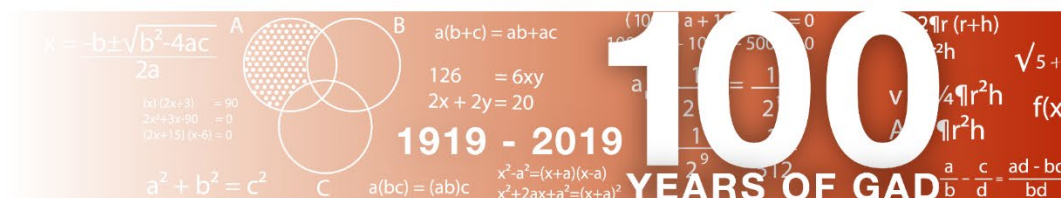




Government
Actuary's
Department



Principal Civil Service Pension Scheme Northern Ireland

Added Pension for classic, classic plus, premium and
nuvos members

Factors and guidance

Version: Issued

Date: 1 August 2019





Contents

1	Introduction	1
2	Instructions	3
3	Worked Examples	7
4	Limitations of this guidance	12
	Appendix A: Factor tables	13
	Appendix B: Assumptions underlying factors	21



1 Introduction

- 1.1 This note is addressed to the Northern Ireland Department of Finance ("DoF NI") as scheme manager of the Principal Civil Service Pension Scheme Northern Ireland (PCSPS(NI) or 'scheme').
- 1.2 The purpose of the note is to provide DoF NI with specific factors, and accompanying guidance to demonstrate how these factors should be applied to calculate the amount of added pension (AP) to be awarded when a member, their employer or third party opts to make a lump sum payment or a member makes regular periodic payments.
- 1.3 This guidance note and the tables contained in the guidance note apply to members in the **classic**, **classic plus**, **premium** or **nuvos** sections of PCSPS(NI), factors for the **alpha** scheme are provided separately.
- 1.4 This guidance does not include age addition factors for increases to added pension for members who have reached pension age. Similarly, this guidance does not include factors for the buyout of actuarial reduction to added pension. These will be provided separately.
- 1.5 Added pension factors are the responsibility of DoF NI under rule 14.2 (6)(b) of the 1972 part and D.4(6)(b) of the 2007 part of the scheme Rules
- 1.6 Members, their employer or a third party may make payments for extra pension in accordance with section 14 of the 1972 part, section C1 of the 2002 part and sections D.4, D.5, D.6, D.7 and D.8 of the 2007 part of the scheme Rules.
- 1.7 Paragraphs 14.2(7), 14.7 and 14.3(2) of the 1972 part, C1.1(7) C1.2(2) and C1.6 of the 2002 part, and D.4(7)(8), D.5(2)(8) and D.8(6) of the 2007 part of the regulations provide for a restriction on the minimum and maximum amount of added pension that can be purchased by a member. DoF NI must check against the current minimum and maximum limits before allowing the member to exercise the option to buy added pension.
- 1.8 The factors provided in this note have been prepared in light of our advice to DoF NI dated 30 October 2018 and subsequent correspondence following that advice.
- 1.9 This guidance supersedes the AP guidance "Principal Civil Service Pension Scheme Northern Ireland: Factors for Added Pension for Classic, classic plus, premium and nuvos members" dated 9 April 2015 and the subsequent addendum to this guidance note dated 16 June 2016.
- 1.10 The factors in this note have been updated but the calculation methodology remains unchanged.
- 1.11 The factors and guidance contained in this note should be implemented with effect from 1 April 2019.



- 1.12 Appendix B contains details of the underlying assumptions used to calculate the factors contained in this guidance note.
- 1.13 We do not envisage any special cases not covered by this note. However, if any do occur they should be referred to GAD.

Implementation and Review

- 1.14 The factors contained in this guidance will apply from 1 April 2019. This implementation date has been determined by DoF NI. This guidance will apply with immediate effect upon receipt of this guidance.
- 1.15 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 Northern Ireland. Any questions concerning the application of the guidance should, in the first instance, be referred to DoF NI.
- 1.16 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.
- 1.17 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.

Third party reliance

- 1.18 This guidance has been prepared for the use of DoF NI 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 DoF NI 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.
- 1.19 Other than DoF NI 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.



2 Instructions

- 2.1 Added pension can be purchased either by a lump sum or by regular annual contributions.

Lump Sum election

- 2.2 The factors are shown per £1 pa of added pension purchased.
- 2.3 The factors should be selected with reference to the member's:
- age in complete years,
 - for a nuvos member, whether the pension is for the member only, or for all beneficiaries,
 - sex, if the member is a nuvos member who is buying member only benefits (however please note that the male and female factors have now been unisexed),
 - section of the scheme (classic, classic plus, premium and nuvos) and
 - for the revaluation factor, the number of 1 Aprils falling between the calculation date and the NPA
- 2.4 If a member purchases added pension by a lump sum payment, then the amount credited is either that set out on any statement of amount of added pension given to the member following their election to buy added pension by lump sum, or the amount determined as at the date of receipt of payment by the member if this occurs more than 1 month after the date of the statement.
- 2.5 To purchase a specific increase to a member's pension for the relevant scheme year, then the lump sum payment (LS) required is determined as follows:

$$LS = P \times F_x^{LS} \times F_y^{Reval}$$

Where:

P = amount of added pension purchased

x = member's age in complete years on the date of calculation

F_x^{LS} = lump sum factor at age x from appropriate table (Appendix A Tables 1-3: P1APLSCL1, P1APLSCP1, or P1APLSNU1)

F_y^{Reval} = relevant revaluation factor for a member with y 1 Aprils between calculation date and up to and including NPA (Appendix A Table 7: Revaluation factors)

calculation date is either

- the date of the statement of amount of added pension to be purchased, or



- the date of receipt of payment (if this occurs more than 1 month after the date of the statement).

2.6 The amount of added pension, P , added to a member's pension for the relevant scheme year in respect of a lump sum payment received is determined as follows:

$$P = \frac{LS}{F_x^{LS} \times F_y^{Reval}}$$

Where:

LS = amount of Lump Sum payment

x = member's age in complete years on the date of calculation

F_x^{LS} = lump sum factor at age x from appropriate table (Appendix A Tables 1-3: P1APLSCL1, P1APLSCP1, P1APLSNU1)

F_y^{Reval} = relevant revaluation factor for a member with y 1 Aprils between calculation date and up to and including NPA (Appendix A Table 7: Revaluation factors)

calculation date is either

- the date of the statement of amount of added pension to be purchased, or
- the date of receipt of payment (if this occurs more than 1 month after the date of the statement).

2.7 A classic member, in addition to their added pension at retirement, is entitled to a lump sum equal to 3 times the added pension at retirement (before commutation, allocation or inverse commutation).

Periodical Payments election

2.8 The factors are shown per £1 pa of added pension purchased.

2.9 A member may buy added pension by opting for a deduction from their pensionable earnings expressed as either a fixed amount or percentage of their pay. Unless the member opts to buy added pension within 3 months of joining the scheme, this will start from beginning of the next scheme year.

2.10 The scheme year runs from 1 April to 31 March.



2.11 Factors should be selected with reference to the member's:

- age in complete years,
- for a nuvos member, whether the pension is for the member only, or for all beneficiaries,
- sex, if the member is a nuvos member who is buying member only benefits (however please note that the male and female factors have now been unisexed),
- section of the scheme (classic, classic plus, premium and nuvos) and
- for the revaluation factor the number of 1 Aprils falling between the calculation date and the NPA

2.12 To calculate the amount of added pension to be awarded for a given scheme year, the total amount of periodic contributions over the scheme year is required.

2.13 The amount of pension added for a scheme year needs to be adjusted to allow for any variations during the year in the level of contributions due to pay awards, members exiting active service or periods of assumed pay, and the commencement of payments falling later than the start of the scheme year (in the case of members starting to buy added pension by periodic payments within 3 months of joining the scheme).

2.14 The amount of added pension, P , added to a member's pension at the end of the period of contributions during that scheme year is determined as follows:

$$P = \frac{C}{F_x^{RC} \times F_y^{Reval}}$$

Where:

- C = total amount of periodic contributions over scheme year
- x = member's age in complete years at the start of scheme year or start of the period of payment if later (ie at the calculation date)
- F_x^{RC} = regular contribution factor at age x from corresponding table (Appendix A Tables 4-6: P1APPCCL1, P1APPCCP1, or P1APPCNU1)
- F_y^{Reval} = relevant revaluation factor for a member with y 1 Aprils (from the day after the date of commencement of contributions) up to and including NPA (Appendix A Table 7: Revaluation factors)

2.15 A classic member, in addition to their added pension at retirement, is entitled to a lump sum equal to 3 times the added pension at retirement (before commutation, allocation or inverse commutation).



- 2.16 The amount of level monthly payments, MP, required to purchase a given amount of added pension if paid over a single full scheme year is determined as follows:

$$MP = \frac{P \times F_x^{RC} \times F_y^{Reval}}{12}$$

Where:

- P = amount of added pension the member wishes to buy
- x = member's age in complete years at the start of the scheme year or start of the period of payment if later
- F_x^{RC} = regular contribution factor at age x from corresponding table (Appendix A Tables 4-6: P1APPCCL1, P1APPCCP1, or P1APPCNU1)
- F_y^{Reval} = relevant revaluation factor for a member with y 1 Aprils (from the day after the date of commencement of contributions) up to and including NPA (Appendix A Table 7: Revaluation factors)

- 2.17 A classic member, in addition to their added pension at retirement, is entitled to a lump sum equal to 3 times the added pension at retirement (before commutation, allocation or inverse commutation).
- 2.18 The formula in 2.16 should only be used for illustrative purposes and only for cases where level payments are to be made over a complete scheme year. It is not appropriate for cases where a percentage of salary is to be paid to buy added pension.



3 Worked Examples

Example 1 – Lump sum election – Added Pension for member and dependant purchased by a given lump sum payment

- Date of Birth 15/10/1963
- Section Classic
- Normal Pension Age (NPA) 60 years
- Amount of lump sum payment £1,000
- Calculation date 01/09/2020
- Age (last birthday) of member at calculation date 56 years
- Number of 1 Aprils between calculation date up to
 - and including NPA 3
- Lump Sum factor F_x^{LS} (from P1APLSCL1) 20.56
- Revaluation factor F_y^{Reval} (from Revaluation factors) 1.06
- Added pension purchased immediately on payment, P

$$= \frac{LS}{F_x^{LS} \times F_y^{Reval}}$$

$$= \frac{£1,000.00}{20.56 \times 1.06}$$

$$= £45.89 \text{ p.a.}$$
- If the pension of the member at retirement was £45.89 pa then the member will also receive a lump sum of

$$3 \times £45.89$$

$$= £137.67$$



Example 2 – Lump sum election – Lump sum payment required to purchase Added Pension for member and dependant

- Sex Male
- Date of Birth 15/10/1963
- Section Classic Plus
- Normal Pension Age 60 years
- Amount of AP intended to purchase £200 pa
- Calculation date 01/09/2020
- Age (last birthday) of member on calculation date 56 years
- Number of 1 Aprils between calculation date up to and including NPA 3
- Lump Sum factor F_x^{LS} (from P1APLSCP1) 17.83
- Revaluation factor F_y^{Reval} (from Revaluation factors) 1.06
- Lump Sum, LS , payment required to immediately purchase added pension

$$\begin{aligned}
 LS &= P \times F_x^{LS} \times F_y^{Reval} \\
 &= £200.00 \times 17.83 \times 1.06 \\
 &= £3,779.96
 \end{aligned}$$



Example 3 – Periodic payments – Added Pension purchased for member and dependant by a periodic contributions in the scheme year 2020-21

- Date of Birth 01/04/1963
- Section Premium
- Normal Pension Age 60 years
- Amount of monthly contribution £200 pm
- Start of periodic payment (calculation date) 01/04/2020
- Age of member at the start of scheme year 57 years
- Number of 1 Aprils between calculation date up to and including NPA 3
- Expected amount of periodic contributions over scheme year 2020-21, C £2,400
- Periodic Contribution factor F_x^{PC} (from P1APPCCP1) 19.02
- Revaluation factor F_y^{Reval} (from Revaluation factors) 1.06
- Added pension, P , expected to be purchased by end of scheme year

$$\begin{aligned}
 P &= \frac{C}{F_x^{PC} \times F_y^{Reval}} \\
 &= \frac{2,400.00}{19.02 \times 1.06} \\
 &= £119.04 \text{ pa}
 \end{aligned}$$



Accounting for a promotion part way through the year

- Salary Increase 20%
- Date of Salary Increase 01/01/2021
- Amount of monthly contribution in final three months $(£48,000.00 \times 120\% \times 5\%) / 12$
= £240.00 pm
- Total amount of periodic contributions over scheme year 2020-21, C $£200.00 \times 9 + £240.00 \times 3$
= £2,520.00
- Regular Contribution factor F_x^{RC} (from P1APPCCP1) 19.02
- Revaluation factor F_y^{Reval} (from Revaluation factors) 1.06
- added pension purchased, P

$$= \frac{C}{F_x^{RC} \times F_y^{Reval}}$$

$$= \frac{2,520.00}{19.02 \times 1.06}$$

$$= £ 124.99 \text{ p.a.}$$

Therefore the member should be granted an added pension of £124.99 pa at the end of the scheme year.



Example 4 – Periodic payments – Added Pension purchased for member only by level payments from 2021-22

- Sex Female
- Date of Birth 18/06/1963
- Section Nuvos
- Normal Pension Age 65 years
- Amount of monthly contribution £100 pm
- Start date of periodic payments (calculation date) 01/04/2021
- Age of member at start of scheme year 57 years
- Number of 1 Aprils between calculation date up to and including NPA 7

Accounting for the member leaving the scheme before completing the payments

- Date of leaving scheme 31/01/2022
- Number of months in which member has made contributions 10
- Total amount of periodic contributions over scheme year 2021-22, C £100.00 × 10 = £1,000.00
- Regular Contribution factor F_x^{PC} (from P1APPCNU1) 13.05
- Revaluation factor F_y^{Reval} (from Revaluation factors) 1.15

$$\begin{aligned}
 \bullet \text{ Added pension purchased, } P &= \frac{C}{F_x^{PC} \times F_y^{Reval}} \\
 &= \frac{1,000.00}{13.05 \times 1.15} \\
 &= \text{£ } 66.63 \text{ pa}
 \end{aligned}$$

Therefore the member should be granted an added pension of £66.63 pa at the date of leaving.



4 Limitations of this guidance

- 4.1 This guidance should not be used for any purpose other than those set out in this guidance.
- 4.2 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.
- 4.3 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.
- 4.4 This guidance only covers the actuarial principles around the calculation and application of added pension factors. Any legal advice in this area should be sought from an appropriately qualified person or source.
- 4.5 Scheme managers and administrators should satisfy themselves that added pension calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.
- 4.6 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 DoF NI and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.



Appendix A: Factor tables

List of Tables

- Table 1: P1APLSCL1 – Added Pension by Lump Sum factors for classic (**Table 712 in consolidated factor spreadsheet**)
- Table 2: P1APLSCP1 – Added Pension by Lump Sum factors for classic plus and premium (**Table 713 in consolidated factor spreadsheet**)
- Table 3: P1APLSNU1 – Added Pension by Lump Sum factors for nuvos (**Table 714 in consolidated factor spreadsheet**)
- Table 4: P1APPCCL1 – Added Pension by Periodical Contribution factors for classic (**Table 709 in consolidated factor spreadsheet**)
- Table 5: P1APPCCP1 – Added Pension by Periodical Contribution factors for classic plus and premium (**Table 710 in consolidated factor spreadsheet**)
- Table 6: P1APPCNU1 – Added Pension by Periodical Contribution factors for nuvos (**Table 711 in consolidated factor spreadsheet**)
- Table 7: Revaluation factors (**Table 001 in consolidated factor spreadsheet**)



Table 1: P1APLSCL1 – Added Pension by Lump Sum factors for classic (*Table 712 in consolidated factor spreadsheet*)

Unisex	
Age	Member + spouse
16	4.06
17	4.24
18	4.42
19	4.60
20	4.79
21	4.99
22	5.20
23	5.41
24	5.64
25	5.87
26	6.12
27	6.37
28	6.64
29	6.91
30	7.20
31	7.50
32	7.81
33	8.13
34	8.47
35	8.82
36	9.18
37	9.56
38	9.95
39	10.35
40	10.78
41	11.22
42	11.68
43	12.16
44	12.65
45	13.17
46	13.71
47	14.27
48	14.86
49	15.47
50	16.10
51	16.77
52	17.46
53	18.18
54	18.94
55	19.73
56	20.56
57	21.44
58	22.36
59	23.33
60	23.59
61	23.09
62	22.58
63	22.06
64	21.53
65	21.00
66	20.46
67	19.92
68	19.37
69	18.81
70	18.25
71	17.69
72	17.13
73	16.57
74	16.01
75	15.73



Table 2: P1APLSCP1 –Added Pension by Lump Sum factors for classic plus and premium (*Table 713 in consolidated factor spreadsheet*)

Unisex	
Age	Member + spouse
16	3.50
17	3.66
18	3.82
19	3.98
20	4.15
21	4.32
22	4.50
23	4.69
24	4.88
25	5.09
26	5.30
27	5.53
28	5.76
29	6.00
30	6.25
31	6.51
32	6.78
33	7.06
34	7.36
35	7.66
36	7.97
37	8.30
38	8.64
39	9.00
40	9.37
41	9.75
42	10.15
43	10.56
44	10.99
45	11.44
46	11.91
47	12.40
48	12.90
49	13.43
50	13.98
51	14.55
52	15.15
53	15.78
54	16.43
55	17.11
56	17.83
57	18.58
58	19.38
59	20.22
60	20.40
61	19.90
62	19.39
63	18.87
64	18.34
65	17.81
66	17.27
67	16.72
68	16.17
69	15.62
70	15.06
71	14.50
72	13.94
73	13.38
74	12.82
75	12.54



Table 3: P1APLSNU1 – Added Pension by Lump Sum factors for nuvos (*Table 714 in consolidated factor spreadsheet*)

	Males	Females	Unisex
Age	Member's pension factor	Member's pension factor	Member + spouse
16	2.51	2.51	2.69
17	2.62	2.62	2.81
18	2.73	2.73	2.93
19	2.84	2.84	3.06
20	2.96	2.96	3.18
21	3.08	3.08	3.31
22	3.21	3.21	3.45
23	3.34	3.34	3.59
24	3.48	3.48	3.74
25	3.62	3.62	3.90
26	3.77	3.77	4.06
27	3.93	3.93	4.23
28	4.09	4.09	4.40
29	4.26	4.26	4.59
30	4.44	4.44	4.78
31	4.62	4.62	4.97
32	4.81	4.81	5.17
33	5.01	5.01	5.38
34	5.21	5.21	5.60
35	5.42	5.42	5.83
36	5.64	5.64	6.06
37	5.87	5.87	6.31
38	6.10	6.10	6.56
39	6.35	6.35	6.82
40	6.60	6.60	7.09
41	6.87	6.87	7.38
42	7.14	7.14	7.67
43	7.42	7.42	7.97
44	7.72	7.72	8.29
45	8.03	8.03	8.62
46	8.34	8.34	8.96
47	8.67	8.67	9.31
48	9.01	9.01	9.67
49	9.37	9.37	10.05
50	9.74	9.74	10.44
51	10.12	10.12	10.85
52	10.52	10.52	11.27
53	10.93	10.93	11.71
54	11.35	11.35	12.16
55	11.80	11.80	12.63
56	12.27	12.27	13.13
57	12.75	12.75	13.64
58	13.26	13.26	14.17
59	13.80	13.80	14.74
60	14.36	14.36	15.32
61	14.95	14.95	15.95
62	15.58	15.58	16.61
63	16.26	16.26	17.31
64	16.98	16.98	18.05
65	17.08	17.08	18.18
66	16.54	16.54	17.64
67	15.99	15.99	17.09
68	15.44	15.44	16.54
69	14.89	14.89	15.98
70	14.33	14.33	15.42
71	13.77	13.77	14.86
72	13.21	13.21	14.30
73	12.66	12.66	13.73
74	12.11	12.11	13.17
75	11.83	11.83	12.89



Table 4: P1APPCCL1 – Added Pension by Periodical Contribution factors for classic
(Table 709 in consolidated factor spreadsheet)

Unisex	
Age	Member + spouse
16	4.15
17	4.34
18	4.53
19	4.71
20	4.90
21	5.11
22	5.32
23	5.54
24	5.77
25	6.01
26	6.27
27	6.52
28	6.80
29	7.07
30	7.37
31	7.68
32	8.00
33	8.32
34	8.67
35	9.03
36	9.40
37	9.79
38	10.19
39	10.60
40	11.04
41	11.49
42	11.96
43	12.45
44	12.95
45	13.48
46	14.04
47	14.61
48	15.21
49	15.84
50	16.48
51	17.17
52	17.88
53	18.61
54	19.39
55	20.20
56	21.05
57	21.95
58	22.89
59	23.88
60	24.15
61	23.64
62	23.12
63	22.58
64	22.04
65	21.50
66	20.95
67	20.39
68	19.83
69	19.26
70	18.68
71	18.11
72	17.54
73	16.96
74	16.39
75	16.10



Table 5: P1APPCCP1 – Added Pension by Periodical Contribution factors for classic plus and premium (*Table 710 in consolidated factor spreadsheet*)

Unisex	
Age	Member + spouse
16	3.59
17	3.75
18	3.91
19	4.07
20	4.25
21	4.42
22	4.61
23	4.80
24	5.00
25	5.21
26	5.43
27	5.66
28	5.90
29	6.14
30	6.40
31	6.66
32	6.94
33	7.23
34	7.53
35	7.84
36	8.16
37	8.50
38	8.85
39	9.21
40	9.59
41	9.98
42	10.39
43	10.81
44	11.25
45	11.71
46	12.19
47	12.69
48	13.21
49	13.75
50	14.31
51	14.90
52	15.51
53	16.16
54	16.82
55	17.52
56	18.25
57	19.02
58	19.84
59	20.70
60	20.88
61	20.37
62	19.85
63	19.32
64	18.78
65	18.23
66	17.68
67	17.12
68	16.55
69	15.99
70	15.42
71	14.84
72	14.27
73	13.70
74	13.12
75	12.84



Table 6: P1APPCNU1 – Added Pension by Periodical Contribution factors for nuvos
(Table 711 in consolidated factor spreadsheet)

	Males	Females	Unisex
Age	Member's pension factor	Member's pension factor	Member + spouse
16	2.57	2.57	2.76
17	2.68	2.68	2.88
18	2.79	2.79	3.00
19	2.91	2.91	3.13
20	3.03	3.03	3.26
21	3.15	3.15	3.39
22	3.29	3.29	3.53
23	3.42	3.42	3.68
24	3.56	3.56	3.83
25	3.71	3.71	3.99
26	3.86	3.86	4.16
27	4.02	4.02	4.33
28	4.19	4.19	4.50
29	4.36	4.36	4.70
30	4.55	4.55	4.89
31	4.73	4.73	5.09
32	4.92	4.92	5.29
33	5.13	5.13	5.51
34	5.33	5.33	5.73
35	5.55	5.55	5.97
36	5.77	5.77	6.20
37	6.01	6.01	6.46
38	6.25	6.25	6.72
39	6.50	6.50	6.98
40	6.76	6.76	7.26
41	7.03	7.03	7.56
42	7.31	7.31	7.85
43	7.60	7.60	8.16
44	7.90	7.90	8.49
45	8.22	8.22	8.82
46	8.54	8.54	9.17
47	8.88	8.88	9.53
48	9.22	9.22	9.90
49	9.59	9.59	10.29
50	9.97	9.97	10.69
51	10.36	10.36	11.11
52	10.77	10.77	11.54
53	11.19	11.19	11.99
54	11.62	11.62	12.45
55	12.08	12.08	12.93
56	12.56	12.56	13.44
57	13.05	13.05	13.96
58	13.58	13.58	14.51
59	14.13	14.13	15.09
60	14.70	14.70	15.68
61	15.31	15.31	16.33
62	15.95	15.95	17.00
63	16.65	16.65	17.72
64	17.38	17.38	18.48
65	17.49	17.49	18.61
66	16.93	16.93	18.06
67	16.37	16.37	17.50
68	15.81	15.81	16.93
69	15.24	15.24	16.36
70	14.67	14.67	15.79
71	14.10	14.10	15.21
72	13.52	13.52	14.64
73	12.96	12.96	14.06
74	12.40	12.40	13.48
75	12.11	12.11	13.20



Table 7: Revaluation factors (*Table 001 in consolidated factor spreadsheet*)

Number of 1 Aprils	Factor	Number of 1 Aprils	Factor	Number of 1 Aprils	Factor
0	1.00	17	1.40	34	1.96
1	1.02	18	1.43	35	2.00
2	1.04	19	1.46	36	2.04
3	1.06	20	1.49	37	2.08
4	1.08	21	1.52	38	2.12
5	1.10	22	1.55	39	2.16
6	1.13	23	1.58	40	2.21
7	1.15	24	1.61	41	2.25
8	1.17	25	1.64	42	2.30
9	1.20	26	1.67	43	2.34
10	1.22	27	1.71	44	2.39
11	1.24	28	1.74	45	2.44
12	1.27	29	1.78	46	2.49
13	1.29	30	1.81	47	2.54
14	1.32	31	1.85	48	2.59
15	1.35	32	1.88	49	2.64
16	1.37	33	1.92	50	2.69



Appendix B: Assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448% pa
Real discount rate (in excess of CPI)	2.40% pa
Real discount rate (in excess of RPI)	1.25% pa

Mortality assumptions

Base mortality tables and adjustments:

	Males	Females
Retirements in normal and ill health	110% of S2NMA	110% of S2NFA
Dependants	124% of S2NMA	106% of S2DFA

Future mortality improvement	Based on ONS principal UK population projections 2016
Year of Use	2020

In-service decrement rates

Withdrawal	In line with 2016 valuation assumptions
Age retirement	In line with 2016 valuation assumptions
Ill Health Retirement	In line with 2016 valuation assumptions

Other assumptions

Proportion of male members for unisex factors	50%
Proportion partnered	100% for Additional Pension with attaching dependants' pension, nil otherwise
Age difference between member and partner	Male members assumed to be 3 years older than their partners and female members are assumed to be 2 years younger than their partners
Allowance for commutation	Nil