Statement of Actuarial Factor Policy



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1. Introduction

This statement was prepared by the Trustees of the Scheme after taking advice from the Scheme Actuary, Rob Wallace of XPS Pensions Group plc. It sets out the principles that the Trustees of the Scheme have adopted in setting the current actuarial factors and will adopt for reviewing the actuarial factors in the future.

The Trustees expect to review the actuarial factors periodically. As a minimum, the Trustees anticipate reviewing the actuarial factors as part of each formal actuarial valuation of the Scheme.

Capitalised terms used in this statement which first appear in "inverted commas" are as defined in the Scheme's Trust Deed & Rules ("TD&R").

The actuarial factors covered by this statement are all those that will be used to calculate the benefits payable to Scheme members under the various options that are available to them, namely the option to:

- exchange part of their pension for a cash lump sum on retirement, calculated using cash commutation factors;
- start receiving their pension early, i.e. before normal retirement age, calculated using early retirement factors;
- defer taking their pension until after normal retirement age, calculated using late retirement factors;
- transfer their benefits to another (registered) pension scheme; calculated using the cash equivalent transfer value basis, or
- exchange all of their benefits for a cash lump sum where they are sufficiently small (i.e. they can be trivially commuted), calculated using the cash equivalent transfer value basis.

They will apply from the date of this statement to benefits provided under the "Main Section" of the Scheme, i.e. the Section into which the assets and liabilities of other Sections will be transferred on "Centralisation" on 31 December 2022.

The actuarial factors adopted in Sections other than the Main Section will be as set out in the "Participation Deed" for each section.

The Trustees will also set the terms of any other benefit conversions using consistent principles to those set out in this document, including but not necessarily limited to:

• any adjustment required to a spouse's pension in cases where the age difference exceeds any threshold specified in the TD&R;

- the full commutation of a member's benefits in cases of serious ill health; and
- the exchange of pension for additional spouse's pension on retirement.

2. Principles for setting actuarial factors

The underlying principles that the Trustees have agreed to adopt in relation to the Main Section are as follows:

- achieving fairness between Employers (if there is more than one) and members by using a consistent method and assumptions whilst allowing for the differences that exist in the benefit provisions;
- striving for simplicity and ease of member understanding;
- to have regard to the allocation of the Main Section's assets between the Investment Fund and the Matching Fund; and
- to have regard to the Scheme's technical provisions and its long-term objective.

The following subsections set out the further principles which apply specifically to each type of actuarial factor:

2.1. Cash commutation factors

The Trustees will use the same method and assumptions to derive all the commutation factors that are required, reflecting in each case the different types and level of increases that apply to the pension once in payment.

The Trustees will also have regard to the following:

- the expected cost to the Employer(s);
- the fact that it is up to member to decide whether or not to take a cash lump sum in exchange for part of their pension on retirement;
- the strength of the covenant afforded to the Main Section by the Employer(s); and
- the risk of adverse selection.

The commutation factors so derived will be unisex, calculated having regard to the proportion of the deferred pensions payable by the Main Section to males and females. They will also be age related.

The current commutation factors were set at 70% of the cost neutral factors calculated using the assumptions underlying the Scheme's technical provisions at 31 December 2019 and are towards the upper middle end of the range typically adopted by schemes, having regard to available survey data.

The Trustees note that the Scheme's current technical provisions are set with reference to the covenant afforded to and the investment strategy adopted by the Scheme as at 31 December 2019, which was the date of the last formal actuarial valuation of the Scheme. The Trustees therefore anticipate that the commutation factors will change when the Scheme's technical provisions are next revised. In particular, the Trustees expect to review the technical provisions in light of the covenant afforded to and the investment strategy adopted by the Scheme at the Centralisation Date (i.e. as at 31 December 2022).

2.2. Early retirement factors

The Trustees will use the same method and assumptions to derive all the early retirement factors that are required, reflecting in each case the different types and level of increases that apply to the pension both in deferment and once in payment.

The Trustees will also have regard to the following:

- the expected cost to the Employer(s);
- the fact that early retirement is an option which is available only at the request of the member; and
- the risk of adverse selection.

The early retirement factors so derived will be unisex, calculated having regard to the proportion of the deferred pensions payable by the Main Section to males and females. They will also be age related.

The current early retirement factors were set at 100% of the cost neutral factors calculated using the assumptions underlying the Scheme's technical provisions at 31 December 2019. As a simplification measure, the current factors are calculated based on CPI linkage in deferment and RPI with a maximum of 5% pension increases in payment, with the intention that factors will be split out to represent different revaluation and pension increases following the Centralisation Date.

2.3. Late retirement factors

The Trustees will use the same method and assumptions to derive all the late retirement factors that are required, reflecting in each case the different type and level of increases that apply to the pension once in payment.

The Trustees will also have regard to the following:

- the expected cost to the Employer(s);
- the fact that late retirement is both an option which is available at the request of the member and one which applies by default in the event that a member cannot be traced at their normal retirement age; and
- the risk of adverse selection.

The late retirement factors so derived will be unisex, calculated having regard to the proportion of the deferred pensions payable by the Main Section to males and females. They will also be age related.

The current late retirement factors were set at 100% of the cost neutral factors calculated using the assumptions underlying the Scheme's technical provisions at 31 December 2019. As a simplification measure, the current factors are calculated based on pension which receives RPI max 5% increases in payment, with the intention that factors will be split out to represent different pension increases following the Centralisation Date.

2.4. Cash equivalent transfer values

The Trustees will set cash equivalent transfer values (for whatever purpose they are required) which represent the expected cost of providing the member's benefits within the Scheme. In doing so the Trustees will have regard to the expected return (net of investment management fees) on each of the Investment Fund and the Matching Fund.

The Trustees will also have regard to the following:

- the expected cost to the Employer(s);
- the funding position of the Main Section on a best estimate basis;
- the funding position of the Main Section relative to its technical provisions and longterm objective;
- the fact that taking a cash equivalent transfer value is an option which is only available at the request of the member; and
- the risk of adverse selection.

Where a member's benefits include an amount of Guaranteed Minimum Pension accrued between 17 May 1990 and 5 April 1997, Scheme benefits accrued between those dates will be valued as the higher of the benefits actually payable and the benefits which would have been payable to a member of the opposite sex.

The current method for calculating cash equivalent transfer values is consistent with the minimum statutory requirement.

2.5. Trivial commutation factors

The Trustees will calculate trivial commutation lump sums using the cash equivalent transfer value basis.

Appendix A: Current actuarial factors

The current actuarial factors set by the Trustees in accordance with this statement are:

Commutation factors

The table below shows the commutation factors currently in use for the two types of increase that the Main Section currently provides on non-GMP benefit (i.e. pensions that increase in line with the increase in the Retail Prices Index ("RPI") up to a maximum of 3% per annum, and pensions that increase in line with the increase in RPI up to a maximum of 5% per annum, commonly referred to as LPI increases):

Age	RPI increases up to 3%	LPI increases
55	26.09	29.47
56	25.26	28.46
57	24.45	27.47
58	23.64	26.49
59	22.84	25.52
60	22.05	24.57
61	21.26	23.63
62	20.49	22.70
63	19.73	21.80
64	18.98	20.91
65	18.24	20.04

Early and late retirement factors

Years early/late	Early retirement factor	Late retirement factor
1	0.96	1.06
2	0.92	1.13
3	0.89	1.20
4	0.86	1.28
5	0.83	1.36
6	0.80	1.45
7	0.77	1.56
8	0.75	1.67
9	0.73	1.80
10	0.71	1.94

The table below shows the early and late retirement factors currently in use in the Main Section:

The early retirement factors are applied to the pension at date of early retirement and the late retirement factors are applied to the pension at normal retirement date.

Appendix B: Method and assumptions for calculating cash equivalent transfer values

The Trustees have adopted the following method and assumptions for calculating cash equivalent transfer values.

Financial assumptions

The financial assumptions vary depending on the timing of each of the projected benefit cashflows payable to or in respect of the member, i.e. they are "term dependent".

Discount rate

Projected benefit cashflows will be discounted with reference to the Bank of England nominal gilt yield curve (the "gilt curve"). The Bank of England curve will be extended by assuming that the forward rate for all durations over 40 years is equal to the forward rate in year 40.

The Trustees have set the discount rates having regard to the Scheme's current investment strategy under which:

- the Investment Fund targets a long-term return of 4% per annum in excess of the yield on gilts, after the deduction of all investment management fees; and
- the Matching Fund targets a long-term return of 0.75% per annum in excess of the yield on gilts, after the deduction of all investment management fees.

The discount rate for calculating transfer values will be based on the expected return on the investment strategy, which is to invest 50:50 in the Investment and Matching Funds at 31 December 2019 phasing linearly to 100% in the Matching Fund by 2045. This equates to a discount rate of the gilt curve plus 2.375% per annum at 31 December 2019 reducing to the gilt curve plus 0.75% per annum by 2045.

Price inflation (RPI)

The RPI inflation assumption will be taken to be the investment market's expectation for inflation as indicated by the difference between yields on conventional and index-linked gilts as measured by the Bank of England gilt inflation curve (the "gilt RPI curve"). The Bank of England curve will be extended by assuming that the forward rate for all durations over 40 years is equal to the forward rate in year 40.

Price inflation (CPI)

The CPI inflation assumption is derived by deducting 1.0% per annum from the RPI inflation assumption for years up to 2025, reducing linearly to a zero deduction by 2030.

Benefit increases

Inflation-linked pre-retirement pension increase assumptions will be derived with reference to the appropriate inflation index, allowing for the maximum and minimum cumulative annual increase over the period of deferment.

Inflation-linked post-retirement pension increase assumptions will be derived with reference to the appropriate inflation index, allowing for the maximum and minimum annual increase and the fact that inflation varies from year to year using the Black Scholes model with an inflation volatility parameter of 1.5% per annum.

The table below provides a summary of the financial assumptions based on market conditions as at 31 December 2019:

Assumption	% per annum
Discount rate	2.7%
Price inflation (RPI)	3.1%
Price inflation (CPI)	2.5%
Pension increases pre-retirement	
CPI inflation (with a cap of 5% of 2.5% applied over the period of deferment)	2.5% (with cumulative cap applied as appropriate)
Pension increases post-retirement	
CPI inflation with a maximum of 3.0%	2.1%
RPI inflation with a maximum of 3.0%	2.4%
RPI inflation with a maximum of 5.0%	3.0%

Notes

For the purpose of illustrating the assumptions used, the yields and related financial assumptions quoted are single equivalent rates based on the full yield curves. The figures shown for pension increases are calculated by applying the relevant caps and floors to the single equivalent inflation rates.

Demographic assumptions

Mortality

The base mortality tables adopted are 83% of the SAPS series 2 ("S2PA") tables for males and 91% of the S2PA tables for females.

Future improvements in mortality are assumed to be in line with the Continuous Mortality Investigation's 2019 core projection model, with the default smoothing parameter, an initial addition of 0.25% and a long-term rate of improvement of 1.25% per annum.

Commutation

No allowance is made for members to take a cash lump sum when they retire in exchange for part of their pension.

Family statistics

The proportion of members assumed to be married at retirement or at the point of their earlier death will be 70%.

Males are assumed to be 3 years older than females.

Retirement

Members are assumed to retire at Normal Retirement Age, i.e. there is no allowance for early retirement (either in normal health or in ill-health) or late retirement.

The table below provides a summary of the demographic assumptions adopted for the purpose of this statement of funding principles:

Assumption				
Mortality base table				
Males	83% of the S2PA tables			
Females	91% of the S2PA tables			
Mortality projection model	CMI 2019 core model with an initial addition of 0.25%			
Long-term improvement rate				
Males	1.25% per annum			
Females	1.25% per annum			
Communication	No allowance			
Retirement	Members are assumed retire at Normal Retirement Age			
Proportion married	70% at retirement or earlier death			
Age difference of dependants	Males 3 years older than females			