



Government Actuary's Department

Civil Service and Others Pension Scheme (CSOPS)

Factors for cash equivalent transfer values (CETVs) for alpha members

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1 Introduction

- 1.1 This note is addressed to The Pension Scheme Executive (TPSE) of the Cabinet Office as scheme manager of the Civil Service and Others Pension Scheme ('CSOPS' or **alpha** scheme). The **alpha** scheme was established by The Public Service (Civil Servants and Others) Pensions Regulations 2014 (SI 2014/1964) ("the Regulations") and came into force on 1 April 2015.
- 1.2 The purpose of this note is to provide tables to calculate the cash equivalent transfer value of a member's deferred **alpha** scheme benefit.
- 1.3 A cash equivalent may be paid by the **alpha** scheme to another pension scheme in accordance with regulations 142 to 147 of the Regulations.
- 1.4 This guidance only relates to benefits in the **alpha** scheme. These tables should not be used to calculate the amount of a Club transfer value. Separate guidance applies to the **classic**, **classic plus**, **premium** or **nuvos** sections of the Principal Civil Service Pension Scheme.
- 1.5 The factors provided in this note have been prepared in accordance with our note *CSOPS: Advice on actuarial calculation factors* dated 19 September 2014, as subsequently amended.
- 1.6 We understand cash equivalent transfer value factors are the responsibility of the scheme manager/the Minister of the CSOPS.
- 1.7 The factors came into force when the alpha pension scheme was introduced from 1 April 2015.
- 1.8 We do not envisage any special cases not covered by this note. However, if any do occur they should be referred to GAD.
- 1.9 Please contact Nick Horne (020 7211 2679) or Cody Shek (020 7211 2684) for further information on this note.



2 Instructions

- 2.1 The formulae for calculating **alpha** scheme CETVs (ie values of non-Club transfers out) are set out in paragraph 2.7.
- 2.2 Tables are provided for the range of pension ages which apply to members who join the **alpha** scheme. This includes a pension age of 60 which may apply if a member elects to pay for Enhanced Effective Pension Age (EEPA) under Schedule 1 Part 4 of the Regulations.
- 2.3 The factors should be selected according to the member's age last birthday, sex, pension age and for the revaluation factor, the number of 1 Aprils falling between the calculation date and pension age. If a member has a non-integer pension age then more than one factor is required and these factors are interpolated to obtain the actual factor to use. Members may have benefits with different pension ages (e.g. some benefits payable from normal pension age¹ (NPA) and some payable from an EPA). In such a case, different factors should be used for the separate tranches of benefit.
- 2.4 To calculate the value of the benefits, the deferred member's pension and deferred partner's pension should be calculated. Each element is multiplied by the relevant factor from Appendix A, and the result multiplied by the appropriate revaluation factor.
- 2.5 Adjustments should be made for any GMP.
- 2.6 In accordance with Regulation 146 (3) and (4) the sum of all member contributions and payments for extra pension made by the member; plus the sum of all transfer payments received by the alpha scheme in relation to the member should be compared to the initial calculation of the transfer amount and the larger amount taken as the final CETV amount.

¹ Normal pension age is defined as a member's state pension age (or 65, if that is higher) in the alpha section. For the purpose of this note, a member's expected NPA in the alpha section is the same as their state pension age as set out in The Public Service Pensions (Valuations and Employer Cost Cap) Directions 2014, as subsequently amended – https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/411287/HMT_Directions_9_Mar_2015.pdf



- 2.7 For calculating CETVs, the following formula should be used. Separate calculations should be done where members have benefits with different pension ages (e.g. because the member has purchased an EPA or EEPA on some of their benefits) and the resultant answers added together to give the total CETV.

$$CETV = \left[(P \times F_x^P + S \times F_x^S) \times F_y^{Reval} - (G^{pre} \times F_x^{Gpre} + G^{post} \times F_x^{Gpost}) \right]$$

where:

P = member's deferred pension at the relevant date

S = partner's pension at the relevant date

G^{pre} = pre-88 GMP at the relevant date

G^{post} = post-88 GMP at the relevant date

F_x^P = member's pension factor for a member aged x last birthday at the relevant date, taken from Tables 1 to 5 depending on the member's NPA or (E)EPA, as appropriate.

F_x^S = partner's pension factor for a member aged x last birthday at the relevant date, taken from Tables 1 to 5 depending on the member's NPA or (E)EPA, as appropriate.

F_x^{Gpre} = pre-88 GMP onset/offset factor for a member aged x last birthday at the relevant date, taken from Tables 1 to 5 depending on the member's NPA or (E)EPA, as appropriate.

F_x^{Gpost} = post-88 GMP onset/offset factor for a member aged x last birthday at the relevant date, taken from Tables 1 to 5 depending on the member's NPA or (E)EPA, as appropriate.

F_y^{Reval} = revaluation factor for a member with y 1 Aprils before NPA / (E)EPA as at the relevant date, taken from Table 6



- 2.8 The receiving scheme in a transfer out may require the value of the accrued GMP to be notified separately, or for the GMP to be retained by the **alpha** scheme. In such cases, the factors in Table 7 should be used to calculate the value of the GMP 'protected rights' using the formula below.

$$\text{Value of GMP Protected Rights} = G^{pre} * F_x^{Pre} + G^{post} * F_x^{Post}$$

where:

G^{pre} = pre-88 GMP at the relevant date

G^{post} = post-88 GMP at the relevant date

F_x^{pre} = pre-88 GMP protected rights factor for a member aged x last birthday at the relevant date, taken from Table 7

F_x^{post} = post-88 GMP protected rights factor for a member aged x last birthday at the relevant date, taken from Table 7

- 2.9 Where the GMP is to be retained within the alpha scheme, the transfer value to be paid should be the net transfer value, which is calculated as:

'Net transfer value' = 'Total transfer value (as calculated in paragraph 2.7)' – 'Value of GMP Protected Rights (as calculated in paragraph 2.8)'



3 Example

Example: Male member

> Date of birth	18/08/1960
> Sex	Male
> Normal Pension age	66 years 5 months
> Amount of deferred pension	£5,600
> Amount of deferred partner's pension	£2,100
> Amount of pre 88 GMP	£150
> Amount of post 88 GMP	£350
> Calculation date	15/04/2016
> Age last birthday	55
> Number of 1 Aprils to NPA	10
> Pension factor	9.2317
> Survivor's pension factor	2.1275
> Pre-88 GMP onset/offset factor	1.9342
> Post-88 GMP onset/offset factor	-0.7667
> Revaluation factor	1.22
> CETV	$= [(£5,600 * 9.2317 + £2,100 * 2.1275) * 1.22 - (£150 * 1.9342 + £350 * (-0.7667))]$ $= £68,499.84$

The factors used above were interpolated for non-integer NPA as shown below:

Factor at NPA 66 years 5 months

$$= \left(\frac{7}{12}\right) * \text{Factor at NPA 66} + \left(\frac{5}{12}\right) * \text{Factor at NPA 67}$$

If required the value of the GMP can be calculated as follows:

> Pre-88 GMP protected rights factor	13.37
> Post-88 GMP protected rights factor	16.40
> Value of GMP Protected Rights	$= £150 * 13.37 + £350 * 16.40$ $= £7,745.50$



4 Limitations of this Guidance

- 4.1 This note is intended for the use of the Cabinet Office 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.
- 4.2 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.
- 4.3 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.
- 4.4 This note only covers the actuarial principles around the factors covered in this note. 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 regulations. If users of this guidance believe it to contain any inconsistencies with the scheme regulations, they should bring this to the attention of Cabinet Office and GAD.



Appendix A: Factor tables

List of Tables

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Table 1: P2CETV60 - Alpha CETV factors for pension age of 60

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
17	2.43	0.44	3.66	0.55	2.56	0.16	3.07	0.47
18	2.55	0.46	3.66	0.55	2.68	0.17	3.06	0.47
19	2.67	0.48	3.65	0.55	2.81	0.18	3.06	0.47
20	2.80	0.51	3.65	0.55	2.95	0.19	3.05	0.47
21	2.94	0.53	3.64	0.55	3.09	0.20	3.05	0.47
22	3.08	0.55	3.63	0.54	3.24	0.21	3.04	0.47
23	3.23	0.58	3.63	0.54	3.40	0.22	3.04	0.47
24	3.39	0.61	3.62	0.54	3.57	0.23	3.03	0.47
25	3.56	0.64	3.62	0.54	3.74	0.24	3.03	0.47
26	3.73	0.67	3.61	0.54	3.92	0.25	3.02	0.47
27	3.91	0.70	3.60	0.54	4.11	0.26	3.02	0.46
28	4.10	0.73	3.60	0.54	4.31	0.27	3.01	0.46
29	4.30	0.76	3.59	0.54	4.52	0.28	3.01	0.46
30	4.51	0.80	3.59	0.54	4.75	0.30	3.00	0.46
31	4.73	0.84	3.58	0.53	4.98	0.31	3.00	0.46
32	4.96	0.88	3.58	0.53	5.22	0.32	2.99	0.46
33	5.20	0.92	3.57	0.53	5.47	0.34	2.99	0.46
34	5.46	0.96	3.56	0.53	5.74	0.35	2.98	0.46
35	5.72	1.00	3.56	0.53	6.02	0.37	2.98	0.46
36	6.00	1.05	3.55	0.53	6.32	0.39	2.97	0.46
37	6.30	1.10	3.55	0.53	6.62	0.40	2.97	0.46
38	6.60	1.15	3.55	0.53	6.95	0.42	2.96	0.45
39	6.93	1.20	3.54	0.53	7.29	0.44	2.96	0.45
40	7.27	1.25	3.54	0.53	7.64	0.46	2.96	0.45
41	7.62	1.31	3.53	0.52	8.02	0.48	2.95	0.45
42	8.00	1.37	3.53	0.52	8.41	0.50	2.95	0.45
43	8.39	1.43	3.52	0.52	8.82	0.52	2.94	0.45
44	8.80	1.49	3.52	0.52	9.26	0.54	2.94	0.45

Table 1: P2CETV60 - Alpha CETV factors for pension age of 60 (continued)

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
45	9.24	1.56	3.52	0.52	9.71	0.56	2.94	0.45
46	9.69	1.63	3.51	0.52	10.19	0.58	2.93	0.45
47	10.17	1.70	3.51	0.52	10.69	0.60	2.93	0.45
48	10.67	1.77	3.51	0.52	11.22	0.63	2.93	0.45
49	11.20	1.85	3.50	0.52	11.77	0.65	2.92	0.45
50	11.75	1.93	3.50	0.52	12.35	0.68	2.92	0.45
51	12.34	2.01	3.50	0.52	12.96	0.70	2.92	0.45
52	12.95	2.09	3.49	0.52	13.61	0.73	2.92	0.45
53	13.60	2.18	3.49	0.52	14.28	0.75	2.92	0.45
54	14.28	2.27	3.49	0.52	15.00	0.78	2.92	0.44
55	14.99	2.36	3.49	0.52	15.74	0.80	2.92	0.44
56	15.75	2.46	3.49	0.52	16.53	0.83	2.92	0.44
57	16.54	2.55	3.49	0.52	17.36	0.86	2.92	0.44
58	17.38	2.65	3.49	0.52	18.23	0.88	2.92	0.44
59	18.27	2.76	3.50	0.52	19.15	0.91	2.99	0.46
60	18.51	2.83	3.50	0.52	19.43	0.93	3.11	0.47
61	18.09	2.88	3.51	0.52	19.03	0.93	3.20	0.49
62	17.66	2.93	3.52	0.52	18.63	0.93	3.29	0.50
63	17.23	2.98	3.53	0.52	18.21	0.94	3.38	0.51
64	16.79	3.02	3.62	0.53	17.79	0.94	3.48	0.53
65	16.34	3.06	3.63	0.53	17.36	0.94	3.45	0.52
66	15.89	3.11	3.47	0.51	16.91	0.94	3.28	0.50
67	15.42	3.15	3.31	0.48	16.46	0.94	3.12	0.47
68	14.95	3.19	3.15	0.46	16.00	0.94	2.95	0.45
69	14.47	3.23	2.99	0.44	15.53	0.94	2.79	0.42
70	13.99	3.26	2.84	0.41	15.06	0.93	2.63	0.40
71	13.50	3.30	2.69	0.39	14.58	0.93	2.47	0.37
72	13.01	3.32	2.55	0.37	14.09	0.92	2.32	0.35
73	12.52	3.35	2.41	0.35	13.60	0.91	2.17	0.33
74	12.04	3.36	2.27	0.33	13.11	0.91	2.02	0.30
75	11.56	3.36	2.14	0.31	12.63	0.90	1.88	0.28

Table 2: P2CETV65 - Alpha CETV factors for pension age of 65

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
17	1.70	0.41	3.66	0.55	1.81	0.15	-0.71	-3.30
18	1.78	0.43	3.66	0.55	1.90	0.16	-0.72	-3.31
19	1.87	0.45	3.65	0.55	1.99	0.17	-0.74	-3.32
20	1.96	0.47	3.65	0.55	2.09	0.18	-0.75	-3.33
21	2.05	0.50	3.64	0.55	2.19	0.18	-0.77	-3.35
22	2.15	0.52	3.63	0.54	2.29	0.19	-0.78	-3.36
23	2.25	0.54	3.63	0.54	2.40	0.20	-0.80	-3.37
24	2.36	0.57	3.62	0.54	2.52	0.21	-0.81	-3.38
25	2.48	0.59	3.62	0.54	2.64	0.22	-0.83	-3.39
26	2.60	0.62	3.61	0.54	2.77	0.23	-0.85	-3.40
27	2.72	0.65	3.60	0.54	2.91	0.24	-0.86	-3.42
28	2.85	0.68	3.60	0.54	3.05	0.25	-0.88	-3.43
29	2.99	0.71	3.59	0.54	3.19	0.26	-0.89	-3.44
30	3.13	0.75	3.59	0.54	3.35	0.28	-0.91	-3.45
31	3.29	0.78	3.58	0.53	3.51	0.29	-0.93	-3.46
32	3.44	0.82	3.58	0.53	3.68	0.30	-0.94	-3.48
33	3.61	0.85	3.57	0.53	3.86	0.31	-0.96	-3.49
34	3.79	0.89	3.56	0.53	4.04	0.33	-0.98	-3.50
35	3.97	0.93	3.56	0.53	4.24	0.34	-0.99	-3.51
36	4.16	0.98	3.55	0.53	4.45	0.36	-1.01	-3.53
37	4.36	1.02	3.55	0.53	4.66	0.37	-1.03	-3.54
38	4.57	1.07	3.55	0.53	4.89	0.39	-1.04	-3.55
39	4.80	1.11	3.54	0.53	5.12	0.41	-1.06	-3.57
40	5.03	1.16	3.54	0.53	5.37	0.42	-1.08	-3.58
41	5.27	1.22	3.53	0.52	5.63	0.44	-1.10	-3.60
42	5.53	1.27	3.53	0.52	5.91	0.46	-1.11	-3.61
43	5.80	1.33	3.52	0.52	6.20	0.48	-1.13	-3.62
44	6.08	1.38	3.52	0.52	6.50	0.50	-1.15	-3.64

Table 2: P2CETV65 - Alpha CETV factors for pension age of 65 (continued)

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
45	6.38	1.44	3.52	0.52	6.81	0.51	-1.17	-3.66
46	6.69	1.51	3.51	0.52	7.15	0.53	-1.19	-3.67
47	7.02	1.57	3.51	0.52	7.50	0.56	-1.20	-3.69
48	7.36	1.64	3.51	0.52	7.86	0.58	-1.22	-3.70
49	7.72	1.71	3.50	0.52	8.25	0.60	-1.24	-3.72
50	8.10	1.78	3.50	0.52	8.65	0.62	-1.26	-3.74
51	8.50	1.85	3.50	0.52	9.08	0.64	-1.28	-3.76
52	8.92	1.93	3.49	0.52	9.52	0.66	-1.30	-3.78
53	9.36	2.01	3.49	0.52	9.99	0.69	-1.32	-3.80
54	9.83	2.09	3.49	0.52	10.49	0.71	-1.34	-3.82
55	10.32	2.17	3.49	0.52	11.01	0.73	-1.37	-3.84
56	10.83	2.26	3.49	0.52	11.55	0.75	-1.39	-3.86
57	11.38	2.34	3.49	0.52	12.13	0.78	-1.41	-3.89
58	11.95	2.43	3.49	0.52	12.74	0.80	-1.44	-3.91
59	12.55	2.52	3.50	0.52	13.38	0.82	-1.49	-4.03
60	13.19	2.61	3.50	0.52	14.05	0.85	-1.07	-3.70
61	13.87	2.71	3.51	0.52	14.76	0.87	-0.10	-2.81
62	14.59	2.80	3.52	0.52	15.51	0.89	0.89	-1.89
63	15.35	2.90	3.53	0.52	16.30	0.91	1.93	-0.94
64	16.15	3.00	3.62	0.53	17.14	0.93	2.99	0.04
65	16.34	3.06	3.63	0.53	17.36	0.94	3.45	0.52
66	15.89	3.11	3.47	0.51	16.91	0.94	3.28	0.50
67	15.42	3.15	3.31	0.48	16.46	0.94	3.12	0.47
68	14.95	3.19	3.15	0.46	16.00	0.94	2.95	0.45
69	14.47	3.23	2.99	0.44	15.53	0.94	2.79	0.42
70	13.99	3.26	2.84	0.41	15.06	0.93	2.63	0.40
71	13.50	3.30	2.69	0.39	14.58	0.93	2.47	0.37
72	13.01	3.32	2.55	0.37	14.09	0.92	2.32	0.35
73	12.52	3.35	2.41	0.35	13.60	0.91	2.17	0.33
74	12.04	3.36	2.27	0.33	13.11	0.91	2.02	0.30
75	11.56	3.36	2.14	0.31	12.63	0.90	1.88	0.28

Table 3: P2CETV66 - Alpha CETV factors for pension age of 66

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
17	1.58	0.41	2.66	-0.27	1.69	0.15	-1.59	-4.02
18	1.65	0.43	2.65	-0.27	1.77	0.16	-1.61	-4.03
19	1.73	0.45	2.64	-0.27	1.85	0.17	-1.63	-4.04
20	1.81	0.47	2.64	-0.27	1.94	0.17	-1.65	-4.06
21	1.90	0.49	2.63	-0.28	2.04	0.18	-1.66	-4.07
22	1.99	0.51	2.62	-0.28	2.13	0.19	-1.68	-4.08
23	2.09	0.54	2.61	-0.28	2.24	0.20	-1.70	-4.10
24	2.19	0.56	2.60	-0.29	2.35	0.21	-1.72	-4.11
25	2.30	0.59	2.60	-0.29	2.46	0.22	-1.73	-4.12
26	2.41	0.61	2.59	-0.29	2.58	0.23	-1.75	-4.14
27	2.52	0.64	2.58	-0.30	2.70	0.24	-1.77	-4.15
28	2.64	0.67	2.57	-0.30	2.83	0.25	-1.79	-4.16
29	2.77	0.70	2.56	-0.30	2.97	0.26	-1.81	-4.18
30	2.90	0.74	2.56	-0.31	3.11	0.27	-1.82	-4.19
31	3.04	0.77	2.55	-0.31	3.26	0.28	-1.84	-4.21
32	3.19	0.81	2.54	-0.31	3.42	0.30	-1.86	-4.22
33	3.35	0.84	2.53	-0.32	3.59	0.31	-1.88	-4.24
34	3.51	0.88	2.52	-0.32	3.76	0.32	-1.90	-4.25
35	3.68	0.92	2.52	-0.32	3.94	0.34	-1.92	-4.26
36	3.85	0.96	2.51	-0.33	4.13	0.35	-1.94	-4.28
37	4.04	1.01	2.50	-0.33	4.33	0.37	-1.96	-4.30
38	4.24	1.05	2.49	-0.33	4.54	0.38	-1.98	-4.31
39	4.44	1.10	2.49	-0.34	4.76	0.40	-2.00	-4.33
40	4.66	1.15	2.48	-0.34	4.99	0.42	-2.02	-4.34
41	4.88	1.20	2.47	-0.35	5.23	0.43	-2.04	-4.36
42	5.12	1.25	2.46	-0.35	5.49	0.45	-2.06	-4.38
43	5.37	1.31	2.46	-0.35	5.75	0.47	-2.08	-4.39
44	5.63	1.36	2.45	-0.36	6.03	0.49	-2.10	-4.41

Table 3: P2CETV66 - Alpha CETV factors for pension age of 66 (continued)

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
45	5.90	1.42	2.44	-0.36	6.33	0.51	-2.12	-4.43
46	6.19	1.49	2.44	-0.36	6.64	0.53	-2.14	-4.45
47	6.49	1.55	2.43	-0.37	6.96	0.55	-2.16	-4.47
48	6.81	1.62	2.42	-0.37	7.30	0.57	-2.18	-4.49
49	7.14	1.68	2.41	-0.38	7.66	0.59	-2.21	-4.51
50	7.49	1.75	2.41	-0.38	8.03	0.61	-2.23	-4.53
51	7.86	1.83	2.40	-0.38	8.42	0.63	-2.25	-4.55
52	8.25	1.90	2.39	-0.39	8.84	0.65	-2.28	-4.57
53	8.66	1.98	2.39	-0.39	9.27	0.68	-2.30	-4.60
54	9.09	2.06	2.38	-0.40	9.73	0.70	-2.33	-4.62
55	9.54	2.14	2.38	-0.40	10.21	0.72	-2.35	-4.65
56	10.01	2.22	2.37	-0.40	10.72	0.74	-2.38	-4.67
57	10.52	2.31	2.37	-0.41	11.25	0.76	-2.41	-4.70
58	11.04	2.39	2.37	-0.41	11.81	0.79	-2.44	-4.73
59	11.60	2.48	2.36	-0.42	12.41	0.81	-2.52	-4.88
60	12.19	2.57	2.36	-0.43	13.03	0.83	-2.14	-4.58
61	12.82	2.66	2.36	-0.43	13.69	0.85	-1.21	-3.72
62	13.48	2.76	2.36	-0.44	14.38	0.87	-0.25	-2.83
63	14.18	2.85	2.36	-0.44	15.12	0.89	0.74	-1.92
64	14.92	2.94	2.42	-0.46	15.89	0.91	1.76	-0.97
65	15.71	3.04	3.01	0.02	16.71	0.93	2.83	0.01
66	15.89	3.11	3.47	0.51	16.91	0.94	3.28	0.50
67	15.42	3.15	3.31	0.48	16.46	0.94	3.12	0.47
68	14.95	3.19	3.15	0.46	16.00	0.94	2.95	0.45
69	14.47	3.23	2.99	0.44	15.53	0.94	2.79	0.42
70	13.99	3.26	2.84	0.41	15.06	0.93	2.63	0.40
71	13.50	3.30	2.69	0.39	14.58	0.93	2.47	0.37
72	13.01	3.32	2.55	0.37	14.09	0.92	2.32	0.35
73	12.52	3.35	2.41	0.35	13.60	0.91	2.17	0.33
74	12.04	3.36	2.27	0.33	13.11	0.91	2.02	0.30
75	11.56	3.36	2.14	0.31	12.63	0.90	1.88	0.28

Table 4: P2CETV67 - Alpha CETV factors for pension age of 67

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
17	1.46	0.40	1.69	-1.05	1.57	0.15	-2.45	-4.71
18	1.53	0.42	1.68	-1.06	1.64	0.16	-2.47	-4.73
19	1.60	0.44	1.67	-1.06	1.72	0.16	-2.49	-4.74
20	1.68	0.46	1.66	-1.07	1.80	0.17	-2.51	-4.76
21	1.76	0.48	1.65	-1.07	1.89	0.18	-2.53	-4.77
22	1.85	0.51	1.64	-1.08	1.98	0.19	-2.55	-4.79
23	1.93	0.53	1.63	-1.08	2.08	0.20	-2.57	-4.80
24	2.03	0.55	1.62	-1.09	2.18	0.21	-2.59	-4.82
25	2.12	0.58	1.61	-1.09	2.28	0.22	-2.60	-4.83
26	2.23	0.61	1.60	-1.10	2.39	0.23	-2.62	-4.85
27	2.33	0.63	1.59	-1.10	2.51	0.24	-2.64	-4.86
28	2.45	0.66	1.58	-1.11	2.63	0.25	-2.66	-4.88
29	2.56	0.69	1.57	-1.12	2.76	0.26	-2.68	-4.89
30	2.69	0.73	1.56	-1.12	2.89	0.27	-2.70	-4.91
31	2.82	0.76	1.55	-1.13	3.03	0.28	-2.73	-4.92
32	2.95	0.80	1.54	-1.13	3.18	0.29	-2.75	-4.94
33	3.09	0.83	1.53	-1.14	3.33	0.31	-2.77	-4.96
34	3.24	0.87	1.52	-1.14	3.49	0.32	-2.79	-4.97
35	3.40	0.91	1.51	-1.15	3.66	0.33	-2.81	-4.99
36	3.56	0.95	1.50	-1.15	3.83	0.35	-2.83	-5.01
37	3.74	0.99	1.49	-1.16	4.02	0.36	-2.85	-5.03
38	3.92	1.04	1.48	-1.17	4.21	0.38	-2.87	-5.04
39	4.11	1.08	1.47	-1.17	4.42	0.39	-2.90	-5.06
40	4.30	1.13	1.46	-1.18	4.63	0.41	-2.92	-5.08
41	4.51	1.18	1.45	-1.19	4.86	0.43	-2.94	-5.10
42	4.73	1.23	1.44	-1.19	5.09	0.45	-2.96	-5.12
43	4.96	1.29	1.43	-1.20	5.34	0.46	-2.99	-5.14
44	5.20	1.35	1.42	-1.20	5.60	0.48	-3.01	-5.16

Table 4: P2CETV67 - Alpha CETV factors for pension age of 67 (continued)

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
45	5.45	1.40	1.41	-1.21	5.87	0.50	-3.03	-5.18
46	5.72	1.46	1.40	-1.22	6.15	0.52	-3.06	-5.20
47	6.00	1.53	1.39	-1.22	6.45	0.54	-3.08	-5.22
48	6.29	1.59	1.38	-1.23	6.77	0.56	-3.11	-5.24
49	6.60	1.66	1.37	-1.24	7.10	0.58	-3.13	-5.27
50	6.92	1.73	1.36	-1.25	7.44	0.60	-3.16	-5.29
51	7.26	1.80	1.35	-1.25	7.81	0.62	-3.19	-5.31
52	7.62	1.87	1.34	-1.26	8.19	0.64	-3.21	-5.34
53	7.99	1.95	1.33	-1.27	8.60	0.67	-3.24	-5.37
54	8.39	2.03	1.32	-1.28	9.02	0.69	-3.27	-5.40
55	8.80	2.11	1.31	-1.28	9.46	0.71	-3.30	-5.43
56	9.24	2.19	1.30	-1.29	9.93	0.73	-3.33	-5.46
57	9.71	2.27	1.29	-1.30	10.43	0.75	-3.37	-5.49
58	10.19	2.35	1.28	-1.31	10.95	0.78	-3.40	-5.52
59	10.71	2.44	1.27	-1.32	11.49	0.80	-3.52	-5.69
60	11.25	2.53	1.27	-1.33	12.07	0.82	-3.18	-5.43
61	11.83	2.62	1.26	-1.34	12.68	0.84	-2.28	-4.60
62	12.44	2.71	1.25	-1.36	13.32	0.86	-1.36	-3.74
63	13.08	2.80	1.24	-1.37	14.00	0.88	-0.40	-2.86
64	13.77	2.89	1.27	-1.42	14.72	0.90	0.58	-1.94
65	14.49	2.99	1.81	-0.98	15.48	0.92	1.61	-0.99
66	15.26	3.08	2.85	0.00	16.28	0.93	2.66	-0.01
67	15.42	3.15	3.31	0.48	16.46	0.94	3.12	0.47
68	14.95	3.19	3.15	0.46	16.00	0.94	2.95	0.45
69	14.47	3.23	2.99	0.44	15.53	0.94	2.79	0.42
70	13.99	3.26	2.84	0.41	15.06	0.93	2.63	0.40
71	13.50	3.30	2.69	0.39	14.58	0.93	2.47	0.37
72	13.01	3.32	2.55	0.37	14.09	0.92	2.32	0.35
73	12.52	3.35	2.41	0.35	13.60	0.91	2.17	0.33
74	12.04	3.36	2.27	0.33	13.11	0.91	2.02	0.30
75	11.56	3.36	2.14	0.31	12.63	0.90	1.88	0.28

Table 5: P2CETV68 - Alpha CETV factors for pension age of 68

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
17	1.35	0.40	0.76	-1.81	1.46	0.15	-3.28	-5.38
18	1.41	0.42	0.75	-1.82	1.53	0.16	-3.30	-5.40
19	1.48	0.44	0.74	-1.83	1.60	0.16	-3.32	-5.42
20	1.55	0.46	0.73	-1.84	1.68	0.17	-3.34	-5.43
21	1.63	0.48	0.72	-1.84	1.76	0.18	-3.36	-5.45
22	1.71	0.50	0.70	-1.85	1.84	0.19	-3.38	-5.46
23	1.79	0.52	0.69	-1.86	1.93	0.20	-3.40	-5.48
24	1.87	0.55	0.68	-1.86	2.02	0.20	-3.42	-5.50
25	1.96	0.57	0.67	-1.87	2.12	0.21	-3.44	-5.52
26	2.06	0.60	0.65	-1.88	2.22	0.22	-3.47	-5.53
27	2.16	0.63	0.64	-1.88	2.33	0.23	-3.49	-5.55
28	2.26	0.66	0.63	-1.89	2.44	0.24	-3.51	-5.57
29	2.37	0.69	0.62	-1.90	2.56	0.25	-3.53	-5.58
30	2.48	0.72	0.60	-1.91	2.68	0.27	-3.55	-5.60
31	2.60	0.75	0.59	-1.91	2.81	0.28	-3.58	-5.62
32	2.73	0.78	0.58	-1.92	2.95	0.29	-3.60	-5.64
33	2.86	0.82	0.57	-1.93	3.09	0.30	-3.62	-5.66
34	3.00	0.86	0.55	-1.94	3.24	0.32	-3.64	-5.67
35	3.14	0.90	0.54	-1.95	3.39	0.33	-3.67	-5.69
36	3.29	0.94	0.53	-1.95	3.56	0.34	-3.69	-5.71
37	3.45	0.98	0.52	-1.96	3.73	0.36	-3.72	-5.73
38	3.62	1.02	0.50	-1.97	3.91	0.37	-3.74	-5.75
39	3.79	1.07	0.49	-1.98	4.09	0.39	-3.76	-5.77
40	3.97	1.12	0.48	-1.99	4.29	0.41	-3.79	-5.79
41	4.16	1.17	0.47	-2.00	4.50	0.42	-3.81	-5.81
42	4.37	1.22	0.45	-2.01	4.72	0.44	-3.84	-5.84
43	4.58	1.27	0.44	-2.01	4.95	0.46	-3.86	-5.86
44	4.80	1.33	0.43	-2.02	5.19	0.48	-3.89	-5.88

Table 5: P2CETV68 - Alpha CETV factors for pension age of 68 (continued)

Age	Male				Female			
	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor	Member's pension factor	Partner's pension factor	Pre 88 GMP onset/offset factor	Post88 GMP onset/offset factor
45	5.03	1.38	0.41	-2.03	5.44	0.49	-3.92	-5.90
46	5.27	1.44	0.40	-2.04	5.70	0.51	-3.94	-5.93
47	5.53	1.50	0.39	-2.05	5.98	0.53	-3.97	-5.95
48	5.80	1.57	0.38	-2.06	6.27	0.55	-4.00	-5.97
49	6.08	1.63	0.36	-2.07	6.57	0.57	-4.03	-6.00
50	6.38	1.70	0.35	-2.08	6.89	0.59	-4.06	-6.03
51	6.69	1.77	0.34	-2.09	7.23	0.61	-4.09	-6.05
52	7.02	1.85	0.32	-2.10	7.58	0.64	-4.12	-6.08
53	7.37	1.92	0.31	-2.11	7.96	0.66	-4.15	-6.11
54	7.73	2.00	0.30	-2.12	8.35	0.68	-4.18	-6.14
55	8.11	2.07	0.28	-2.14	8.76	0.70	-4.22	-6.18
56	8.52	2.15	0.27	-2.15	9.19	0.72	-4.25	-6.21
57	8.94	2.23	0.25	-2.16	9.65	0.74	-4.29	-6.25
58	9.39	2.32	0.24	-2.18	10.13	0.76	-4.33	-6.29
59	9.87	2.40	0.23	-2.19	10.63	0.78	-4.47	-6.48
60	10.37	2.49	0.21	-2.21	11.17	0.81	-4.17	-6.25
61	10.90	2.57	0.20	-2.22	11.73	0.83	-3.31	-5.45
62	11.46	2.66	0.19	-2.24	12.32	0.85	-2.42	-4.62
63	12.05	2.75	0.17	-2.26	12.95	0.87	-1.50	-3.76
64	12.68	2.84	0.16	-2.34	13.61	0.88	-0.55	-2.88
65	13.35	2.93	0.65	-1.94	14.31	0.90	0.43	-1.96
66	14.05	3.03	1.66	-1.00	15.05	0.92	1.45	-1.02
67	14.81	3.12	2.70	-0.03	15.83	0.93	2.50	-0.04
68	14.95	3.19	3.15	0.46	16.00	0.94	2.95	0.45
69	14.47	3.23	2.99	0.44	15.53	0.94	2.79	0.42
70	13.99	3.26	2.84	0.41	15.06	0.93	2.63	0.40
71	13.50	3.30	2.69	0.39	14.58	0.93	2.47	0.37
72	13.01	3.32	2.55	0.37	14.09	0.92	2.32	0.35
73	12.52	3.35	2.41	0.35	13.60	0.91	2.17	0.33
74	12.04	3.36	2.27	0.33	13.11	0.91	2.02	0.30
75	11.56	3.36	2.14	0.31	12.63	0.90	1.88	0.28

Table 6: P2CETVREVAL - Non-club Alpha revaluation factors

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

Table 7: P2GMPPR - Alpha GMP Protected Rights factors – all pension ages

Age	Male		Female	
	Pre 88 GMP	Post88 GMP	Pre 88 GMP	Post88 GMP
17	12.70	15.89	13.35	17.44
18	12.71	15.90	13.37	17.46
19	12.73	15.91	13.39	17.48
20	12.74	15.92	13.41	17.50
21	12.76	15.93	13.43	17.52
22	12.78	15.95	13.45	17.54
23	12.79	15.96	13.46	17.56
24	12.81	15.97	13.48	17.58
25	12.82	15.98	13.50	17.60
26	12.84	15.99	13.52	17.62
27	12.85	16.00	13.54	17.64
28	12.87	16.01	13.56	17.66
29	12.88	16.02	13.58	17.68
30	12.90	16.03	13.60	17.70
31	12.91	16.04	13.63	17.72
32	12.93	16.06	13.65	17.74
33	12.95	16.07	13.67	17.76
34	12.96	16.08	13.69	17.78
35	12.98	16.09	13.71	17.80
36	13.00	16.10	13.74	17.82
37	13.01	16.12	13.76	17.85
38	13.03	16.13	13.79	17.87
39	13.05	16.14	13.81	17.89
40	13.07	16.15	13.84	17.92
41	13.08	16.17	13.87	17.94
42	13.10	16.18	13.89	17.97
43	13.12	16.20	13.92	17.99
44	13.14	16.21	13.95	18.02

Table 7: P2GMPPR - Alpha GMP Protected Rights factors – all pension ages (continued)

Age	Male		Female	
	Pre 88 GMP	Post88 GMP	Pre 88 GMP	Post88 GMP
45	13.16	16.23	13.98	18.05
46	13.18	16.24	14.01	18.07
47	13.20	16.26	14.04	18.10
48	13.22	16.27	14.08	18.13
49	13.24	16.28	14.11	18.17
50	13.26	16.30	14.15	18.20
51	13.28	16.32	14.19	18.24
52	13.30	16.33	14.23	18.28
53	13.32	16.35	14.28	18.32
54	13.35	16.37	14.33	18.36
55	13.37	16.40	14.38	18.41
56	13.40	16.42	14.43	18.46
57	13.43	16.45	14.49	18.51
58	13.46	16.48	14.55	18.57
59	13.50	16.51	14.97	19.08
60	13.53	16.55	15.23	19.37
61	13.58	16.59	15.00	18.99
62	13.63	16.64	14.75	18.60
63	13.68	16.70	14.50	18.21
64	14.07	17.16	14.24	17.80
65	14.28	17.38	13.96	17.38
66	14.00	16.95	13.67	16.95
67	13.70	16.51	13.38	16.51
68	13.40	16.06	13.07	16.06
69	13.08	15.59	12.75	15.59
70	12.74	15.12	12.42	15.12
71	12.40	14.64	12.08	14.63
72	12.04	14.14	11.73	14.14
73	11.68	13.64	11.37	13.64
74	11.30	13.14	11.00	13.13
75	10.92	12.63	10.63	12.62