

2021 Statement of Funding Principles

The Pearson Pension Plan

This statement has been prepared by the Trustee of the Pearson Pension Plan ("the Plan") for the purposes of the actuarial valuation as at 1 January 2021, to satisfy the requirements of Section 223 of the Pensions Act 2004, after obtaining the advice of the Plan Actuary, Steve Leake ("the Actuary"). The Trustee has discussed and agreed it with the Principal Company; Pearson Services Limited ("the Company"), the agreed representative of all Participating Employers to the Plan.

This Statement replaces the previous Statement dated 22 November 2018.

Statutory Funding Objective

The statutory funding objective is that the Plan should have sufficient and appropriate assets to cover its technical provisions, and this Statement sets out the Trustee's policy for securing that this objective is met.

The Trustee may assume that the Plan will be able to capture part of the expected investment premium available for asset classes other than Government Securities, and may hold investments in other asset classes. The Trustee will though adopt a prudent approach to determining the investment return assumption, in particular considering whether and to what degree margins for adverse deviations should be taken into account in determining the assumption.

In particular, the Trustee will consider what a realistic allowance might be for investment returns in each future year, and will base the funding assumptions on lower returns.

In determining the base table mortality assumptions, the Trustee will take account of both the Plan's recent experience and other analyses of the expected longevity of the membership, for example by postcode. The Trustee will also make a reasonable allowance for possible future improvements in longevity.

Trustee's long term target

The Trustee's aim is to achieve full funding on a long term funding target using discount rates based on the Bank of England ("BoE") gilt nominal curve, which has been extended beyond 40 years, with no margin applied. All other assumptions are consistent with the Plan's technical provisions basis with the exception of the allowance for GMP equalisation of 0.75% of liabilities, an expense reserve of £119m for administration and other non-investment expenses, more prudent mortality improvement assumptions and no allowance for member's taking transfer values at retirement. The Company is aware of the Trustee's long term target, however this is not a formal subsidiary objective.

Technical Provisions

Method

For the purely defined benefits sections of the Plan, the Trustee and the Company have agreed that the technical provisions for the Plan at any given date are to be calculated as the capital value of the prospective benefits arising from service completed before that date, including allowance for prospective salary increases for those members in active service at that date. This method of calculating technical provisions is commonly known as the projected unit credit method.

Money purchase benefits are taken into account at their market value at the valuation date. For the Money Purchase 2003 ("MP03") Section of the Plan the capital value of the prospective defined benefit underpin for each member is calculated in respect of service completed before the relevant date and, where higher than the member's Money Purchase account, the difference is added to the technical provisions.

For the defined benefit sections of the Plan, the employers' contribution rates, expressed as a percentage of the Pensionable Salary of the relevant members, is the average rate which is expected to be adequate on the assumptions made to meet the cost of benefits earned over the year following the valuation date after allowing for members' required contributions. For the 2021 valuation, a reserve has been included in the technical provisions in respect of death in service lump sum benefits, and ill-health and dependants' benefits, as well as Plan expenses.

Assumptions

A full list of all assumptions that have been used to calculate the technical provisions can be found in Appendix A.

The Trustee and the Company have further agreed that:

- the discount rates used to calculate the capital value of future cashflows will be determined for each future year and expressed relative to the forward rates on the BoE gilt nominal curve;
- the discount rates applied to the pensioner liabilities will be based upon the above gilt curve with no margin applied. This is consistent with the approach used to value the insured assets in the Trustee Report and Accounts and to the extent that the insured benefits match the Plan's liabilities the insured liability will therefore be consistent with the insured asset;
- the discount rates applied to the balance of the liabilities will be prudent estimates which have regard to the expected investment return on the Plan's current benchmark asset allocation but which also reflects more broadly the intention that the technical provisions are set on a suitably low risk basis;
- future price inflation and pension increase assumptions will be set on a realistic basis and take into account information in respect of bond markets and other relevant market information at the effective date of the actuarial valuation; and
- demographic assumptions will have regard to an analysis of recent changes and longer term trends in the Plan membership as well as relevant statistics applicable to similar pension schemes, and the Trustee's and Company's views about how these may change in future. In general, when there is clarity that assumptions are best estimates these will be used, other than for future improvements in mortality where the assumption will be prudent.

The Trustee and the Company have agreed that, in general, the assumptions used to determine the Plan's ongoing contributions required to cover the ongoing accrual of benefits will take into account the funding position at each valuation and be at least a best estimate of the cost of future accrual of the benefits. Note that, as detailed below, in the light of the funding position at 1 January 2021 it has been agreed that for the valuation at 1 January 2021, it is appropriate to adopt best estimate assumptions for the calculation of the contributions.

GMP equalisation

The Lloyds Bank case has clarified that pension schemes are required to adjust member benefits where relevant to reflect the impact on benefits of unequal GMPs. The judgment also includes a method, C2, that should be used to effect this unless agreement is reached with the Company on other, more generous, alternatives. The approach to be adopted by the Plan is not yet known and therefore approximate allowance has been made in the calculations for the adjustments that would be broadly consistent with method C2.

Discretionary Benefits

There are a number of areas where the benefits payable are subject to some exercise of discretion on the part of the Trustee and/or the Company, the principal details of which are set out below:

- Pension increases for some members of the Plan are calculated by reference to a "Price Index" defined in the Rules of the Plan. The Trustee continues to use the Retail Price Index as the appropriate index for this purpose.
- Depending on the member's Section and when the relevant pension rights accrued, the pensions in deferment or in the course of payment may be guaranteed under the Rules to receive annual increases either at a fixed rate, or in line with price inflation, subject to various minima and maxima. The Trustee and the Company have discretion to increase benefits above this guaranteed level after taking advice from the Actuary. For the purposes of calculating the technical provisions, the Trustee has agreed with the Company that it will be assumed that members will receive only the increases guaranteed in the Rules. On the advice of the Actuary, immediate additional funding from the Company may therefore be required if discretionary increases are awarded in future.
- At the request of any Participating Employer, and upon payment by that Employer of any contributions that the Trustee (with the advice of the Actuary) may consider appropriate, the Trustee may increase any benefit or provide additional benefits under the Plan. The Trustee and Company have agreed that the award of such discretionary benefits will not be taken into account in advance in the calculation of technical provisions, but if the Trustee considers it appropriate, the capital value of any such benefits granted would be paid in full by the Employer at the time the discretion is exercised.
- Active and deferred members may retire early subject to Trustee and/or Company consent. Where the terms on which the early retirement pension is granted are not cost neutral to the Plan, allowance is made in the demographic assumptions for members to retire early in line with recent experience.
- Active and deferred members may convert part of their pension at retirement into cash. The Trustee and Company have agreed that allowance for this should be made within the technical provisions. For the valuation as at 1 January 2021, the amount of pension assumed to be commuted at retirement is in line with recent experience. The assumed commutation terms for calculating the technical provisions and future service contribution rates have been derived using an investment return assumption of 1.5% pa in excess of gilt yields.
- Where the Plan's current treatment of Guaranteed Minimum Pensions is more generous than the minimum that may be required under a strict interpretation of the contracting-out legislation, this practice has been assumed to continue in future.
- Approximate allowance has been made within the technical provisions for the expected impact of ongoing data rectification exercises.
- There may be a number of further discretions that enable members to convert the benefit from one form into another, typically at the discretion of the Trustee, and the Trustee and the Company have agreed that these will be allowed for in line with recent experience, where the terms offered create a strain on the Technical Provisions assumptions.

Expenses

Investment management costs are assumed to be met out of future investment income. The valuation discount rate is therefore net of such costs.

For all members of the Plan, administrative and other non-investment expenses (including Pension Protection Fund Scheme Based levies) are allowed for by deriving an expense reserve which broadly reflects the present value of expected future costs assuming some efficiency gains over time. It is assumed that the Company will pay any required Pension Protection Fund Risk Based levies in addition.

The expense reserve at 1 January 2021 is intended to broadly cover the expected ongoing costs of the Plan over the next 10-15 years.

For the 2021 valuation, administrative and other non-investment expenses (including Pension Protection Fund Scheme Based levies) are broadly allowed for by an expense reserve equal to £90m, which reflects an assumption of some efficiency gains over time.

Actuarial investigation as at 1 January 2021

The Trustee (having taken the advice of the Actuary) and the Company have agreed on the assumptions for the investigation as at 1 January 2021, in line with the process described above. Details are set out in the table below:

	Approach	Single equivalent rate % pa
Discount rate for pensioner liabilities	BoE gilt nominal curve	0.58%*
Discount rate for non-pensioner liabilities	BoE gilt nominal curve plus 0.60% pa	1.18%*
Discount rate for future service	BoE gilt nominal curve plus 1.2% pa	1.78%*

*Shown for illustrative purposes only and is based on the Bank of England spot yield at the duration of the Plan liabilities (16 years).

The discount rate used for future service contributions is based upon a best estimate of the investment return for the Plan's assets. This is assumed to be 1.20% per annum above the Bank of England gilt nominal curve.

The discount rate assumptions take into account the Trustee's view of the covenant of the employers, including appropriate allowance for the guarantees provided by the Company's parent, Pearson plc.

The discount rate for non-pensioner liabilities is also used to discount the value of members' reference scheme test ("RST") underpin that exceeds their estimated money purchase fund value at their Normal Retirement Date.

Other financial assumptions as at 1 January 2021

The other financial assumptions that are not fixed have been set relative to the BoE gilt RPI curve.

Following the announcement of the convergence of RPI and CPIH from 2030 onwards CPI price inflation has been derived as RPI price inflation less a deduction of 1% per annum pre 2030, and equal to RPI post 2030.

The pension increases assumptions have been derived by applying the Black-Scholes model to the appropriate inflation assumption, with a volatility of 1.5% per annum for RPI linked increases and volatility of 1% per annum for CPI linked increases.

	Assumption	Approximate single equivalent rate % per annum
Price inflation (RPI):	BoE gilt RPI curve	3.38%*
Price inflation (CPI):		
> pre 2030	RPI less 1.0% pa	2.28%*
> post 2030	Equal to RPI	3.38%*
Salary increases (which includes an allowance for promotional increases):	RPI plus 0.5% pa	3.88%*
Pension increases:		
RPI, max 5%		3.27%*
RPI, max 5%, min 3%	Set using the assumed rate of inflation and a Black-Scholes model with inflation volatility of 1.5% per annum for RPI linked increases and 1.0% for CPI linked increases	3.71%*
RPI, max 3%		2.56%*
RPI, min 0%		3.38%*
RPI, min 4%		4.36%*
CPI, max 3%		2.63%*
Fixed 3%		3.00%

*Shown for illustrative purposes only based on the Bank of England RPI spot yield at the duration of the Plan liabilities (16 years).

Statistical assumptions as at 1 January 2021

Post-retirement mortality is based on the Plan's actual experience and other statistical analysis of the expected longevity of the membership. These are based on the Self-Administered Pension Schemes (SAPS) published tables, rolled forward as appropriate. Improvements as at the valuation date are assumed to be in line with the Continuous Mortality Investigation (CMI) 2019 projections, with a long-term rate of 1.5% per annum and a default smoothing factor of 7.0 for males and females and an initial addition of 0%. Sample rates for the agreed base tables are shown in Appendix B to this Statement. For future years the latest available CMI projection model will be adopted with a long-term rate of 1.5% per annum, with all other parameters set to the default.

Post-retirement mortality assumed for the calculation of future service contributions is the same as used to value the non-insured liabilities.

For the long term target basis the mortality assumptions are the same as the technical provisions but with an initial addition of 0.4%.

Details (including sample rates) of the remaining demographic assumptions for the investigation as at 1 January 2021 are also shown in Appendix B.

Reserves

A reserve of £20m has been included in the technical provisions in respect of death in service lump sum benefits and ill-health and dependents benefits for Money Purchase 2003 Section members. In addition to this, various reserves have been included which relate to the cost of reconciling and equalising the Plan's GMPs. The reserves included are as follows.

- £9.5m for GMP reconciliation
- 0.5% of the technical provisions liabilities and 0.75% of the long term target liabilities for the estimated cost of equalising the Plan's GMPs
- £2m for the cost of equalising historic transfer values

Valuation of defined benefit underpin for Money Purchase 2003 members

For the purpose of this calculation the value of the reference scheme test ("RST") benefit underpin was determined by comparing, for each member, the assets expected at retirement calculated assuming that members' investments achieve a return of 2.0% per annum above BoE gilt nominal curve, extended beyond 40 years, in the period before retirement. This is broadly intended to represent a prudent estimate of the investment strategy underlying the default "lifecycle" option with the cost of providing the RST underpin. It has been assumed that any underpin is provided through conversion within the Plan.

The terms for converting funds into a Plan pension are based upon discount rates in line with BoE gilt nominal curve with no margin applied.

Where the underpin bites, any additional funding needed is assumed to be invested with the rest of the assets before retirement, and is therefore discounted at the term dependent discount rate which is applied to the defined benefit assets using the assumptions underlying the technical provisions for non-insured liabilities. At 1 January 2021 this discount rate was the gilt curve plus a margin of 0.60% per annum. Post-retirement, the discount rate adopted is in line with gilt yields with no margin applied.

Whilst a member remains in active service, their money purchase funds are expected to increase in line with contributions paid and with investment returns. However, RST pension accrual ceased with effect from 5 April 2016. From that point onwards, an active member's RST pension remains fixed until they leave service. After leaving service, the RST pension increases in line with deferred revaluation. For the technical provisions at 1 January 2021 it has been assumed that active members remain in service for three years (subject to retirement before three years) following the valuation date.

The Trustee and the Company have agreed that Money Purchase 2003 Section members should be given the option to convert their fund values into a pension from the Plan at retirement regardless of whether the RST underpin bites. Therefore it is appropriate to make allowance for a proportion of Money Purchase 2003 Section members to be provided with pensions from the Plan even where the RST underpin is not expected to apply. For the technical provisions at 1 January 2021 it has been assumed that 50% on average of members for whom the RST underpin does not bite opt to convert their funds to pension within the Plan and the remaining 50% transfer out at retirement.

Eliminating a shortfall

The Trustee and the Company have agreed that any funding shortfalls identified at an actuarial valuation should be eliminated as quickly as the Participating Employers can reasonably afford by the payment of additional fixed annual contributions over the agreed recovery period. In determining the actual recovery period at any particular valuation the Trustee will take into account the following factors to the extent that these are relevant; amongst others:

- the size of the funding shortfall
- the risk that the value of the Plan's assets may deteriorate further relative to the technical provisions, the secondary funding objective and the solvency liabilities of the Plan
- independent advice received by the Trustee on the financial position of Pearson plc, the Company and/or the Participating Employers and their ability to pay the required contributions

- the impact, if any, of proposed deficit payments on the credit rating of Pearson plc.

The Plan is calculated to be £160m in surplus on the technical provisions basis at 1 January 2021 using the assumptions as set out in this Statement of Funding Principles, and therefore no shortfall contributions have been calculated.

Frequency of actuarial investigations

The Plan's sixth actuarial valuation under Part 3 of the Pensions Act 2004 has been carried out as at 1 January 2021. The Actuary will provide an estimate of the up-to-date financial position of the Plan, relative to the statutory funding objective and the solvency liabilities, as at each 1 January for which a full valuation is not requested. In the normal course of events, such annual updates would not be expected to lead to changes to the agreed Schedule of Contributions.

In general, the Trustee will request subsequent valuations three years after the preceding one and the intention is that the next valuation will be as at 1 January 2024. However, the Trustee may call for a formal funding valuation at any date if they are of the opinion that events have made it unsafe to rely on the results of the previous valuation for funding purposes. In reaching such a view, the Trustee will consider the advice of the Actuary and consult with the Company.

Arrangements for other parties to make payments to the Plan

Other than as reflected in the terms of the guarantee from Pearson plc, there are no arrangements for a person other than the Participating Employers or a member of the Plan to contribute to the funds held by the Plan.

Paying funding surpluses to the employer

The General Rules do not include provisions for the Trustee to make payments to the Company out of funds held for the purposes of the Plan unless a surplus exists following a winding-up of the Plan.

Cash equivalent transfer value calculations

The Trustee will ask the Actuary to advise them on a regular basis of the extent to which assets are sufficient to provide cash equivalent transfer values for all non-pensioners without adversely affecting the security of the benefits of other members and beneficiaries. The Trustee's policy is not to reduce cash equivalent transfer values paid to members unless the Actuary advises that the Plan's assets are materially insufficient to provide cash equivalent transfer values in full to all members, on the method and assumptions adopted for that purpose, in which case it will consider whether or not transfer values should be scaled back.

Dates of review of this Statement

This Statement will be reviewed, and if necessary revised, by the Trustee either

- within 15 months after the effective date of each actuarial valuation; or
- within a reasonable period after any occasion on which the Regulator has used its powers to modify future accrual of the Plan, directed as to the manner in which technical provisions are to be calculated or the period over which failure to meet the statutory funding objective is to be remedied, or imposed a Schedule of Contributions.

The Trustee may also elect to review, and if necessary revise, the Statement at other appropriate times.

Signed on behalf of the Company:

Name

Sally Johnson

Date

20 January 2022

Signature

Position

Chief Financial Officer

Signed on behalf of the Trustee of the Plan:

Name

James Joll

Date

20 January 2022

Signature

Position

Chairman of the Trustee

Appendix A

Technical Provisions Assumptions

Financial Assumptions

Item	Derivation
Discount interest rate: > non-pensioners	Gilt curve* plus 0.6% per annum
> pensioners	Gilt curve
Price inflation (RPI)	Inflation curve**
Price inflation (CPI)	Pre 2030: RPI less 1.0% per annum Post 2030: RPI less 0.0% per annum
Salary inflation	RPI plus 0.5% per annum
Deferred pension revaluation:	Set using the assumed rate of inflation with the relevant caps and floors
Pension increases post retirement:	Set using the assumed rate of inflation and a Black-Scholes model with inflation volatility of 1.5% per annum for RPI linked increases and 1.0% for CPI linked increases
Expected returns on Money Purchase funds (RST valuation):	Gilt curve* plus 2.0% per annum

* The gilt curve referenced above is the Bank of England gilt nominal curve, extended by assuming the curve is flat beyond 40 years.

** The inflation curve referenced above is the Bank of England gilt RPI curve, extended by assuming the curve is flat beyond 40 years.

Demographic Assumptions

Sample rates for some of the assumptions can be found in Appendix B.

Item	Assumption
Mortality pre and post retirement	95% of the S3PA table for males and 97% of the S3PA table for females projected from 2013 in line with the CMI 2019 projections and with long term improvement rates of 1.5% p.a. for both males and females, a default smoothing parameter of 7.0 and an initial addition of 0%. For future years the latest available CMI projection model will be adopted with a long-term rate of 1.5% per annum, with all other parameters set to the default.
New entrants	No allowance
Withdrawal from active service	Active members are assumed to withdraw from active service in line with the table set out in Appendix B
Transfer values	10% of members assumed to take a transfer value at retirement, with transfer values being set at 93% of the value of the technical provisions liability
Ill health retirements	Some ill health early retirement assumed for active members in line with the table set out in Appendix B
Early retirement	Active members: 10%(m) & 5%(f) of members retiring at age 55, 20% of members retiring at age 60, with the remainder retiring at their Normal Retirement Age Deferred members: Extel Section: Members assumed to retire at age 62 Other Sections: Members assumed to retire at NRA
Late retirement	No allowance
Age difference of dependants	Used dependants actual date of birth where available, where this is not available it has been assumed that male members are 4 years older than their female spouses and female members are 2 years younger than their male spouses.
Commutation	Members assumed to commute 18% of pension at retirement. The assumed commutation terms have been derived using investment returns of 1.5% above nominal gilt yields.
Proportion married	Used actual dependant existence data where available, where this is not available it has been assumed that 85% of males and 60% of females are married at retirement
Expenses: > Administration and other non-investment expenses (including PPF scheme-based levies)	Expense reserve of £90m within the technical provisions liabilities Expense reserve of £119m within the Long Term Target liabilities
> Insurance of death in service lump sums	Reserve of £20m
> Investment Expenses	No explicit allowance. Discount rates are net of investment expenses.
> GMP Reconciliation & Equalisation	£9.5m reserve for GMP reconciliation 0.5% of technical provisions liabilities 0.75% of Long Term Target liabilities £2m additional allowance for the cost of equalising historic transfer values

Appendix B

Sample Rates for Standard Tables used

Mortality in retirement

Age	Male life expectancy	Female life expectancy
60	87.3	89.6
65	87.5	89.7
70	88.0	89.9
75	88.9	90.5
80	90.1	91.3

Early retirement from active service

Age	Male early retirement assumption	Female early retirement assumption
55	0.10	0.05
60	0.20	0.20

Ill health retirement from active service

Age	Male ill health assumption	Female ill health assumption
35	0.00012	0.00012
40	0.00037	0.00037
45	0.00053	0.00053
50	0.00083	0.00083
55	0.00156	0.00156
60	0.00306	0.00306

Withdrawal from active service

Age	Male withdrawal assumption	Female withdrawal assumption
25	0.120	0.120
30	0.120	0.120
35	0.096	0.096
40	0.084	0.084
45	0.048	0.048
50	0.024	0.024