

Police pension schemes Verification of cost of new scheme design

Date: 14 August 2012

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Review of the Police pension schemes – Verification of cost of new scheme design

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1 Introduction

- 1.1 This report has been prepared by the Government Actuary's Department (GAD) in its capacity as actuarial advisor to the Home Office (HO) on the Police pension schemes (PPS and NPPS). In carrying out this verification I have followed our normal quality processes for work conducted on public service pension matters¹.
- 1.2 This report contains our verification that the new scheme design is within the cost ceiling and sets out the data, methodology and assumptions used in determining the value of the Reference Scheme and the new scheme design.
- 1.3 I understand that HO will forward this note to HM Treasury (HMT).
- 1.4 The data, methodology, assumptions and new scheme design described in this report have been approved by HMT.

http://www.gad.gov.uk/Documents/Occupational%20Pensions/GAD Statement of Understanding v 1.1 Dec 2011.pdf

¹ The GAD Statement of Understanding sets out the standards which the Department currently applies for any work carried out in this area.



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2 Verification Statement

2.1 The Home Secretary wrote to the Police Negotiating Board on 27 March 2012 setting out the gross cost ceilings for the Police pension scheme (England and Wales). The gross cost ceiling is the scheme specific contribution rate required to provide the Government's preferred design (the "Reference Scheme") set out in that letter. The letter set out the following gross cost ceiling for the Police pension scheme (England and Wales):

Gross cost ceiling	Taxpayer contribution	Employee contribution
(% pay)	(% pay)	(% pay)
28.0%	14.3%	13.7%

- 2.2 Following scheme level discussions, the Home Secretary has set out the new scheme design for the Police pension scheme (England and Wales) for service from 1 April 2015. The new scheme design is described at Appendix A.
- 2.3 In its capacity as advisor to HMT, GAD provided advice to HMT on cost ceilings for scheme level discussions in the note of 7 October 2011: Cost Ceilings for scheme level discussions: Advice on data, methodology and assumptions. Section 8 of that note provided advice on verifying that proposed scheme designs are within the cost ceiling. This report has been prepared in accordance with the advice outlined in the 7 October 2011 report and subsequent HMT instructions (in particular, the treatment of past service costs as outlined in Appendix D).
- 2.4 I have compared the cost of the new scheme design set out in Appendix A with the Reference Scheme, and concluded that this new scheme design is within the required cost ceiling. This conclusion is subject to the comments below.
- 2.5 The conclusion in 2.4 is dependent on, and sensitive to, the data, methodology and assumptions adopted. These are set out in Section 3 and discussed in Section 4.
- 2.6 The data, methodology, assumptions and new scheme design described in this report are subject to approval by HMT, based on advice from GAD in its capacity as advisor to HMT. HMT has confirmed to HO that it is content with the data, methodology, assumptions and new scheme design.
- 2.7 The costs of both the new scheme design and the Reference Scheme will change over time. HMT has specified that the comparison should allow for the likely increases in the average age of the schemes' membership due to the increased pension ages. I have considered the possible increase in the average age of the membership and conclude that, allowing for this effect, the cost of the new scheme design set out in Appendix A remains within the cost of the Reference Scheme when assessed on the revised assumptions discussed in 3.5 and 3.7. This comparison is discussed in section 5.
- 2.8 Limitations of our advice are described in Section 6.



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3 Data, methodology and assumptions

- 3.1 This section sets out the data, methodology and assumptions used for the purposes of comparing the Reference Scheme with the new scheme design.
- 3.2 The cost ceilings were set in accordance with the data, methodology and assumptions set out in GAD's notes:
 - > Review of the Police pension schemes: Assessment of cost ceiling and schemespecific proposals: Cost ceiling – results dated 24 May 2012, which referred to:
 - > Review of the Police pension schemes: Cost ceiling and scheme-specific proposals: Data, methodology and assumptions dated 16 November 2011.
- 3.3 As required in paragraphs 8.2 to 8.10 of the GAD advice of 7 October 2011, I have considered whether the data, methodology and assumptions used to calculate cost ceilings will be appropriate to provide a fair comparison between the costs of the new scheme design set out in Appendix A and the costs of the Reference Scheme. Paragraphs 3.4 and 3.5 describe adjustments made to the data, methodology and assumptions in order to ensure a fair comparison.
- 3.4 The data outlined in the above reports of 24 May 2012 and 16 November 2011 was the valuation data provided for the valuation of the schemes as at 31 March 2008. The new scheme design set out in Appendix A will result in additional past service costs (see paragraph 3.8). These costs will depend on the profile of the membership in 2015, which will differ from that in 2008. We have, therefore, made the following adjustments to the data:
 - > By 2015 the NPPS will have been open for 9 years, so members with 9 years' service or less are assumed to be members of the NPPS, whilst those with more than 9 years' service are assumed to be members of the PPS.
 - The membership profile by service in the 2008 valuation data is fairly flat, except for a large group of members with 4 to 7 years' service as at 2008. Including these members in the NPPS group would artificially inflate the assumed NPPS proportion of the membership in 2015 (as these members are known to be in the PPS). They would have between 11 and 14 years' service in 2015, so we have made allowance for this by scaling down the number of members with 4 to 7 years' service and scaling up those with 11 to 14 years' service.
 - > The number of Police officers is expected to reduce in the period to 1 April 2015. Following the conclusions set out in the HMIC report *Adapting to Austerity* dated July 2011, we have allowed for lower recruitment which is expected to reduce officer numbers by 16,200 over the period between 31 March 2010 and 1 April 2015. We have done this by scaling down the number of members assumed to have less than 5 years' service in 2015.
- 3.5 The following changes have been made to the methodology and assumptions outlined in the above reports of 24 May 2012 and 16 November 2011:
 - > The gross cost ceiling outlined in 2.1 above assumed that all members retired on reaching age 60. No allowance was made for early or late retirements. The new scheme design allows for early retirement reduction factors calculated with reference to the period to age 60 rather than the period to SPA for active members who retire between ages 55 and 60.



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- > In order to assess the impact of this design change it is necessary to allow for early retirements in assessing the cost of the new scheme design.
- > Consequently HMT have requested that:
 - > The Reference Scheme is reassessed allowing for 50% of unprotected PPS members (those with most service)² to leave service at age 52. (See Appendix C for further details.)
 - > In the short-term, we assume the introduction of the revised early retirement terms will result in all active unprotected members, except the 50% of unprotected PPS members who are assumed to leave service at age 52, retiring at age 55.
 - > In the long-term, we assume the introduction of the revised early retirement terms will result in 25% of active members retiring at age 55.
 - > In addition, members who were assumed to withdraw between ages 55 and 60 (when costing the Reference Scheme) should instead be assumed to take early retirement at the age at which they would have withdrawn.
- 3.6 These revised assumptions are used to assess the costs of the new scheme design set out in Appendix A and the Reference Scheme. Note that the contribution rate required for the Reference Scheme using these revised assumptions will differ from the original cost ceiling, and so the cost ceiling outlined in 2.1 above does not play any direct role in the comparison.
- 3.7 The following additional assumptions are required to calculate the cost of the new scheme design:
 - > Early retirement reduction factors will be broadly cost neutral on a deferred benefit approach to the (notional) benefit payable at age 60 (rather than SPA) for active members who retire between ages 55 and 60.
 - Early retirement reduction factors for those who retire before age 55 will be broadly cost neutral on a deferred benefit approach to the benefit payable at SPA.
- 3.8 The new scheme design may lead to differences in member behaviour. As a result of the revised early retirement terms the PPS and NPPS liabilities may be expected to increase. As requested by HMT we have assumed that the PPS past service liability will increase by an amount equivalent to assuming that 50% (those with least service) of active unprotected PPS members² will change their behaviour to retire at age 55 (five years earlier than they would have otherwise done). We have assumed that the NPPS past service liability will increase by an amount equivalent to assuming that all active unprotected NPPS members will change their behaviour to retire at age 55 (five years earlier than they would have otherwise done). Allowing for these past service costs the cost of the new scheme remains within the revised cost ceiling.
- 3.9 The Home Secretary set out in her letter to the PNB of 27 March 2012 that transitional protection would apply to members of the PPS on 1 April 2012 who were aged 40 and over and who were 10 years or less away from being able to retire on a maximum unreduced pension. Subsequently, transitional protection arrangements have been extended to cover members of the PPS on 1 April 2012 who were aged 38 or 39 who

² The split of unprotected PPS members relates to the transitional protection outlined by the Home Secretary in her letter to the Police Negotiating Board of 27 March 2012. Under the extended transitional protection offered in the new scheme design described in Appendix A, slightly fewer than half of unprotected PPS members are assumed to leave service at age 52



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were 10 years or less away from being able to retire on a maximum unreduced pension. As agreed between HO and HMT, the accrual rate has not been reduced to reflect the extra costs of providing this additional transitional protection.

- 3.10 No allowance has been made for any tapering of the ten-year transitional protection; members who are subject to tapered protection have been treated as unprotected members.
- 3.11 Both the Reference Scheme and the new scheme are assumed to have the same contracted-out status.

Summary of data, methodology and assumptions

- 3.12 The membership data used to assess the cost of the Reference Scheme and the new scheme design outlined in Appendix A is based on the most recent full extract of membership data used for actuarial valuations of the schemes (data as at 31 March 2008), adjusted in line with paragraph 3.4, and is summarised in Appendix B.
- 3.13 The methodology used to determine the value of the Reference Scheme and the new scheme design is the standard actuarial methodology known as the Projected Unit Method with a one year control period.
- 3.14 The assumptions used to determine the relevant costs are:
 - a real discount rate of 3% pa in excess of CPI in line with the current SCAPE discount rate
 - > a nominal discount rate of 5% pa
 - > CPI increases of 2% pa
 - > earnings increases of 4.25% pa
 - > improvements in post-retirement life expectancy in line with the ONS 2008-based principal population projections³
 - > 19.6% of pension⁴ is commuted in exchange for a lump sum at retirement
 - > withdrawal rates as set out in my report dated 24 May 2012
 - > retirement rates as outlined in Appendix C
 - > for other demographic assumptions, set as best estimates

Summary of HMT specified tests

- 3.15 HMT specified a number of tests which the new scheme design must satisfy. The details of these tests, which must be applied consistently across all schemes, are formally outlined in various letters and reports issued by HMT.
- 3.16 For convenience, the following provides a succinct summary of the various tests:
- 3.17 "Short-term" test

The cost of the new scheme design cannot exceed the cost of the Reference Scheme over the 7 years from April 2015.

³ The Office for National Statistics published the 2010-based principal population projections on 26 October 2011. Improvements in life expectancy are assumed to be in line with the 2008-based projections for consistency with reviews of other schemes.

⁴ Assuming that members commute 19.6% of their pension is equivalent, with a 12:1 factor for converting pension to lump sum, to assuming members commute 55% of the HMRC maximum



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3.18 "Long-term" test

The assumed retirement patterns for new entrants mean that the relative costs of the new scheme design and the Reference Scheme vary in the longer term. HMT requires the cost of the new scheme design not to exceed the cost of the Reference Scheme in the longer term.

This test is discussed further in section 5.

3.19 "Past Service Cost" test

Any element of the new scheme design which is expected to lead to further costs relating to past service effects ("past service costs") are required to be compensated by reductions in cost elsewhere. Past service costs are to be spread over the salaries of unprotected members over the 7 years from April 2015.

Further details of the Past Service Cost test are outlined in Appendix D.

3.20 The Past Service cost test requires the use of a "new reference cost". The new reference cost is the cost of the new scheme design but with the accrual rate set at the maximum rate that will pass both the short-term and long-term tests above. HMT requires that the total cost of the new scheme and the Past Service costs is not more than the new reference cost over the 7 years from April 2015.



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4 Sensitivity analysis

- 4.1 The conclusion in paragraph 2.4 is sensitive to the assumptions used. The key sensitivities in the assumptions are as follows⁵:
 - > Earnings growth relative to CPI: If earnings growth is assumed to exceed CPI by less than the current margin of 2.25% then the assessed cost of the new scheme design will be in excess of the cost of the Reference Scheme. The converse is also true.
 - Age retirement assumptions: The figures provided in this report have been based on the assumption that half (those with least service) of unprotected PPS members⁶, all unprotected NPPS members and 25% of new entrant active members will retire five years earlier as a result of the introduction of the revised early retirement terms but that no other members will change their behaviour. If a different spread of retirements were assumed between ages 55 and scheme's Normal Pension Age then the affordable accrual rate may be higher or lower.
 - Withdrawal rates: The new scheme design is expected to be less favourable to those members who remain in service for long periods than to those who work for shorter periods relative to the Reference Scheme. However, the new scheme design is expected to be more favourable to those members who remain in service until age 55 than those who leave before then relative to the Reference Scheme. Thus if we assumed a different rate of withdrawals at ages below 55 than has been assumed in the current assessments, the cost of the new scheme might be higher or lower than the cost of the Reference Scheme.

⁵ This paragraph discusses the impact of different assumptions on the cost of the new scheme design compared with the Reference Scheme. The actual cost of the new scheme, if experience is different from the assumptions used (as outlined in paragraph 3.14), may be different.

The split of unprotected PPS members relates to the transitional protection outlined by the Home Secretary in her letter to the Police Negotiating Board of 27 March 2012. Under the extended transitional protection offered in the new scheme design described in Appendix A, slightly fewer than half of unprotected PPS members are assumed to leave service at age 52



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5 Comparisons of costs in the longer term

- 5.1 Paragraphs 8.21 to 8.23 of GAD's note to HMT of 7 October 2011 provide that if any benefit design options are proposed in which the comparison of costs differs in the short term and the long term, then HMT could consider the issues arising on a case-by-case basis.
- 5.2 The data used for the comparison is based on membership data as at 31 March 2008 (with the adjustments described in paragraph 3.4) when members had a right to retire at age 55 or below. Hence this data includes relatively fewer active members aged over 55 (because of retirements) than might be expected in the future in the new scheme where the Normal Pension Age is 60.
- 5.3 HMT has specified that the comparison should allow for the likely increases in average member age due to the increased pension ages.
- 5.4 The future membership age profile is uncertain. For simplicity, I have performed a comparison for the assumed membership in 2015 with average age increased by 4 years, which is approximately half the difference between 60, the Normal Pension Age for the new scheme, and the average retirement age in the existing schemes of about 52.
- 5.5 In order to provide a fair comparison with the long-term cost of the scheme I have assumed a State Pension Age of 68 for all members in both the Reference Scheme and the new scheme design.
- 5.6 I have concluded that, allowing for this effect, the cost of the new scheme design set out in Appendix A remains within the cost of the Reference Scheme when valued on the assumptions discussed in 3.5 and 3.7 above.



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6 Limitations

6.1 A number of limitations apply to the comparisons made and the conclusions reached in paragraphs 2.4 and 2.7. These are described below.

Verification statement

- 6.2 The purpose of this report is to provide HMT with the requested statement verifying that the cost of providing the new scheme structure is within specified cost limits as discussed in paragraphs 3.15 to 3.20.
- 6.3 This report has been produced on the basis of the comparisons requested by HMT, namely:
 - > On an ongoing basis comparing the Reference Scheme with the new scheme structure allowing for the changes in assumptions outlined in 3.5 and 3.7.
 - > On a long-term basis comparing the impact of an increase in the average age of the scheme membership.
- 6.4 The costs compared for this report will inevitably differ from the ultimate costs of the new scheme and of the Reference Scheme, for reasons such as:
 - > The membership data used to calculate the cost for the purposes of this report will differ from the actual scheme membership to which the new scheme will apply in future. The relative weighting of older and younger members in future may impact on how the new scheme design and Reference Scheme compare in the longer term.
 - > The outturn will differ from the assumptions made. In particular the current assumed gap between the revaluation rates in service of the Reference Scheme and the new scheme may not be maintained in practice resulting in the cost of the two scheme structures diverging over time. In addition, the assumed retirement and withdrawal rates will not occur in practice.

The above list is not exhaustive.

6.5 Some of the assumptions adopted are different between the Reference Scheme and the new scheme. Since only one scheme will be implemented in practice, it will not be possible to determine how close the assumption adopted for a scheme design that is not implemented would have been to actual experience.

Data, methodology and assumptions

- 6.6 The costs being compared are sensitive to the data, methodology and assumptions adopted.
- 6.7 HMT has agreed the data, methodology and assumptions for purposes of the comparison.
- 6.8 We have not made any allowance in our calculations for:
 - > the changes to State Pension Age that were announced in the Autumn Statement on 29 November 2011;
 - > any other changes to the State Pension Age not yet announced; or
 - > any changes to the scheme's Normal Pension Age, which is subject to review.



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Changes to the State Pension Age and the scheme's Normal Pension Age will affect the costs of the Scheme.

Calculations

6.9 Some of the calculations undertaken for the purposes of this document have been based on approximate methods. I do not expect this to affect materially the accrual rate of a scheme design that will pass the tests set out by HM Treasury.

Benefits

6.10 The Reference Scheme set out by the Home Secretary and the new scheme design do not specify the full detail of every aspect of the benefit structures. Where there is scope for interpreting what benefits the Reference Scheme or new scheme design includes, the calculations value benefits which are consistent with the recommendations of Lord Hutton's Independent Public Service Pensions Commission and in line with the NPPS current provisions (i.e. the scheme currently open to new members). The approach taken in determining the cost ceiling is outlined in our report Review of the Police pension schemes: Assessment of cost ceiling and scheme-specific proposals: Cost ceiling – results dated 24 May 2012.

Third party reliance and liability

- 6.7 This report has been prepared for HO. I am content for HO to release this report to third parties (including HMT, the Police Negotiating Board, other public service schemes and respective scheme actuaries), provided that:
 - > it is released in full;
 - > the advice is not quoted selectively or partially; and
 - > GAD is identified as the source of the note.
- 6.8 Third parties whose interests may differ from those of HO should be encouraged to seek their own actuarial advice where appropriate.
- 6.9 This report has been provided to HO for the purpose of providing HMT with verification of the cost of the new scheme design from 2015. No person other than HO or any third party other than HMT is entitled to place any reliance on the contents of this report, 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 report.

HMT assessments not considered in providing this report

6.10 Cash-flow (OBR) assessment

Government advised that public service workers who, as of 1 April 2012, have 10 years or less to their current Normal Pension Age will see no change in when they can retire, nor any decrease in the amount of pension they receive at their current Normal Pension Age. Schemes were asked to determine the fairest way of achieving this while ensuring that costs to the taxpayer in each and every year do not exceed the Office for Budget Responsibility forecasts of public service pension costs. In addition, schemes may also design a taper over a period of 3 to 4 years, providing some protection to those close to being within 10 years of their Normal Pension Age as at 1 April 2012. Protection should reduce linearly over the taper period.



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- 6.11 Within the new scheme design, protection has been provided in line with the above with no additional protection being proposed. Consequently we have not considered the cash-flow test in respect of these protected members in providing this report.
- 6.12 Low and Middle Earners
 Government gave its commitment that low and middle earners working a full public service career will receive broadly the same pension at normal pension age under the new scheme designs as they do under the current pension scheme.
- 6.13 In providing this report, I have had regard to the overall cost of the new scheme design compared with the Reference Scheme only. The impact of the new scheme design on individual members (and in particular low and middle earners) has not formed any part of my assessment and therefore this report cannot be considered as providing assurance that the above commitment has been met by the new scheme design.



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Appendix A: New scheme design (post-2015)

A.1 We have valued a Career Average Revalued Earnings (CARE) pension scheme with the following features:

- a) a normal pension age of 60
- b) a deferred pension age of State Pension Age (or 65, whichever is higher)
- c) revaluation of past CARE service for active members in line with CPI + 1.25% pa
- d) pensions accrue at a rate of 1/55.3 for each year of service
- e) early retirement reduction factors for retirement from active service from age 55 based on the period to normal pension age rather than the period to deferred pension age. Early retirement reduction factors for all other retirements based on the period to deferred pension age.
- f) pensions in payment and in deferment indexed by CPI⁷
- g) no fixed lump sums, optional commutation, with a 12:1 factor for converting pension to lump sum
- h) ancillary benefits (ill-health, death and survivors benefits) that match provision in the scheme that is currently open to new members (i.e. a lower tier ill health pensioner receives an unreduced CARE pension; a partner receives same proportion of member's pension as now⁸)
- i) members rejoining after a period of deferment of less than 5 years can link new service with previous service, as if they had always been an active member (so previous accruals are indexed by CPI +1.25% pa for that period of deferment)
- j) members transferring between public service schemes would be treated as having continuous active service (which would include those transferring between schemes who had rejoined public service after a gap of less than 5 years)

A.2 The following members receive transitional protection and are able to continue accruing benefits in their current scheme:

- a) Members of the PPS or NPPS on 1 April 2012 who are aged 45 or over on that day.
- b) Members of the PPS on 1 April 2012 who aged 38⁹ or over and are 10 years or less from maximum unreduced pension (i.e. with 20 or more years' service) on that day.

A.3 There is tapered protection for those members close to qualifying for transitional protection, broadly those members within 4 years of qualifying ¹⁰. Members covered by tapered protection are able to accrue some benefits in the current scheme after 1 April 2015.

⁷ Pensions in payment and in deferment are assumed to be indexed in line with the Pensions Increase Act 1971 – currently these increases are assumed to reference CPI.

⁸ Survivors' pensions are to be calculated as 50% of each member's post-commutation pension.

⁹ This represents an extension of the transitional protection arrangements for members of the PPS on 1 April 2012 which the Home Secretary set out in her letter the PNB of 27 March 2012 (the minimum age was 40 in that letter). As agreed between HO and HMT, the accrual rate has not been reduced to reflect the extra costs of providing this additional transitional protection.

¹⁰ Full details of how tapered protection will apply are included in the Reform Design Framework.



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Appendix B: Data

- B.1 This appendix contains summary statistics of the data used to value the Reference Scheme and the new scheme design.
- B.2 Table B1 contains the number of members by headcount in the scheme as at 31 March 2008, their total full time equivalent pensionable salaries and their average ages weighted by pensionable salaries. These figures include members of both the PPS and NPPS schemes.

Table B1 - Active members as at 31 March 2008

	Number (thousands)	Total Pensionable Salaries (£ million pa)	Average Age weighted by pensionable salaries
Males	108	3,707	401⁄4
Females	36	1,143	36
Total	144	4,851	39¼

- B.3 Further details regarding this data can be found in our note of 16 November 2011: "Review of the Police Pension Schemes: Cost ceiling and scheme-specific proposals: Data, methodology and assumptions.
- B.4 Adjustments, as described in paragraph 3.4, were made to the data as at 31 March 2008 to derive the assumed membership profile as at April 2015. Table B2 contains the assumed number of members by headcount in the scheme as at 1 April 2015, their total full time equivalent pensionable salaries¹¹ and their average ages weighted by pensionable salaries. These figures include members of both the PPS and NPPS schemes.

Table B2 – Assumed active members as at 1 April 2015

	Number (thousands)	Total Pensionable Salaries (£ million pa)	Average Age weighted by pensionable salaries
Males	98	3,523	41½
Females	29	989	38
Total	127	4,512	40¾

¹¹ Salaries remain in 2008 terms, ie no allowance has been made for increases to Police pay scales.



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Appendix C: Retirement Rates

- C.1 As outlined in paragraphs 3.5 the Reference Scheme has been reassessed on the following early retirement pattern:
 - a. 50% of unprotected PPS members¹² (those with most service) will leave service at age 52
 - 50% of unprotected PPS members (those with least service) will retire at age
 60
 - c. All unprotected NPPS members will retire at age 60
 - d. All new entrants post-2015 will retire at age 60
- C.2 The above pattern of early retirements was specified by HMT.
- C.3 HMT indicated that the inclusion of revised early retirement terms (i.e. early retirement reduction factors based on the period to age 60, rather than SPA, for active members that retire at age 55 or later) in the new scheme design will alter members' behaviour. Active members are expected to retire earlier than they would otherwise have done (i.e. if early retirement reduction factors were based on the period to deferred pension age for early retirements at all ages).
- C.4 HMT has specified that the introduction of the revised early retirement terms will result in 50% (those with least service) of active unprotected PPS members, all active unprotected NPPS members and 25% of active new entrants post-2015 retiring five years earlier, ie at age 55 rather than 60. We have made allowance for these behavioural changes in calculating the costs of the new scheme design.

¹² The split of unprotected PPS members relates to the transitional protection outlined by the Home Secretary in her letter to the Police Negotiating Board of 27 March 2012. Under the extended transitional protection offered in the new scheme design described in Appendix A, slightly fewer than half of unprotected PPS members are assumed to leave service at age 52



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Appendix D: Treatment of Past Service costs

- D.1 A past service cost arises under the new scheme design in respect of unprotected PPS and NPPS members. HMT policy on the treatment of this past service cost is set out below.
- D.2 Having determined a proposed scheme design that remains within the published cost ceiling when assessed across members of all ages (including those within 10 years of their current Normal Pension Age) in the long term and the short term, schemes may offer protection for those within 10 years of their scheme's Normal Pension Age on 1 April 2012 and a taper of 3-4 years without any reduction to the accrual rate of proposed scheme design. Schemes may offer transitional arrangements over and above the 10 year protection and 3-4 year taper, but in this case the accrual rate must be reduced to allow for the extra costs of additional protection. The costs of the proposed scheme design with additional transitional protection and reduced accrual rate must not exceed the costs of the original proposed scheme design with the 10 year protection and 3-4 year taper.
- D.3 Note this requires an iterative process to set the cost limits:
 - Firstly the accrual rate required for the proposed design (without additional transition) will need to be calculated – this is then used to set the cost limit for transition / past service costs
 - Then this accrual rate would need to be adjusted for transition / past service costs
- D.4 The 7 year averaging period still applies, and so the transition cost limit is as follows:

Average contribution rate required in 2015-2022 for proposed scheme design (including 10 year protection, taper, transition and adjusted accrual rate)

Past service costs spread over 7 years

≤

Average contribution rate required in 2015-2022 for original proposed scheme design (including 10 year protection and taper, but before allowance for transition and adjusted accrual rate)