting with scheme reform discussions. No person other than the Department for Communities and Local Government or third party other than HMT is entitled to place any reliance on the contents of this letter, except to any extent explicitly stated herein, and GAD has no liability to any other person or third party for any act or omission taken, either in whole or in part, on the basis of this letter.

Yours sincerely

DRAFT


Deputy Chief Actuary

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Annex A: New scheme design (post 2015)

Other than the accrual rates, the designs with enhanced ERFs from age 55 are as set out in Appendix A to the verification report, except that:

- > Early retirement reduction factors for retirement from active service from age 55 are based on the period to normal pension age rather than the period to deferred pension age [57 in the verification report]. Early retirement reduction factors for all other retirements are based on the period to deferred pension age.
- > Revaluation whilst in service is at the rates specified.

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Annex B: Data methodology and assumptions

We have used the same data, methodology and assumptions as adopted in the Verification report, with the exception of changes to the retirement patterns detailed in paragraph 3.6 of the Verification Report to reflect the alternative early retirement provisions. The retirement pattern assumptions are as follows:

- > The Reference Scheme should be reassessed allowing for the early retirement of half of the unprotected ex-FPS 1992 members at age 52, on terms consistent² with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme. This is unchanged from the Verification Report
- > We should assume that the introduction of the revised early retirement terms will result in the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55 [57 in the verification report]. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it should be assumed that the revised early retirement factors will lead to a change in behaviour and 25% of members in active service reaching age 55 [57 in the verification report] will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 [between 57 and 60 in the verification report] should instead be assumed to take early retirement at the age at which they would have deferred.

As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. Consistent with paragraph 3.8 of the verification report we have assumed that the FPS 1992 past service liability will increase by an amount equivalent to assuming that half of all unprotected ex-FPS 1992 members will change their behaviour to retire at age 55 [57 in the verification report].

² There are no early retirement factors in the FPS 1992.



GOVERNMENT ACTUARY'S DEPARTMENT

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DRAFT

Reference:

By e-mail to [REDACTED]@communities.gsi.gov.uk

24 January 2014

Dear [REDACTED]

Costing of alternative early retirement provisions

When we met with the FBU on 14 January, you asked me to calculate the affordable accrual rate for the scheme designs proposed by the FBU.

GAD's report 'Verification of cost of final scheme design' dated 23 May 2012¹ (the Verification Report) set out the accrual rate that could be provided within the framework of the HMT cost ceiling process on a benefit design where Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 57. The accrual rate stated was 1/58.7.

[REDACTED] draft letter of 16 May 2013, set out the corresponding accrual rate for the same proposed design as above, except that Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 55. The accrual rate stated was 1/59.7.

The accrual rates above were calculated assuming that Early Retirement Factors with reference to the normal pension age of 60 were on a "deferred basis" (see explanation below). You have asked GAD to calculate the affordable accrual rates if the Early Retirement Factors were instead on an "active basis" (see explanation below), as requested in [REDACTED] email to me dated 15 January 2014.

This letter should be read in conjunction with the Verification Report and [REDACTED] letter of 16 May 2013, and in particular the limitations contained therein.

Early Retirement Factors

The scheme designs which have previously been considered assumed that Early Retirement Factors with reference to the normal pension age of 60 were calculated on a deferred basis (deferred ERFs). Deferred ERFs are calculated such that the value of the member's reduced pension following early retirement will be broadly equal to the value of their pension if they had instead withdrawn at the same point with an entitlement to a deferred pension which could be paid unreduced from age 60.

You have asked GAD to calculate the affordable accrual rates if these early retirement factors were instead calculated on an active basis (active ERFs). Active ERFs are calculated such that

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9401/2150577.pdf

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the value of the member's reduced pension following early retirement will be broadly equal to the value of the pension if they had instead remained as an active member of the scheme until age 60 or earlier exit due to death or ill health.

Results

Table 1 sets out the affordable accrual rates for the scheme designs described above using the data, methodology and assumptions described in this letter. These accrual rates should be considered in conjunction with the limitations noted below.

Table 1 – Affordable accrual rates

	Deferred ERFs	Active ERFs
Enhanced early retirement from 57	1/58.7	not calculated
Enhanced early retirement from 55	1/59.7	1/61.2

The accrual rates shown above are based on the benefits set out in Annex A.

The accrual rates shown above have been determined using the same approach detailed in the Verification Report including HM Treasury's instructions set out in Appendix C to the Verification Report. In particular, the accrual rate allows for the long term test and spreading of past service costs.

We would be happy to discuss the reasons why the active ERF results relate to the deferred ERF results in the way they do.

Data, methodology and assumptions

We have used the same data, methodology and assumptions as adopted in the Verification Report, except for the changes detailed in Annex B.

Limitations

1. The affordable accrual rate is very sensitive to the assumptions and methodology used when quoted to the nearest 0.1 (which represents only about a 0.2% proportionate change in the accrual rate – and which is well within the bounds of normal actuarial approximations).
2. The data, methodology and assumptions (DMA) used in calculating the affordable accrual rate for a proposed scheme design are set by HM Treasury. The DMA underlying the new results shown in this letter have not been discussed with or agreed by HM Treasury; and nor has the proposed change in benefit design. The new figures provided are therefore provisional pending such discussion and agreement.
3. GAD's calculation of these figures does not imply approval of the proposed benefit structure by HM Treasury.

Third party reliance and liability

This letter has been prepared for the Department for Communities and Local Government. I am content for the Department to release this report to third parties (including HM Treasury, other public service schemes, trades unions and parliament), provided that:

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- > it is released in full along with the verification report.
- > the advice is not quoted selectively or partially,
- > GAD is identified as the source of the report, and
- > GAD is notified of such release

Third parties whose interests may differ from those of the Department for Communities and Local Government should be encouraged to seek their own actuarial advice where appropriate.

This letter has been prepared for the Department for Communities and Local Government for the purpose of assisting with scheme reform discussions. No person other than the Department for Communities and Local Government or third party other than HMT is entitled to place any reliance on the contents of this letter, except to any extent explicitly stated herein, and GAD has no liability to any other person or third party for any act or omission taken, either in whole or in part, on the basis of this letter.

Yours sincerely

DRAFT


Deputy Chief Actuary

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Annex A: New scheme design (post 2015)

The design with enhanced ERFs from age 57 is as set out in Appendix A to the verification report.

Other than the accrual rates, the designs with enhanced ERFs from age 55 are as set out in Appendix A to the verification report, except that:

- > Early retirement reduction factors for retirement from active service from age 55 are based on the period to normal pension age rather than the period to deferred pension age [57 in the verification report]. Early retirement reduction factors for all other retirements are based on the period to deferred pension age.

The different methods for calculating ERFs have been described earlier in this letter.

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Annex B: Data methodology and assumptions

For enhanced ERFs, from 55 (deferred and active ERFs), we have used the same data, methodology and assumptions as adopted in the Verification report, with the exception of changes to the retirement patterns detailed in paragraph 3.6 of the Verification Report to reflect the alternative early retirement provisions. The retirement pattern assumptions are as follows:

- > The Reference Scheme should be reassessed allowing for the early retirement of half of the unprotected ex-FPS 1992 members at age 52, on terms consistent² with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme. This is unchanged from the Verification Report.
- > We should assume that the introduction of the revised early retirement terms will result in the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55 [57 in the verification report]. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it should be assumed that the revised early retirement factors will lead to a change in behaviour and 25% of members in active service reaching age 55 [57 in the verification report] will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 [between 57 and 60 in the verification report] should instead be assumed to take early retirement at the age at which they would have deferred.

As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. Consistent with paragraph 3.8 of the verification report we have assumed that the FPS 1992 past service liability will increase by an amount equivalent to assuming that half of all unprotected ex-FPS 1992 members will change their behaviour to retire at age 55 [57 in the verification report].

² There are no early retirement factors in the FPS 1992.



GOVERNMENT ACTUARY'S DEPARTMENT

PROTECT - SCHEME MANAGEMENT

DRAFT

Reference:

By e-mail to [REDACTED]@communities.gsi.gov.uk

31 January 2014

Dear [REDACTED]

Costing of alternative early retirement provisions - sensitivities

1. When we met with the FBU on 14 January, you asked me to calculate the affordable accrual rate for the scheme designs proposed by the FBU.
2. GAD's report 'Verification of cost of final scheme design' dated 23 May 2012¹ (the Verification Report) set out the accrual rate that could be provided within the framework of the HMT cost ceiling process on a benefit design where Early Retirement Factors (ERFs) with reference to the normal pension age of 60 are provided on early retirement from active service from age 57. The accrual rate stated was 1/58.7.
3. [REDACTED] draft letter of 16 May 2013, set out the corresponding accrual rate for the same proposed design as above, except that ERFs with reference to the normal pension age of 60 are provided on early retirement from active service from age 55. The accrual rate stated was 1/59.7.
4. The accrual rates above were calculated assuming that ERFs with reference to the normal pension age of 60 were on a "deferred basis". You then asked GAD to calculate the affordable accrual rates if the Early Retirement Factors were instead on an "active basis", as requested in [REDACTED] email to me dated 15 January 2014. Our advice (including an explanation of the terms "deferred basis" and "actives basis") was set out in my letter to you of 24 January 2014. The accrual rate stated was 1/61.2.
5. You have asked me to provide figures that show the sensitivity of the 1/61.2 figure to alternative assumptions for the behavioural changes that might arise from this option in comparison to the Reference Scheme.
6. This letter should be read in conjunction with the Verification Report, [REDACTED] draft letter of 16 May 2013 and my letter of 24 January 2014, and in particular the limitations contained therein.

Sensitivities requested

7. You have asked me to consider the impact of changing the assumption for the proportion of members who in the long-term would retire at 60 in the Reference Scheme to instead retire at

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9401/2150577.pdf
Finlaison House 15-17 Furnival Street London EC4A 1AB T: +44 (0)20 7211 2600 W: www.gad.gov.uk
Direct Line: +44 (0)20 7211 [REDACTED] Fax Number: +44 (0)20 7211 [REDACTED] Email: [REDACTED]@gad.gov.uk

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55. This assumption was previously 25% and you have asked me to show the impact of changing this to 50%.

8. You have also asked me to consider the sensitivity of changing the assumptions for short-term behavioural effects. The assumption underlying the accrual rate of 1/61.2 from paragraph was that in the short-term, the 50% of unprotected FPS members with the least amount of service are assumed to retire at age 60 in the Reference Scheme but at 55 in the scheme with "active" ERFs. The remainder of unprotected FPS members withdraw/ retire at age 52 in both schemes. At your request, I have also considered a variation of the short-term behavioural change. This is the impact of assuming that 45% of unprotected FPS members (with the most amount of service) withdraw/ retire at 52 and the 55% (with the least amount of service) change their behaviour from retiring at 60 to retiring at 55.

Results

9. Table 1 sets out the affordable accrual rates for the scheme designs described above using the data, methodology and assumptions described in this letter. These accrual rates should be considered in conjunction with the limitations noted below.

Table 1 – Affordable accrual rates

	Affordable accrual rate
Previously stated assumptions	1/61.2
Long-term sensitivity	1/61.3
Short-term sensitivity	1/61.8
Both sensitivities	1/61.9

10. The accrual rates shown above are based on the benefits set out in Annex A. The accrual rates shown above have been determined using the same approach detailed in the Verification Report including HM Treasury's instructions set out in Appendix C to the Verification Report. In particular, the accrual rate allows for the long term test and spreading of past service costs.

11. We would be happy to discuss the reasons why the sensitivities relate to the original result in the way they do.

12. If the assumptions were varied in the opposite direction, then the impact on the accrual rate would be roughly the same size of movement but in the opposite direction.

Data, methodology and assumptions

13. We have used the same data, methodology and assumptions as adopted in the Verification Report, except for the changes detailed in Annex B.

Limitations

14. The affordable accrual rate is very sensitive to the assumptions and methodology used when quoted to the nearest 0.1 (which represents only about a 0.2% proportionate change in the accrual rate – and which is well within the bounds of normal actuarial approximations).
15. The data, methodology and assumptions (DMA) used in calculating the affordable accrual rate for a proposed scheme design are set by HM Treasury. The DMA underlying the new results shown in this letter have not been discussed with or agreed by HM Treasury, and nor has the

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proposed change in benefit design. The new figures provided are therefore provisional pending such discussion and agreement.

16. GAD's calculation of these figures does not imply approval of the proposed benefit structure by HM Treasury.
17. This sensitivity analysis should not be taken as implying that the assumptions chosen are a best estimate for possible behavioural change.

Third party reliance and liability

18. This letter has been prepared for the Department for Communities and Local Government. I am content for the Department to release this report to third parties (including HM Treasury, other public service schemes, trades unions and parliament), provided that:
 - > it is released in full along with the verification report.
 - > the advice is not quoted selectively or partially,
 - > GAD is identified as the source of the report, and
 - > GAD is notified of such release
19. Third parties whose interests may differ from those of the Department for Communities and Local Government should be encouraged to seek their own actuarial advice where appropriate.
20. This letter has been prepared for the Department for Communities and Local Government for the purpose of assisting with scheme reform discussions. No person other than the Department for Communities and Local Government or third party other than HMT is entitled to place any reliance on the contents of this letter, except to any extent explicitly stated herein, and GAD has no liability to any other person or third party for any act or omission taken, either in whole or in part, on the basis of this letter.

Yours sincerely

DRAFT


Deputy Chief Actuary

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Annex A: New scheme design (post 2015)

The design with enhanced ERFs from age 57 is as set out in Appendix A to the verification report.

Other than the accrual rates, the designs with enhanced ERFs from age 55 are as set out in Appendix A to the verification report, except that:

- > Early retirement reduction factors for retirement from active service from age 55 are based on the period to normal pension age rather than the period to deferred pension age [57 in the verification report]. Early retirement reduction factors for all other retirements are based on the period to deferred pension age.

The different methods for calculating ERFs have been described earlier in this letter.

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Annex B: Data methodology and assumptions

For enhanced ERFs, from 55 (deferred and active ERFs), we have used the same data, methodology and assumptions as adopted in the Verification report, with the exception of changes to the retirement patterns detailed in paragraph 3.6 of the Verification Report to reflect the alternative early retirement provisions.

The retirement pattern assumptions in these areas are as follows for each scenario in turn:

24 January 2014 letter accrual rate

- > The Reference Scheme should be reassessed allowing for the early retirement of **half** of the unprotected ex-FPS 1992 members at age 52, on terms consistent² with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme. This is unchanged from the Verification Report.
- > It has been assumed that the introduction of the revised early retirement terms will result in **all** the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55 [57 in the verification report]. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it is assumed that the revised early retirement factors will lead to a change in behaviour and **25%** of members in active service reaching age 55 [57 in the verification report] will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 [between 57 and 60 in the verification report] are instead assumed to take early retirement at the age at which they would have deferred.
- > As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. It has been assumed that the **50%** of unprotected FPS 1992 members with the most amount of FPS 1992 scheme service retire at age 52, with all those who remain in the scheme to age 55 [57 in the verification report] retiring at that point.

These assumptions are identical to those in my letter of 24 January 2014 but have been reworded slightly to facilitate clarity on the differences between these assumptions and those assumed under the sensitivity scenarios.

² There are no early retirement factors in the FPS 1992.

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Long-term sensitivity

- > The Reference Scheme should be reassessed allowing for the early retirement of **half** of the unprotected ex-FPS 1992 members at age 52, on terms consistent with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme.
- > It has been assumed that the introduction of the revised early retirement terms will result in **all** the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it is assumed that the revised early retirement factors will lead to a change in behaviour and **50%** of members in active service reaching age 55 will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 are instead assumed to take early retirement at the age at which they would have deferred.
- > As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. It has been assumed that the **50%** of unprotected FPS 1992 members with the most amount of FPS 1992 scheme service retire at age 52, with all those who remain in the scheme to age 55 retiring at that point.

Short-term sensitivity

- > The Reference Scheme should be reassessed allowing for the early retirement of **45%** of the unprotected ex-FPS 1992 members at age 52, on terms consistent with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme.
- > It has been assumed that the introduction of the revised early retirement terms will result in **all** the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it is assumed that the revised early retirement factors will lead to a change in behaviour and **25%** of members in active service reaching age 55 will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 are instead assumed to take early retirement at the age at which they would have deferred.
- > As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. It has been assumed that the **45%** of unprotected FPS 1992 members with the most amount of FPS 1992 scheme service retire at age 52, with all those who remain in the scheme to age 55 retiring at that point.

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Combination of long and short-term sensitivity

- > The Reference Scheme should be reassessed allowing for the early retirement of **45%** of the unprotected ex-FPS 1992 members at age 52, on terms consistent with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme.
- > It has been assumed that the introduction of the revised early retirement terms will result in all the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it is assumed that the revised early retirement factors will lead to a change in behaviour and **50%** of members in active service reaching age 55 will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 are instead assumed to take early retirement at the age at which they would have deferred.
- > As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. It has been assumed that the **45%** of unprotected FPS 1992 members with the most amount of FPS 1992 scheme service retire at age 52, with all those who remain in the scheme to age 55 retiring at that point.



GOVERNMENT ACTUARY'S DEPARTMENT

PROTECT - SCHEME MANAGEMENT

Reference:

By e-mail to [REDACTED]@communities.gsi.gov.uk

7 February 2014

Dear [REDACTED]

Costing of alternative early retirement and revaluation provisions

When we met with the FBU on 14 January, you asked me to calculate the affordable accrual rate for the scheme designs proposed by the FBU.

GAD's report 'Verification of cost of final scheme design' dated 23 May 2012¹ (the Verification Report) set out the accrual rate that could be provided within the framework of the HMT cost ceiling process on a benefit design where Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 57. The accrual rate stated was 1/58.7.

[REDACTED] draft letter of 16 May 2013, set out the corresponding accrual rate for the same proposed design as above, except that Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 55. The accrual rate stated was 1/59.7.

The accrual rates in [REDACTED] draft letter were calculated assuming that revaluation whilst in service was in line with earnings. You have asked GAD to calculate the affordable accrual rates if the in-service revaluation rates were linked to CPI and to CPI plus 1.25% a year, as requested in [REDACTED] email to me dated 15 January 2014.

This letter should be read in conjunction with the Verification Report and [REDACTED] letter of 16 May 2013, and in particular the limitations contained therein.

Results

You have asked GAD to calculate the affordable accrual rates if these alternative revaluation rates applied. Table 1 sets out the affordable accrual rates for the scheme designs described above calculated using the data, methodology and assumptions described in this letter. These accrual rates should be considered in conjunction with the limitations noted below..

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9401/2150577.pdf
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Direct Line: +44 (0)20 [REDACTED] Fax Number: +44 (0)20 7211 [REDACTED] Email: [REDACTED]@gad.gov.uk

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Table 1 – Affordable accrual rates - early retirement factors with reference to a deferred pension payable from age 60 on retirement from active service from age 55

Revaluation Rate	Accrual rate
earnings	1/59.7
CPI+1.25%	1/54.5
CPI	1/49.1

The accrual rates shown above are based on the benefits set out in Annex A.

The accrual rates shown above have been determined using the same approach detailed in the Verification Report including HM Treasury's instructions set out in Appendix C to the Verification Report. In particular, the accrual rate allows for the long term test and spreading of past service costs.

We would be happy to discuss the reasons why the results relate to each other the way they do.

Data, methodology and assumptions

We have used the same data, methodology and assumptions (DMA) as adopted in the Verification Report, except for the changes detailed in Annex B.

Since the Verification Report was produced, work has been ongoing on the 2012 valuation of the fire pension schemes. The DMA to be used for the 2012 valuation will be different to that underlying the verification report. If the 2012 valuation DMA were used to calculate affordable accrual rates, then these rates would be likely to be different to those set out in this letter.

Limitations

1. The affordable accrual rate is very sensitive to the assumptions and methodology used when quoted to the nearest 0.1 (which represents only about a 0.2% proportionate change in the accrual rate – and which is well within the bounds of normal actuarial approximations).
2. The data, methodology and assumptions used in calculating the affordable accrual rate for a proposed scheme design are set by HM Treasury. The DMA underlying the new results shown in this letter have not been discussed with or agreed by HM Treasury, and nor has the proposed change in benefit design. The new figures provided are therefore provisional pending such discussion and agreement.
3. GAD's calculation of these figures does not imply approval of the proposed benefit structure by HM Treasury.

Third party reliance and liability

This letter has been prepared for the Department for Communities and Local Government. I am content for the Department to release this report to third parties (including HM Treasury, other public service schemes, trades unions and parliament), provided that:

- > it is released in full along with the verification report.
- > the advice is not quoted selectively or partially,
- > GAD is identified as the source of the report, and

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> GAD is notified of such release

Third parties whose interests may differ from those of the Department for Communities and Local Government should be encouraged to seek their own actuarial advice where appropriate.

This letter has been prepared for the Department for Communities and Local Government for the purpose of assisting with scheme reform discussions. No person other than the Department for Communities and Local Government or third party other than HMT is entitled to place any reliance on the contents of this letter, except to any extent explicitly stated herein, and GAD has no liability to any other person or third party for any act or omission taken, either in whole or in part, on the basis of this letter.

Yours sincerely



Deputy Chief Actuary

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Annex A: New scheme design (post 2015)

Other than the accrual rates, the designs with enhanced ERFs from age 55 are as set out in Appendix A to the verification report, except that:

- > Early retirement reduction factors for retirement from active service from age 55 are based on the period to normal pension age rather than the period to deferred pension age [57 in the verification report]. Early retirement reduction factors for all other retirements are based on the period to deferred pension age.
- > Revaluation whilst in service is at the rates specified.

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Annex B: Data methodology and assumptions

We have used the same data, methodology and assumptions as adopted in the Verification report, with the exception of changes to the retirement patterns detailed in paragraph 3.6 of the Verification Report to reflect the alternative early retirement provisions. The retirement pattern assumptions are as follows:

- > The Reference Scheme should be reassessed allowing for the early retirement of half of the unprotected ex-FPS 1992 members at age 52, on terms consistent² with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme. This is unchanged from the Verification Report
- > We should assume that the introduction of the revised early retirement terms will result in the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55 [57 in the verification report]. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it should be assumed that the revised early retirement factors will lead to a change in behaviour and 25% of members in active service reaching age 55 [57 in the verification report] will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 [between 57 and 60 in the verification report] should instead be assumed to take early retirement at the age at which they would have deferred.

As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. Consistent with paragraph 3.8 of the verification report we have assumed that the FPS 1992 past service liability will increase by an amount equivalent to assuming that half of all unprotected ex-FPS 1992 members will change their behaviour to retire at age 55 [57 in the verification report].

² There are no early retirement factors in the FPS 1992.



GOVERNMENT ACTUARY'S DEPARTMENT

PROTECT - SCHEME MANAGEMENT

Reference:

By e-mail to [redacted]@communities.gsi.gov.uk

7 March 2014

Dear [redacted]

Costing of alternative early retirement and revaluation provisions

You have asked me to value a further alternative scheme design.

GAD's report 'Verification of cost of final scheme design' dated 23 May 2012¹ (the Verification Report) set out the accrual rate that could be provided within the framework of the HMT cost ceiling process on a benefit design where Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 57. The accrual rate stated was 1/58.7.

[redacted] draft letter of 16 May 2013, set out the corresponding accrual rate for the same proposed design as above, except that Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 55. The accrual rate stated was 1/59.7.

The accrual rates in [redacted] draft letter were calculated assuming that revaluation whilst in service was in line with earnings. You have asked GAD to calculate the affordable accrual rates if the in-service revaluation rates were linked to CPI plus 1.6% a year.

This letter should be read in conjunction with the Verification Report and [redacted] letter of 16 May 2013, and in particular the limitations contained therein.

Results

Table 1 sets out the affordable accrual rate for the scheme design described above calculated using the data, methodology and assumptions described in this letter together with those set out in my letter of 7 February 2014. These accrual rates should be considered in conjunction with the limitations noted below.

Table 1 – Affordable accrual rates - early retirement factors with reference to a deferred pension payable from age 60 on retirement from active service from age 55

Revaluation Rate	Accrual rate
earnings	1/59.7
CPI+1.6%	1/56.2
CPI+1.25%	1/54.5
CPI	1/49.1

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9401/2150577.pdf

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The accrual rates shown above are based on the benefits set out in Annex A.

The accrual rates shown above have been determined using the same approach detailed in the Verification Report including HM Treasury's instructions set out in Appendix C to the Verification Report. In particular, the accrual rate allows for the long term test and spreading of past service costs.

We would be happy to discuss the reasons why the results relate to each other the way they do.

Data, methodology and assumptions

We have used the same data, methodology and assumptions (DMA) as adopted in the Verification Report, except for the changes detailed in Annex B.

Since the Verification Report was produced, work has been ongoing on the 2012 valuation of the fire pension schemes. The DMA to be used for the 2012 valuation will be different to that underlying the verification report. If the 2012 valuation DMA were used to calculate affordable accrual rates, then these rates would be likely to be different to those set out in this letter.

Limitations

1. The affordable accrual rate is very sensitive to the assumptions and methodology used when quoted to the nearest 0.1 (which represents only about a 0.2% proportionate change in the accrual rate – and which is well within the bounds of normal actuarial approximations).
2. The data, methodology and assumptions used in calculating the affordable accrual rate for a proposed scheme design are set by HM Treasury. The DMA underlying the new results shown in this letter have not been discussed with or agreed by HM Treasury, and nor has the proposed change in benefit design. The new figures provided are therefore provisional pending such discussion and agreement.
3. GAD's calculation of these figures does not imply approval of the proposed benefit structure by HM Treasury.

Third party reliance and liability

This letter has been prepared for the Department for Communities and Local Government. I am content for the Department to release this report to third parties (including HM Treasury, other public service schemes, trades unions and parliament), provided that:

- > it is released in full along with the verification report.
- > the advice is not quoted selectively or partially,
- > GAD is identified as the source of the report, and
- > GAD is notified of such release

Third parties whose interests may differ from those of the Department for Communities and Local Government should be encouraged to seek their own actuarial advice where appropriate.

This letter has been prepared for the Department for Communities and Local Government for the purpose of assisting with scheme reform discussions. No person other than the Department for Communities and Local Government or third party other than HMT is entitled to place any reliance

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on the contents of this letter, except to any extent explicitly stated herein, and GAD has no liability to any other person or third party for any act or omission taken, either in whole or in part, on the basis of this letter.

Yours sincerely

A large black rectangular redaction box covering the signature area.A small black rectangular redaction box covering the name of the signatory.

Deputy Chief Actuary

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Annex A: New scheme design (post 2015)

Other than the accrual rates, the designs with enhanced ERFs from age 55 are as set out in Appendix A to the verification report, except that:

- > Early retirement reduction factors for retirement from active service from age 55 are based on the period to normal pension age rather than the period to deferred pension age [57 in the verification report]. Early retirement reduction factors for all other retirements are based on the period to deferred pension age.
- > Revaluation whilst in service is at the rates specified.

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Annex B: Data methodology and assumptions

We have used the same data, methodology and assumptions as adopted in the Verification report, with the exception of changes to the retirement patterns detailed in paragraph 3.6 of the Verification Report to reflect the alternative early retirement provisions. The retirement pattern assumptions are as follows:

- > The Reference Scheme should be reassessed allowing for the early retirement of half of the unprotected ex-FPS 1992 members at age 52, on terms consistent² with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme. This is unchanged from the Verification Report
- > We should assume that the introduction of the revised early retirement terms will result in the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55 [57 in the verification report]. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it should be assumed that the revised early retirement factors will lead to a change in behaviour and 25% of members in active service reaching age 55 [57 in the verification report] will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 [between 57 and 60 in the verification report] should instead be assumed to take early retirement at the age at which they would have deferred.

As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. Consistent with paragraph 3.8 of the verification report we have assumed that the FPS 1992 past service liability will increase by an amount equivalent to assuming that half of all unprotected ex-FPS 1992 members will change their behaviour to retire at age 55 [57 in the verification report].

² There are no early retirement factors in the FPS 1992.



GOVERNMENT ACTUARY'S DEPARTMENT

PROTECT - SCHEME MANAGEMENT

Reference:

By e-mail to [REDACTED]@communities.gsi.gov.uk

19 March 2014

Dear [REDACTED]

Costing of alternative early retirement and revaluation provisions with special terms for certain unprotected FPS member

1. You have asked me to value a further alternative scheme design.
2. GAD's report 'Verification of cost of final scheme design' dated 23 May 2012¹ (the Verification Report) set out the accrual rate that could be provided within the framework of the HMT cost ceiling process on a benefit design where Early Retirement Factors with reference to the normal pension age of 60 are provided on early retirement from active service from age 57. The accrual rate stated was 1/58.7.
3. [REDACTED] draft letter of 16 May 2013, set out the corresponding accrual rate for the same proposed design as above, except that Early Retirement Factors with reference to the normal pension age of 60 (calculated on a deferred basis as described in annex A) are provided on early retirement from active service from age 55. The accrual rate stated was 1/59.7.
4. The accrual rates in [REDACTED] draft letter were calculated assuming that revaluation whilst in service was in line with earnings. You subsequently asked GAD to calculate the affordable accrual rates if, all other benefits remaining unchanged, the in-service revaluation rate was linked to CPI plus 1.6% a year. My letter of 7 March 2014 showed this accrual rate to be 1/56.2.
5. You also asked for a further calculation following on from that set out in my letter of 7 March 2014. Unprotected members of the FPS who were aged 40 or over and had at least 20 years of service will have different early retirement factors if they retire from active service after age 55. These will be calculated in the same way as for other members but so that the pension will be 1% higher for each year early that the member retires before age 60, up to a maximum of 5% for those who retire on their 55th birthday.
6. This letter should be read in conjunction with the Verification Report [REDACTED] letter of 16 May 2013 and my letter of 7 March 2014, and in particular the limitations contained therein.

Result

7. The assumptions used to calculate affordable accrual rates for other scheme designs have assumed that the half of unprotected FPS members, those with the most service, will retire at age 52 in the Reference scheme and all proposed scheme designs. The members subject to

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/9401/2150577.pdf

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the additional special terms proposed in this latest costing request fall into the half of unprotected FPS members who have the most service. They would, therefore be assumed to retire at age 52 and not take up the special terms being proposed.

8. Therefore, under the assumptions adopted for assessing other benefit design scenarios, the affordable accrual rate would be the same as that calculated in my letter of 7 March i.e. 1/56.2.
9. The accrual rate should be considered in conjunction with the limitations noted below.
10. The accrual rate is based on the benefits set out in Annex A. It has been determined using the same approach detailed in the Verification Report including HM Treasury's instructions set out in Appendix C to the Verification Report. In particular, the accrual rate allows for the long term test and spreading of past service costs.
11. We have used the same data, methodology and assumptions (DMA) as adopted in the Verification Report, except for the changes detailed in Annex B.
12. The majority of the members eligible for these special terms will be subject to tapered transitional protection. As for previous work, we have not allowed for the taper in our calculations. All of the members eligible for these special terms who are eligible for taper protection would have to work beyond the end of their taper period to be able to access the special terms.
13. The result emerging from this latest calculation does however possibly call into question whether the methodology and assumptions adopted, and in particular the assumption set out in paragraph 7 above, remain appropriate to use for this purpose. Alternative approaches are considered below. These have not been discussed with HM Treasury.

Alternative calculations

14. Under the scheme reform process, HMT is responsible for setting assumptions. HMT may not regard the current assumptions as appropriate for valuing this latest option. We cannot second guess what assumptions HMT might regard as being appropriate for valuing this option. We are happy for you to instruct us to calculate the affordable accrual rate on alternative assumptions. However HMT may ultimately require different assumptions to be used, leading to a different accrual rate.
15. More generous early retirement terms would be expected to lead to a reduction in the affordable accrual rate and I have looked into some alternative methods of calculating an affordable accrual rate which might have this effect. Any alternative calculation methods might however be inconsistent with calculations previously done to calculate affordable accrual rates for other scheme designs. The indicative results in this section assume that the calculations would follow the DMA described in annex B except for the specific variations described in this section.
16. The first alternative might be to make no changes to assumptions that affect the value of the Reference Scheme but to assume that all of the members eligible for these special terms retire at age 55 when valuing the alternative scheme design. This would generate the biggest impact on the accrual rate without changing the valuation of the reference scheme. However, initial work shows that this calculation will lead to a more generous rather than less generous accrual rate. The reason for this is there will be a past service saving (since these members are receiving their FPS benefits later – ie at age 55 rather than 52) alongside the future service cost (since these members are receiving the special terms). The impact of the past service saving is greater than that of the future service cost and the net saving leads to an increase in accrual rate. I have not calculated the exact accrual rate under this approach.

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17. A second option might be to assume that the members eligible for these special terms retire at age 55 in the Reference Scheme. This would generate the biggest reduction in the accrual rate without changing the assumptions for members unaffected by the special terms. This accrual rate could be no more generous than the accrual rate in my letter of 7 March but when calculated in practice it is likely to be the same as that accrual rate. The reason for this is set out in the next paragraph.
18. The calculation of the affordable accrual rate in my letter of 7 March uses the least generous of the accrual rates calculated using the short-term and long-term tests and it is the long-term test that is the less generous. However, these special terms only affect the short-term test and our expectation is that the reduction in the accrual rate is unlikely to be sufficient to make the accrual rate calculated under the short-term test the least generous. In the time available we have not however undertaken detailed calculations to confirm this expectation.
19. A final option would be to use a methodology that departs from the cost ceiling methodology. One approach would be to calculate the reduction in the short-term accrual rate arising from the second option described above and then apply it to the accrual rate set out in my letter of 7 March. The reduction would be a short-term calculation while the main accrual rate derived from a long-term calculation so these quantities would not be strictly comparable. The accrual rate arising from this calculation is unlikely to be lower than 1/58

Please let me know if you would like me to provide figures for these, or any other, alternative calculation methodologies.

Limitations

20. The affordable accrual rate is very sensitive to the assumptions and methodology used when quoted to the nearest 0.1 (which represents only about a 0.2% proportionate change in the accrual rate – and which is well within the bounds of normal actuarial approximations).
21. The data, methodology and assumptions used in calculating the affordable accrual rate for a proposed scheme design are set by HM Treasury. The DMA underlying the new results shown in this letter have not been discussed with or agreed by HM Treasury, and nor has the proposed change in benefit design. The new figures provided are therefore provisional pending such discussion and agreement.
22. GAD's calculation of these figures does not imply approval of the proposed benefit structure by HM Treasury.
23. Since the Verification Report was produced, work has been ongoing on the 2012 valuation of the fire pension schemes. The DMA to be used for the 2012 valuation will be different to that underlying the verification report. If the 2012 valuation DMA were used to calculate affordable accrual rates, then these rates would be likely to be different to those set out in this, or earlier letters.

Third party reliance and liability

This letter has been prepared for the Department for Communities and Local Government. I am content for the Department to release this report to third parties (including HM Treasury, other public service schemes, trades unions and parliament), provided that:

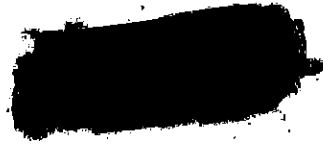
- > it is released in full along with the verification report.
- > the advice is not quoted selectively or partially,
- > GAD is identified as the source of the report, and
- > GAD is notified of such release

PROTECT - SCHEME MANAGEMENT

Third parties whose interests may differ from those of the Department for Communities and Local Government should be encouraged to seek their own actuarial advice where appropriate.

This letter has been prepared for the Department for Communities and Local Government for the purpose of assisting with scheme reform discussions. No person other than the Department for Communities and Local Government or third party other than HMT is entitled to place any reliance on the contents of this letter, except to any extent explicitly stated herein, and GAD has no liability to any other person or third party for any act or omission taken, either in whole or in part, on the basis of this letter.

Yours sincerely,




Deputy Chief Actuary

PROTECT - SCHEME MANAGEMENT

Annex A: New scheme design (post 2015)

Other than the accrual rates, the designs with enhanced ERFs from age 55 are as set out in Appendix A to the verification report, except that:

- > Early retirement reduction factors for retirement from active service from age 55 are based on the period to normal pension age rather than the period to deferred pension age. Factors are set so that the early retirement pension is actuarially equivalent to a deferred pension payable from normal pension age. Early retirement reduction factors for all other retirements are based on the period to deferred pension age.
- > Unprotected members of the FPS aged 40 or over and with at least 20 years' service on 1 April 2012 who retire from active service from age 55 will receive a 1% increase in their pension relative to the terms set out in the bullet point above for every year that they retire before age 60, up to a maximum of 5%.
- > Revaluation whilst in service is at the rate of CPI plus 1.6% a year.

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Annex B: Data methodology and assumptions

We have used the same data, methodology and assumptions as adopted in the Verification report, with the exception of changes to the retirement patterns detailed in paragraph 3.6 of the Verification Report to reflect the alternative early retirement provisions. The retirement pattern assumptions are as follows:

- > The Reference Scheme should be reassessed allowing for the early retirement of half of the unprotected ex-FPS 1992 members at age 52, on terms consistent² with the current FPS 1992 scheme. The remaining unprotected ex-FPS 1992 members should be assumed to remain in the scheme. This is unchanged from the Verification Report.
- > We should assume that the introduction of the revised early retirement terms will result in the unprotected ex-FPS 1992 members who would have retired at 60 instead retiring at 55. In the short-term, other members (including all ex-NFPS 2006 members) should be assumed to have the same retirement pattern as in the Reference Scheme.
- > In the long-term it should be assumed that the revised early retirement factors will lead to a change in behaviour and 25% of members in active service reaching age 55 [57 in the verification report] will be assumed to retire immediately.
- > In addition members who were assumed to withdraw from the scheme between ages 55 and 60 should instead be assumed to take early retirement at the age at which they would have deferred.

As a result of the revised early retirement terms, the FPS 1992 liabilities may be expected to increase. Consistent with paragraph 3.8 of the verification report we have assumed that the FPS 1992 past service liability will increase by an amount equivalent to assuming that half of all unprotected ex-FPS 1992 members will change their behaviour to retire at age 55.

Note that the "alternative calculations" section of this letter describes variations to this methodology.

² There are no early retirement factors in the FPS 1992.