



Government Actuary's Department

Principal Civil Service Pension Scheme (Northern Ireland)

Early and late retirement factors

Date: 20 April 2015
Author: John Bayliss FIA
James Pepler FIA



Contents

1	Summary	1
2	Early Retirement – classic, premium and nuvos.....	3
3	Late retirement – classic, premium and nuvos scheme.....	7
4	Age addition - nuvos scheme.....	8
5	Late payment supplements - nuvos scheme	11
6	Examples.....	13
7	Limitations of this guidance.....	20
	Appendix A: Early payment reduction factors.....	21
	Table 1: P1ER60PEN1 – Early retirement direct from service and/or over age 55	21
	Table 2: P1ER60LS1 – Early retirement direct from service and deferred status over age 55	22
	Table 3: P1ER60PEN2 – Early retirement from deferment and under 55	23
	Table 4: P1ER60LS2 – Early retirement from deferment and under 55	24
	Table 5: P1ER65PEN1 – Early retirement direct from service or deferred status over age 55	25
	Table 6: P1ER65LS1 – Early retirement direct from service and/or over age 55	26
	Table 7: P1ER65PEN2 – Early retirement from deferment and under 55	27
	Table 8: P1ER65LS2 – Early retirement from deferment and under 55	28
	Table 9: P1ER65NUV – Early retirement from nuvos scheme.....	29
	Appendix B: Age addition factors.....	30
	Table 10: P1AANUV – Age addition factors in Nuvos	30
	Appendix C: Late payment supplement factors.....	31
	Table 11: P1LPSNUV – Late payment supplement factors in Nuvos	31



1 Summary

- 1.1 This note is addressed to the Department of Personnel and Finance (DFP) as scheme manager of the Principal Civil Service Pension Scheme (Northern Ireland) (PCSPS(NI)).
- 1.2 This note provides advice on the following:
- > Early retirement factors (in normal health) for:
 - o **classic** and **premium** members with a normal pension age (NPA) of 60 years
 - o **classic** and **premium** members with a NPA of more than 60 years (sometimes known as personal pension ages)
 - o **nuvos** members
 - > Age addition and late payment supplement 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.
- 1.5 The factors provided in this note have been prepared in light of our advice to DFP dated 3 October 2014 and subsequent correspondence following that advice.
- 1.6 The factors contained in this note, are taken from the draft report "Principal Civil Service Pension Scheme Early and late retirement factors" dated 3 March 2015 by Sandra Bell and Nick Horne to Cabinet Office in respect of the GB PCSPS.
- 1.7 Early retirement factors for **classic** main scheme benefits are the responsibility of the Scheme Actuary of PCSPS(NI) under rule 3.10a of the 1972 Section of the Rules. This guidance has immediate effect, replacing all previous guidance relating to early retirement factors for classic.



- 1.8 The remaining factors are responsibility of the Department after consultation with the Scheme Actuary.

Factor	Rule assigning Responsibility
Early Retirement Classic Plus / Premium	2002 Section, Rule D.3(4)
Early Retirement Nuvos	2007 Section, Rule C.5(8)(b)
Age Addition Classic	1972 Section, Rule 14.10(6)
Age Addition, Classic Plus and Premium	2002 Section, Rule C1.8(6)
Age Addition Nuvos	2007 Section, Rule C.2(6)
Late Payment Supplement Nuvos	2007 Section, Rule C.4(12)(b)

- 1.9 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.
- 1.10 This note does not apply to benefits in the **alpha** scheme. Separate advice is provided for the **alpha** scheme.

Special Cases

- 1.11 Any special cases that are not covered by this guidance should be treated on a case by case basis.
- 1.12 Please contact John Bayliss (020 7211 3454) for further information on this draft note.



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:
- > Early retirement direct from service and/or over age 55 (described in paragraphs 2.5 and 2.6).
 - > Early retirement from deferment under age 55 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 Minimum retirement ages (in normal health) in the PCSPS(NI) are as follows:
- > **classic, premium** – 50 years (for some members it will be 55 years)
 - > **nuvos** – 55 years

Early retirement direct from service and/or over age 55

- 2.5 The formula below sets out how to reduce the member's pension on early retirement when the member retires directly from active service and/or over age 55 at retirement date.

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

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:



- o **classic** and **premium** members with an NPA of 60 – Table 1 (P1ER60PEN1)
- o **classic** and **premium** members with an NPA of 65 and linked service benefits of **nuvos** members – Table 3 (P1ER65PEN1)
- o scheme benefits (excluding linked service benefits) for **nuvos** members – Table 5 (P1ER65NUV)

- 2.6 In the **classic** scheme members accrue an automatic lump sum alongside their pension. This should be reduced as follows when the member retires directly from active service and deferment over age 55 at retirement date:

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

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:

- o **classic** members with an NPA of 60 – Table 2 (P1ER60LS1)
- o **classic** members with an NPA of 65 – Table 4 (P1ER65LS1)

Early retirement from deferment and under age 55

- 2.7 The formula below sets out how to reduce the member's pension on early retirement when the member retires from deferment and is under age 55 at retirement date.

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

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:

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

PI is the pension increase multiplier for the period from the beginning date of the preserved award to the date from which the reduced pension is payable.

F is:



- o 1.272 for **classic** and **premium** members with an NPA of 60
- o 1.651 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 when the member retires from deferment and is under age 55 at retirement date:

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

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:

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

PI is the pension increase multiplier for the period from the beginning date of the preserved award to the date from which the reduced pension is payable.

2.9 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

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

- 2.10 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)

- 2.11 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.

Added Pension

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

Scheme pays debits

- 2.13 This note does not cover the adjustments to apply to scheme pays debits on early or late retirement. Scheme pays debits in PCSPS(NI) should be treated on a case by case basis.

Eligibility for actuarially reduced early retirement

- 2.14 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).

GMP tests in the PCSPS(NI) are the subject of a separate guidance document.



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 section 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 section 5.
- 3.4 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 There are no late retirement increases awarded to pensions in the **classic, classic plus** or **premium** schemes, except in respect of added pension. Members requesting late payment with added pension should be treated on a case by case basis.
- 3.7 This note does not cover the adjustments to apply to scheme pays debits on early or late retirement. Scheme pays debits should be treated on a case by case basis.



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 rule C.2(5) of the **nuvos** scheme rules. 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, as follows:
- o 6% per year where the member is aged 65 to 66 (years last birthday) at the date the age addition is awarded
 - o 7% per year where the member is aged 67 to 70 (years last birthday) at the date the age addition is awarded
 - o 7.5% per year thereafter (ie, 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 $1/12^{\text{th}}$ 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:

$$\text{Age addition} = (\text{Opening balance for previous scheme year}) \times [m/12 \times \text{Factor}]$$

[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:

- o 6% per year where the member is aged 65 to 66 (years last birthday) at the date the age addition is awarded
- o 7% per year where the member is aged 67 to 70 (years last birthday) at the date the age addition is awarded
- o 7.5% per year thereafter (ie, 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 Pension Credit pensions should not receive any increase on late retirement.

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

4.12 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 section 5.



Scheme pays debits

- 4.13 This note does not cover the adjustments to apply to scheme pays debits on early or late retirement. Scheme pays debits should be treated on a case by case basis.

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 is as follows:

- o 6% per year between ages 65 and 69 (years last birthday)
- o 7% per year between ages 70 and 75 (years last birthday)
- o 7.75% per year thereafter (ie, 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:

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

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)

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 Pension Credit pensions should not receive any increase on late retirement.

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

5.7 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. Scheme pays debits should be treated on a case by case basis.

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

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 = 0.838
- > Early retirement pension = £5,000 x 0.838
= **£4,190.00**
- > 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 = 0.888
- > Early retirement lump sum = £15,000 x 0.888
= **£13,320.00**
- > Any pension increases will then need to be added, as appropriate.



Example 2 – Early retirement over age 55 – Premium NPA 65 member

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 = 0.766
- > Early retirement pension = £10,000 x 0.766
= **£ 7,660.00**
- > Any pension increases will then need to be added, as appropriate.



Example 3 – Early retirement from deferment under age 55 – Classic member

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 – **04/12/2014**

Calculation:

- > Early retirement pension = Unreduced pension $\times \frac{1}{(Ax / PI) + F}$
 - > Factor **Ax** is taken from Table 3 (P1ER60PEN2) = 0.201
 - > Factor **PI** is taken from PI tables published by HMT = 1.1384 (2014 PI table using deferment date of 12/04/2009)
 - > Factor **F** is taken from paragraph 2.7 = 1.272
- $$\begin{aligned} \text{Early retirement pension} &= £6,000 \times \frac{1}{(0.201 / 1.1384) + 1.272} \\ &= \mathbf{£4,142.03} \end{aligned}$$
- > 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 $\times \frac{1}{(Bx / PI) + Cx}$
 - > Factor **Bx** is taken from Table 4 (P1ER60LS2) = 0.207
 - > Factor **Cx** is taken from Table 4 (P1ER60LS2) = 1.100
 - > As above Factor **PI** = 1.1384
- $$\begin{aligned} \text{Early retirement lump sum} &= £18,000 \times \frac{1}{(0.207 / 1.1384) + 1.100} \\ &= \mathbf{£14,042.38} \end{aligned}$$
- > 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 taken 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 $1/12^{\text{th}}$ of the appropriate annual reduction for each complete month.*

* For the purposes of this example we have assumed that the part year adjustment is undertaken using complete months but other methods are possible (eg, part year adjustment by days).

- > Factor = $1 - (3 \times 5\% + 3 \times 4\% + 1/12 \times 3\%)$
= 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 – **20/10/1950**
- > Date member reaches NPA – **20/10/2015**
- > Date of late retirement – **5/08/2017**
- > Member remains in active service until date of late retirement.

Calculation:

Opening balance for 2015-16	£8,000.00	A	<i>i.e. balance as at 31/3/2015</i>
Relevant CPI figure	2.50%	B	
Indexation amount	£200.00	C	<i>(= A x B) added to member's account on 1/4/2015.</i>
Age addition	£0	D	<i>member is still below NPA at 1/4/2015.</i>
Pension accrued in 2015-16	£500.00	E	
Opening balance for 2016-17	£8,700.00	F	<i>i.e. balance as at 31/3/2016. (= A + C + D + E)</i>
Relevant CPI figure	2.00%	G	
Indexation amount	£174.00	H	<i>(= F x G) added to member's account on 1/4/2016.</i>



Age (last birthday) at 1/4/2016	65	J	Therefore use 6% pa factor (Table 10)
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 1/4/2016.
Pension accrued in 2016-17	£520.00	N	
Opening balance for 2017-18	£9,594.00	P	i.e. balance as at 31/3/2017 (= F + H + M + N)
Relevant CPI figure	1.50%	Q	
Indexation amount	£143.91	R	(= P x Q) added to member's account on 1/4/2017 (rounded to nearest £0.01)
Age (last birthday) at 1/4/2017	66		Therefore use 6% pa factor (Table 10)
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 1/4/2017.
Pension accrued in 2017-18	£270.00	V	
Age (last birthday) at retirement	66	W	Therefore use 6% pa factor (Table 10)
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
			(= P + R + U + V + Y). The pension will be increased to allow for indexation between 1/4/2017 and retirement at the next scheme anniversary when the relevant CPI figure is known.
Pension at retirement in August 2017	£10,721.79	Z	



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 and factors set out in Table 11 (P1LPSNUV).
- > Member is retiring 9 years and 5 complete months after NPA.
- > $LPS = (\text{Pension at retirement}) \times [(1 + 6\%)^{m/12} \times (1 + 7\%)^{n/12} \times (1 + 7.75\%)^{o/12} - 1]$

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

$$= £10,000 \times [1.8043 - 1] \text{ (square brackets rounded to 4 decimal places)}$$

$$= £8,043.00$$

- > Pension (including late payment supplement) = £10,000 + £8,043.00
= £18,043.00

- > Any pension increases will then need to be added, as appropriate.



7 Limitations of this guidance

- 7.1 This note is intended for the use of DFP and the scheme administrators for the purposes of demonstrating the application of the factors covered by this guidance only. The information and advice in this note should not be relied upon, or assumed to be appropriate, for any other purpose or by any other person. GAD does not accept any liability to third parties, whether or not GAD has agreed to the disclosure of its advice to the third party.
- 7.2 The factors contained in this note are subject to regular review. Administrators need to ensure that they are using the latest factors, as relevant, when processing cases.
- 7.3 Advice provided by GAD must be taken in context and is intended to be read and used as a whole, not in parts. 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.
- 7.4 This note only covers the actuarial principles around the factors covered in this note. Administrators should satisfy themselves that any added pension complies with all legislative requirements including, but not limited to, tax and contracting-out requirements. Any legal advice in this area should be sought from an appropriately qualified person or source. In no circumstances should this guidance take precedence over the scheme rules. If users of this guidance believe it to contain any inconsistencies with the scheme rules, they should bring this to the attention of DFP and GAD.



Appendix A: Early payment reduction factors

Table 1: P1ER60PEN1 – Early retirement direct from service and/or over age 55

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
months										
0	0.637	0.663	0.690	0.720	0.753	0.788	0.825	0.865	0.907	0.953
1	0.639	0.665	0.693	0.723	0.756	0.791	0.828	0.868	0.911	0.957
2	0.641	0.667	0.695	0.726	0.758	0.794	0.832	0.872	0.915	0.961
3	0.643	0.670	0.698	0.728	0.761	0.797	0.835	0.875	0.919	0.965
4	0.646	0.672	0.700	0.731	0.764	0.800	0.838	0.879	0.923	0.969
5	0.648	0.674	0.703	0.734	0.767	0.803	0.841	0.882	0.926	0.974
6	0.650	0.677	0.705	0.736	0.770	0.806	0.845	0.886	0.930	0.978
7	0.652	0.679	0.708	0.739	0.773	0.809	0.848	0.890	0.934	0.982
8	0.654	0.681	0.710	0.742	0.776	0.812	0.851	0.893	0.938	0.986
9	0.656	0.683	0.713	0.744	0.779	0.815	0.855	0.897	0.942	0.990
10	0.658	0.686	0.715	0.747	0.782	0.819	0.858	0.900	0.945	0.994
11	0.661	0.688	0.718	0.750	0.785	0.822	0.861	0.904	0.949	0.998



Table 2: P1ER60LS1 – Early retirement direct from service and deferred status over age 55

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
months										
0	0.728	0.751	0.775	0.799	0.825	0.851	0.879	0.908	0.938	0.969
1	0.730	0.753	0.777	0.801	0.827	0.854	0.881	0.910	0.940	0.972
2	0.732	0.755	0.779	0.803	0.829	0.856	0.884	0.913	0.943	0.974
3	0.734	0.757	0.781	0.806	0.831	0.858	0.886	0.915	0.945	0.977
4	0.736	0.759	0.783	0.808	0.834	0.860	0.888	0.918	0.948	0.980
5	0.738	0.761	0.785	0.810	0.836	0.863	0.891	0.920	0.951	0.982
6	0.740	0.763	0.787	0.812	0.838	0.865	0.893	0.923	0.953	0.985
7	0.742	0.765	0.789	0.814	0.840	0.867	0.896	0.925	0.956	0.988
8	0.743	0.767	0.791	0.816	0.842	0.870	0.898	0.928	0.958	0.991
9	0.745	0.769	0.793	0.818	0.845	0.872	0.900	0.930	0.961	0.993
10	0.747	0.771	0.795	0.820	0.847	0.874	0.903	0.933	0.964	0.996
11	0.749	0.773	0.797	0.823	0.849	0.877	0.905	0.935	0.966	0.999



Table 3: P1ER60PEN2 – Early retirement from deferment and under 55

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
months					
0	0.298	0.237	0.176	0.116	0.057
1	0.293	0.232	0.171	0.111	0.052
2	0.288	0.227	0.166	0.106	0.047
3	0.283	0.222	0.161	0.101	0.042
4	0.278	0.217	0.156	0.096	0.037
5	0.272	0.212	0.151	0.091	0.032
6	0.267	0.206	0.146	0.086	0.027
7	0.262	0.201	0.141	0.081	0.022
8	0.257	0.196	0.136	0.076	0.017
9	0.252	0.191	0.131	0.072	0.012
10	0.247	0.186	0.126	0.067	0.007
11	0.242	0.181	0.121	0.062	0.002



Table 4: P1ER60LS2 – Early retirement from deferment and under 55

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
months					
0	0.307	0.244	0.181	0.120	0.058
1	0.302	0.239	0.176	0.115	0.053
2	0.296	0.233	0.171	0.109	0.048
3	0.291	0.228	0.166	0.104	0.043
4	0.286	0.223	0.161	0.099	0.038
5	0.281	0.218	0.156	0.094	0.033
6	0.275	0.213	0.151	0.089	0.028
7	0.270	0.207	0.145	0.084	0.023
8	0.265	0.202	0.140	0.079	0.018
9	0.260	0.197	0.135	0.074	0.013
10	0.254	0.192	0.130	0.069	0.008
11	0.249	0.187	0.125	0.063	0.003
C	50	51	52	53	54
months					
0	1.066	1.088	1.109	1.132	1.154
1	1.068	1.089	1.111	1.133	1.156
2	1.070	1.091	1.113	1.135	1.158
3	1.072	1.093	1.115	1.137	1.160
4	1.073	1.095	1.117	1.139	1.162
5	1.075	1.097	1.119	1.141	1.164
6	1.077	1.098	1.120	1.143	1.166
7	1.079	1.100	1.122	1.145	1.168
8	1.081	1.102	1.124	1.147	1.170
9	1.082	1.104	1.126	1.149	1.172
10	1.084	1.106	1.128	1.150	1.173
11	1.086	1.108	1.130	1.152	1.175

Table 5: P1ER65PEN1 – Early retirement direct from service or deferred status over age 55

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
months															
0	0.492	0.512	0.533	0.556	0.580	0.607	0.635	0.665	0.697	0.732	0.769	0.809	0.852	0.898	0.948
1	0.494	0.514	0.535	0.558	0.582	0.609	0.638	0.668	0.700	0.735	0.772	0.812	0.856	0.902	0.953
2	0.496	0.516	0.537	0.560	0.585	0.612	0.640	0.671	0.703	0.738	0.776	0.816	0.859	0.906	0.957
3	0.497	0.517	0.539	0.562	0.587	0.614	0.643	0.673	0.706	0.741	0.779	0.820	0.863	0.911	0.962
4	0.499	0.519	0.541	0.564	0.589	0.616	0.645	0.676	0.709	0.744	0.782	0.823	0.867	0.915	0.966
5	0.501	0.521	0.543	0.566	0.591	0.619	0.648	0.679	0.712	0.747	0.786	0.827	0.871	0.919	0.971
6	0.502	0.523	0.544	0.568	0.594	0.621	0.650	0.681	0.715	0.750	0.789	0.830	0.875	0.923	0.975
7	0.504	0.524	0.546	0.570	0.596	0.623	0.653	0.684	0.718	0.754	0.792	0.834	0.879	0.927	0.980
8	0.506	0.526	0.548	0.572	0.598	0.626	0.655	0.687	0.720	0.757	0.796	0.837	0.883	0.931	0.984
9	0.507	0.528	0.550	0.574	0.600	0.628	0.658	0.689	0.723	0.760	0.799	0.841	0.886	0.936	0.989
10	0.509	0.530	0.552	0.576	0.602	0.630	0.660	0.692	0.726	0.763	0.802	0.845	0.890	0.940	0.993
11	0.510	0.531	0.554	0.578	0.605	0.633	0.663	0.695	0.729	0.766	0.805	0.848	0.894	0.944	0.998



Table 6: P1ER65LS1 – Early retirement direct from service and/or over age 55

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
months															
0	0.617	0.636	0.656	0.677	0.698	0.720	0.743	0.767	0.792	0.818	0.846	0.874	0.904	0.935	0.967
1	0.619	0.638	0.658	0.678	0.700	0.722	0.745	0.769	0.795	0.821	0.848	0.876	0.906	0.937	0.970
2	0.620	0.640	0.660	0.680	0.702	0.724	0.747	0.772	0.797	0.823	0.850	0.879	0.909	0.940	0.973
3	0.622	0.641	0.661	0.682	0.704	0.726	0.749	0.774	0.799	0.825	0.853	0.881	0.911	0.943	0.976
4	0.624	0.643	0.663	0.684	0.705	0.728	0.751	0.776	0.801	0.827	0.855	0.884	0.914	0.946	0.979
5	0.625	0.645	0.665	0.686	0.707	0.730	0.753	0.778	0.803	0.830	0.857	0.886	0.917	0.948	0.982
6	0.627	0.646	0.666	0.687	0.709	0.732	0.755	0.780	0.805	0.832	0.860	0.889	0.919	0.951	0.984
7	0.628	0.648	0.668	0.689	0.711	0.734	0.757	0.782	0.808	0.834	0.862	0.891	0.922	0.954	0.987
8	0.630	0.649	0.670	0.691	0.713	0.736	0.759	0.784	0.810	0.836	0.864	0.894	0.924	0.956	0.990
9	0.632	0.651	0.672	0.693	0.715	0.738	0.761	0.786	0.812	0.839	0.867	0.896	0.927	0.959	0.993
10	0.633	0.653	0.673	0.694	0.717	0.739	0.763	0.788	0.814	0.841	0.869	0.899	0.930	0.962	0.996
11	0.635	0.654	0.675	0.696	0.718	0.741	0.765	0.790	0.816	0.843	0.872	0.901	0.932	0.965	0.999



Table 7: P1ER65PEN2 – Early retirement from deferment and under 55

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
months					
0	0.380	0.302	0.225	0.148	0.072
1	0.373	0.295	0.218	0.142	0.066
2	0.367	0.289	0.212	0.136	0.060
3	0.360	0.283	0.206	0.129	0.053
4	0.354	0.276	0.199	0.123	0.047
5	0.347	0.270	0.193	0.117	0.041
6	0.341	0.263	0.186	0.110	0.035
7	0.334	0.257	0.180	0.104	0.028
8	0.328	0.250	0.174	0.098	0.022
9	0.321	0.244	0.167	0.091	0.016
10	0.315	0.238	0.161	0.085	0.009
11	0.308	0.231	0.155	0.079	0.003



Table 8: P1ER65LS2 – Early retirement from deferment and under 55

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
months					
0	0.360	0.286	0.213	0.140	0.068
1	0.354	0.280	0.207	0.134	0.063
2	0.348	0.274	0.201	0.128	0.057
3	0.342	0.268	0.195	0.122	0.051
4	0.335	0.262	0.189	0.116	0.045
5	0.329	0.256	0.183	0.110	0.039
6	0.323	0.250	0.177	0.104	0.033
7	0.317	0.243	0.171	0.098	0.027
8	0.311	0.237	0.165	0.092	0.021
9	0.305	0.231	0.159	0.086	0.015
10	0.298	0.225	0.153	0.080	0.009
11	0.292	0.219	0.146	0.074	0.003
C	50	51	52	53	54
months					
0	1.260	1.285	1.311	1.337	1.364
1	1.262	1.288	1.313	1.340	1.366
2	1.264	1.290	1.316	1.342	1.369
3	1.267	1.292	1.318	1.344	1.371
4	1.269	1.294	1.320	1.346	1.373
5	1.271	1.296	1.322	1.349	1.376
6	1.273	1.298	1.324	1.351	1.378
7	1.275	1.300	1.326	1.353	1.380
8	1.277	1.303	1.329	1.355	1.382
9	1.279	1.305	1.331	1.357	1.385
10	1.281	1.307	1.333	1.360	1.387
11	1.283	1.309	1.335	1.362	1.389



Table 9: P1ER65NUV – Early retirement from nuvos scheme

The factors are simple reductions of:

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

We have assumed that calculations are based on the member's age at early retirement in years and complete months (ignoring part months) but note that other methods are acceptable (eg, part year adjustment by exact days).



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 (ie, 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+)

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