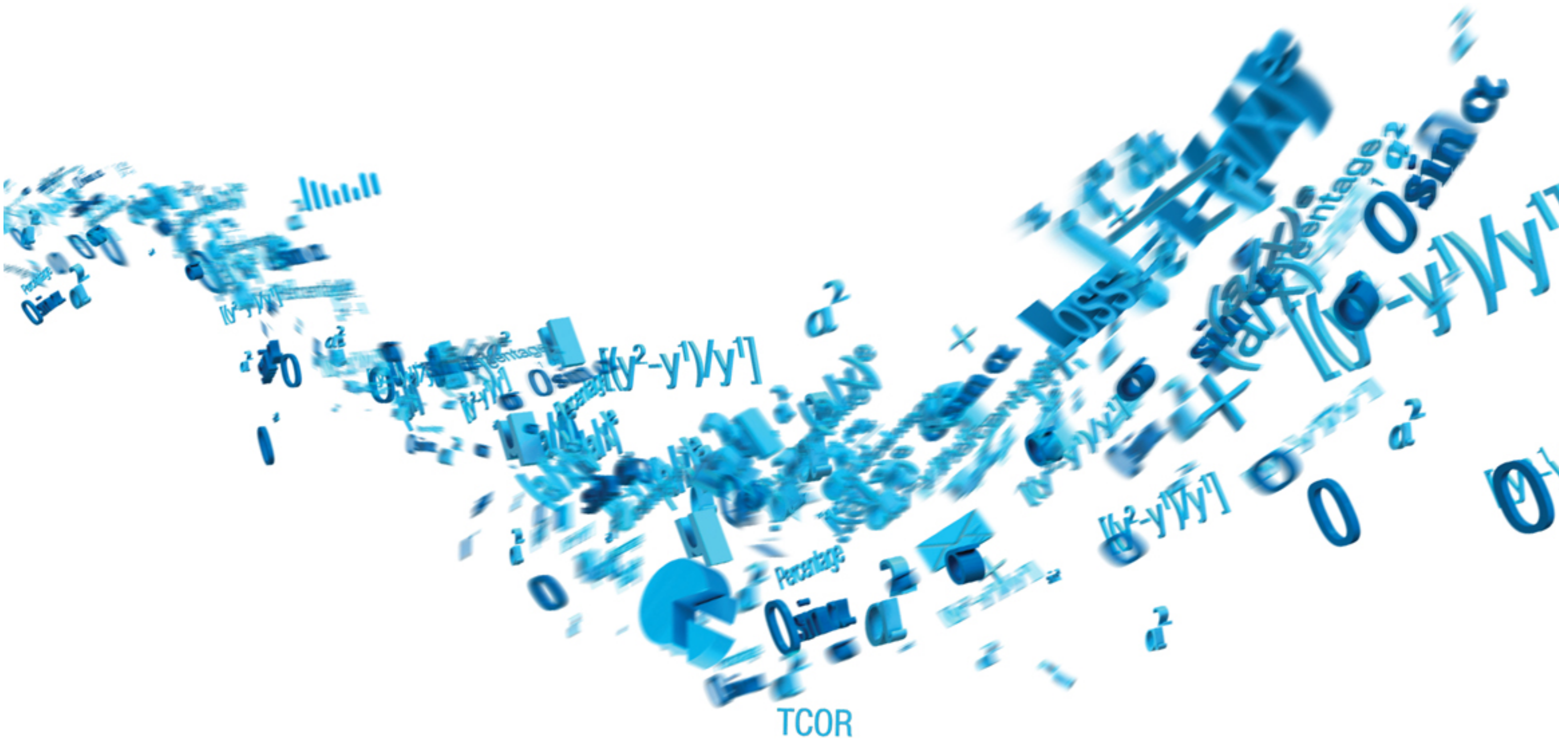
Aon Hewitt
Retirement & Investment



Actuarial Valuation as at 31 October 2015

Hewlett-Packard Limited Retirement Benefits Plan: Digital Section

Prepared for	The Trustee
Prepared by	David Eteen FIA
Date	12 July 2017

QAS Institute and Faculty of Actuaries Quality Assurance Scheme

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Executive Summary

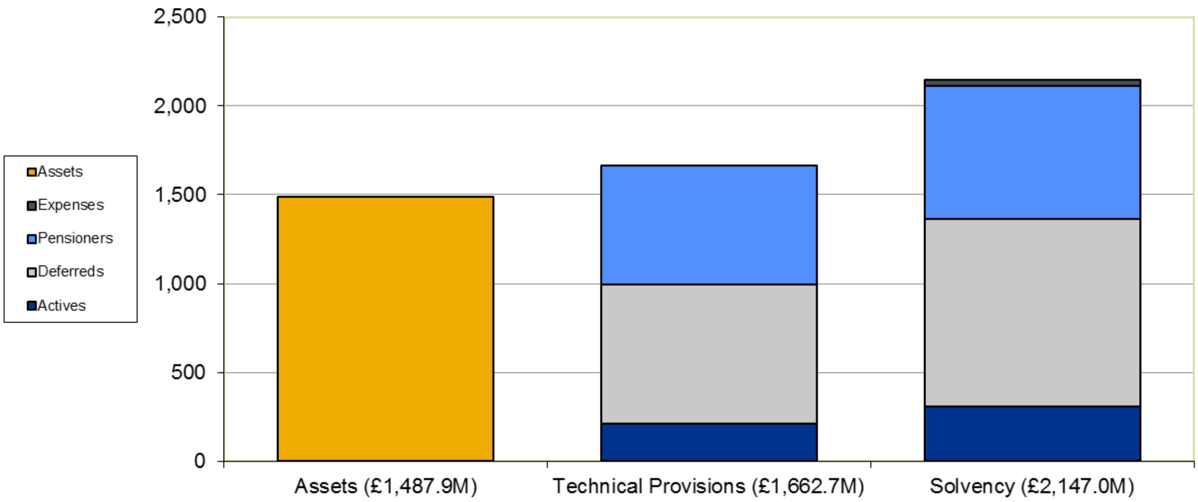
The key results of the actuarial valuation as at 31 October 2015 are set out below

There was a deficit of £174.8M relative to the technical provisions

The technical provisions are the funding target agreed by the Trustee and the Company as being appropriate to meet member benefits, assuming the Plan continues as a going concern.

There was an estimated deficit of £659.1M relative to the solvency liabilities

The solvency liabilities are the estimated level of assets needed to buy insurance policies for benefits earned to the actuarial valuation date.



In order to pay off the deficit as at 31 October 2015, as well as to cover the cost of future accrual and expenses, it has been agreed that the Company will pay the following Ongoing Funding Obligation Contributions:

- £34.3M paid in March 2016
- £43.9M paid in April 2017
- £0.247M – due to be paid by 31 October 2017
- £2.2M – due to be paid by 30 April 2018
- £4.0M – due to be paid by 30 April 2019
- £3.3M – due to be paid by 30 April 2020
- £1.5M – due to be paid by 30 April 2021

The Ongoing Funding Obligation Contributions are subject to annual review as at 31 October. The Company will also pay Salary Sacrifice Funding Obligation Contributions.

Contents

Introduction

This report has been prepared for the Trustee. It sets out the results and conclusions of the actuarial valuation as at 31 October 2015

- This is a scheme funding report. It relies on and draws together other pieces of work and advice from throughout the actuarial valuation process which are listed in Appendix 1
- Appendix 1 also sets out the legal framework within which the actuarial valuation has been completed
- Throughout the body of this report, defined contribution additional voluntary contributions (DC AVCs) have been excluded from the actuarial valuation results because in my view this provides a clearer picture. In order to comply formally with the legislation, an alternative presentation of the actuarial valuation results is shown in Appendix 1 which includes DC AVC benefits in both the asset and liability measures
- Some shorthand used in this report is explained opposite. Some technical pensions terms are explained in the glossary in Appendix 7

Shorthand

Plan

Hewlett-Packard Limited Retirement Benefits Plan: Digital Section

Trustee

The Hewlett Packard Enterprise UK Pension Trustee Limited

Company

Hewlett-Packard Limited and other participating employers

Rules

The Rules effective from 1 September 2008 and amending documentation

Annual Salary

Annual rate of basic salary

Pensionable Service

As defined in the rules

Snapshot view

The report concentrates on the Plan's financial position as at the actuarial valuation date. As time moves on, the Plan's finances will fluctuate. If you are reading this report some time after it was produced, the Plan's financial position could have changed significantly.

Update since the previous actuarial valuation

The key results from the previous actuarial valuation as at 31 October 2012 were:

The Plan's assets were £1,040.3M and the technical provisions were £1,384.0M, which corresponded to a deficit of £343.7M and a funding level of 75%.

The Plan was 57% funded using a solvency measure.

Contributions agreed as part of previous actuarial valuation

The key outcome of the actuarial valuation as at 31 October 2012 was that the Company would pay Ongoing Funding Obligation Contributions (as defined in the statement of funding principles) of:

- £42.6M in March 2013
- £27.8M in October 2013 as a prepayment
- Nil in April 2014 with the prepayment reducing to £5.3M from 30 April 2014
- £15.2M by 30 April 2015 with the prepayment reducing to nil from 30 April 2015
- £18.5M by 30 April 2016
- £16.5M by 30 April 2017
- £14.7M by 30 April 2018

It was also agreed that Ongoing Funding Obligation Contributions would be recalculated annually.

The Company was also required to pay Salary Sacrifice Funding Obligation Contributions (as defined in the statement of funding principles) and the cost of any augmentations to benefits.

Ongoing Funding Obligation Contributions paid

As agreed, the Ongoing Funding Obligation Contributions were recalculated annually as at each 31 October. As a result the following Ongoing Funding Obligation Contributions were actually paid:

- £42.6M in March 2013
- £98.0M in March 2015
- £34.3M in March 2016
- £43.9M in March 2017

No payment was required in 2014, but the prepayment of £27.8M was reduced to £5.3M with effect from 30 April 2014. The prepayment subsequently reduced to nil with effect from 30 April 2015.

Other key developments

Since the previous actuarial valuation, Hewlett-Packard Company has split into two companies, HP Inc. and Hewlett Packard Enterprise Company.

A guarantee from Hewlett-Packard Company was in place when the previous actuarial valuation was carried out. Following the split of Hewlett-Packard Company, this guarantee was replaced with a guarantee from Hewlett Packard Enterprise Company.

Membership data

This actuarial valuation is based on membership data as at 31 July 2015 supplied to us by Equiniti Paymaster

The chart below shows how the membership profile of the Plan has changed over the past three actuarial valuations. A summary of the membership data is included in Appendix 2.

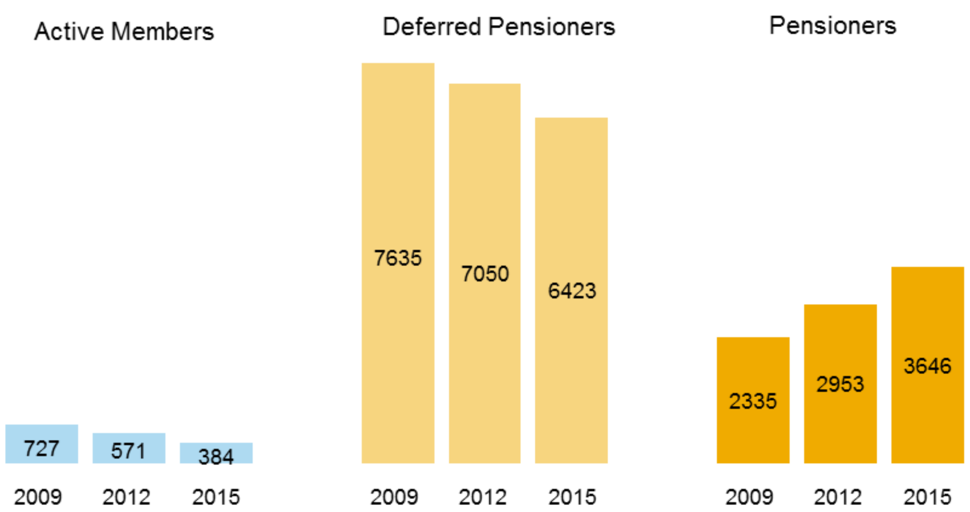
I have carried out some general checks to satisfy myself that:

- The information used for this actuarial valuation is sensible compared with the information used for the previous actuarial valuation and also with that shown in the Plan's Trustee Report and Accounts
- The results of this actuarial valuation can be traced from the results of the previous actuarial valuation

I have no reason to believe that there are any significant anomalies or errors in the membership data I have been provided with, and have used for the purposes of the actuarial valuation calculations, that would have a material impact on the results. The membership data is correct as at 31 July 2015, but adjusted to allow for 18 members who became deferred on 1 September 2015 as a result of having their employment transferred to the HP Inc. group of companies.

The results in my report rely entirely on the accuracy of the information supplied. If you believe the membership data I have used may be incomplete or inaccurate, or you are aware of significant membership movements between 31 July 2015 and 31 October 2015, other than what we have allowed for then please let me know.

Membership profile of the Plan



Benefits valued

I have valued the benefits to which members are entitled as defined by the rules of the Plan which have been amended over time, subject to the comments below. A summary of the benefits defined by the Rules effective from 1 September 2008 is set out in Appendix 3

- **Statutory revaluations and increases**

  I have allowed for the impact of the Government's decision to switch from using RPI to CPI when calculating statutory revaluations and increases.

- **Discretionary benefits**

  Benefits earned before 6 April 1997 do not have guaranteed pension increases (aside from any GMP). No allowance has been made for discretionary benefits for the purpose of this actuarial valuation.

- **GMP equalisation**

  In July 2014 the Government stated an intention to develop fully considered proposals and to publish guidance on equalising Guaranteed Minimum Pensions (GMPs) between men and women. A consultation on the proposed methodology was carried out in late 2016 and the Government response was published in March 2017. No target date was given for final publication. At this stage, I have made no allowance for the equalisation of GMPs in the actuarial valuation.

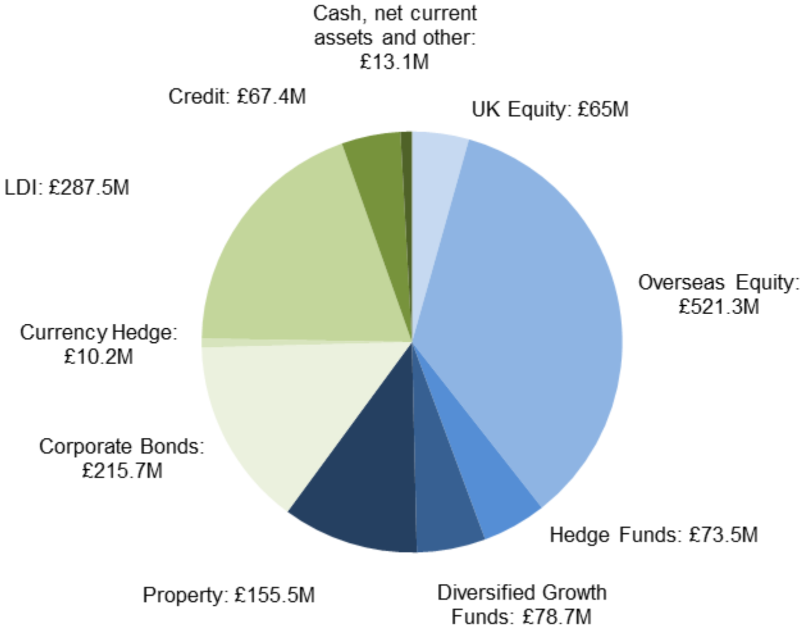
- **In-Plan AVCs**

  I have allowed for increases in payment to In-Plan AVCs as set out in the court order dated 31 October 2013. These increases were not allowed for as part of the actuarial valuation as at 31 October 2012.

Asset data

The audited accounts for the Plan for the year ended 31 October 2015 show the assets were £1,487.9M excluding DC AVCs

The balance of the assets of £1,487.9M is invested as follows:



De-risking strategy

The Trustee has agreed that as the funding level improves, the investment strategy will be de-risked. The de-risking strategy has been set such that 12% will be invested in growth assets and 88% in protection assets by the time the Plan is fully funded on the technical provisions measure.

Current investment strategy

Since the date of the actuarial valuation a number of de-risking triggers have been met. The current investment strategy is to invest 21.6% in growth assets and 78.4% in protection assets. Interest-rate and inflation hedges are also used to reduce the sensitivity of the funding level to changes in these.

Funding objective

Terminology

Technical provisions

The funding target for a scheme agreed as part of the actuarial valuation.

Statutory funding objective

To hold sufficient and appropriate assets to meet the technical provisions.

Statement of funding principles

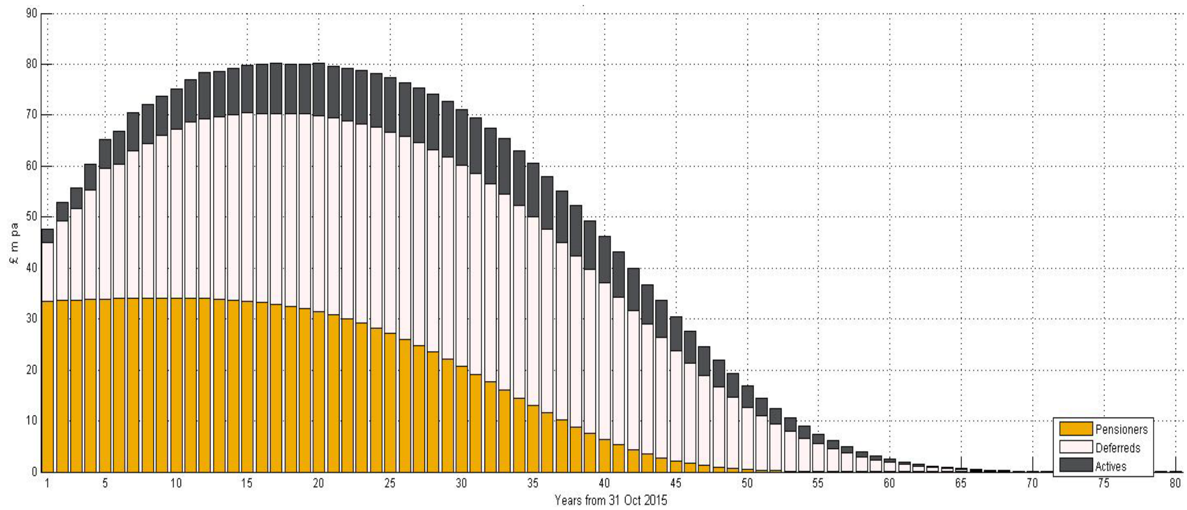
Sets out the Trustee's policy for meeting the statutory funding objective

The Trustee's funding objective is to meet the statutory funding objective as defined above.

In order to calculate the technical provisions and the cost to the Company of future benefit accrual, the benefits paid out by the Plan are estimated for each year into the future. The estimated benefit payments are then 'discounted back' to the actuarial valuation date using an agreed rate of interest known as the discount rate.

The benefit payments from the Plan are expected to be made for a very long period, as illustrated in the chart below. Some cash-flows will be fixed but others will be linked to future levels of inflation.

Projection of Digital Section cashflows from 31 October 2015



Summary of method and assumptions for technical provisions

The Trustee and Company have agreed the assumptions that will be used to calculate the technical provisions and the cost of future benefit accrual. The table below summarises the key assumptions, together with those used for the previous actuarial valuation. Further details of all of the assumptions are set out in Appendix 4

Assumption	This actuarial valuation	Previous actuarial valuation	Comment
Discount Rate	3.21% p.a.	4.00% p.a.	This is now set equal to the single equivalent yield on UK gilts plus 0.7% p.a. At the previous actuarial valuation, the discount rate was set relative to corporate bond yields less a margin
RPI inflation	3.21% p.a.	2.99% p.a.	The proportion of RPI linked liabilities hedged are now valued in line with market implied RPI. The remainder of the RPI linked liabilities are valued assuming RPI equals 3.00% p.a.
CPI inflation	2.31% p.a.	2.29% p.a.	Now set equal to RPI less 0.9% p.a. (previously less 0.7% p.a.)
Annual Salary Increases	2.50% p.a.	2.00% p.a.	Increased to reflect assumption adopted by the Company for its accounting disclosures
Post-retirement mortality assumption – base table	SAPS S2 light tables with 104% (male) and 89% (female) scaling factors	SAPS S1 Light tables with 110% (male) and 98% (female) scaling factors	This has been updated to reflect the latest research and an analysis carried out of the Plan's membership and experience using the Aon Hewitt Longevity Model
Post-retirement mortality assumption – future improvements	CMI 2016 core projections with S=8 with long-term improvement rate of 1.25% p.a. for men and women	CMI 2011 core projections with long-term improvement rate of 1.25%p.a. for men and women	It was agreed to adopt the CMI 2016 core projections after discussions in mid-2017.

As for the previous actuarial valuation, the technical provisions have been calculated using the projected unit method. This method, with a one year control period, has also been used to calculate the cost of future benefit accrual.

Technical provisions

The Plan's technical provisions are shown below. They have been calculated using the assumptions in the previous section

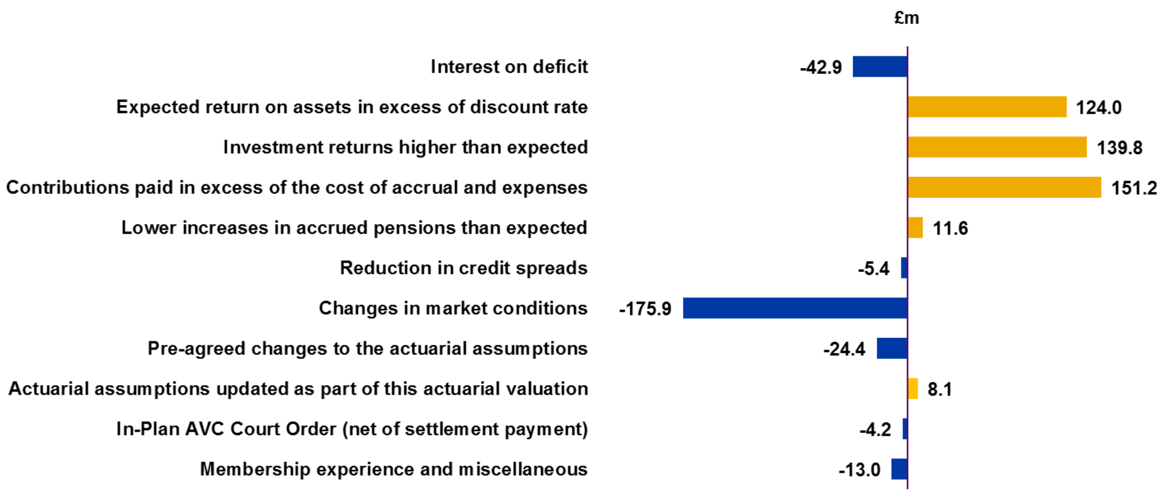
	£M
Value of past service benefits for	
Actives	213.2
Deferreds	782.4
Pensioners	667.1
Total i.e. technical provisions	1,662.7
Value of assets	1,487.9
Past service surplus (deficit)	(174.8)
Funding ratio	89%

My statutory certification of the Plan's technical provisions is attached as Appendix 6.

Reasons for change in past service position

At the previous actuarial valuation, the Plan had a deficit of £343.7M. The funding position has therefore improved by £168.9M over the period

The chart below shows the key reasons for the change in funding position.



The analysis shows that the main factors affecting the funding position since the previous actuarial valuation have been:

- Ongoing Funding Obligation Contributions paid, which has reduced the deficit
- Investment returns being greater than expected, which has reduced the deficit
- Changes in market conditions, in particular falling gilt yields, which has increased the deficit

Cost to the Company of future benefit accrual

The table below shows the cost at the actuarial valuation date of benefits that members will earn in the Plan in future

This has been calculated for the one year period following the date of the actuarial valuation using the same assumptions as for the technical provisions. It does not include the costs of administering the Plan.

	% of Annual Salaries
Value of benefits accruing	37.8
Less member contributions	(11.5)
Net cost to the Company	**26.3**

When calculating contributions payable to the Plan an allowance is made for the fact that the cost of benefit accrual increases as active members get older.

As at the date of the actuarial valuation, the Plan was contracted-out. The ability to contract-out was abolished with effect from 6 April 2016. As a result, changes were made to the accrual rate options in the Plan, as well as changes to member contribution rates. The above rates do not make any allowance for these changes.

Agreed Contributions

The Ongoing Funding Obligation Contributions are determined using the approach set out in the statement of funding principles

Ongoing Funding Obligation Contributions are calculated as:

- Cost of new benefits accruing in excess of salary sacrifice contributions; plus
- Allowance for administrative expenses and levies; plus
- Amortisation of deficit (see below); less
- Additional expected return on assets above the discount rate used to value the technical provisions

The amortisation of deficit is calculated as set out as follows:

- Any deficit below 85% of the technical provisions will be amortised over 1 year
- Any deficit between 85% and 95% of the technical provisions will be amortised over 3 years
- Any deficit between 95% and 100% of the technical provisions will be amortised over 5 years

The technical provisions assumptions based on market conditions as at 31 October 2015 are used for this contribution calculation, except that the expected return on assets is assumed to reduce from 6.34% p.a. as at 31 October 2015 to 3.94% p.a. as at 31 October 2021.

Based on the technical provisions as at 31 October 2015, it has been determined that Ongoing Funding Obligation Contributions during the period covered by the Schedule of Contributions will be as follows.

- £0.247M due by 31 October 2017
- £2.2M due by 30 April 2018
- £4.0M due by 30 April 2019
- £3.3M due by 30 April 2020
- £1.5M due by 30 April 2021

These contributions allow for annual expenses of £3.4M, including levies, assumed to increase in line with RPI inflation.

The actual Ongoing Funding Obligation Contributions paid will be recalculated each 31 October.

Agreed contributions

The Company will also pay Salary Sacrifice Funding Obligation Contributions.

Member contributions will continue at various rates as specified in the schedule of contributions, with DC AVCs payable in addition.

The contributions above are set out in a new schedule of contributions. My certification of the schedule of contributions will be based on the position at the effective date of the actuarial valuation.

Terminology

Recovery plan

A plan for making good any deficit relative to the technical provisions.

Schedule of contributions

Specifies the amounts and dates of contributions payable by the Company and the members over the next five years or the recovery period, if longer. I am required to certify that the contributions in the schedule are expected to remove the deficit over the period stated based on the agreed assumptions.

I estimate that, by the next actuarial valuation, these contributions will have:

- Increased the technical provisions funding ratio to about 99%
- Increased the solvency level to about 80%

These estimates assume that:

- The experience of the Plan is in line with the assumptions underlying the technical provisions and recovery plan
- The assumptions underlying the technical provisions and solvency bases remain unchanged

Update since the actuarial valuation date

The funding position is estimated to be around 99% as at 31 May 2017

This is based on assumptions consistent with those used to calculate the technical provisions, with financial assumptions updated to reflect changes in market conditions.

The funding ratio has increased mainly due to the contributions of £34.3M in March 2016 and £43.9M in March 2017.

Solvency

The solvency estimate below represents the cost of purchasing annuities at the actuarial valuation date from an insurance company to meet the Plan's benefits

The assumptions include an allowance for the expenses of winding-up the Plan's. Further details and the assumptions used in the solvency estimate are summarised in Appendix 5.

	£M
Value of past service benefits for	
Actives	308.8
Deferreds	1,051.8
Pensioners	754.2
Expenses	32.2
Value of liabilities (solvency estimate)	2,147.0
Value of assets	1,487.9
Surplus/(Deficit)	(659.1)
Solvency ratio	69%

In practice, if the Plan were to be discontinued with no solvent employer then the assets are unlikely to be sufficient to provide the benefits in full. If this were the case then:

- Benefits corresponding to those covered by the PPF would be met first (either through the PPF or, if there were sufficient funds, by securing these benefits with an insurance company)
- Any remaining assets would be used to secure part of the remaining benefits with an insurance company

The proportion of full benefits provided will vary from member to member and may be higher or lower than the statutory estimate of solvency ratio quoted above.

Risks and uncertainties

The Plan faces a number of key risks which could affect its funding position.

These risks include:

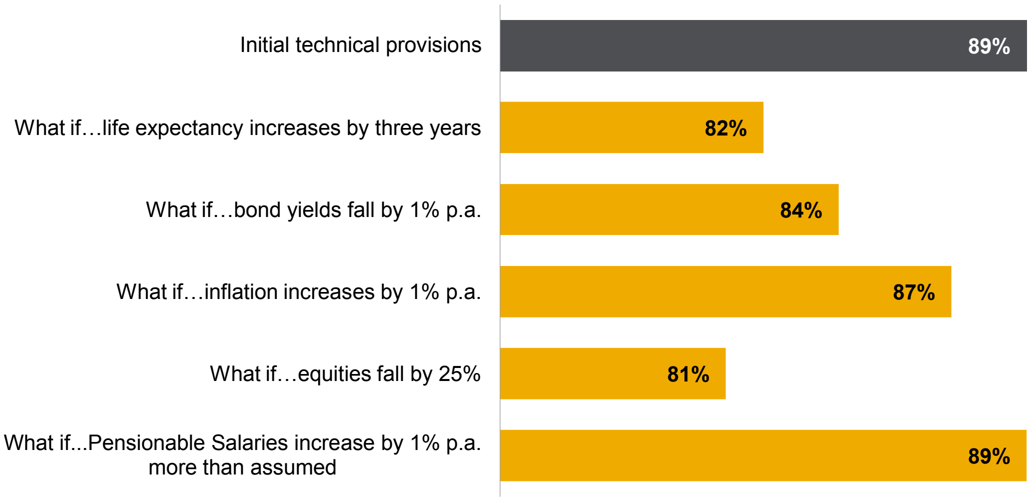
- Funding risk – the risk that the technical provisions are set too low and prove insufficient to meet the liabilities (e.g. in the event of discontinuance)
- Sponsor covenant risk – the risk that the Company is no longer willing or able to support the Plan, if things go wrong
- Investment risks – the risk that investment returns are lower than assumed in the actuarial valuation, and also that the assets are volatile and move out of line with the liabilities, so the funding position is not stable
- Longevity risk – the risk that Plan members live for longer than assumed and that pensions would therefore need to be paid for longer
- Inflation risk – the risk that inflation is higher than assumed, increasing the pensions that need to be paid

To quantify some of these risks, the chart on the following page shows the approximate impact of the following one-off step changes on the Plan's funding position as at the date of the actuarial valuation on the technical provisions basis:

- Life expectancy at age 60 is three years longer than anticipated (with corresponding increases at other ages)
- Yields on gilts, swaps and corporate bonds decrease by 1% p.a. (with no change in equity markets)
- Real yields on index-linked gilts decrease by 1% p.a. (with fixed-interest gilt yields, corporate bond yields and equity markets unchanged)—this is equivalent to a 1% p.a. increase in the assumed rate of inflation (measured by both RPI and CPI)
- The market value of equities falls by 25% (with no change in bond markets)
- Pensionable Salaries increase 1% p.a. faster than assumed

All sensitivities have been calculated based on the investment strategy in place as at 31 October 2015.

Risks and uncertainties



The analysis emphasises that the Plan is highly susceptible to:

- Equity markets falling
- Members living longer than expected

The scenarios considered are not 'worst case' scenarios, and could occur in combination (rather than in isolation).

Since the date of the actuarial valuation the Plan has de-risked, so the above analysis would be different if carried out today.

The Solvency measure is also highly sensitive to most of these factors.

Next steps

As part of the actuarial valuation, the Trustee and the Company have already agreed a statement of funding principles

The next steps are:

- For the Trustee to provide a copy of this report to the Company within 7 days
- For the Trustee and Company to sign the recovery plan and schedule of contributions
- For me to certify the schedule of contributions
- To submit the actuarial valuation summary and supporting documentation to the recovery plan to the Pensions Regulator via Exchange
- To provide a summary funding statement to members as soon as practicable

Checklist

The actuarial valuation process is complete when all of the following have been agreed and are in place:

- Statement of funding principles
- This scheme funding report
- Recovery plan
- Schedule of contributions
- Actuarial certification of the schedule of contributions

The statutory deadline for completing the actuarial valuation process was 31 January 2017, i.e. 15 months after the actuarial valuation date, but the valuation was delayed until there was greater certainty on the covenant of Hewlett Packard Enterprise following the HPES spin merger. The Pensions Regulator was informed and has been kept up to date during the delay

Appendix 1: Legal framework and alternative presentation

It is a legal requirement to carry out a full actuarial valuation at least once every three years

This report is produced in compliance with:

- General Rule 4.2 of the Rules
- Section 224 of the Pensions Act 2004
- The terms of the Scheme Actuary Agreement effective from 1 October 2006 between the Trustee and me, on the understanding that it is solely for the benefit of the addressees

Unless prior written consent has been given by me or Aon Hewitt Limited, this report should not be disclosed to or discussed with anyone else unless they have a statutory right to see it. Notwithstanding such consent, neither Aon Hewitt Limited nor I accept or assume responsibility to anyone other than the addressees of this report.

Actuaries who provide written advice on scheme funding matters are under a professional obligation to ensure that their advice is reviewed by another actuary. This is called a 'compliance review'. The reviewing actuary is required to have the necessary experience to have given the original advice.

This actuarial valuation report has been reviewed by another actuary within Aon Hewitt Limited, before it was issued. The reviewer was David Lindsay FIA who meets the professional requirements.

Alternative presentation including defined contribution benefits

DC AVC benefits amounted to £10.1M at the actuarial valuation date. If these benefits are included in the actuarial valuation:

- The value of the assets is £1,498.0M
- The technical provisions are £1,672.8M (funding ratio 90%)
- The value of the solvency liabilities is £2,157.1M (solvency ratio 69%)

Appendix 2: Membership data

The membership data is summarised below. The data is at 31 July of the relevant year.

Active members		Number	Average age	Total pensionable salaries (£000 pa)	Average pensionable salaries (£ pa)	Average service (years)
Men	2015	300	52.8	18,580	61,934	25
	2012	*447*	*51.6*	*25,334*	*56,676*	*23*
Women	2015	84	50.4	4,406	52,450	23
	2012	*124*	*48.3*	*5,674*	*45,757*	*21*
Total	2015	384	52.2	22,986	59,860	24
	2012	*571*	*50.9*	*31,008*	*54,305*	*23*

Deferred pensioners		Number	Average age	Total pension (£000 pa)	Average pension (£ pa)
Men	2015	4,158	53.9	26,935	6,478
	2012	*4,650*	*51.8*	*29,306*	*6,302*
Women	2015	2,265	52.3	8,275	3,653
	2012	*2,400*	*49.8*	*8,181*	*3,409*
Total	2015	6,423	53.3	35,211	5,482
	2012	*7,050*	*51.1*	*37,448*	*5,312*

Note: The deferred pension amounts shown above are at date of exit from the Plan.

Appendix 2: Membership data

Pensioners		Number	Average age	Total pension (£000 pa)	Average pension (£ pa)
Men	2015	2,618	67.5	28,411	10,852
	2012	*2,117*	*66.0*	*21,270*	*10,047*
Women	2015	1,028	66.3	5,162	5,021
	2012	*836*	*64.2*	*3,831*	*4,582*
Total	2015	3,646	67.2	33,573	9,208
	2012	*2,953*	*65.5*	*25,100*	*8,500*

Notes:

- The average service for active members includes any transferred in service
- The deferred pension amounts show above include revaluations up to the valuation date
- The pensioners include dependants including dependent children
- Average age figures are un-weighted
- The membership data is correct as at 31 July 2015, adjusted to allow for 18 members who became deferred on 1 September 2015 as a result of having their employment transferred to the HP Inc. group of companies

Appendix 3: Benefits

Benefits defined in Rules applicable to members in service as at actuarial valuation date

Normal Pension Date	A member's 65^{th} birthday. Members can retire with an unreduced pension from age 60, with no Company or Trustee's consent required
Pensionable Salary	Pensionable Salary is the annual basic salary on 1 July each year, less an amount equal to 1.5 times the annual Basic State Pension for a single person at that date
Pensionable Service	Complete continuous years and months of service as a member of the Plan, including Pensionable Service credited to the member under the Digital Pension Plan before 1 October 2006
Final Pensionable Salary	Final Pensionable Salary is the best average of member's Pensionable Salary during any 12 consecutive months in the 5 years before leaving Pensionable Service
Normal retirement pension	On normal retirement, a member paying higher rate contributions receives a pension calculated as: 1/50 of a member's Final Pensionable Salary for Pensionable Service to 1 July 1988 plus 1/60 of a member's Final Pensionable Salary for Pensionable Service from 1 July 1988 For members who have chosen to pay lower contributions, a range of lower accrual rates apply
Death after retirement	If a member dies within five years of retiring, a lump sum equal to the balance of five years' pension payments, less any pension payments for a spouse to the end of that period; plus A spouse's pension of 60% of the member's pension that would have been payable if the member had not taken a commutation lump sum. Dependants' and children's pensions may also be payable

Death in service	A spouse's pension of 60% of the prospective pension the member would have received had they continued in service until Normal Pension Age, but based on Pensionable Salary at the date of death. Dependants' and children's pensions may also be payable. The lump sum payable on death in service is now provided from a separate trust
Death in deferment	A spouse's pension of 60% of the member's pension revalued to the date of death, and a lump sum benefit of a refund of member contributions
Pension increases in payment	Pensions in excess of GMP relating to pensionable service before 6 April 1997 receive increases at the discretion of the Company. Pensions relating to pensionable service from 6 April 1997 to 30 June 2005 are subject to guaranteed increases in line with the Retail Prices Index capped at 5% per annum. Pensions relating to pensionable service after 30 June 2005 are subject to guaranteed increases in line with the Retail Prices Index capped at either 2.5% per annum or 5% per annum depending on member election. GMP accrued between 6 April 1988 and 5 April 1997 is increased in line with GMP Increase Orders (currently in line with the Consumer Prices Index up to a maximum of 3% per annum)
Pension increases in deferment	GMP is increased in deferment at a rate fixed at the date of leaving service. Benefits in excess of GMP are increased in line with statutory deferred increase orders, subject to maximum increase of 5% per annum for the period of deferment. For members who left service before 1 January 1991, increases to non-GMP benefit may be restricted below this level. For service after 5 April 2009, the maximum increase is 2.5% p.a. for the period of deferment
Transferred-in benefits	Transferred-in benefits are treated the same as normal scheme benefits with the following exception of members with transfers-in prior to 1/7/88 which have a minimum pension age of 65.members have minimum pension age of 65.
State Pension Scheme	The Plan was contracted out on a "Reference Scheme" basis until 5 April 2016

AVCs	Members of the Plan may choose to pay Additional Voluntary Contributions (AVCs) in order to purchase additional benefits. Members can pay In-Plan AVCs to secure additional Plan pension as a percentage of Final Pensionable Salary or can pay Investment Option AVCs which are invested separately from the other assets of the Plan
Notes	Certain categories of members of the Plan are entitled to different benefits from those summarised above

Appendix 4: Assumptions for technical provisions

The assumptions used for calculating the technical provisions are summarised below. Different assumptions are used for the solvency estimate, as set out in Appendix 5

Financial Assumptions

	31 October 2015	31 October 2012
Discount Rate	3.21% p.a.	4.00% p.a.
Annual Salary Increase	2.50% p.a.	2.00% p.a.
Rate of (RPI) price inflation	3.21% p.a.	2.99% p.a.
Rate of (CPI) price inflation	2.31% p.a.	2.29% p.a.
Pension increases:		
RPI capped at 5% p.a.	3.14% p.a.	2.91% p.a.
RPI capped at 2.5% p.a.	2.22% p.a.	2.05% p.a.
CPI capped 5% p.a.	2.32% p.a.	2.31% p.a.
Statutory increases to post-April 1988 GMPs	2.07% p.a.	1.99% p.a.
Rate of deferred pension increases	2.31% p.a.	2.29% p.a.
Basic State Pension Increases	4.00% p.a.	4.00% p.a.

Appendix 4: Assumptions for technical provisions

Demographic Assumptions

Pre-retirement mortality	▪ Males: 70% of standard table AM92 ▪ Females: 70% of standard table AF92
Post-retirement mortality	Base mortality table: ▪ Males: 104% of standard SAPS S2 'Light' tables ▪ Females: 89% of standard SAPS S2 'Light' tables An allowance for future improvements has been made in line with the CMI_2016 projection model assuming a long-term annual rate of improvement in mortality rates of 1.25% for men and women and a period smoothing parameter of 8.0.
Withdrawals	Allowance is made for withdrawals from service (see rates below). On withdrawal, members are assumed to leave a deferred pension in the Plan and are not assumed to exercise their option to take a transfer value
Early retirements	Allowance is made in line with the rates below
Commutation	Each member is assumed to commute 17% of their pension on retirement, based on the commutation factors currently in force
Family details	▪ 94% of male members are assumed to be married at retirement or earlier death. It is assumed that the member is three years older than his spouse and the spouse is female ▪ 75% of female members are assumed to be married at retirement or earlier death. It is assumed that the member is one year younger than the spouse and that the spouse is male
Expenses	Administration expenses of £3.4m p.a., including PPF levies, when calculating the Ongoing Funding Obligation Contribution
Ill-health retirement	No allowance
Funding Method	Projected unit method with a one-year control period

Appendix 4: Assumptions for technical provisions

Withdrawals

Allowance is made for active members to withdraw from pensionable service before their Normal Pension Date. The rates are set out in the table opposite:

Age	Withdrawals from service each year
Below 50	5%
50 - 60	7.5%
Over 60	0%

Retirements – Active Members:

Allowance is made for active members to retire directly from active service before their Normal Pension Date. The rates are set out in the table opposite:

Age	Early retirements each year
Below 55	0%
55	10%
56	7.5%
57	7.5%
58	7.5%
59	7.5%
60 or over	100%

Retirements - Deferred Members:

Allowance is made for deferred members to retire before their Normal Pension Date. The rates are set out in the table opposite:

Years before Normal Pension Date	Early retirements each year
>5	0%
5	6.5%
4	4%
3	4%
2	4%
1	4%
0	100%

Appendix 5: Assumptions for solvency estimate

The solvency estimate has been calculated in line with statutory requirements. However, I have not carried out a detailed analysis of the cost of risks that might apply specifically to the Plan and so my estimate is only a guide. In practice, the true position can only be established by completing a buy-out as interest rates and supply and demand affect pricing. I have taken into account margins that a life assurance company is likely to use in the setting of its premium basis. A summary of assumptions is set out on the next page.

Solvency estimate

This considers the position if:

- The Plan were discontinued on the actuarial valuation date
- Member benefits were crystallised and, for active members, were based on their Pensionable Service and Salary at the valuation date
- Discretionary benefits were suspended permanently
- The assets were used to buy immediate and deferred annuities from an insurance company, with an extra margin needed to cover the expenses of shutting down the Plan

The solvency estimate is a regulatory requirement and also provides a useful benchmark against which the Trustee and others can assess the prudence of other funding measures.

Appendix 5: Assumptions for solvency estimate

The table below shows the main assumptions used in calculating the solvency estimate, where these are different from those used for the technical provisions.

Pre-retirement discount rate	Aon Hewitt Bulk Annuity Market Monitor yield curve for pensioners, which is constructed from swap and UK corporate bond market curves
Post-retirement discount rate	Aon Hewitt Bulk Annuity Market Monitor yield curve for non-pensioners, which is constructed from swap and UK corporate bond market curves
RPI inflation	Term-dependent rates derived from the RPI swap markets
CPI Inflation	Equal to the RPI assumption less 0.3% p.a.
Pension increases	Derived from the price inflation assumptions with allowance for caps and floors and with the aim of approximately reflecting the cost of hedging these increases using LPI-linked swaps
Pre-retirement mortality	SAPS S2 tables with best-estimate scaling factors derived from experience analysis combined with postcode analysis
Post-retirement mortality	Base mortality table: ▪ Males: 104% of standard SAPS S2 'Light' tables ▪ Females: 89% of standard SAPS S2 'Light' tables An allowance for future improvements have been made in line with the CMI_2014 Core Projections assuming a long-term annual rate of improvement in mortality rates of 1.75% for men and women
Withdrawals	All members assumed to immediately withdraw from service with entitlement to deferred pension
Early retirement	All members are assumed to retire at the earliest age at which benefits are payable unreduced without the need for consent
Commutation	No allowance

Discretionary benefits	No allowance
GMP equalisation	No allowance is made for the additional cost that may arise from equalising male and female GMP
Expenses	The reserve for expenses allows for deductions to allow for the cost of forced sales of assets, an allowance for the management expenses associated with winding up and an estimate of the per member charges expected to be levied by an insurance company on buy-out. All of these allowances for expenses are presented as additions to the liabilities as the regulations require the assets to be shown at audited market value

Appendix 6: Certificate of technical provisions

Actuarial certificate given for the purposes of Regulation 7(4)(a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005

Hewlett-Packard Limited Retirement Benefits Plan – Digital Section (the Plan)

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Plan's technical provisions as at 31 October 2015 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Plan and set out in the statement of funding principles dated 30 June 2017.

Signature:		Date:	12 July 2017
Name:	David Eteen FIA	Address:	Aon Hewitt Limited Verulam Point Station Way St Albans AL1 5HE
Qualification:	Fellow of the Institute and Faculty of Actuaries		

Appendix 7: Glossary

Deficit

This is the funding target less the value of assets. If the value of assets is greater than the funding target, then the difference is called the surplus.

Discount rate

This is used to place a present value on a future payment. A 'risk-free' discount rate is usually derived from the investment return achievable by investing in government gilt-edged stock. A discount rate higher than the 'risk-free' rate is often used to allow for some of the extra investment return that is expected by investing in assets other than gilts.

Funding ratio

This is the ratio of the value of assets to the funding target.

Funding target

An assessment of the present value of the benefits that will be paid from the scheme in the future, normally based on pensionable service prior to the valuation date. Often, the funding target is equal to the technical provisions.

Guaranteed Minimum Pensions (GMPs)

Most schemes that were contracted out of the State Earnings Related Pension Scheme (SERPS) before April 1997 have to provide a pension for service before that date at least equal to the Guaranteed Minimum Pension (GMP). This is approximately equal to the SERPS pension that the member would have earned had the scheme not been contracted out. GMPs ceased to build up on 6 April 1997 when the legislation changed.

Limited Price Indexation (LPI)

The Pensions Act 1995 required schemes to provide a minimum level of annual increase to pensions in payment. The minimum level is the smaller of 5% and the increase in inflation* and applies to the pension earned from 6 April 1997 to 5 April 2005. With effect from 6 April 2005, the cap for statutorily required LPI for future service was reduced from 5% to 2.5%.

*Until 2010, inflation for the purpose of this minimum was defined with reference to changes in the Retail Prices Index. From 2011, inflation was defined with reference to changes in the Consumer Prices Index.

Appendix 7: Glossary (continued)

Pension Protection Fund (PPF)

The PPF was established with effect from 6 April 2005. The PPF will normally take over the assets of a pension scheme in the event of its employer becoming insolvent and the scheme having insufficient assets to provide the PPF benefits. The PPF will not provide the scheme benefits in full. The PPF is financed by a levy on most defined benefit pension schemes.

The PPF benefits are broadly 100% of benefits for pensioners over normal retirement age and 90% of benefits up to a cap for all other members. Pension increases granted on benefits are at lower levels than apply in many schemes, in particular, benefits earned before 6 April 1997 would not be given any pension increases within the PPF.

Present value

Actuarial valuations involve projections of pay, pensions and other benefits into the future. To express the value of the projected benefits in terms of a cash amount at the valuation date, the projected amounts are discounted back to the valuation date by a discount rate. This value is known as the present value. For example, if the discount rate was 6% a year and if we had to pay a lump sum of £1,060 in one year's time the present value would be £1,000.

Projected Unit Method

One of the common methods used by actuaries to calculate a contribution rate to a scheme.

This method calculates the present value of the benefits expected to accrue to members over a control period (often one year) following the valuation date. The present value is usually expressed as a percentage of the members' pensionable pay. It allows for projected future increases to pay through to retirement or date of leaving service. Provided that the distribution of members remains stable with new members joining to take the place of older leavers, the contribution rate calculated can be expected to remain stable, if all the other assumptions are borne out. If there are no new members however, the average age will increase and the contribution rate can be expected to rise.

Prudent

Prudent assumptions are assumptions that, if a scheme continues on an ongoing basis, are more likely to overstate than understate the amount of money actually required to meet the cost of the benefits.

Recovery plan

Where a valuation shows a funding shortfall against the technical provisions, trustees must prepare a recovery plan setting out how they plan to meet the statutory funding objective.

Appendix 7: Glossary (continued)

Schedule of contributions

Trustee of pension schemes must prepare and maintain a schedule of contributions. This shows the dates and amounts of contributions due from the employer and members. Under the Pensions Act 2004 the schedule must be put in place within 15 months of the valuation date.

The Statement of Funding Principles

The Pensions Act 2004 requires trustees to prepare (and from time to time review and if necessary revise) a written statement of their policy for securing that the statutory funding objective is met. This is referred to as a statement of funding principles.

Statutory estimate of solvency

This is the difference between the market value of a scheme's assets and the estimated cost of securing a scheme's liabilities in the event of the discontinuance of the scheme.

Statutory funding objective

Under the Pensions Act 2004, every scheme is subject to the statutory funding objective, which is to have sufficient and appropriate assets to cover its technical provisions.

Surplus

This is the value of assets less the funding target. If the funding target is greater than the value of assets, then the difference is called a deficit.

Technical provisions

This is the present value of the benefits members are entitled to based on pensionable service to the valuation date, assessed using the assumptions agreed between a scheme's trustees and the company. It generally allows for projected future increases to pay through to retirement or date of leaving service.

Transfer value

Members generally have a legal right to transfer their benefits to another pension arrangement before they retire. In taking a transfer, members give up their benefits in a scheme, and a sum of money (called the transfer value) is paid into another approved pension scheme; this is used to provide pension benefits on the terms offered in that scheme.

Report Framework

This report has been prepared in accordance with the framework below

TAS compliant

'Technical Actuarial Standard R: Reporting Actuarial Information' ('TAS R'), 'Technical Actuarial Standard D: Data' ('TAS D'), 'Technical Actuarial Standard M: Modelling' ('TAS M') and the 'Pensions Technical Actuarial Standard' ('Pensions TAS') apply to this report and the work relating to it, and have been complied with.

The compliance is on the basis that are the addressees and the only users and that the report is only to be used. If you intend to make any other decisions after reviewing this report, please let me know and I will consider what further information I need to provide to help you make those decisions.

The report has been prepared under the terms of the Scheme Actuary Agreement between the Trustee and Aon Hewitt Limited on the understanding that it is solely for the benefit of the addressees.