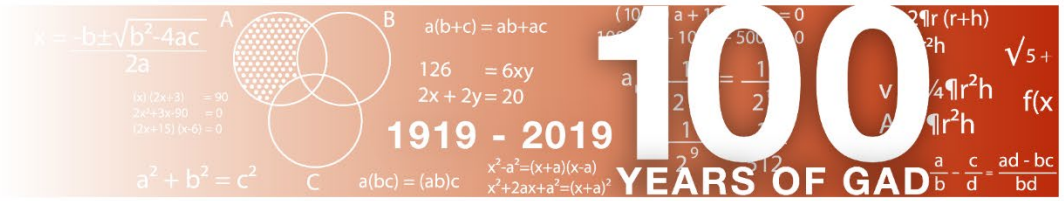
Government Actuary's Department



Principal Civil Service Pension Scheme (PCSPS)

Classic, classic plus, premium and nuvos schemes

Early retirement, late retirement, age addition and late payment supplement

Factors and guidance

Date: 1 August 2019

Contents

1 Summary

1.1 This note is addressed to the Cabinet Office as scheme manager of the PCSPS (Principal Civil Service Pension Scheme).

1.2 This note provides advice on the following:

- Early retirement factors (in normal health) for:
  - **classic** and **premium** members with a normal pension age (NPA) of 60 years
  - **classic** and **premium** members with a NPA of 65 years
  - **nuvos** members
- Age addition factors to be used to increase added pension accrued in **classic**, **classic plus** and **premium**.
- Age addition factors for **nuvos** scheme benefits and added pensions. These are used to increase the pensions of members in active service after NPA.
- Late payment supplement factors for **nuvos** scheme benefits and added pensions. These are used to increase the pensions of members retiring after NPA from deferred status.

1.3 Members of **classic plus** have accrued some of their benefits in **classic** and some in **premium**. The **classic** and **premium** factors in this note should be applied as described to the appropriate tranche of the **classic plus** members' benefits.

1.4 There are no increases on late retirement in **classic**, **classic plus** or **premium**, except in respect of added pension in active service.

1.5 Please refer to paragraph 2.10 for early retirement calculations involving members with personal pension ages (i.e. **classic** and **premium** members with a NPA that is not 60 or 65 years).

1.6 The factors provided in this note have been prepared in light of our advice to the Cabinet Office dated 30 October 2018 and its instructions following that advice.

Implementation and review

1.7 We understand early retirement factors for **classic** scheme benefits are the responsibility of the Scheme Actuary of the PCSPS. The remaining factors are responsibility of the Minister, after consultation with the Scheme Actuary.

1.8 The factors contained in this guidance will apply from 1 May 2019.This implementation date has been determined by Cabinet Office. This guidance will apply with immediate effect.

1.9 This guidance is intended to supersede any factors or advice previously issued which rely on input from the GAD. In particular, this guidance supersedes our previous guidance "Principal Civil Service Pension Scheme (PCSPS): Early and late retirement factors" dated 2 October 2015.

1.10 Factors have been updated but the calculation methodology remains unchanged.

1.11 This note does not apply to benefits in the **alpha** scheme (or Civil Servants and Others Pension Scheme). Separate guidance is issued in respect of early retirement, age addition and late payment supplements for members of the alpha scheme.

1.12 The actuarially reduced pension and lump sum on early retirement are based on the preserved pension and lump sum before the addition of any pension increase. Late payment supplements on pension and lump sum are based on the preserved pension and lump sum before the addition of any pension increase.

1.13 The following factors are provided in Appendices A to C.

Factor table number	Scheme	Description
Table 1: P1ER60PEN1 (Consolidated spreadsheet table number 406)	Classic and Premium NPA 60 members	Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 1) Unisex factors Factors for calculating the actuarially reduced pension.
Table 2: P1ER60LS1 (Consolidated spreadsheet table number 407)	Classic NPA 60 members	Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 1) Unisex factors Factors for calculating the actuarially reduced lump sum.

Table3: P1ER60PEN2 (Consolidated spreadsheet table number 408)	Classic and Premium NPA 60 members	Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2) Unisex factors Factors for calculating the actuarially reduced pension.
Table 4: P1ER60LS2 (Consolidated spreadsheet table number 409)	Classic NPA 60 members	Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2) Unisex factors Factors for calculating the actuarially reduced lump sum.
Table 5: P1ER65PEN1 (Consolidated spreadsheet table number 410)	Classic and Premium NPA 65 members	Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 1) Unisex factors Factors for calculating the actuarially reduced pension.
Table 6: P1ER65LS1 (Consolidated spreadsheet table number 411)	Classic NPA 65 members	Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 1) Unisex factors Factors for calculating the actuarially reduced lump sum.
Table 7: P1ER65PEN2 (Consolidated spreadsheet table number 412)	Classic and Premium NPA 65 members	Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2) Unisex factors Factors for calculating the actuarially reduced pension.

Table 8: P1ER65LS2 (Consolidated spreadsheet table number 413)	Classic NPA 65 members	Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2) Unisex factors Factors for calculating the actuarially reduced lump sum.
Table 9: P1ER65NUV (Consolidated spreadsheet table number 414)	Nuvos	Early retirement from Nuvos scheme Unisex factors
Table 10: P1AANUV (Consolidated spreadsheet table number 417)	Nuvos	Age addition factors in Nuvos Unisex factors
Table 11: P1LPSNUV (Consolidated spreadsheet table number 418)	Nuvos	Late payment supplement factors in Nuvos Unisex factors

1.14 Details of the principal assumptions underlying the factor tables in this guidance are set out in Appendix D.

1.15 Examples of using the factors are in Section 6.

1.16 We do not anticipate any special cases not covered by this note. However, if any do occur they should be referred to GAD.

1.17 This guidance has been written for pension administrators and assumes some knowledge of general pension terminology, and some familiarity with retirement calculations for the Principal Civil Service Pension Scheme. Any questions concerning the application of the guidance should, in the first instance, be referred to Cabinet Office.

1.18 In line with best practice and in order to make sure that factors are being used as intended and the instructions are fit for purpose, we suggest that some example calculations are sent to GAD for review.

1.19 The factors contained in this guidance will be subject to review periodically. This will depend on external circumstances, for example whenever there is a change in the SCAPE basis; when changes in the actuarial assumptions adopted for other scheme factors take place; or following each future actuarial valuation where mortality and other relevant experience is reviewed or if other credible and material information comes to light.

Scheme regulations

1.20 Our understanding of the various responsibilities for setting early and late retirement factors in the PCSPS is set out below:

- The Scheme Actuary is responsible for setting the early retirement factors in **classic**
- The Minister for the Civil Service is responsible for setting the other factors covered by this note, having taken actuarial advice.

1.21 The Regulations to which this document relates, and the corresponding factors provided, are as follows:

Factor type	Section name and statutory reference (*)	Title of Regulation
Early retirement – early payment reduction	**(Classic)**	
	Section II: 3.10a, 3.10b, 3.10c	Termination of pensionable service on resignation or option out of the scheme
	(Premium & Classic Plus)	
	Section I: D3(4)	Early payment of pensions with actuarial reduction
	L11(2)	Retirement benefits: early retirement with actuarial reduction
	(Nuvos)	
	Section III: C4	Effect of active member becoming deferred member
	C5(8b)	Effect of members becoming entitled to pensions: general
	C6	Effect of members becoming entitled to pensions under rule E.4
	E14(3b)	Club transfer pension
	E15(3b)	Linked service pension

Late retirement - age addition (late retirement from active	**Classic)** Section II: 14.10(6) 14.12(9) **(Premium and Classic Plus)** Section I: C1.8 C1.10 C1.11 **(Nuvos)** Section III: C.2 C.4 C.5 C.6	Pension accounts for civil servants who have bought contributed pension and lump sum Effect of pension account of civil servant resigning or opting out of the scheme Pension accounts for active members who have bought contributed pension Effect on pension account of active member becoming deferred member Effect on pension account of member becoming entitled to pension Pension accounts for active members Effect of active member becoming deferred member Effect of members becoming entitled to pensions: general Effect of members becoming entitled to pensions under rule E.4
Late retirement - late payment supplement (late retirement from deferred)	**(Nuvos only)** Section III: C.4 (12)	Effect of active member becoming deferred member

***** References are to: UK Superannuation Act 1972 section 2(11): The Principal Civil Service Pension Scheme 1974 (as amended)

Third party reliance

1.22 This guidance has been prepared for the use of Cabinet Office and the scheme administrators for the purposes of demonstrating the application of the factors covered by this guidance only. This guidance may be published on the Cabinet Office and the scheme administrator's website but must not otherwise be reproduced, distributed or communicated in whole or in part to any other person without GAD's prior written permission.

1.23 Other than the Cabinet Office and the scheme administrators, no person or third party is entitled to place any reliance on the contents of this guidance, except to any extent explicitly stated herein. GAD has no liability to any person or third party for any action taken or for any failure to act, either in whole or in part, on the basis of this guidance, whether or not GAD has agreed to the disclosure of its advice to the third party.

Limitations

1.24 This guidance should not be used for any purpose other than those set out in this guidance.

1.25 The factors contained in this guidance are subject to regular review. Scheme managers and administrators need to ensure that they are using the latest factors, as relevant, when processing cases.

1.26 Advice provided by GAD must be taken in context and is intended to be considered in its entirety. Individual sections, if considered in isolation, may be misleading, and conclusions reached by a review of some sections on their own may be incorrect. GAD does not accept responsibility for advice that is altered or used selectively. Clarification should be sought if there is any doubt about the intention or scope of advice provided by GAD.

1.27 This guidance only covers the actuarial principles around the calculation and application of early retirement, late retirement, age addition and late payment supplement factors. Any legal advice in this area should be sought from an appropriately qualified person or source.

1.28 Scheme managers and administrators should satisfy themselves that early retirement, late retirement, age addition and late payment supplement factors calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.

1.29 This guidance is based on the Regulations in force at the time of writing. It is possible that future changes to the Regulations might create inconsistencies between this guidance and the Regulations. If users of this guidance believe there to be any such inconsistencies, they should bring this to the attention of Cabinet Office and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.

2 Early Retirement – classic, premium and nuvos

2.1 Early payment reduction factors are used to reduce benefits of members in normal health who wish to retire before their normal pension age (NPA). This note does not apply to those who retire with an ill-health pension.

2.2 The methodology used to calculate the early payment reduction is different depending on which of the following two circumstances applies to the member in question:

- **Circumstance 1**: Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (described in paragraphs 2.5 and 2.6).
- **Circumstance 2**: Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (described in paragraphs 2.7 and 2.8).

2.3 The following points should be noted:

- Reduced benefits should be calculated before the commutation option is exercised. Paragraphs 2.6 and 2.8 apply only to lump sums accrued automatically in the **classic** scheme. They do not apply to lump sums which arise from members exercising the commutation option.
- The early retirement reduction applied to the member's pension does not apply to the contingent dependant benefits which may be payable in the future.

2.4 We understand that the minimum retirement ages (in normal health) in the PCSPS are as follows:

- **classic, premium** – 50 years (for some members it will be 55 years)
- **nuvos** – 55 years

Circumstance 1 - Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs

2.5 The formula below sets out how to reduce the member's pension on early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs. On this basis, the formula below is used for (i) an active member or a deferred member retiring early on or after age 55 or (ii) an active member or a deferred member retiring before age 55 whose deemed date for pension increases is in the same financial year as early retirement.

$$\textit{Early retirement pension} = \textit{Unreduced pension} \times \textit{Factor}$$

Where;

Unreduced pension is the member's pension at retirement (before pension increases applied).

Factor is the factor appropriate to the member's age in years and complete months (ignoring part months) at retirement, taken from the appropriate table in Appendix A. The appropriate table will depend on the member's scheme and NPA as follows:

- **classic** and **premium** members with an NPA of 60 – Table 1 (P1ER60PEN1)
- **classic** and **premium** members with an NPA of 65 – Table 5 (P1ER65PEN1)
- **nuvos** members (including linked service and Club transfer pension) – Table 9 (P1ER65NUV)

2.6 In the **classic** scheme members accrue an automatic lump sum alongside their pension. This should be reduced as follows:

$$\textit{Early retirement lump sum} = \textit{Unreduced lump sum} \times \textit{Factor}$$

Where;

Unreduced lump sum is the member's lump sum at retirement (before pension increases applied).

Factor is the factor appropriate to the member's age in years and complete months (ignoring part months) at retirement taken from the following table in Appendix A:

- **classic** members with an NPA of 60 – Table 2 (P1ER60LS1)
- **classic** members with an NPA of 65 – Table 6 (P1ER65LS1)

Circumstance 2 - Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs

2.7 The formula below sets out how to reduce the member's pension on early retirement when the member retires before age 55 and the deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs.

$$\textit{Early retirement pension} = \textit{Unreduced pension} \times \frac{1}{(Ax/PI) + F}$$

Where;

Unreduced pension is the member's pension at retirement (before pension increases applied).

Ax is the factor for a member aged x (in years and complete months) at retirement, from the following table in Appendix A:

- **classic** and **premium** members with an NPA of 60 – Table 3 (P1ER60PEN2)
- **classic** and **premium** members with an NPA of 65 – Table 7 (P1ER65PEN2)

PI is the pension increase multiplier for the period from deemed date for pension increases to the date from which the reduced pension is payable.

F is:

- 1.262 for **classic** and **premium** members with an NPA of 60
- 1.634 for **classic** and **premium** members with an NPA of 65

2.8 In the **classic** scheme members accrue an automatic lump sum alongside their pension. This should be reduced as follows:

$$\textit{Early retirement lump sum} = \textit{Unreduced lump sum} \times \frac{1}{(Bx/PI) + Cx}$$

Where;

Unreduced lump sum is the member's lump sum at retirement (before pension increases applied).

Bx and **Cx** are the factors for a member aged x (in years and complete months) at retirement, taken from the following table in Appendix A:

- **classic** members with an NPA of 60 - Table 4 (P1ER60LS2)
- **classic** members with an NPA of 65 - Table 8 (P1ER65LS2)

PI is the pension increase multiplier for the period from deemed date for pension increases to the date from which the reduced pension is payable.

2.9 We understand that the minimum retirement age in **nuvos** is 55, so there should not be any cases of early retirement from deferment under age 55 in the **nuvos** scheme.

Miscellaneous

Personal pension ages

2.10 We understand that there are a number of members of the final salary sections of the PCSPS who have a personal pension age (i.e. a NPA between age 60 and 65 years). These cases are handled on a case by case basis. Please continue to refer these cases to GAD.

Pension credits (as a result of Pension Sharing on Divorce)

2.11 Pension Credit pensions should be reduced on early retirement as described above. Note that Pension Credit members in the **nuvos** scheme may receive their pension unreduced from age 60 (not age 65). The reductions applied for **nuvos** Pension Credit members are as described in Table 9 in Appendix A (where the number of years early that they retire is in relation to a pension age of 60 years rather than 65 years). For example, a Pension Credit member retiring at age 56 is retiring 4 years early so would have their pension reduced by 19% (calculated as 5% for 3 years and 4% for one year).

Pension debits (as a result of Pension Sharing on Divorce)

2.12 Pension Debit pensions should be treated in the same way as a deferred member's pension. Therefore they should be reduced on early retirement as described above.

Scheme pays debits

2.13 This note does not cover the adjustments to apply to scheme pays debits on early or late retirement. Separate guidance is provided on scheme pays debits in the PCSPS.

Added pension

2.14 On early retirement, added pension should be reduced in line with the main Scheme benefits for the various sections, as detailed above.

Eligibility for actuarially reduced early retirement

2.15 Actuarially reduced early retirement is not allowed if the reduced benefits in respect of service given on or after 6 April 1978 and on or before 5 April 1997 are expected to be less than a member's guaranteed minimum pension (GMP) at GMP payment age (65 for males and 60 for females). Separate guidance is provided on GMP tests in the PCSPS.

3 Late retirement – classic, premium and nuvos scheme

Nuvos

3.1 In the **nuvos** scheme, there is a different process for increasing the pension on late retirement depending on whether the member is still in active service or is a deferred member.

3.2 Members are awarded an **age addition** on each scheme anniversary (1 April) that the member remains in active service while over NPA. An age addition (assumed age addition) is also awarded on the date that the member leaves active service, if they are over NPA. The process is covered in Chapter 4.

3.3 Members are awarded a **late payment supplement** (LPS) as a one-off increase at the point that they retire if they are retiring from deferred status and are over NPA. The process is covered in Chapter 5.

3.4 Our understanding is that a **nuvos** member who leaves active service after NPA but does not retire immediately can receive an age addition in respect of the period up to leaving active service and also a late payment supplement in respect of the period from their leaving date to their eventual retirement date.

3.5 A nuvos Pension Credit member who retires late will not be awarded a LPS. Instead backdated payments will be made to the Pension Credit member to reflect payment(s) from (i) age 60 or (ii) the date of the pension sharing order if the Pension Credit member is already over age 60 at that time.

Classic and Premium

3.6 Our understanding is that there are no late retirement increases awarded to pensions in the **classic, classic plus** or **premium** schemes, except in respect of added pension.

3.7 Added pension accrued in **classic**, **classic plus** or **premium** will be increased on late retirement. In general, the factors to use should be the alpha NPA 60 age addition factors. The age addition factors should be applied to the added pension in respect of the period up to the member's leaving active service. No late payment supplements apply to the added pension (purchased as a **classic**, **classic plus** or **premium** member) if the member retires at an age over NPA from deferred status.

3.8 The alpha NPA60 factors are:

- age addition factors across various NPA/EPAs: Table P2AA1 from our note entitled *CSOPS: Alpha scheme: Early Payment Reduction (normal health) and Age Addition: Factors and guidance*.

The factors used should assume NPA is 60 years. The factors can be applied to both pension and retirement lump sum for classic and classic plus members.

3.9 We understand that there are a number of members of the final salary sections of the PCSPS who have a personal pension age (PPA) (i.e. a NPA between age 60 and 65 years). These age addition calculations applying to added pension (purchased as a **classic**, **classic plus** or **premium** member) for a member with their own PPA are handled on a cases by case basis. Please continue to refer these cases to GAD.

3.10 This note does not cover the adjustments to apply to scheme pays debits on early or late retirement. Please refer to our separate guidance on scheme pays debits.

4 Age addition - nuvos scheme

4.1 Members of **nuvos** who continue in active service after their NPA will have their benefits increased for late payment. This is done by an 'age addition' that is added to the member's account on each scheme anniversary (1 April) where the member remains in active service after NPA. An age addition (assumed age addition) is also awarded on the date that the member leaves active service, where this is after NPA.

4.2 In order to calculate the appropriate age addition for a scheme year, a percentage is applied to the 'opening balance' of the relevant description of accrued pension for the **previous** scheme year.

4.3 Where the age addition is awarded on a date other than a scheme anniversary (i.e. because they have left active service during a scheme year), the (assumed) age addition should be the amount which would have been awarded at the following scheme anniversary, allowing for the proportion of the scheme year that the member was an active member who had reached NPA. Therefore, the 'opening balance for the previous scheme year' referred to in paragraph 4.2 is actually the opening balance for the current scheme year.

4.4 For example, to calculate an age addition to be applied on 01/04/2017 a percentage is applied to the opening balance of pension for the year 2016-17, not the opening balance for the year 2017-18. The opening balance for 2016-17 can be thought of as the balance at 31 March 2016.

4.5 Similarly an age addition awarded on 25/07/2017 would be calculated by applying a percentage to the opening balance of pension for the year 2017-18.

4.6 The 'opening balance' is as defined in C.2(5) of the **nuvos** scheme rules. We understand that the opening balance on a given scheme anniversary includes the opening balance at the previous scheme anniversary, indexation on the opening balance (at the previous scheme anniversary), earned pension applicable over the previous scheme year and any age addition awarded on the previous scheme anniversary.

4.7 The appropriate percentage to apply to the opening balance of the previous scheme year is determined, based on the member's age (last birthday) at the date the age addition is awarded and the period of time that the member has been active and over NPA during the scheme year[1], as follows:

- 6% per year where the member is aged 65 to 66 (years last birthday) at the date the age addition is awarded

[1] The profile of the age addition percentages is 6% pa for 2 years, 7% pa for 4 years and 7.5% pa thereafter.

- 7% per year where the member is aged 67 to 70 (years last birthday) at the date the age addition is awarded
- 7.5% per year thereafter (i.e., age 71 or over (years last birthday) at date the age addition is awarded)

4.8 For the initial age addition (e.g. the first scheme anniversary reached past NPA) the appropriate increase is $1/12^{th}$ of the full year's increase for each complete month between NPA and the relevant scheme anniversary. Part months can be ignored.

4.9 The age addition can be summarised as follows:

Age addition = (Opening balance for previous scheme year) x [m/12 x Factor]

[The assumed age addition is applied to the opening balance for the current scheme year]

Where:

m is the number of complete months during the previous scheme year where the member was:

- in active service, and
- over NPA

Factor is:

- 6% per year where the member is aged 65 to 66 (years last birthday) at the date the age addition is awarded
- 7% per year where the member is aged 67 to 70 (years last birthday) at the date the age addition is awarded
- 7.5% per year thereafter (i.e., age 71 or over (years last birthday) at the current scheme anniversary)

4.10 The following points should be noted:

- Age additions are calculated before the commutation option is exercised.
- The age additions applied to the member's pension should also apply to the contingent partner's pension (where one is payable).

Pension Credits (as a result of Pension Sharing on Divorce)

4.11 Our understanding is that Pension Credit pensions should not receive any increase on late retirement.

Pension Debits (as a result of Pension Sharing on Divorce)

4.12 Our understanding is that Pension Debit pensions should be treated in the same way as a deferred member's pension. Therefore on late retirement they should be increased by a late payment supplement, not an age addition. Please refer to Chapter 5.

Scheme pays debits

4.13 This note does not cover the adjustments to apply to scheme pays debits on early or late retirement. Please refer to our separate guidance on scheme pays debits.

Added Pension

4.14 Added pension for **nuvos** members in service should receive age additions as described in paragraph 4.7.

5 Late payment supplements - nuvos scheme

5.1 A late payment supplement (LPS) is awarded as an increase to the benefits of deferred members of the **nuvos** scheme who retire after their NPA.

5.2 The LPS is awarded as a one-off increase on the date of the member's retirement. This differs from age additions, which are awarded each year that the member remains in active service after NPA.

5.3 The LPS is calculated by multiplying the pension at retirement by the appropriate percentage based on the number of years that the member was in deferment and over NPA. The appropriate percentage[2] is as follows:

- 6% per year between ages 65 and 69 (years last birthday)
- 7% per year between ages 70 and 75 (years last birthday)
- 7.75% per year thereafter (i.e., age 76 or over (years last birthday)

For part years, the calculation uses a member's age in complete years and months when the member retires. Part months can be ignored.

5.4 The late payment supplement (LPS) can be summarised as follows:

$$LPS = (Pension\ at\ retirement) \times [(1 + 6\%)^{r/12} \times (1 + 7\%)^{s/12} \times (1 + 7.75\%)^{t/12} - 1]$$

Where:

Pension at retirement is the pension before pension increases

r is the number of complete months where the following was true of the relevant member:

- deferred member of the scheme
- over NPA
- aged between 65 and 69 (age last birthday in years)

[2] The profile of the late payment supplement percentages is 6% pa for 5 years, 7% pa for 6 years and 7.75% pa thereafter

s is the number of complete months where the following was true of the relevant member:

- deferred member of the scheme
- over NPA
- aged between 70 and 75 (age last birthday in years)

t is the number of complete months where the following was true of the relevant member:

- deferred member of the scheme
- over NPA
- aged 76 or over (age last birthday in years)

5.5 The following points should be noted:

- A late payment supplement is calculated before the commutation option is exercised.
- A late payment supplement applied to the member's pension should also apply to the contingent partner's pension (where one is payable).

Pension credits (as a result of Pension Sharing on Divorce)

5.6 Our understanding is that Pension Credit pensions should not receive any increase on late retirement.

Pension debits (as a result of Pension Sharing on Divorce)

5.7 Our understanding is that Pension Debit pensions should be treated in the same way as a deferred member's pension. Therefore, they should be increased for late payment supplements using the method described above.

Scheme pays debits

5.8 This note does not cover the adjustments to apply to scheme pays debits on early or late retirement. Please refer to our separate guidance on scheme pays debits.

Added pension

5.9 Added pension for **nuvos** members in deferment should receive late payment supplements using the methodology described above.

6 Examples

Example 1 – Early retirement over age 55 – Classic member (i.e. Circumstance 1)

Member details:

- Scheme section – **Classic (NPA 60)**
- Age at early retirement – **56 years 4 months** (ignoring part months)
- Unreduced pension at retirement (before pension increases applied) - **£5,000**
- Unreduced lump sum at retirement (before pension increases applied) - **£15,000**

Calculation:

- Early retirement pension = Unreduced pension x Factor
- Factor is taken from Table 1 (P1ER60PEN1)
- Factor = 0.843
- Early retirement pension = £5,000 x 0.843

  = **£4,215.00**
- Any pension increases will then need to be added, as appropriate.

- Early retirement lump sum = Unreduced lump sum x Factor
- Factor is taken from Table 2 (P1ER60LS1)
- Factor = 0.918
- Early retirement lump sum = £15,000 x 0.918

  = **£13,770.00**
- Any pension increases will then need to be added, as appropriate.

Example 2 – Early retirement over age 55 – Premium NPA 65 member (i.e. Circumstance 1)

Member details:

- Scheme section – **Premium (NPA 65)**
- Age at early retirement – **59 years 11 months** (ignoring part months)
- Unreduced pension at retirement (before pension increases applied) - **£10,000**

Calculation:

- Early retirement pension = Unreduced pension x Factor
- Factor is taken from Table 5 (P1ER65PEN1)
- Factor = 0.768
- Early retirement pension = £10,000 x 0.768

  = **£ 7,680.00**
- Any pension increases will then need to be added, as appropriate.

Example 3 – Early retirement from deferment and under age 55 – Classic member (i.e. Circumstance 2)

Member details:

- Scheme section – **Classic (NPA 60)**
- Age at early retirement – **51 years 7 months** (ignoring part months)
- Unreduced pension at retirement (before pension increases applied) - **£6,000**
- Unreduced lump sum at retirement (before pension increases applied) - **£18,000**
- Deferment Date - **12/04/2009**
- Retirement Date – **04/12/2019**

Calculation:

- Early retirement pension = Unreduced pension x $\frac{1}{(Ax\ /\ PI\ ) + F}$
- Factor **Ax** is taken from Table 3 (P1ER60PEN2) = 0.187
- Factor **PI** is taken from PI tables published by HMT = 1.2273 (2019 PI table using deferment date of 12/04/2009)
- Factor **F** is taken from paragraph 2.7 = 1.262
- Early retirement pension = £6,000 x $\frac{1}{(0.187\ /\ 1.2273\ ) + 1.262}$

  = **£4,242.18**
- The pension is put into payment without the addition of any pension increases, with appropriate adjustment made when the member reaches age 55.

  - Early retirement lump sum = Unreduced lump sum x $\frac{1}{(Bx\ /\ PI\ ) + Cx}$
  - Factor **Bx** is taken from Table 4 (P1ER60LS2) = 0.167
  - Factor **Cx** is taken from Table 4 (P1ER60LS2) = 1.053
  - As above Factor **PI** = 1.2273

- Early retirement lump sum = £18,000 x $\frac{1}{(0.167 / 1.2273) + 1.053}$

= **£15,137.87**

- The lump sum is paid without the addition of any pension increases, with an appropriate retrospective increase made when the member reaches age 55.

Example 4 – Early retirement – Nuvos member

Member details:

- Scheme section – **Nuvos** (NPA 65)
- Age at early retirement – **58 years 11 months** (ignoring part months)
- Unreduced pension at retirement (before pension increases applied) - **£10,000**

Calculation:

- Early retirement pension = Unreduced pension x Factor
- Factor is calculated from Table 9 (P1ER65NUV)
- Member is retiring 6 years and 1 month early.
- The appropriate reduction is 5% per year for the first 3 years then 4% per year for the next 3 years and then 3% thereafter. The reduction for part years is $1/12^{th}$ of the appropriate annual reduction for each complete month.
- Factor = 1 – (3 x 5% + 3 x 4% + 1/12 x 3%)

  = 0.7275 (rounded to 4 decimal places)
- Early retirement pension = £10,000 x 0.7275

  = **£ 7,275.00**
- Any pension increases will then need to be added, as appropriate.

Example 5 – Age addition – Nuvos member

Member details:

- Scheme section – **Nuvos** (NPA 65)
- Date of birth – **20/10/1955**
- Date member reaches NPA – **20/10/2020**
- Date of late retirement – **5/08/2022**
- Member remains in active service until date of late retirement.

Calculation:

Opening balance for 2020-21	**£8,000.00**	**A**	***i.e. balance as at 31/3/2020***
Relevant CPI figure	2.50%	B	
Indexation amount	£200.00	C	*(= A x B) added to member's account on 1/4/2020.*
Age addition	£0	D	*member is still below NPA at 1/4/2020.*
Pension accrued in 2020-21	£500.00	E	
Opening balance for 2021-22	**£8,700.00**	**F**	***i.e. balance as at 31/3/2021. (= A + C + D + E)***
Relevant CPI figure	2.00%	G	

Indexation amount	£174.00	H	*(= F x G) added to member's account on 1/4/2021.*
Age (last birthday) at 1/4/2021	65	J	*Therefore use 6% pa factor*
Proportion of annual factor to apply	5/12	K	*Member was active and over NPA for 5 complete months in previous scheme year*
Age addition percentage increase	2.5%	L	*5/12ths of 6% (rounded to 4 decimal places when expressed in form 0.0250)*
Age addition	£200.00	M	*(= A x L) added to member's account on 1/4/2021*
Pension accrued in 2021-22	£520.00	N	
Opening balance for 2022-23	**£9,594.00**	**P**	***i.e. balance as at 31/3/2022 (= F + H + M + N)***
Relevant CPI figure	1.50%	Q	
Indexation amount	£143.91	R	*(= P x Q) added to member's account on 1/4/2022 (rounded to nearest £0.01)*
Age (last birthday) at 1/4/2022	66		*Therefore use 6% pa factor*
Proportion of annual factor to apply	12/12	S	*Member was active and over NPA for 12 complete months in previous scheme year*
Age addition percentage increase	6.00%	T	*12/12ths of 6%*
Age addition	£522.00	U	*(= F x T) added to member's account on 1/4/2022*
Pension accrued in 2022-23	£270.00	V	
Age (last birthday) at retirement	66	W	*Therefore use 6% pa factor*
Proportion of annual factor to apply	4/12		*Member was active and over NPA for 4 complete months in this scheme year before retirement*
Age addition percentage increase	2.00%	X	*4/12ths of 6% (rounded to 4 decimal places when expressed in form 0.0200)*
Assumed age addition	£191.88	Y	*(= P x X) added to member's account on retirement*
Pension at retirement in August 2022	**£10,721.79**	**Z**	***(= P + R + U + V + Y). The pension will be increased to allow for indexation between 1/4/2022 and retirement at the next scheme anniversary when the relevant CPI figure is known.***

Example 6 – Late payment supplement – Nuvos member

Member details:

- Scheme section – **Nuvos** (NPA 65)
- Age when left active service – **58 years 2 months** (not used in calculations below)
- Age at late retirement – **74 years 5 months** (ignoring part months)
- Unreduced pension at retirement (before pension increases applied) - **£10,000**

Calculation:

- Late payment supplement (LPS) calculated using the methodology described in paragraph 5.4.
- Member is retiring 9 years and 5 complete months after NPA.
- LPS = (Pension at retirement) x $[(1 + 6\%)^{m/12} \times (1 + 7\%)^{n/12} \times (1 + 7.75\%)^{o/12} - 1]$

  = £10,000 x $[(1+ 6\%)^{60/12} \times (1 + 7\%)^{53/12} \times (1 + 7.75\%)^{0/12} - 1]$

  = £10,000 x [1.8043 - 1] (square brackets rounded to 4 decimal places)

  = £8,043.00
- Pension (including late payment supplement) = £10,000 + £8,043.00

  = **£18,043.00**
- Any pension increases will then need to be added, as appropriate.

Appendix A: Early payment reduction factors

Table 1: P1ER60PEN1 – Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 1)

Classic and Premium NPA 60 members

Factors for calculating the actuarially reduced pension

	Age at early retirement (in years and complete months)										
	50	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
months											
0	0.650	0.675	0.701	0.730	0.760	0.794	0.830	0.868	0.910	0.954	1.000
1	0.652	0.677	0.704	0.732	0.763	0.797	0.833	0.872	0.913	0.958	
2	0.654	0.679	0.706	0.735	0.766	0.800	0.836	0.875	0.917	0.962	
3	0.657	0.681	0.708	0.737	0.769	0.803	0.839	0.879	0.921	0.966	
4	0.659	0.684	0.711	0.740	0.771	0.806	0.843	0.882	0.924	0.970	
5	0.661	0.686	0.713	0.742	0.774	0.809	0.846	0.886	0.928	0.974	
6	0.663	0.688	0.715	0.745	0.777	0.812	0.849	0.889	0.932	0.978	
7	0.665	0.690	0.718	0.748	0.780	0.815	0.852	0.892	0.936	0.982	
8	0.667	0.692	0.720	0.750	0.783	0.818	0.855	0.896	0.939	0.986	
9	0.669	0.695	0.722	0.753	0.785	0.821	0.859	0.899	0.943	0.990	
10	0.671	0.697	0.725	0.755	0.788	0.824	0.862	0.903	0.947	0.994	
11	0.673	0.699	0.727	0.758	0.791	0.827	0.865	0.906	0.950	0.998	

Table 2: P1ER60LS1 – Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement (Circumstance 1)

Classic NPA 60 members

Factors for calculating the actuarially reduced lump sum

Age at early retirement (in years and complete months)											
	50	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**
months											
0	0.790	0.809	0.828	0.848	0.868	0.889	0.910	0.932	0.955	0.978	1.000
1	0.791	0.810	0.830	0.850	0.870	0.891	0.912	0.934	0.957	0.979	
2	0.793	0.812	0.831	0.851	0.872	0.893	0.914	0.936	0.958	0.981	
3	0.794	0.813	0.833	0.853	0.873	0.894	0.916	0.938	0.960	0.983	
4	0.796	0.815	0.835	0.855	0.875	0.896	0.918	0.940	0.962	0.985	
5	0.798	0.817	0.836	0.856	0.877	0.898	0.919	0.942	0.964	0.987	
6	0.799	0.818	0.838	0.858	0.879	0.900	0.921	0.943	0.966	0.989	
7	0.801	0.820	0.840	0.860	0.880	0.902	0.923	0.945	0.968	0.991	
8	0.802	0.822	0.841	0.861	0.882	0.903	0.925	0.947	0.970	0.993	
9	0.804	0.823	0.843	0.863	0.884	0.905	0.927	0.949	0.972	0.995	
10	0.805	0.825	0.845	0.865	0.886	0.907	0.929	0.951	0.974	0.997	
11	0.807	0.826	0.846	0.867	0.887	0.909	0.930	0.953	0.976	0.999	

Table 3: P1ER60PEN2 – Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2)

Classic and Premium NPA 60 members

Factors for calculating the actuarially reduced pension

Age at early retirement (in years and complete months)						
A	**50**	**51**	**52**	**53**	**54**	**55**
months						
0	0.275	0.220	0.164	0.108	0.053	0.000
1	0.271	0.215	0.159	0.104	0.048	
2	0.266	0.210	0.155	0.099	0.044	
3	0.261	0.206	0.150	0.095	0.039	
4	0.257	0.201	0.145	0.090	0.035	
5	0.252	0.196	0.141	0.085	0.030	
6	0.247	0.192	0.136	0.081	0.025	
7	0.243	0.187	0.132	0.076	0.021	
8	0.238	0.183	0.127	0.072	0.016	
9	0.234	0.178	0.122	0.067	0.012	
10	0.229	0.173	0.118	0.062	0.007	
11	0.224	0.169	0.113	0.058	0.002	

Table 4: P1ER60LS2 – Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2)

Classic NPA 60 members

Factors for calculating the actuarially reduced lump sum

Age at early retirement (in years and complete months)						
B	**50**	**51**	**52**	**53**	**54**	**55**
months						
0	0.246	0.196	0.146	0.096	0.047	0.000
1	0.242	0.192	0.142	0.092	0.043	
2	0.238	0.187	0.138	0.088	0.039	
3	0.233	0.183	0.134	0.084	0.035	
4	0.229	0.179	0.129	0.080	0.031	
5	0.225	0.175	0.125	0.076	0.027	
6	0.221	0.171	0.121	0.072	0.023	
7	0.217	0.167	0.117	0.068	0.018	
8	0.212	0.163	0.113	0.064	0.014	
9	0.208	0.158	0.109	0.059	0.010	
10	0.204	0.154	0.105	0.055	0.006	
11	0.200	0.150	0.101	0.051	0.002	
C	**50**	**51**	**52**	**53**	**54**	**55**
months						
0	1.021	1.041	1.062	1.083	1.105	1.126
1	1.022	1.043	1.064	1.085	1.107	
2	1.024	1.044	1.065	1.087	1.108	
3	1.026	1.046	1.067	1.088	1.110	
4	1.027	1.048	1.069	1.090	1.112	
5	1.029	1.050	1.071	1.092	1.114	
6	1.031	1.051	1.072	1.094	1.116	
7	1.032	1.053	1.074	1.096	1.118	
8	1.034	1.055	1.076	1.097	1.119	
9	1.036	1.057	1.078	1.099	1.121	
10	1.038	1.058	1.079	1.101	1.123	
11	1.039	1.060	1.081	1.103	1.125	

Table 5: P1ER65PEN1 – Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 1)

Classic and Premium NPA 65 members

Factors for calculating the actuarially reduced pension

Age at early retirement (in years and complete months)																
	50	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**
months																
0	0.504	0.523	0.543	0.564	0.588	0.613	0.640	0.670	0.701	0.735	0.771	0.810	0.852	0.898	0.948	1.000
1	0.506	0.524	0.545	0.566	0.590	0.615	0.643	0.672	0.704	0.738	0.774	0.814	0.856	0.902	0.953	
2	0.507	0.526	0.546	0.568	0.592	0.618	0.645	0.675	0.707	0.741	0.777	0.817	0.860	0.906	0.957	
3	0.509	0.528	0.548	0.570	0.594	0.620	0.648	0.677	0.709	0.744	0.781	0.821	0.864	0.911	0.962	
4	0.510	0.529	0.550	0.572	0.596	0.622	0.650	0.680	0.712	0.747	0.784	0.824	0.868	0.915	0.966	
5	0.512	0.531	0.552	0.574	0.598	0.624	0.653	0.683	0.715	0.750	0.787	0.828	0.871	0.919	0.971	
6	0.513	0.533	0.554	0.576	0.600	0.627	0.655	0.685	0.718	0.753	0.790	0.831	0.875	0.923	0.975	
7	0.515	0.534	0.555	0.578	0.603	0.629	0.657	0.688	0.721	0.756	0.794	0.835	0.879	0.927	0.980	
8	0.517	0.536	0.557	0.580	0.605	0.631	0.660	0.690	0.723	0.759	0.797	0.838	0.883	0.931	0.984	
9	0.518	0.538	0.559	0.582	0.607	0.634	0.662	0.693	0.726	0.762	0.800	0.842	0.887	0.935	0.989	
10	0.520	0.539	0.561	0.584	0.609	0.636	0.665	0.696	0.729	0.765	0.803	0.845	0.890	0.940	0.993	
11	0.521	0.541	0.563	0.586	0.611	0.638	0.667	0.698	0.732	0.768	0.807	0.849	0.894	0.944	0.998	

Table 6: P1ER65LS1 – Early retirement for all members except for those members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 1)

Classic NPA 65 members

Factors for calculating the actuarially reduced lump sum

	Age at early retirement (in years and complete months)															
	50	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**
months																
0	0.701	0.718	0.735	0.753	0.771	0.790	0.809	0.828	0.848	0.868	0.889	0.910	0.932	0.955	0.978	1.000
1	0.703	0.720	0.737	0.755	0.773	0.791	0.810	0.830	0.850	0.870	0.891	0.912	0.934	0.957	0.979	
2	0.704	0.721	0.738	0.756	0.774	0.793	0.812	0.831	0.851	0.872	0.893	0.914	0.936	0.958	0.981	
3	0.706	0.722	0.740	0.758	0.776	0.794	0.813	0.833	0.853	0.873	0.894	0.916	0.938	0.960	0.983	
4	0.707	0.724	0.741	0.759	0.777	0.796	0.815	0.835	0.855	0.875	0.896	0.918	0.940	0.962	0.985	
5	0.708	0.725	0.743	0.761	0.779	0.798	0.817	0.836	0.856	0.877	0.898	0.919	0.942	0.964	0.987	
6	0.710	0.727	0.744	0.762	0.780	0.799	0.818	0.838	0.858	0.879	0.900	0.921	0.943	0.966	0.989	
7	0.711	0.728	0.746	0.764	0.782	0.801	0.820	0.840	0.860	0.880	0.902	0.923	0.945	0.968	0.991	
8	0.713	0.730	0.747	0.765	0.783	0.802	0.822	0.841	0.861	0.882	0.903	0.925	0.947	0.970	0.993	
9	0.714	0.731	0.749	0.767	0.785	0.804	0.823	0.843	0.863	0.884	0.905	0.927	0.949	0.972	0.995	
10	0.715	0.733	0.750	0.768	0.787	0.805	0.825	0.845	0.865	0.886	0.907	0.929	0.951	0.974	0.997	
11	0.717	0.734	0.752	0.770	0.788	0.807	0.826	0.846	0.867	0.887	0.909	0.930	0.953	0.976	0.999	

Table 7: P1ER65PEN2 – Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2)

Classic and Premium NPA 65 members

Factors for calculating the actuarially reduced pension

Age at early retirement (in years and complete months)						
A	**50**	**51**	**52**	**53**	**54**	**55**
months						
0	0.350	0.279	0.208	0.138	0.068	0.000
1	0.344	0.273	0.203	0.132	0.062	
2	0.338	0.267	0.197	0.126	0.056	
3	0.332	0.261	0.191	0.120	0.050	
4	0.326	0.256	0.185	0.114	0.044	
5	0.320	0.250	0.179	0.109	0.038	
6	0.314	0.244	0.173	0.103	0.032	
7	0.308	0.238	0.167	0.097	0.026	
8	0.303	0.232	0.161	0.091	0.021	
9	0.297	0.226	0.156	0.085	0.015	
10	0.291	0.220	0.150	0.079	0.009	
11	0.285	0.214	0.144	0.073	0.003	

Table 8: P1ER65LS2 – Early retirement for members retiring before age 55 whose deemed date for pension increases is in an earlier financial year than when the date of early retirement occurs (Circumstance 2)

Classic NPA 65 members

Factors for calculating the actuarially reduced lump sum

Age at early retirement (in years and complete months)						
B	**50**	**51**	**52**	**53**	**54**	**55**
months						
0	0.277	0.220	0.164	0.109	0.053	0.000
1	0.272	0.216	0.160	0.104	0.048	
2	0.267	0.211	0.155	0.099	0.044	
3	0.263	0.206	0.150	0.095	0.039	
4	0.258	0.202	0.146	0.090	0.035	
5	0.253	0.197	0.141	0.085	0.030	
6	0.249	0.192	0.136	0.081	0.025	
7	0.244	0.188	0.132	0.076	0.021	
8	0.239	0.183	0.127	0.072	0.016	
9	0.235	0.178	0.122	0.067	0.012	
10	0.230	0.174	0.118	0.062	0.007	
11	0.225	0.169	0.113	0.058	0.002	
C	**50**	**51**	**52**	**53**	**54**	**55**
months						
0	1.149	1.172	1.195	1.219	1.244	1.268
1	1.151	1.174	1.197	1.221	1.246	
2	1.153	1.176	1.199	1.223	1.248	
3	1.155	1.178	1.201	1.225	1.250	
4	1.157	1.180	1.203	1.228	1.252	
5	1.159	1.182	1.205	1.230	1.254	
6	1.160	1.184	1.207	1.232	1.256	
7	1.162	1.186	1.209	1.234	1.258	
8	1.164	1.188	1.211	1.236	1.260	
9	1.166	1.190	1.213	1.238	1.262	
10	1.168	1.192	1.215	1.240	1.265	
11	1.170	1.193	1.217	1.242	1.267	

Table 9: P1ER65NUV – Early retirement from nuvos scheme

The factors are simple reductions of:

- 5% p.a. for the first 3 years that the member retires early
- 4% p.a. for the next 3 years
- 3% p.a. for each year above 6 years that the member retires early.

The member's age at early retirement in years and complete months (ignoring part months) is calculated. This retirement age is then used to determine how many years (and months) the member retires early and the corresponding Factor is then determined, based on the reductions set out above (see Example 4).

Appendix B: Age addition factors

Table 10: P1AANUV – Age addition factors in Nuvos

The Factors are increases of:

- 6% per year where the member is aged 65 to 66 (years last birthday) at the date the age addition is awarded
- 7% per year where the member is aged 67 to 70 (years last birthday) at the date the age addition is awarded
- 7.5% per year thereafter (i.e., age 71 or over (years last birthday) at the date the age addition is awarded

Appendix C: Late payment supplement factors

Table 11: P1LPSNUV – Late payment supplement factors in Nuvos

The Factors are compound increases of:

- 6% per year between ages 65 and 69 (years last birthday)
- 7% per year between ages 70 and 75 (years last birthday)
- 7.75% for each year thereafter (age 76+)

The above age related increases are applied for the period (in complete months) between NPA (or if later, from date member became a deferred member) and eventual retirement age. Part months can be ignored.

Appendix D: Principal assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448%
CPI	2.00%
Long term earnings growth	4.20%
Real discount rate (in excess of CPI)	2.40%
Real discount rate (in excess of general earnings growth)	0.24%

Mortality assumptions

Base mortality tables and adjustments	Member: 104% of S2NMA (M) and 104% of S2NFA (F) (as per 2016 valuation)
Future mortality improvement	Based on ONS principal UK population projections 2016
Year of use	2020

Other assumptions

Proportion of male members for unisex factors	50%
Allowance for commutation	Nil