Government Actuary's Department

1919 - 2019 100 YEARS OF GAD

Principal Civil Service Pension Scheme

Inverse commutation (lump sum to pension)

Factors and guidance for classic section

Date: 19 September 2019

Government Actuary's Department

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At GAD, we seek to achieve a high standard in all our work. We are accredited under the Institute and Faculty of Actuaries' Quality Assurance Scheme. Our website describes the standards we apply.

1 Introduction

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

1.2 The purpose of the note is to provide Cabinet Office with factors to be used to calculate the extra pension payable to a **classic** member due to the conversion of a lump sum cash payment into an annual pension (known as inverse commutation) and accompanying guidance to demonstrate how these factors should be applied to determine the extra pension payable.

1.3 This guidance is intended to supersede any factors or advice previously issued, for the purposes of trivial commutation calculations. No advice or factors issued in the past should be used for cases after this date. In particular, this guidance supersedes the following guidance note:

"Principal Civil Service Pension Scheme: Inverse Commutation (lump sum to pension). Factors and guidance for classic section" dated 9 March 2015.

1.4 Section 3 sets out some worked examples of applying the factors.

1.5 Appendix A sets out the following factors:

Factor table number	Description
P1IC1 **(Table number 504 in consolidated factor spreadsheet)**	Factors to convert a cash lump sum into increased pension (inverse commutation)

1.6 The factors in this note have been updated but the calculation methodology remains unchanged.

Assumptions

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

1.8 Where relevant, the factors in this note have been calculated assuming that 100% of members have a spouse at retirement. This is because we understand that under rule 3.1(a)(v)(b)(ii), an increase in the spouse's pension is only awarded in respect of the member's spouse at the time the option was exercised (i.e. an increase would not be awarded to the member's spouse if they were not their spouse at the time the option was exercised).Therefore, it is reasonable to assume that anyone choosing to increase the member and spouse's pension (instead of choosing to increase the member's pension only) will have a spouse.

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

Scheme rules

1.10 This note applies to cases of inverse commutation as described in the following paragraphs of the **classic** section scheme rules:

- Unauthorised lump sum payments: 1.19;
- Inverse commutation for member: 3.1a; and
- Inverse commutation for a pension credit member: 12.3.

1.11 We understand that inverse commutation factors are the responsibility of the Scheme Actuary of the PCSPS.

1.12 The guidance and examples in this note describe how the inverse commutation factors should be applied. We understand that this paper will be shared with MyCSP and Claybrook.

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

Implementation and Review

1.14 Cabinet Office have confirmed they implemented the revised PCSPS inverse commutation factors with effect from 14 March 2019. They have also confirmed they were aware of any risks in selecting that implementation date.

1.15 This guidance will apply from the date issued on the cover.

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

1.17 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.

1.18 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.

1.19 Any special cases that are not covered by this guidance should be treated on a case by case basis.

Third Party Reliance

1.20 This guidance has been prepared 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. This guidance may be published on Cabinet Office and 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.

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

2 Guidance on application of inverse commutation factors

2.1 A member of the classic section of the PCSPS who is about to be paid a pension and lump sum can give up part (or all) of the lump sum in exchange for an increase in their pension.

2.2 Scheme administrators should ensure that members opting for inverse commutation meet the eligibility requirements set out in the scheme rules.

2.3 Members exercising the inverse commutation option can do so in two different ways. The member can:

2.4 Give up part (or all) of their lump sum and increase their pension only. The widow or widower's pension remains unchanged; or

2.5 Give up part (or all) of their lump sum and increase both their pension and the pension that would be payable to their widow or widower.

2.6 If a member chooses to give up pension as described in 16(ii), this provides an increased widow or widower's pension for the person to whom the member is married on the day before the member's pension benefits become payable. It does not increase any children's pension or adult dependant's pension.

The member cannot take this option if they are not married. If the member marries again after exercising the option, the amount of pension which would then be payable to their new partner in event of the member's death is not increased.

2.7 The member must give up their lump sum in multiples of £100 unless they are giving up all of it.

2.8 Members cannot opt to increase only the partner's pension.

2.9 The increase in the member's pension for each £100 of lump sum given up (or amount surrendered) should be determined as follows.

General formulae:

$$\textit{Increase in member's pension} = \textit{amount surrendered} \times \frac{\textit{Factor}}{100}$$

2.10 The **amount surrendered** is the cash lump sum that is being exchanged for annual pension at the calculation date.

2.11 The **Factor** is based on the member's actual age (complete years and months, ignoring part months) at the calculation date. The **Factor** is taken from Table P1IC1 in Appendix B and is expressed as an amount of annual pension to be awarded for every £100 of lump sum surrendered. The factor should be chosen from the appropriate column in the table:

2.12 Where the lump sum is surrendered in exchange for an increase to the member's pension only, columns (1) and (2) should be used.

2.13 Where the lump sum is surrendered in exchange for an increase to both the member's pension and spouse's pension, columns (3) and (4) should be used. When the member dies, half of the increase to the member's pension is payable to the spouse.

2.14 For cases of inverse commutation under rule 1.19 (unauthorised lump sum payment) and rule 12.3 (conversion of retirement lump sum for a pension credit member), the member can only surrender the lump sum in exchange for an increase to the member's pension. Therefore, columns (3) and (4) of Table P1IC1 should not be used for such cases.

2.15 An adjustment to the general formula in paragraph 2.9 is required if the member is more than 10 years older than their spouse. The increase in the member's pension (as calculated in paragraph 2.9) is reduced by 0.50% for each complete year in excess of 10 years that the member is older than the spouse. Example 2 gives an example of this adjustment.

2.16 The extra pension which the member receives as a result of inverse commutation should have the same deemed date for pension increases as the lump sum which was surrendered. The example below illustrates how this would work for a member who retires before the age of 55. The member leaves active service at age 40 with a lump sum of £10,000

2.17 The member retires at age 51. They are entitled to a lump sum of £10,000 at retirement and a 'second bite' lump sum at age 55 of £3,000 (in respect of the pension increases between 40 and 51).

2.18 At retirement if they choose to inverse commute some of their lump sum then the extra pension which they receive would be increased at age 55 to allow for the accumulated pension increases since they originally left service at age 40. They would not receive the 'second bite' lump sum at age 55 in respect of the lump sum that they have inverse commuted.

3 Worked examples

Worked example 1 – Member surrendering lump sum for increase to own pension only

Sex:	Male
Date of commutation:	10 May 2020
Date of birth:	1 April 1955
Age at date of commutation:	65 years 1 month (years and complete months)
Scheme section:	Classic
Total Pension:	£8,000 pa
Total lump sum:	£24,000 pa

The member opts to surrender £17,000 of lump sum for an increase in own pension only.

Factor to use is from column (1) of table P1IC1 (consolidated factor spreadsheet table 504) for age 65 years 1 month: ie 5.75

The formula is:

$$\textit{Increase in member's pension} = \textit{amount surrendered} \times \frac{\textit{Factor}}{100}$$

Substituting values into the formula:

$$\textit{Increase in member's pension} = £17,000 \times \frac{5.75}{100}$$

Increase in member's pension	= £977.50 pa
The revised member's pension	= £8,977.50pa
The revised lump sum	= £7,000.

Worked example 2 – Member surrendering lump sum for increase to own and spouse's pension. And member more than 10 years older than spouse.

Sex:	Male
Date of commutation:	10 May 2020
Date of birth:	1 April 1955
Age at date of commutation:	65 years 1 month (years and complete months)
Scheme section:	Classic
Total Pension:	£8,000 pa
Total lump sum:	£24,000 pa

The member opts to surrender £2,000 of lump sum for an increase in member's and spouse's pension. The member is 14.4 years older than his wife.

Factor to use is from column (3) of table P1IC1 for age 65 years 1 month: ie 5.27

The formula is:

$$\textit{Increase in member's pension} = \textit{amount surrendered} \times \frac{\textit{Factor}}{100}$$

Substituting values into the formula:

$$\textit{Increase in member's pension} = £2,000 \times \frac{5.27}{100}$$

Increase in member's pension = £105.40 pa

This is reduced by 2% (0.5% per year x 4 complete years) because the member is 14.4 years older than his wife (see paragraph 2.15).

The increase in the member's pension is reduced by £105.40 × 2/100 = £2.11

Increase in member's pension is thus: £103.29 pa

Increase in contingent partner pension is half of this: £ 51.65 pa.

The **revised member's pension** is £ 8,103.29 pa.

The **revised lump sum** is **£22,000.**

Appendix A: Factor table

Table 1: P1IC1 – classic: inverse commutation factors
(Consolidated factor spreadsheet table number 504)

Amount of additional pension for every £100 of lump sum

Age at retirement in years and complete months		Member Pension		Member and Spouse	
from	**to**	**Male member**	**Female member**	**Male member**	**Female member**
		(Column 1)	**(column 2)**	**(Column 3)**	**(Column 4)**
50 years and 0 months	50 years and 5 months	4.06	4.06	3.85	3.85
50 years and 6 months	50 years and 11 months	4.09	4.09	3.88	3.88
51 years and 0 months	51 years and 5 months	4.13	4.13	3.91	3.91
51 years and 6 months	51 years and 11 months	4.17	4.17	3.94	3.94
52 years and 0 months	52 years and 5 months	4.21	4.21	3.97	3.97
52 years and 6 months	52 years and 11 months	4.24	4.24	4.01	4.01
53 years and 0 months	53 years and 5 months	4.29	4.29	4.04	4.04
53 years and 6 months	53 years and 11 months	4.33	4.33	4.08	4.08
54 years and 0 months	54 years and 5 months	4.37	4.37	4.11	4.11
54 years and 6 months	54 years and 11 months	4.41	4.41	4.15	4.15
55 years and 0 months	55 years and 5 months	4.46	4.46	4.19	4.19
55 years and 6 months	55 years and 11 months	4.51	4.51	4.23	4.23
56 years and 0 months	56 years and 5 months	4.55	4.55	4.27	4.27
56 years and 6 months	56 years and 11 months	4.60	4.60	4.31	4.31
57 years and 0 months	57 years and 5 months	4.65	4.65	4.35	4.35
57 years and 6 months	57 years and 11 months	4.71	4.71	4.40	4.40
58 years and 0 months	58 years and 5 months	4.76	4.76	4.44	4.44
58 years and 6 months	58 years and 11 months	4.82	4.82	4.49	4.49
59 years and 0 months	59 years and 5 months	4.87	4.87	4.54	4.54
59 years and 6 months	59 years and 11 months	4.93	4.93	4.59	4.59
60 years and 0 months	60 years and 5 months	5.00	5.00	4.64	4.64
60 years and 6 months	60 years and 11 months	5.06	5.06	4.70	4.70
61 years and 0 months	61 years and 5 months	5.13	5.13	4.75	4.75
61 years and 6 months	61 years and 11 months	5.20	5.20	4.81	4.81
62 years and 0 months	62 years and 5 months	5.27	5.27	4.87	4.87

62 years and 6 months	62 years and 11 months	5.34	5.34	4.93	4.93
63 years and 0 months	63 years and 5 months	5.42	5.42	5.00	5.00
63 years and 6 months	63 years and 11 months	5.50	5.50	5.06	5.06
64 years and 0 months	64 years and 5 months	5.58	5.58	5.13	5.13
64 years and 6 months	64 years and 11 months	5.66	5.66	5.20	5.20
65 years and 0 months	65 years and 5 months	5.75	5.75	5.27	5.27
65 years and 6 months	65 years and 11 months	5.85	5.85	5.35	5.35
66 years and 0 months	66 years and 5 months	5.94	5.94	5.43	5.43
66 years and 6 months	66 years and 11 months	6.04	6.04	5.51	5.51
67 years and 0 months	67 years and 5 months	6.14	6.14	5.59	5.59
67 years and 6 months	67 years and 11 months	6.25	6.25	5.68	5.68
68 years and 0 months	68 years and 5 months	6.36	6.36	5.77	5.77
68 years and 6 months	68 years and 11 months	6.48	6.48	5.87	5.87
69 years and 0 months	69 years and 5 months	6.60	6.60	5.97	5.97
69 years and 6 months	69 years and 11 months	6.73	6.73	6.07	6.07
70 years and 0 months	70 years and 5 months	6.86	6.86	6.18	6.18
70 years and 6 months	70 years and 11 months	7.00	7.00	6.29	6.29
71 years and 0 months	71 years and 5 months	7.14	7.14	6.41	6.41
71 years and 6 months	71 years and 11 months	7.29	7.29	6.53	6.53
72 years and 0 months	72 years and 5 months	7.45	7.45	6.66	6.66
72 years and 6 months	72 years and 11 months	7.61	7.61	6.79	6.79
73 years and 0 months	73 years and 5 months	7.79	7.79	6.93	6.93
73 years and 6 months	73 years and 11 months	7.97	7.97	7.07	7.07
74 years and 0 months	74 years and 5 months	8.16	8.16	7.23	7.23
74 years and 6 months	74 years and 11 months	8.35	8.35	7.38	7.38

Note that the amount of extra pension should be adjusted where the member and spouse pension will both be increased (columns 3 and 4) and the member is more than 10 years older than their spouse. The adjustment is a reduction of 0.5% for each complete year in excess of 10 years that the member is older than the spouse.

Appendix B: Assumptions underlying actuarially set factors

Financial assumptions

Nominal discount rate	4.856%
Real discount rate (in excess of CPI)	2.0%

Mortality assumptions

Base mortality tables	S2NMA, S2NFA and S2DFA
Base table adjustment	Member: 104% of S2NMA for males and 104% of S2NFA for females Dependants: 117% of S2NMA for males and 100% of S2DFA for females (as per 2016 valuation)
Future mortality improvement	Based on ONS principal UK population projections 2016
Year of Use	2020

Other assumptions

Proportion of male members for the purpose of unisexing factors	50%
Age difference between member and partner	male members assumed to be 3 years older than partner. Female members assumed to be 2 years younger than partner.
Proportions partnered	Classic: 68% (male) and 50% (female) at retirement. Non-Classic: 73% (male) and 50% (female) at retirement
Allowance for short-term spouses' pensions (where relevant)	Nil

Appendix C: Limitations

C.1 This guidance should not be used for any purpose other than those set out in this guidance.

C.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.

C.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.

C.4 This guidance only covers the actuarial principles around the calculation and application of annual allowance scheme pays offset factors. Any legal advice in this area should be sought from an appropriately qualified person or source.

C.5 Scheme managers and administrators should satisfy themselves that annual allowance scheme pays offset calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.

C.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 Cabinet Office and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.