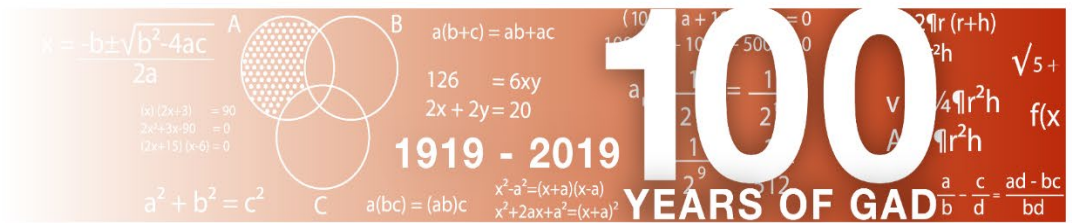




Government
Actuary's
Department



Police pension schemes (Scotland)

2015 Scheme

Purchase of added pension

Factors and guidance

Date: 16 October 2019





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1 Introduction

- 1.1 This note is provided for Scottish Public Pensions Agency (SPPA) as scheme manager of the police pension schemes. The purpose of the note is to provide the factors for determining the amount of Added Pension (AP) to be credited to a member's pension account in respect of lump sum and periodical payments made by members to purchase such pension. This does not apply to protected members in the 1987 and 2006 schemes.
- 1.2 This note should not be used for any purpose other than to calculate the amount of added pension to be credited to a member's pension account in respect of lump sum and periodical payments made by the member to purchase such pension
- 1.3 This note provides the actuarial guidance required by the scheme manager referred to in the following regulations:
- Schedule 3, Part 3, paragraph 10(3) of the Scottish Police Pension Scheme Regulations 2015
 - Schedule 3, Part 3, paragraph 11(3) of the Scottish Police Pension Scheme Regulations 2015
 - Schedule 3, Part 4, paragraph 15(3) of the Scottish Police Pension Scheme Regulations 2015
 - Schedule 3, Part 4, paragraph 16(3) of the Scottish Police Pension Scheme Regulations 2015
- 1.4 There is a maximum overall amount of extra pension a member can purchase and this note provides guidance on how administrators can calculate the maximum payment that a member can make in respect of AP.
- 1.5 The factors and guidance provided in this note have been prepared in light of our advice to SPPA dated 30 October 2018 and its instructions following that advice.
- 1.6 This guidance supersedes:
- “Police Pension Schemes (Scotland) 2015 Scheme: Purchase of added pension – Factors and guidance” dated 3 March 2015.
- 1.7 The factors in this note have been updated but the calculation methodology remains unchanged.



1.8 In the remainder of this note:

- Section 2 provides the methodology for calculating an AP credit
- Section 3 sets out the limits on added pension
- Section 4 sets out example calculations
- Appendix A sets out the factor tables
- Appendix B sets out the assumptions underlying the factors contained in this guidance note.
- Appendix C sets out some important limitations

Implementation and Review

- 1.9 The factors contained in this guidance will apply from 21 January 2019. This implementation date has been determined by SPPA. This guidance will apply from with immediate effect upon receipt of the respective guidance.
- 1.10 This guidance has been written for pension administrators and assumes some knowledge of general pension terminology, and some familiarity with retirement calculations for the Police Pension Schemes.
- 1.11 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.
- 1.12 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

- 1.13 This guidance has been prepared for the use of SPPA, the scheme administrators, for the purposes of demonstrating the application of the factors covered by this guidance only. This guidance may be published on SPPA'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.
- 1.14 Other than SPPA, 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 Calculation of AP credit

- 2.1 An active member of the 2015 scheme may elect to purchase AP in accordance with Schedule 3 of the 2015 regulations. This purchase may be made by a lump sum payment or by periodical payments.
- 2.2 Payment by lump sum is available to those who have been in a continuous period of pensionable service for at least 12 months. Only one lump sum payment is permitted for each scheme year. Payments by lump sum may come from the whole of or part of a payment due to the member under the compensation scheme.
- 2.3 Payment by periodical payments may be made over any period specified by the member, and may be expressed as a percentage of salary or as a regular fixed sum. The amount of any periodical payment cannot be less than any minimum amount determined by the scheme manager.
- 2.4 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, 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)
- 2.5 The member can chose to purchase self only AP, which increases the member's retirement benefits only, or all beneficiaries AP, which also provides 50% of the AP to the member's surviving dependants.
- 2.6 At any given time, the total amount of AP in a member's pension account cannot exceed the overall limit of extra pension¹, which is set out in Part 1 of Schedule 3 to the 2015 regulations. An AP election should therefore only be accepted where this total will not be exceeded. See section 3 for more details.
- 2.7 Following receipt of a lump sum payment, an amount of added pension must be credited to the member's pension account for that scheme year. The amount credited should be calculated as follows:

$$AP\ Credit = \frac{Lump\ sum\ payment}{F}$$

Where:

F = factor for AP elections (see Tables S-AP and B-AP in Appendix A)

¹ £6,500 for any scheme year ending before 1 April 2016. This limit was increased to £6,924 in the 2019-20 financial year.



2.8 Factors for calculating the AP to be credited to a member's account should be selected with reference to:

- the member's age (last birthday) at the start of the scheme year;
- whether dependant's benefits have been purchased; and
- the member's gender, if the election is to purchase self only AP.

2.9 Where a member chooses to purchase AP by periodic payments, an amount of AP should be credited to the member's pension account. The amount credited should be calculated as follows:

$$AP\ Credit = \frac{Periodic\ payment}{F}$$

Where:

Periodic payment is the nominal (£) amount of the payment made by the member (whether specified as a fixed sum or a percentage of pensionable earnings in the option notice)

F = factor for AP elections (see Tables S-AP and B-AP in Appendix A)

2.10 For members choosing periodic payments, the AP credit can be calculated and added to the member's account after each periodic payment or at the end of the scheme year. If the calculation is done at the end of the scheme year, add together of all of the periodic payments throughout the year and apply the formula in paragraph 2.9.

2.11 Factors for calculating the AP to be credited to a member's account should be selected with reference to:

- the member's age (last birthday) at the start of the scheme year;
- whether dependant's benefits have been purchased; and
- the member's gender, if the election is to purchase self only AP.

2.12 Once credited to a member's pension account, the AP increases in line with increases awarded to eligible pensions under the Pensions (Increase) Act 1971 before coming into payment.



3 Overall limit of extra pension

- 3.1 At any given time, the total amount of accrued AP in a member's pension account cannot exceed the overall limit of extra pension set out in Part 1 of Schedule 3 to the 2015 regulations.
- 3.2 The HMRC limits on the tax relief in respect of pension contributions and the HMRC Annual and Lifetime Allowance apply to additional pension contributions and benefits
- 3.3 The maximum overall limit of added pension was £6,500 per annum for the 2015-16 financial year. The limit was increased to £6,924 in the 2019-20 financial year. The limit will change in accordance with Part 1 of Schedule 3 to the 2015 regulations in subsequent years.
- 3.4 When a member makes an AP election, a check needs to be carried out to ensure the member has enough headroom within the overall extra pension limit to purchase the desired amount of AP. The amount of pension from this election to count against the overall limit will simply be the amount of AP the member has elected to purchase.
- 3.5 If the member has previously made an AP election, the amount of pension from any earlier AP elections to count against the extra pension limit will be the amount of AP the member has elected to purchase, or the paid-up credit, increased in line with inflation to the date of the new election
- 3.6 The following formula should be used to calculate the maximum lump sum payment a member can make to purchase AP.

$$\text{Maximum LS payment} = H \times F$$

Where:

H = the available headroom under the overall limit of extra pension.

F = factor for AP elections (see Tables S-AP and B-AP in Appendix A)

- 3.7 The available headroom under the overall limit of extra pension can be calculated as the overall limit of extra pension at the time of the election minus the total amount of AP credit within the member's pension account at the time of the election.
- 3.8 Factors for calculating the maximum lump sum payment amount should be selected with reference to;
- the member's age (last birthday) at the start of the scheme year;
 - whether dependant's benefits have been purchased; and
 - the member's gender, if the AP to be purchased is self only AP.



- 3.9 The overall limit of extra pension also applies to periodic payment elections. However, it is not possible to determine at the time of the election the exact amount of periodic payments permissible under the limit, where these fall in multiple scheme years. Each year the scheme manager should check that the total added pension credited to the member's pension account does not exceed the overall limit of extra pension and, if it does, act in accordance with Part 1 of Schedule 3 to the 2015 regulations (cancellation of contract and refund of contributions as required).



4 Examples

Example 1: Lump sum payment

Member details

Date of birth 30 May 1976
Gender Male

AP election

Date payment received 1 Aug 2020
Scheme year 2020-21

Form of AP Self only
Lump sum payment £10,000

AP Credit

Relevant table S-AP
Member's age last birthday at start of scheme year 43
Factor for determining AP Credit (F) 13.80

Using the formula from paragraph 2.7, the amount AP to be credited to a member's pension account can be calculated as follows,

$$AP\ Credit = \frac{Lump\ sum\ payment}{F}$$

$$AP\ Credit = \frac{£10,000.00}{13.80} = £724.64$$

At the date that the payment is received, the member's pension account should be credited with £724.64 pa of self only AP for the 2020-21 scheme year.



Example 2: Periodic payment

Member details

Date of birth	15 August 1985
Gender	Female

AP election

Date payment received	25 June 2020
Scheme year	2020-21

Form of AP	All beneficiaries
Periodic payment	£10

AP Credit

Relevant table	B-AP
Member's age last birthday at start of scheme year	34
Factor for determining AP Credit (F)	13.05

Using the formula from paragraph 2.9, the amount AP to be credited to a member's pension account can be calculated as follows,

$$AP\ Credit = \frac{Periodic\ payment}{F}$$

$$AP\ Credit = \frac{£10.00}{13.05} = £0.77$$

At the date that the payment is received, the member's pension account should be credited with £0.77 pa of all beneficiaries AP for the 2020-21 scheme year.

This calculation will need to be made for each periodic payment received from the member. This can be done by either calculating separate AP credits at the point at which each payment is received, or by calculating the total AP credit in respect of all periodic payments at the end of the scheme year. This second approach is illustrated on the next page using details from the example above.



AP election – payments over scheme year

Scheme year	2020-21
Form of AP	All beneficiaries
Periodic payments over scheme year ²	£100

Using the formula from paragraph 2.9 and the factor selected above, the amount of AP to be credited to a member's pension account can be calculated as follows,

$$AP\ Credit = \frac{Periodic\ payments\ over\ scheme\ year}{F}$$

$$AP\ Credit = \frac{£100.00}{13.05} = £7.66$$

At the end of the scheme year, the member's pension account should be credited with £7.66 pa of all beneficiaries AP for the 2020-21 scheme year.

² Option form received within 3 months of joining the scheme and so first periodic payment of £10 was made in June 2020 (rather than at the start of the scheme year).



Example 3: Maximum allowable payment

Member details

Date of birth 20 March 1974
Gender Female

AP election

Intended date of payment 1 July 2019
Scheme year 2019-20

Form of AP Self only
Total accrued AP £1,100
Overall limit of added pension for 2016-17³ £6,924
Available headroom (H) £5,824 (=£6,924.00 -
£1,100.00)

AP Credit

Relevant table S-AP
Member's age last birthday at start of scheme year 45
Factor for determining AP Credit (F) 15.30

Using the formula from paragraph 3.6, the maximum amount of lump sum a member can pay for self only AP can be calculated as follows,

$$\text{Maximum LS payment} = H \times F$$

$$\text{Maximum LS payment} = £5,824.00 \times 15.30 = £89,107.20$$

The maximum lump sum payment would be larger (£5,824.00 x 16.13 = £93,941.12) if the member elected to purchase all beneficiaries AP.

³ This is an illustrative figure for the example only, the 2019-20 overall limit of added pension should be determined in accordance with Part 1 of Schedule 3 to the 2015 regulations



Appendix A: Tables of factors

Table S-AP: Factors for self only AP (Table 702 in consolidated factor table spreadsheet)

Age last birthday at start of scheme year	Added Pension Self only	
	Male	Female
20	8.53	9.41
21	8.72	9.61
22	8.91	9.82
23	9.10	10.04
24	9.30	10.26
25	9.50	10.48
26	9.71	10.70
27	9.92	10.92
28	10.13	11.15
29	10.35	11.37
30	10.58	11.60
31	10.81	11.83
32	11.03	12.07
33	11.27	12.31
34	11.50	12.55
35	11.74	12.79
36	11.99	13.04
37	12.23	13.30
38	12.48	13.55
39	12.74	13.81
40	13.00	14.06
41	13.27	14.31
42	13.53	14.56
43	13.80	14.81
44	14.06	15.05
45	14.33	15.30
46	14.60	15.55
47	14.87	15.80
48	15.15	16.06
49	15.43	16.32
50	15.72	16.59
51	16.01	16.88
52	16.32	17.18
53	16.64	17.49
54	16.98	17.82
55	17.33	18.17
56	17.70	18.55
57	18.10	18.95
58	18.52	19.39
59	18.96	19.85



Table B-AP: Factors for all beneficiaries AP (Table 703 in consolidated factor table spreadsheet)

Age last birthday at start of scheme year	Added Pension All beneficiaries
	Male and Female
20	9.70
21	9.91
22	10.13
23	10.35
24	10.58
25	10.81
26	11.04
27	11.28
28	11.52
29	11.77
30	12.02
31	12.27
32	12.53
33	12.78
34	13.05
35	13.31
36	13.58
37	13.86
38	14.14
39	14.42
40	14.70
41	14.99
42	15.28
43	15.56
44	15.85
45	16.13
46	16.41
47	16.70
48	16.99
49	17.29
50	17.60
51	17.91
52	18.23
53	18.57
54	18.92
55	19.29
56	19.68
57	20.10
58	20.53
59	21.00



Appendix B: Assumptions underlying factors

Financial assumptions

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

Mortality assumptions

Base mortality tables and adjustments	Member: 117% of S2NMA (males) and 117% of S2NFA (females) Dependant: 116% of S2NMA (males) and 116% S2NFA (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 unisex factors	70% for members and 30% for dependants.
Proportion partnered	85% (M) and 80% (F) at retirement.
Age difference between member and partner	Males assumed 3 years older than partner. Females assumed 3 years younger than partner.
Allowance for commutation	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 added pension reduction 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 added pension 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 the SPPA and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.