



Contents

Overview	2
Guidance on application of LPS factors	5
Limitations of this guidance	8
Appendix A: Factor tables	9
Appendix B: Worked examples	11
Appendix C: Principal assumptions underlying factors	20



Overview

1. This note is addressed to the Northern Ireland Department of Finance (DoF NI) as scheme manager of the **alpha** pension scheme (Public Service (Civil Servants and Others) Pension Scheme). The **alpha** scheme was established by The Public Service (Civil Servants and Others) Pensions Regulations (Northern Ireland) 2014 (“the Regulations”) and came into force on 1 April 2015.
2. The purpose of the note is to provide DoF NI with factors to be used to calculate the Late Payment Supplement (LPS) for benefits accruing in the alpha pension scheme, and accompanying guidance to demonstrate how these factors should be applied to members’ benefits.
3. A LPS is applied to the pension of deferred members who don’t begin receiving their pension until after their NPA/EPA. LPS factors are different from ‘Age Addition’ factors, which are used to increase the benefits of members who continue in active service after their NPA/EPA. Age Addition factors are the subject of separate guidance.
4. The LPS is calculated as a one-off calculation at the point of retirement. This is different to the approach used for Age Addition, where an Age Addition is calculated in each scheme year in which the member is still active after NPA/EPA.
5. This guidance only relates to benefits in the **alpha** pension scheme. Benefits in the **Classic, Premium, Nuvos** or **Classic Plus** schemes should be treated separately, in accordance with the relevant guidance for those schemes.
6. The factors provided in this note have been prepared in light of our advice to the DoF NI dated 30 October 2018 and its instructions following that advice.

Implementation and review

7. LPS factors are the responsibility of the Department under regulation 2 of the Regulations.
8. 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.
9. This guidance is intended to supersede any factors or advice previously issued which rely on input from GAD. In particular, this guidance supersedes the previous guidance “Public Service (Civil Servants and Others) Pension Scheme (Northern Ireland) (Alpha scheme): Factors for Late Payment Supplements” dated 28 April 2015.
10. Factors have been updated but the calculation methodology remains unchanged.
11. The guidance and examples in this note describe how the LPS factors should be applied and reflect our understanding of the way that administration systems have been programmed to calculate LPSs. We understand that this paper will be shared with the Scheme’s administrator.



12. Appendix A sets out the unisex factor tables to be used to calculate the LPS for benefits accruing in the alpha scheme. There are two tables:

Table 1: P2LPS1– to be used where the LPS applies to the member's pension and the contingent partner's pension. The following "descriptions of pension" (as defined in the scheme regulations) will be increased using this table:

- Standard earned pension
- Transferred pension
- Earned pension attributable to an effective pension age option
- Earned pension attributable to an enhanced effective pension age option
- Club transfer earned pension
- Added (all beneficiaries) pension

Table 2: P2LPS2 – to be used where the LPS applies only to the member's pension. The following "descriptions of pension" (as defined in the scheme regulations) will be increased using this table:

- Added (self only) pension

13. Appendix B sets out some worked examples of applying the factors.

14. Appendix C provides details of the principal assumptions underlying the factor tables in this guidance.

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 Civil Servants and Others Pension Scheme Northern Ireland (CSOPS NI). Any questions concerning the application of the guidance should, in the first instance, be referred to Dof NI.

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.

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.



Scheme Regulations

18. The Regulations to which this document relates, and the corresponding factors provided, are as follows:

Factor Table Titles/Reference Numbers	Statutory References (*)
P2LPS1 (Consolidated spreadsheet table number 418) – Late payment supplement factors across various NPAs for use where member's and contingent partner's pension will receive a LPS	Regulation 2: Interpretation - "Late Payment Supplement"
P2LPS2 (Consolidated spreadsheet table number 419) – Late payment supplement factors across various NPAs for use with added (self only) pension	Regulation 2: Interpretation - "Late Payment Supplement"

* References are to: SRNI 2014/290: The Public Service (Civil Servants and Others) Pensions Regulations (Northern Ireland) 2014

Third party reliance

19. 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 the 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.
20. Other than the 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



Guidance on application of LPS factors

21. These factors are used to increase the benefits of deferred members who retire after their NPA/EPA. LPS will be awarded in cases where members leave service on or after NPA/EPA and then delay claiming a pension until after NPA/EPA. The process for calculating the LPS is slightly different depending on whether the member left service before or after NPA/EPA, as described in the boxes below paragraph 23.
22. The LPS is determined by applying the appropriate LPS factors to each description of pension at the point of retirement, where the pension includes any inflation increases awarded between the date that the member left service and the date at which they retire.
23. The formulae below set out the two stage process for calculating the LPS. Where a member has different pension ages for different tranches of their pension (e.g. because they have purchased an EPA option on some of their benefits), the LPS should be calculated separately for each tranche. The formulae below show how the LPS would be calculated if the member had purchased an EPA on some of their pension (with the remainder of their pension payable from the member's NPA).

Stage 1 – Calculate the LPS factor for each different pension age

LPS_{NPA} percentage =

$$\mathbf{[(Factor\ at\ late\ retirement\ age) \div (Factor\ at\ NPA^*)] - 1}$$

LPS_{(E)EPA} percentage =

$$\mathbf{[(Factor\ at\ late\ retirement\ age) \div (Factor\ at\ EPA^*)] - 1}$$

Where;

Factors are taken from the appropriate table, as explained in paragraph 12. Late retirement age, NPA and EPA should be ages in complete years and months, with part months ignored.

*where the member leaves active service after NPA / EPA, the factor at leaving age should be used instead of the factor at NPA / EPA.



Stage 2 – Calculate the LPS using the LPS percentages calculated in Stage 1

$$LPS_{NPA} =$$

$$(LPS_{NPA} \text{ percentage}) \times (\text{Pension at retirement which was payable from NPA})$$

$$LPS_{EPA} =$$

$$(LPS_{EPA} \text{ percentage}) \times (\text{Pension at retirement which was payable from EPA})$$

$$\text{Total LPS} = LPS_{NPA} + LPS_{EPA}$$

Where:

Pension at retirement is before the commutation option is exercised and includes any inflation increases awarded between the member leaving service and the date of retirement.

Where the member leaves active service after NPA / EPA the pension at retirement should additionally include any age addition awarded in respect of the member's post-NPA / post-EPA active service.

24. Example 1 in Appendix B shows how to calculate the LPS for a member with standard earned pension only. Example 2 shows how to calculate the LPS if the member has a combination of standard earned pension and earned pension attributable to an EPA option. Example 6 shows how to calculate the LPS for a member who leaves active service after NPA and then delays claiming their pension.

25. The following points should be noted:

1. The LPS should be added before the commutation option is exercised.
2. Where the LPS is calculated using factor Table 1 (P2LPS1), the contingent partner's pension should also receive a LPS increase. Where the LPS is calculated using factor Table 2 (P2LPS2), the contingent partner's pension should not receive a LPS increase. See paragraph 12 for further details.



Pension debits (as a result of Pension Sharing on Divorce)

26. On late retirement, pension debits must be increased to reflect that the debit will be in effect for a shorter period than expected.
27. If the debit occurred before the member's NPA, then it should be treated as a (negative) standard earned pension (i.e. payable from NPA) for the purposes of determining the LPS increase which should be applied to the debit. The debit at retirement should be calculated in accordance with the formulae above.
28. Pension debits apply to the contingent partner's pension, as well as the member's pension. The LPS applied to the pension debit should also be applied to the contingent partner's pension.
29. If the debit occurred after NPA, then the case should be referred to GAD to advise on the appropriate increase to apply to the debit.
30. Example 3 in Appendix B shows how to calculate a LPS for a member who has a pension debit as a result of Pension Sharing on Divorce.

Scheme pays debits

31. Scheme pays debits should be increased if the member retires after their NPA. Separate guidance is provided on scheme pays debits in the CSOPS NI.

Added pension

32. LPSs for added pension will be calculated differently depending on whether the added pension is 'all beneficiaries' or 'self only'.
33. LPSs for added pension (all beneficiaries) are calculated using Table 1 (P2LPS1) in the same way as for standard earned pension (i.e. assuming the added pension is payable from the member's NPA). The contingent partner's pension will also be increased by 37.5% of the LPS applied to the member's pension. Example 4 in Appendix B shows how to calculate a LPS for added (all beneficiaries) pension.
34. LPSs for added pension (self only) are calculated using Table 2 (P2LPS2). It should be assumed that the added (self only) pension is payable from the member's NPA. There is no contingent partner's pension attached to added (self only) pension. Example 5 in Appendix B shows how to calculate a LPS for added (self only) pension.



Limitations of this guidance

35. This guidance should not be used for any purpose other than those set out in this guidance.
36. 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.
37. 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.
38. This guidance only covers the actuarial principles around the calculation and application of late payment supplement factors. Any legal advice in this area should be sought from an appropriately qualified person or source.
39. Scheme managers and administrators should satisfy themselves that late payment supplement calculations and benefit awards comply with all legislative requirements including, but not limited to, tax and contracting-out requirements.
40. 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

Table 1: P2LPS1 – Late Payment Supplement factors across various NPAs (Unisex) – for use where member's and contingent partner's pension will receive a LPS (see paragraph 12)

Age (complete years and months, ignoring part months)																
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
months																
0	1.000	1.056	1.116	1.183	1.256	1.333	1.421	1.518	1.625	1.742	1.866	2.010	2.168	2.344	2.539	2.744
1	1.005	1.061	1.122	1.189	1.262	1.341	1.429	1.527	1.635	1.753	1.878	2.023	2.183	2.360	2.556	
2	1.009	1.066	1.127	1.195	1.269	1.348	1.438	1.536	1.644	1.763	1.890	2.036	2.198	2.376	2.573	
3	1.014	1.071	1.133	1.201	1.275	1.355	1.446	1.545	1.654	1.773	1.902	2.049	2.212	2.393	2.590	
4	1.019	1.076	1.139	1.207	1.281	1.363	1.454	1.554	1.664	1.784	1.914	2.063	2.227	2.409	2.607	
5	1.023	1.081	1.144	1.213	1.288	1.370	1.462	1.563	1.674	1.794	1.926	2.076	2.242	2.425	2.624	
6	1.028	1.086	1.150	1.219	1.294	1.377	1.470	1.572	1.684	1.804	1.938	2.089	2.256	2.441	2.641	
7	1.032	1.091	1.155	1.225	1.301	1.385	1.478	1.580	1.693	1.815	1.950	2.102	2.271	2.457	2.659	
8	1.037	1.096	1.161	1.231	1.307	1.392	1.486	1.589	1.703	1.825	1.962	2.115	2.285	2.474	2.676	
9	1.042	1.101	1.166	1.237	1.314	1.399	1.494	1.598	1.713	1.835	1.974	2.129	2.300	2.490	2.693	
10	1.046	1.106	1.172	1.243	1.320	1.407	1.502	1.607	1.723	1.846	1.986	2.142	2.315	2.506	2.710	
11	1.051	1.111	1.177	1.250	1.327	1.414	1.510	1.616	1.733	1.856	1.998	2.155	2.329	2.522	2.727	



Table 2: P2LPS2 – Late Payment Supplement factors across various NPAs (Unisex) - for use with added (self only) pension (see paragraph 12)

Age (complete years and months, ignoring part months)																
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
months																
0	1.000	1.058	1.122	1.192	1.269	1.354	1.448	1.552	1.666	1.793	1.933	2.088	2.261	2.453	2.666	2.902
1	1.005	1.064	1.128	1.198	1.276	1.362	1.457	1.561	1.677	1.804	1.946	2.103	2.277	2.470	2.685	
2	1.010	1.069	1.134	1.205	1.283	1.370	1.465	1.571	1.687	1.816	1.959	2.117	2.293	2.488	2.705	
3	1.015	1.074	1.140	1.211	1.290	1.378	1.474	1.580	1.698	1.828	1.972	2.132	2.309	2.506	2.725	
4	1.019	1.080	1.145	1.218	1.297	1.385	1.483	1.590	1.708	1.839	1.985	2.146	2.325	2.524	2.744	
5	1.024	1.085	1.151	1.224	1.304	1.393	1.491	1.599	1.719	1.851	1.998	2.160	2.341	2.541	2.764	
6	1.029	1.090	1.157	1.231	1.312	1.401	1.500	1.609	1.729	1.863	2.011	2.175	2.357	2.559	2.784	
7	1.034	1.096	1.163	1.237	1.319	1.409	1.508	1.618	1.740	1.874	2.024	2.189	2.373	2.577	2.803	
8	1.039	1.101	1.169	1.243	1.326	1.417	1.517	1.628	1.750	1.886	2.037	2.204	2.389	2.595	2.823	
9	1.044	1.106	1.175	1.250	1.333	1.425	1.526	1.637	1.761	1.898	2.050	2.218	2.405	2.612	2.843	
10	1.049	1.111	1.180	1.256	1.340	1.432	1.534	1.647	1.771	1.909	2.063	2.232	2.421	2.630	2.862	
11	1.053	1.117	1.186	1.263	1.347	1.440	1.543	1.656	1.782	1.921	2.075	2.247	2.437	2.648	2.882	



Appendix B: Worked examples

Worked example 1 – Member with standard earned pension only:

The member's entire pension amount is in respect of the same pension age with further information as follows:

- Age when left active service: 55 years (*not used in calculations*)
- Normal Pension Age (NPA): 66 years 2 months (*complete years and months, part months ignored*)
- Age at late retirement date: 69 years 8 months (*complete years and months, part months ignored*)
- Standard earned pension (at late retirement date), including all inflation increases awarded between leaving and retirement: £6,000 pa

LPSs for standard earned pension are calculated using Table 1 (P2LPS1).

The LPS percentage which will be applied at retirement will be:

$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 66 years 2 months}) - 1]$

i.e. $[(1.307 \div 1.066) - 1] = 0.226$

Therefore, the Late Payment Supplement will be 22.6% of the member's pension at retirement:

$$\begin{aligned}\text{Late Payment Supplement} &= 22.6\% * \text{£}6,000 \text{ pa} \\ &= \text{£}1,356.00 \text{ pa}\end{aligned}$$

So the total pension payable to the member is:

$$\text{£}6,000 \text{ pa} + \text{£}1,356 \text{ pa} = \text{£}7,356.00 \text{ pa}$$

On the death of the member, a surviving partner would be entitled to 37.5% of the member's pension (including the LPS) – i.e. £2,758.50 pa if member died immediately after retirement.



Worked example 2: Member with EPA option on part of their pension

Consider a member who purchased an Effective Pension Age (EPA) option on some of their benefits.

- Age when left active service: 55 years (*not used in calculations*)
- Normal Pension Age (NPA): 66 years 2 months (*complete years and months, part months ignored*)
- Effective Pension Age (EPA): 65 years 2 months (*complete years and months, part months ignored*)
- Age at late retirement date: 69 years 8 months (*complete years and months, part months ignored*)
- Standard earned pension (at late retirement date), including all inflation increases awarded between leaving and retirement: £4,000 pa
- Earned pension attributable to an EPA option (at late retirement date), including all inflation increases awarded between leaving and retirement: £2,000 pa

LPSs for standard earned pension and pension attributable to an EPA option are both increased using Table 1 (P2LPS1).

A different LPS percentage will be applied to the two tranches of pension.

The LPS percentage which will be applied to the standard earned pension will be:

$$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 66 years 2 months}) - 1]$$

$$\text{i.e. } [(1.307 \div 1.066) - 1] = 0.226$$

The LPS factor which will be applied to the pension attributable to an EPA option will be:

$$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 65 years 2 months}) - 1]$$

$$\text{i.e. } [(1.307 \div 1.009) - 1] = 0.295$$

Therefore, the Late Payment Supplement will be 22.6% of the standard earned pension and 29.5% of the pension attributable to an EPA option.

$$\begin{aligned} \text{LPS on standard earned pension} &= 22.6\% \times \text{£4,000 pa} \\ &= \text{£904.00 pa} \end{aligned}$$



$$\begin{aligned} \text{LPS on pension with EPA} &= 29.5\% \times \text{£}2,000 \text{ pa} \\ &= \text{£}590.00 \text{ pa} \end{aligned}$$

$$\begin{aligned} \text{Total LPS} &= \text{£}904.00 \text{ pa} + \text{£}590.00 \text{ pa} \\ &= \text{£}1,494.00 \text{ pa} \end{aligned}$$

So the total pension payable to the member is:

$$\text{£}6,000 \text{ pa} + \text{£}1,494.00 \text{ pa} = \text{£}7,494.00 \text{ pa}$$

On the death of the member, a surviving partner would be entitled to 37.5% of the member's pension (including the LPS) – i.e. £2,810.25 pa if member died immediately after retirement.



Worked example 3 – Member with a pension debit as a result of Pension Sharing on Divorce:

The member has a pension debit as well as standard earned pension with further information as follows:

- Age when left active service: 55 years (*not used in calculations*)
- Normal Pension Age (NPA): 66 years 2 months (*complete years and months, part months ignored*)
- Age at late retirement date: 69 years 8 months (*complete years and months, part months ignored*)
- Standard earned pension (at late retirement date), including all inflation increases awarded between leaving and retirement: £6,000 pa
- Pension debit (at late retirement date), including all increases up to retirement: £1,000 pa

LPSs for standard earned pension and pension debits are calculated using Table 1 (P2LPS1).

The LPS percentage which will be applied at retirement (to both the standard earned pension and pension debit) will be:

$$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 66 years 2 months}) - 1]$$

$$\text{i.e. } [(1.307 \div 1.066) - 1] = 0.226$$

The same LPS percentage (22.6%) will be applied to the member's standard earned pension and to the pension debit.

$$\begin{aligned} \text{LPS on standard earned pension} &= 22.6\% \times \text{£}6,000.00 \text{ pa} \\ &= \text{£}1,356.00 \text{ pa} \end{aligned}$$

$$\begin{aligned} \text{LPS on pension debit} &= 22.6\% \times \text{£}1,000 \text{ pa} \\ &= \text{£}226.00 \text{ pa} \end{aligned}$$

$$\begin{aligned} \text{Total standard earned pension (with LPS)} &= \text{£}6,000.00 \text{ pa} + \text{£}1,356.00 \text{ pa} \\ &= \text{£}7,356.00 \text{ pa} \end{aligned}$$

$$\begin{aligned} \text{Total pension debit (with LPS)} &= \text{£}1,000.00 \text{ pa} + \text{£}226.00 \text{ pa} \\ &= \text{£}1,226.00 \text{ pa} \end{aligned}$$



So the pension payable to the member is:

$£7,356.00 \text{ pa} - £1,226.00 \text{ pa} = £6,130.00 \text{ pa}$

Pension debits also apply to surviving partner's pensions. Therefore, a surviving partner would be entitled to 37.5% of the pension payable to the member at their death – i.e. £2,298.75 pa if the member died immediately after retiring.



Worked example 4 – Member with Added (all beneficiaries) Pension:

The member has Added (all beneficiaries) Pension as well as standard earned pension with further information as follows:

- Age when left active service: 55 years (*not used in calculations*)
- Normal Pension Age (NPA): 66 years 2 months (*complete years and months, part months ignored*)
- Age at late retirement date: 69 years 8 months (*complete years and months, part months ignored*)
- Standard earned pension (at late retirement date), including all inflation increases awarded between leaving and retirement: £6,000 pa
- Added (all beneficiaries) Pension (at late retirement date), including all inflation increases up to retirement: £1,000 pa

LPSs for standard earned pension and Added (all beneficiaries) Pension are both calculated using Table 1 (P2LPS1).

The LPS percentage which will be applied at retirement will be:

$$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 66 years 2 months}) - 1]$$

i.e. $[(1.307 \div 1.066) - 1] = 0.226$

The same LPS percentage (22.6%) will be applied to the member's standard earned pension and the added (all beneficiaries) pension.

$$\begin{aligned} \text{LPS on standard earned pension} &= 22.6\% \times \text{£}6,000.00 \text{ pa} \\ &= \text{£}1,356.00 \text{ pa} \end{aligned}$$

$$\begin{aligned} \text{LPS on added (all beneficiaries) pension} &= 22.6\% \times \text{£}1,000 \text{ pa} \\ &= \text{£}226.00 \text{ pa} \end{aligned}$$

$$\begin{aligned} \text{Total LPS} &= \text{£}1,356.00 \text{ pa} + \text{£}226.00 \text{ pa} \\ &= \text{£}1,582.00 \text{ pa} \end{aligned}$$

So the total pension payable to the member is:

$$\text{£}6,000 \text{ pa} + \text{£}1,000 \text{ pa} + \text{£}1,582.00 \text{ pa} = \text{£}8,582.00 \text{ pa}$$

On the death of the member, a surviving partner would be entitled to 37.5% of the member's total pension (including the LPS) – i.e. 37.5% of £8,582.00 pa = £3,218.25 pa if the member died immediately after retiring.



Worked example 5: Member with earned pension attributable to an EPA option, added (self only) pension and no standard earned pension

Consider a member who purchased an Effective Pension Age (EPA) option and also purchased added (self only) pension. They have no standard earned pension.

- Age when left active service: 55 years (*not used in calculations*)
- Normal Pension Age (NPA): 66 years 2 months (*complete years and months, part months ignored*)
- Effective Pension Age (EPA): 65 years 2 months (*complete years and months, part months ignored*)
- Age at late retirement date: 69 years 8 months (*complete years and months, part months ignored*)
- Earned pension attributable to an EPA option (at late retirement date), including all inflation increases awarded between leaving and retirement: £2,000 pa
- Added (self only) pension (at late retirement date), including all inflation increases up to retirement: £1,000 pa

LPSs for earned pension attributable to an EPA option are calculated using Table 1 (P2LPS1).

LPSs for added (self only) pension are calculated using Table 2 (P2LPS2).

The LPS percentage which will be applied to the earned pension attributable to an EPA option will be:

$$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 65 years 2 months}) - 1]$$

$$\text{i.e. } [(1.307 \div 1.009) - 1] = 0.295$$

The LPS percentage which will be applied to the added (self only) pension will be:

$$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 66 years 2 months}) - 1]$$

$$\text{i.e. } [(1.326 \div 1.069) - 1] = 0.240$$

Therefore, the Late Payment Supplement will be 29.5% of the earned pension attributable to an EPA option and 24.0% of the added (self only) pension.

$$\text{LPS on pension with EPA} = 29.5\% \times \text{£}2,000.00 \text{ pa}$$

$$= \text{£}590.00 \text{ pa}$$



$$\begin{aligned} \text{LPS on added (self only) pension} &= 24.0\% \times \text{£1,000.00 pa} \\ &= \text{£240.00 pa} \end{aligned}$$

$$\begin{aligned} \text{Total LPS} &= \text{£590.00 pa} + \text{£240.00 pa} \\ &= \text{£830.00 pa} \end{aligned}$$

So the total pension payable to the member is:

$$\text{£2,000.00 pa} + \text{£1,000.00 pa} + \text{£830.00 pa} = \text{£3,830.00 pa}$$

On the death of the member, a surviving partner would be entitled to 37.5% of the member's earned pension attributable to an EPA option (including the LPS on that pension). There is no partner's pension payable in respect of added (self only) pension, including in respect of any LPS awarded on the added (self only) pension. Therefore, if the member died immediately after retirement, the partner's pension would be:

$$= 37.5\% \times (\text{£2,000.00} + \text{£590.00})$$

$$= \text{£971.25}$$



Worked example 6 – Member with standard earned pension only who leaves active service after NPA and delays claiming their pension:

The member's entire pension amount is in respect of the same pension age with further information as follows:

- Age when left active service: 67 years 5 months
- Normal Pension Age (NPA): 66 years 2 months (*complete years and months, part months ignored*)
- Age at late retirement date: 69 years 8 months (*complete years and months, part months ignored*)
- Standard earned pension (at late retirement date), including all inflation increases awarded between leaving and retirement and any age addition awarded: £6,000 pa

LPSs for standard earned pension are calculated using Table 1 (P2LPS1).

The member left active service after NPA. Therefore, the LPS percentage which will be applied at retirement will be calculated using their age at leaving active service, not their NPA:

$$[(\text{Factor for 69 years 8 months}) \div (\text{Factor for 67 years 5 months}) - 1]$$

$$\text{i.e. } [(1.307 \div 1.144) - 1] = 0.142$$

Therefore, the Late Payment Supplement will be 14.2% of the member's pension at retirement:

$$\begin{aligned} \text{Late Payment Supplement} &= 14.2\% * \text{£6,000 pa} \\ &= \text{£852.00 pa} \end{aligned}$$

So the total pension payable to the member is:

$$\text{£6,000 pa} + \text{£852 pa} = \text{£6,852.00 pa}$$

On the death of the member, a surviving partner would be entitled to 37.5% of the member's pension (including the LPS) – i.e. £2,569.50 pa if member died immediately after retirement.



Appendix C: Principal assumptions underlying factors

Financial assumptions

Nominal discount rate	4.448%
CPI	2.00%
Long term earnings growth	4.20%
Real discount rate (in excess of CPI)	2.40%
Real discount rate (in excess of general earnings growth)	0.24%

Mortality assumptions

Base mortality tables and adjustments	Member: 110% of S2NMA (M) and 110% of S2NFA (F) (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	50%
Allowance for commutation	Nil