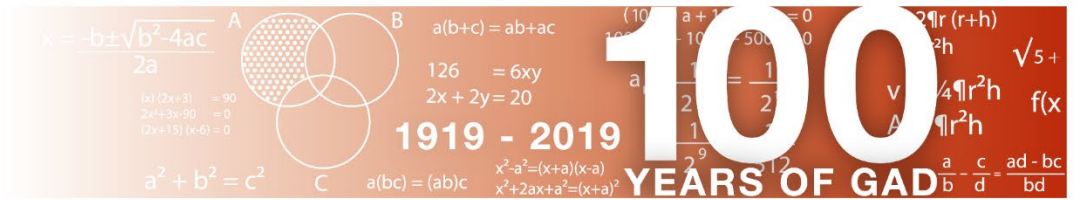




Government
Actuary's
Department



Police pension schemes (Scotland)

1987, 2006 and 2015 Schemes

Trivial commutation and capitalisation for death gratuities

Factors and guidance

Date:





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1 Introduction

- 1.1 This note is provided for the Scottish Public Pensions Agency (SPPA) in our capacity as Scheme actuary to the police pension schemes in Scotland. This note relates to the 1987, 2006 and 2015 schemes and sets out the factors and guidance for trivial commutation and the calculation of the capitalised value of benefits for the purpose of determining death gratuities.
- 1.2 This guidance applies to the trivial commutation of pensions under regulations B8, E4(3) and M3 of the Police Pensions Regulations 1987 (SI 1987/257), regulation 38 of the Police Pensions (Scotland) Regulations 2007 (SSI 2007/201) and regulation 193 of the Police Pension Scheme (Scotland) Regulations (SSI 2015/142).
- 1.3 This guidance also applies to the calculation of the capitalised value of benefits for the purpose of determining death gratuities under regulation E3 of the Police Pensions Regulations 1987, regulation 45 of the Police Pensions (Scotland) Regulations 2007 and regulation 156 of the Police Pension Scheme (Scotland) Regulations 2015.
- 1.4 The factors provided in this note have been prepared in light of our letter to SPPA dated 30 October 2018, and subsequent discussions.
- 1.5 The actuarial factors in this note came into effect on 29 October 2018.
- 1.6 This guidance is intended to supersede any factors or advice previously issued, for the purposes of trivial commutation calculations, carried out from the date of this note. No advice or factors issued in the past should be used for cases after this date. In particular, this guidance supersedes:

“Police Pension Schemes (Scotland): 1987, 2006 and 2015 Schemes. Trivial Commutation and capitalisation for death gratuities - Factors and guidance” dated 27 March 2015.
- 1.7 The factors in this note have been updated but the calculation methodology remains unchanged.
- 1.8 The scope of cases that are covered by this guidance is detailed later in this note. Cases this guidance does not cover should be referred to SPPA for onward transmission to GAD.
- 1.9 If you have any questions about how to use this guidance, contact the Police Pensions Team at the SPPA. The team can be contacted in writing at the following address: Scottish Public Pensions Agency, 7 Tweedside Park, Tweedbank, Galashiels TD1 3TE. SPPA will seek input from the Scheme actuary if necessary.
- 1.10 The remainder of this note covers the factor tables, guidance on their use and worked examples.
- 1.11 Appendix B sets out the assumptions underlying the factors contained in Appendix A of this guidance note.



1.12 Appendix C sets out some important limitations.

Implementation and Review

- 1.13 This guidance will apply from the date issued on the cover
- 1.14 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 (Scotland). Any questions concerning the application of the guidance should, in the first instance, be referred to SPPA.
- 1.15 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.
- 1.16 The factors contained in this note 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

- 1.17 This guidance has been prepared for the use of the SPPA 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 the SPPA 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.
- 1.18 Other than the SPPA 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 Trivial commutation

- 2.1 Various restrictions on the trivial commutation of pensions are imposed by both the pension taxation regime under the Finance Act 2004 (and any amending legislation) and contracting out legislation. Administrators should ensure that the payment of a lump sum in lieu of a small pension is compliant with these restrictions as well as with the police pension scheme regulations.
- 2.2 Please note that the factors in this note should be applied to total pension, including any accrued Guaranteed Minimum Pension (GMP). Separate factors for GMP are not required.

Member (former officer)

- 2.3 In the case of a small pension in payment to a member the lump sum payable should be determined as follows:

$$(P_m \times F_m) + (P_s \times F_s)$$

where

P_m = annual pension in payment to a member

P_s = annual survivor's pension payable upon member's death

F_m = factor for pension in payment to a member

F_s = factor for contingent survivor's pension

- 2.4 Factors for members of the 1987 scheme should be taken from **Table 1**. Factors for members of either the 2006 or 2015 schemes should be taken from **Table 2**.
- 2.5 Examples 1 and 2 in section 4 illustrate a trivial commutation calculation for a 1987 scheme and 2006 scheme (or 2015 scheme) member respectively.
- 2.6 The survivor's pension to be used in the calculation is the pension that would actually be payable to the member's dependant if the member died on the day of the calculation. Please note that survivor's pension elements should be included whether or not the member has an eligible dependant at the date of the calculation.
- 2.7 The 'annual pension in payment' is the pension that would otherwise be paid if trivial commutation were not to proceed. Therefore this pension is the pension after any reduction due to commutation for tax-free cash if relevant.



Surviving dependant

- 2.8 In the case of a small pension in payment to the surviving eligible dependant of a member the lump sum payable should be determined as follows:

$$P_w \times F_w$$

where

P_w = annual pension in payment to a surviving dependant

F_w = factor for pension in payment

- 2.9 Factors for this calculation should be taken from **Table 3**.

Underpin

- 2.10 In the 1987 scheme, the lump sum paid to a surviving spouse is subject to an underpin calculated as follows:

$$\text{annual pension in payment} \times 11$$

- 2.11 If this underpin is higher than the sum calculated under paragraph 2.8 then the underpin amount should be paid instead.
- 2.12 The underpin will bite if the factor F_w is less than 11. When this occurs (ie for widows aged 77 and above), the lump sum payable to surviving spouse or civil partner is calculated as $P_w \times 11$.
- 2.13 There is no equivalent underpin in the 2006 or 2015 schemes.
- 2.14 Example 3 in section 4 illustrates the underpin calculation.
- 2.15 The 'annual pension in payment' is the pension that would otherwise be put into payment if trivial commutation were not to proceed.



3 Capitalisation factors for death gratuities

- 3.1 The police schemes provide a return of the officer's aggregate pension contributions on death, less any payments made or due to the officer on account of his or her pension and the capitalised value of any pension or allowance granted in respect of the officer's death.
- 3.2 This guidance relates to the determination of the capitalised value of the long-term survivor's pension. Any short-term increase in the level of survivor's pension (such as under regulation E8 of the Police Pensions Regulations 1987) must be brought into account in addition to the capitalised value of the long-term pension.
- 3.3 Please note that the factors in this note should be applied to total pension, including any accrued Guaranteed Minimum Pension (GMP). Separate factors for GMP are not required.

Adult survivor pension

- 3.4 The capitalised value of the survivor's pension can be calculated as follows:

$$P_w \times F_w$$

where

P_w = annual pension in payment to a dependant
 F_w = factor for pension in payment

- 3.5 Factors for this calculation should be taken from **Table 3**.
- 3.6 Example 4 in section 4 illustrates the capitalisation for death gratuity calculation.
- 3.7 For cases where the surviving dependant has not yet attained age 60, a simple rule of thumb can be used to determine whether or not more detailed consideration is required.
- 3.8 A death gratuity will not be payable if the capitalised value of the survivor's pension plus the value of other benefits paid to the member or surviving partner as described in the relevant regulations¹ exceed the member's aggregate contributions.
- 3.9 For individuals below age 60; if multiplying the surviving dependant's pension in payment by **19.8** gives a value greater than the member's aggregate contributions, then it is safe to conclude that a death gratuity will not be payable, even before assessing the value of any other benefits that might be payable/have been paid.

¹ Regulation E3 of the Police Pensions Regulations 1987, regulation 45 of the Police Pensions (Scotland) Regulations 2007 and regulation 156 of the Police Pension Scheme (Scotland) Regulations 2015.



- 3.10 If the rule of thumb is not satisfied then you should extend consideration to all other relevant benefits that fall under the appropriate regulations.
- 3.11 If the rule of thumb is not satisfied and aggregate member contributions still exceed the assessed value of all relevant benefits under the regulations, the case should be referred to the SPPA, see paragraph 1.9.
- 3.12 Example 5 in section 4 illustrates the calculation to be used to test whether a death gratuity will be payable.
- 3.13 Please note that administrators are responsible for ensuring that payment of the death gratuity is compliant with relevant pensions taxation legislation, and administrators should seek further advice as necessary.

Children's pensions

- 3.14 This guidance does not cover the capitalised value of children's pensions. These cases must be referred to the SPPA, see paragraph 1.9.

4 Example calculations

4.1 This section provides examples of the calculations described in this note.

Example 1 – Trivial commutation: 1987 scheme member

Sex	Male
Date of birth	5 August 1951
Calculation date	7 September 2019
Total pension in payment	£650 pa
Survivor's pension	£325 pa
Age in completed years at calculation date	68

P_m	£650 pa
P_s	£325 pa

As this is a 1987 scheme member, factors should be taken from **Table 1**.

F_m	14.9
F_s	2.8

The trivial commutation lump sum payable to member can be calculated as follows,

$$\begin{aligned} &= (P_m \times F_m) + (P_s \times F_s) \\ &= (650 \times 14.9) + (325 \times 2.8) \\ &= 9,685 + 910 \\ &= \mathbf{£10,595} \end{aligned}$$

Example 2 – Trivial commutation: 2006 scheme member

Sex	Male
Date of birth	4 May 1955
Calculation date	10 June 2020
Total pension in payment	£1,000 pa
Survivor's pension	£500 pa
Age in completed years at calculation date	65
P_m	£1,000 pa
P_s	£500 pa

As this is a 2006 scheme member, factors should be taken from **Table 2**.

F_m	16.5
F_s	2.9

Trivial commutation lump sum payable to member

$$\begin{aligned} &= (P_m \times F_m) + (P_s \times F_s) \\ &= (1,000 \times 16.5) + (500 \times 2.9) \\ &= 16,500.00 + 1,450.00 \\ &= \mathbf{£17,950.00} \end{aligned}$$

Example 3 – Trivial commutation: 1987 scheme widow

Sex	Female
Date of birth	15 January 1944
Calculation date	24 April 2020
Total survivor's pension in payment	£700 pa
Age in completed years at calculation date	76

P_w £700 pa

Factors should be taken from **Table 3**.

F_w 10.9

The widow's trivial commutation lump sum can be calculated as:

$$\begin{aligned} &= P_w \times F_w \\ &= 700 \times 10.9 \\ &= \mathbf{£7,630} \end{aligned}$$

As this is a widow of a former 1987 scheme officer, the lump sum needs to be checked against the underpin, which is calculated as:

$$\begin{aligned} &= \text{annual pension in payment} \times 11 \\ &= 700 \times 11 \\ &= \mathbf{£7,700} \end{aligned}$$

The underpin does bite and the trivial commutation lump sum payable is therefore £7,770.



Example 4 – Capitalisation for death gratuity: Widow of officer who died in deferment

Sex	Female
Date of birth	20 July 1952
Calculation date	30 May 2020
Total survivor's pension in payment	£1,025 pa
Payments already made to, or in respect of, officer	nil
Short-term increase to survivor's pension	nil
Officer's aggregate pension contributions	£17,000
Age in completed years at calculation date	67

P_w £1,025 pa

Factors should be taken from **Table 3**.

F_w 16.1

The capitalised value of the widow's pension can then be calculated as:

$$\begin{aligned}
 &= P_w \times F_w \\
 &= 1,025 \times 16.1 \\
 &= \mathbf{£16,502.50}
 \end{aligned}$$

The death gratuity can then be calculated as follows:²

$$\begin{aligned}
 &= \text{Aggregate pension contributions} - \text{capitalised value of survivor's pension} \\
 &= 17,000 - 16,502.50 \\
 &= \mathbf{£497.50}
 \end{aligned}$$

² Note that in this case there are no other benefits that have been paid or are payable in respect of this officer. Therefore the death gratuity can be calculated by simply subtracting the capitalised value of the survivor's pension from the aggregate pension contributions.

Example 5 – Capitalisation for death gratuity: survivor aged below 60

Sex	Male
Date of birth	7 June 1961
Calculation date	19 August 2019
Total survivor's pension in payment	£2,255 pa
Payments already made to, or in respect of, officer	nil
Short-term increase to survivor's pension	nil
Officer's aggregate pension contributions	£30,000
Age in completed years at calculation date	58

As the widower has not reached aged 60 the factors in **Table 3** cannot be used, but the rule of thumb can be used.

Rule of thumb calculation = Survivor's pension in payment \times 19.8
 = £2,255 \times 19.8
 = £44,649
 > £30,000

The rule of thumb calculation gives a value higher than the officer's aggregate contributions. It is therefore safe to conclude that the capitalised value of benefits exceeds the aggregate pension contributions paid by the officer, and no death gratuity will be payable.



Appendix A: Tables of factors

Table 1: Factors for commutation of small pension in the 1987 scheme

Former police officers – Males and females
(Table 501 in Consolidated factor spreadsheet)

Age in completed years	Factors for benefits in payment to member	Factors for survivor's pension
60	19.2	2.8
61	18.7	2.8
62	18.2	2.9
63	17.6	2.9
64	17.1	2.8
65	16.5	2.8
66	16.0	2.8
67	15.4	2.8
68	14.9	2.8
69	14.3	2.8
70	13.7	2.7
71	13.1	2.7
72	12.6	2.7
73	12.0	2.7
74	11.4	2.5
75	10.8	2.4
76	10.3	2.4
77	9.7	2.3
78	9.2	2.3
79	8.6	2.1
80	8.1	1.9
81	7.6	1.8
82	7.0	1.8
83	6.5	1.7
84	6.1	1.5
85	5.6	1.3
86	5.2	1.2
87	4.8	1.2
88	4.4	1.1
89	4.0	0.9
90	3.7	0.7
91	3.4	0.6
92	3.1	0.6
93	2.8	0.5
94	2.6	0.5
95	2.4	0.5
96	2.2	0.4
97	2.1	0.4
98	1.9	0.4
99	1.8	0.3



Table 2: Factors for commutation of small pension in the 2006 and 2015 schemes

Former police officers – Males and females
(Table 502 in Consolidated factor spreadsheet)

Age in completed years	Factors for benefits in payment to member	Factors for survivor's pension
60	19.2	3.0
61	18.7	3.0
62	18.2	3.0
63	17.6	3.1
64	17.1	3.0
65	16.5	2.9
66	16.0	2.9
67	15.4	2.9
68	14.9	2.9
69	14.3	2.8
70	13.7	2.8
71	13.1	2.8
72	12.6	2.8
73	12.0	2.8
74	11.4	2.6
75	10.8	2.5
76	10.3	2.4
77	9.7	2.4
78	9.2	2.3
79	8.6	2.1
80	8.1	1.9
81	7.6	1.9
82	7.0	1.8
83	6.5	1.8
84	6.1	1.5
85	5.6	1.3
86	5.2	1.2
87	4.8	1.2
88	4.4	1.1
89	4.0	0.9
90	3.7	0.7
91	3.4	0.6
92	3.1	0.6
93	2.8	0.6
94	2.6	0.5
95	2.4	0.5
96	2.2	0.4
97	2.1	0.4
98	1.9	0.4
99	1.8	0.3



Table 3: Factors for trivial commutation of pension payable to surviving dependants and for capitalisation of survivor pension for determination of death gratuity in the 1987, 2006 and 2015 scheme

**Surviving spouses or partners
(Table 503 in Consolidated factor spreadsheet)**

Age in completed years	Factors for benefits in payment to survivor
60	19.8
61	19.3
62	18.8
63	18.3
64	17.8
65	17.2
66	16.7
67	16.1
68	15.6
69	15.0
70	14.4
71	13.8
72	13.2
73	12.7
74	12.1
75	11.5
76	10.9
77	10.3
78	9.8
79	9.2
80	8.6
81	8.1
82	7.6
83	7.0
84	6.5
85	6.0
86	5.6
87	5.1
88	4.7
89	4.4
90	4.0
91	3.7
92	3.4
93	3.1
94	2.8
95	2.6
96	2.4
97	2.2
98	2.1
99	1.9



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 - members	S2NMA and S2NFA
Base table adjustment – members in normal health	117% (males and females)
Base mortality tables - dependants	S2NMA and S2NFA
Base table adjustment – dependants	116% (males and females)
Future mortality improvement	Based on ONS principal UK population projections 2016
Year of use	2020

Other assumptions

Proportion of male members for the purposes of unisexing factors	70%
Family statistics	80% (male), 75% (female) of members assumed married at retirement (85% (male), 80% (female) assumed partnered)
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 note should not be used for any purpose other than those set out in this guidance note.
- C.2 The factors contained in this note 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 note only covers the actuarial principles around the calculation and application of trivial commutation 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 trivial commutation 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 SPPA and GAD. Under no circumstances should this guidance take precedence over the Regulations. Administrators should ensure that they comply with all relevant Regulations.