University of Aberdeen Superannuation and Life Assurance Scheme

Report on the actuarial valuation as at 31 July 2010

TOWERS WATSON

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Throughout this document:

- "Scheme" refers to the University of Aberdeen Superannuation and Life Assurance Scheme
- "Trustees" refers to the Trustees of the Scheme
- "University" refers to the University of Aberdeen and other participating employers.

Further definitions and terms in italics are explained in the glossary (Appendix E).

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Section 1: Summary of main conclusions

Introduction

1.1 This is my report on the actuarial valuation of the University of Aberdeen Superannuation and Life Assurance Scheme as at 31 July 2010. The report is addressed to the Trustees.

1.2 The main purposes of the actuarial valuation are to review the financial position of the Scheme relative to its statutory funding objective, as required under the Pensions Act 2004, and to determine the appropriate level of future contributions.

1.3 The valuation is required under the terms of Part VIII, Rule 14.1 of the Trust Deed and Rules dated 7 January 2010 and Part 3 of the Pensions Act 2004. Both the Trustees and the University have an interest in the valuation process and, as required by law, a copy of this report must be provided to the University. This report has been prepared in accordance with the guidance note GN9 version 9.0 Funding Defined Benefits – Presentation of Actuarial Advice issued by the Board for Actuarial Standards and effective from 1 November 2010.

1.4 This report on the actuarial valuation also falls within the scope of two Technical Actuarial Standards (TASs) published by the Board for Actuarial Standards, *TAS R: Reporting Actuarial Information* and *TAS D: Data*. I confirm that the report complies with these two TASs. However, because it is a 'report of record', and not a report provided with the intention of assisting the Trustees or any other party to make any decisions, the requirements of TAS R are not, in practice, relevant.

1.5 This valuation is based on the *Statement of Funding Principles* prepared by the Trustees, having consulted the University, dated 30 March 2011. The principal conclusions of the valuation are summarised below:

Ongoing funding position

1.6 Past service:

- On the assumptions adopted by the Trustees, having consulted the University, the Scheme had a shortfall relative to its *statutory funding objective* of £15.8 million at the valuation date. This means that the assets of £81.0 million (excluding AVCs) covered 84% of the Scheme's *technical provisions*.

1.7 Recovery plan:

- The Trustees, having consulted the University, have decided that the University will pay additional contributions of 5.8% of Pensionable Salary each year from 1 August 2011 until 31 July 2028. If the assumptions set out in the *Statement of Funding Principles* and the *Recovery Plan* are borne out in practice, the shortfall will be removed within a period of 18 years from the valuation date.

1.8 Future service:

- On the assumptions adopted, the University's basic contribution rate required to fund future benefits for employed members based on the benefit structure in place at the valuation date is 15.8% of Pensionable Salary.

- As of 1 August 2011 future benefit accrual will be based on CARE. The University's basic contribution rate required to fund the revised future benefits as we understand them is 11.7% of Pensionable Salary.

- These rates include a provision of 1.5% of Pensionable Salary for administration expenses, PPF and other statutory levies. They do not include life assurance premiums, which are met directly by the University.

- The University also contributes 7.05% of Pensionable Salary in respect of members participating in the Pensions Plus salary sacrifice arrangements. Other members of the Scheme contribute at this rate themselves.

1.9 The Pensions Act 2004 requires the Trustees, having consulted the University, to prepare a revised *schedule of contributions* following my signing this report. The Trustees will also need to submit the *recovery plan* to the *Pensions Regulator.*

Discontinuance position

1.10 If the Scheme had been discontinued and wound up at the valuation date, there would not have been sufficient assets to secure the accrued benefits through the purchase of annuity policies with an insurer. My estimate of the solvency of the Scheme at the valuation date is 52%. The approach I have followed in making this estimate is specified in Section 4 of this report.

Reporting to members

1.11 The Trustees are required to disclose to members, in a *summary funding statement,* certain outcomes of this actuarial valuation within a reasonable period.

Next actuarial valuation

1.12 The financial position of the Scheme and the level of University contributions to be paid will be reviewed at the next actuarial valuation, which is expected to be carried out as at 31 July 2013. However in the intervening years the Trustees will obtain annual *actuarial reports* on developments affecting the Scheme's assets and *technical provisions.* The first such report as at 31 July 2011 must be completed by 31 July 2012.

David A Gordon
Fellow of the Institute and Faculty of Actuaries
30 March 2011

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The limitations of the investigation

Third parties

I have written this report for the Trustees, as required under Part VIII, Rule 14.1 of the Trust Deed and Rules dated 7 January 2010. I have prepared it to satisfy both the requirements of the Rules and the statutory requirements of section 224 of the Pensions Act 2004. It has not been prepared for any other purpose. As such, it should not be used or relied upon by any other person for any other purpose, including, without limitation, by individual members of the Scheme for individual investment or other financial decisions, and those persons should take their own professional advice on such investment or financial decisions. Neither I nor Towers Watson Limited accepts any responsibility for any consequences arising from a third party relying on this report.

Except with the prior written consent of Towers Watson Limited, the recipient may not reproduce, distribute or communicate (in whole or in part) this report to any other person other than the University or to meet any statutory requirements.

Data supplied

The Trustees bear the primary responsibility for the accuracy of the information provided, but will, in turn, have relied on others for the maintenance of accurate data, including the University who must provide and update certain membership information. Even so it is the Trustees' responsibility to ensure the adequacy of these arrangements. I have taken reasonable steps to satisfy myself that the data provided is of adequate quality for the purposes of the investigation, including carrying out basic tests to detect obvious inconsistencies. These checks have given me no reason to doubt the correctness of the information supplied. It is not possible, however, for me to confirm that the detailed information provided, including that in respect of individual members and the asset details, is correct.

This report has been based on data available to me as at the effective date of the actuarial valuation and takes no account of developments after that date except where explicitly stated otherwise.

Assumptions

The choice of assumptions, as set out in the Scheme's *Statement of Funding Principles* dated 30 March 2011, is the responsibility of the Trustees, having consulted the University, after taking my advice. They are only assumptions; they are not predictions and there is no guarantee that they will be borne out in practice. In fact I would expect the Scheme's experience from time to time, to be better or worse than that assumed. The Trustees and the University must be aware that there are uncertainties and risks involved in any course of action they choose based on results derived from these assumptions.

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Section 2: Background to the valuation

Purposes of the valuation

2.1 The main purposes of the actuarial valuation are to

- review the financial position of the Scheme relative to its *statutory funding objective* as required by section 224 of the Pensions Act 2004, and to determine the level of future University contributions required; and
- examine the extent to which the Scheme's resources would have been adequate to secure accrued benefits if it had discontinued at the valuation date.

Previous valuation and the contributions paid since then

2.2 The previous actuarial valuation of the Scheme was carried out by me as at 31 July 2007. The main results were:

- a shortfall of £5.8 million which meant that the Scheme's assets of £75.7 million were expected to cover 93% of the *technical provisions* as at 31 July 2007. The University has paid additional contributions of 1.3% of Pensionable Salaries since October 2008, which was expected to make good the shortfall over nine years from 31 July 2007 along with an allowance for additional investment returns above the discount rate of 0.85% per annum.
- University contributions to fund future service benefits of 15.8% of Pensionable Salary and 7.05% of Salary Sacrifice members' Pensionable Salary, inclusive of all administrative expenses and Pension Protection Fund levies. Life assurance premiums are paid by the University in addition to these rates.

Scheme benefits valued

2.3 I have valued the Scheme benefits as set out in the Trust Deed and Rules dated 7 January 2010.

2.4 There have been no changes to the Rules in the three years to the valuation date that materially affect the results of the actuarial valuation. The Rules were amended in 2008 to comply with age discrimination regulations. The rules were then consolidated in 2010 although no material changes were made in that exercise.

2.5 In calculating the future service contribution rate I have made allowance for revised benefits as notified to Scheme members in the closing consultation notice dated 17 February 2011. In particular, it allows for the fact that the Scheme will operate on a Career Average Revalued Earnings (CARE) basis from 1 August 2011. In addition, pensions accrued after this date will increase in payment in line with the Consumer Price Index (CPI), subject to a maximum of 5% per annum.

2.6 In valuing the Scheme benefits we make reference to price inflation as measured by CPI following the 2010 announcement that statutory increases to certain benefits will be linked to CPI instead of RPI in the future. Our understanding is that the rate of future pension increases

in deferment should be linked to CPI but, (apart from the increase applied to Guaranteed Minimum Pensions accrued after 5 April 1988, which are also to be linked to CPI) the increases to pensions in payment will not be affected.

2.7 There is still legislative uncertainty about whether the Scheme will need to adjust benefits to counter the effect of unequal Guaranteed Minimum Pensions. In this valuation no allowance has been made for the cost implications of such a requirement.

2.8 I have excluded the assets and corresponding liabilities in respect of pensions wholly secured by annuities with insurance companies.

Membership data

2.9 In order to carry out the valuation, I have obtained detailed information regarding the membership of the Scheme from the administrators. A summary of the data supplied is shown in Appendix A.

2.10 I have taken reasonable steps to satisfy myself that the data provided is of adequate quality for the purpose of the valuation.

Assets

2.11 I have been provided with audited accounts for the period since the previous valuation. The market value of the Scheme's assets (excluding AVCs) was £81.0 million at the valuation date. A summary of the main classes of the Scheme's assets is shown in Appendix A.

2.12 The corresponding market value of assets at the previous valuation date was £75.7 million.

Section 3: The funding position and future contribution requirements

3.1 This part of the actuarial valuation reviews the financial position of the Scheme relative to its *statutory funding objective*. From this assessment we determine the level of University contributions required to meet the funding objectives.

3.2 There are normally three stages to the assessment of the financial position relative to its funding objectives:

- First, we compare the Scheme's assets with the value of the benefits earned in respect of service up to the valuation date (the *technical provisions*);
- If this reveals a shortfall, a *recovery plan* to remove this shortfall with additional University contributions over a suitable period is required;
- Finally, we calculate the cost of the continuing accrual of benefits for employed members after the valuation date, so that the funding plan remains on track.

Funding objectives

3.3 Having considered the support available for the Scheme from the University, the Trustees, having consulted the University, have decided the funding objective for the Scheme, and the method and assumptions for calculating the Scheme's *technical provisions*. These are set out in the *Statement of Funding Principles* dated 30 March 2011, which is included as Appendix C.

3.4 The Scheme's *statutory funding objective* is to have sufficient and appropriate assets to cover its *technical provisions* (ie the amount that the Trustees has determined should be set aside to meet the Scheme's liabilities).

3.5 The *funding objective* has not changed since the last valuation.

Method and assumptions for calculating technical provisions

3.6 The funding method is to determine the discounted capital value of the prospective benefits arising from service completed before the valuation date, including allowance for prospective salary increases for employed members at the valuation date. This is the same method that was used for the last valuation.

3.7 The assumptions for calculating the technical provisions are set out in the Statement of Funding Principles dated 30 March 2011 in Appendix C.

3.8 The key changes to the assumptions since the last valuation are set out below:

- The real discount rate assumption (the anticipated return relative to RPI) has been reduced from 3.1% to 2.7% per annum, which represents a consistent margin over gilt yields;

- An assumption for the Consumer Prices Index (CPI) following the legislative changes outline in 2.6 above. CPI is assumed to be 0.5% per annum below RPI;
- Our calculations allow for salary increases for the next three years to be fixed at 2.0% per annum;
- The allowance for pension increases in payment relative to the price inflation assumption (RPI) has been increased by 0.2% per annum to allow for the long term expected impact of the 3% underpin on pension increases;
- The mortality assumption has been strengthened, reflecting the Scheme's membership profile and updated views on future developments in mortality research following the completion of a postcode mortality study and other analysis;
- In particular, the CMI has produced a model for future improvements in mortality rates and this model has been used for future improvements in post-retirement mortality.

3.9 My investigations revealed that, apart from investment returns, the experience of the Scheme since the last valuation did not vary significantly from the assumptions at that valuation. The investment return achieved on the Scheme's assets was 3.0% per annum over the three year period which compares with 6.2% per annum implied by the assumptions derived for the 2007 actuarial valuation.

3.10 A provision of 1.5% of Pensionable Salary has been made in the contribution rate for administration expenses, PPF and other statutory levies.

3.11 The Trustees hold a group life assurance policy with Canada Life to provide for the lump sum benefits payable on death in service. Since the University meets them directly, the University contribution rates set out in this report are in addition to the premiums payable under this insurance policy.

3.12 As Scheme Actuary I am required to certify that the *technical provisions* were calculated in accordance with section 222 of the Pensions Act 2004. My certificate for this purpose is included at Appendix D.

3.13 Please note that the *technical provisions* are not an estimate of the cost of securing the benefits if the Scheme were to wind up.

Past service – comparing assets with technical provisions

3.14 A comparison of the Scheme's *technical provisions* with the market value of the Scheme's assets is as follows:

Valuation statement as at 31 July 2010	£m
Technical provisions:	
Employed members, in respect of service up to 31 July 2010	35.8
Deferred pensioners	16.6
Pensioners and dependants	44.4

Valuation statement as at 31 July 2010	£m
Total Technical Provisions	96.8
Market value of assets	81.0
Past service shortfall (assets less technical provisions)	(15.8)
Funding level (assets / technical provisions)	84%

3.15 I confirm that, for the purpose of this comparison, the basis for valuing the Scheme's assets is compatible with the basis for valuing its liabilities.

3.16 The figures above compare with a shortfall of £5.8 million, corresponding to a funding level of 93%, revealed at the 31 July 2007 actuarial valuation.

3.17 The main factors contributing to this deterioration in the funding position are shown below:

Reconciliation from 31 July 2007 to 31 July 2010	£m
Shortfall at 31 July 2007	**(6)**
Interest on the deficit	(1)
Investment returns lower than expected	(8)
Contributions in excess of cost of accruing benefits	1
Change in salary increase assumption	4
Change in real discount rate/market conditions	(5)
Change in mortality assumptions	(2)
Miscellaneous experience items	1
Shortfall at 31 July 2010	**(16)**

3.18 It is advisable to monitor the Scheme's finances on a regular basis because movements in the market value of assets can make the funding position volatile. The Trustees are required to obtain annual *actuarial reports* on developments affecting the Scheme's assets and *technical provisions* in years when a formal actuarial valuation is not carried out. The first such *actuarial report* as at 31 July 2011 must be completed by 31 July 2012.

Recovery plan

3.19 As there was a shortfall relative to the *technical provisions* at the valuation date, the Trustees, having consulted the University, must determine a *recovery plan.* This specifies how and by when the *statutory funding objective* is expected to be met.

3.20 The Trustees, having consulted the University, have decided that additional contributions aimed at meeting the deficit by 31 July 2028 will be paid to the Scheme by the University as follows:

- 5.8% of Pensionable Salary each year from 1 August 2011 until 31 July 2028

3.21 The balance of the funding shortfall is expected to be met by investment returns on the Scheme's assets in excess of those assumed in the calculation of the Scheme's *technical provisions.* If the other assumptions are borne out, the required rate of investment return is 0.5% per annum above the increase in the discount rate. This is to be set out in the *recovery plan.*

Future service contribution rate

3.22 The annual University contribution rate required, in addition to members' normal contributions, to cover the accrual of benefits for future service over the year from 1 August 2010 is 15.8% of Pensionable Salary. As noted in 2.5 above, future benefits accrual with effect from 1 August 2011 will be based on CARE. The University's contribution rate from this date will be 11.7% of Pensionable Salary.

3.23 These rates include an allowance of 1.5% of Pensionable Salary for administration expenses, and PPF and other statutory levies. They do not include premiums for insured death benefits as these are paid direct by the University.

3.24 The University contribution rate has been calculated as the rate required, in addition to the member contributions payable, over the year following the valuation date to meet the cost of the benefits expected to be earned over that year. On this basis, this rate will be sufficient, if the assumptions are borne out in practice, to cover the accrual of benefits in the future provided the age, sex and salary profile of the employed membership remains stable which is consistent with the Scheme remaining open to new entrants.

3.1.2 The University also contributes 7.05% of Pensionable Salary in respect of members participating in the Pensions Plus salary sacrifice arrangements. Other members of the Scheme contribute at this rate themselves.

3.1 Members' additional voluntary contributions are payable in addition to the above rates.

3.2 The above contributions are to be set out in the *schedule of contributions*.

Section 4: The position of the Scheme on discontinuance

4.1 This section of the report considers what would happen to the Scheme on discontinuance. This would occur, for example, if the University were to terminate its liability to contribute, or if the University were to go into liquidation.

4.2 If the Scheme were discontinued, employed members would become deferred pensioners with no entitlement to future service benefits. The Scheme would then have liabilities comprising:

- the pensions payable to pensioners and deferred pensioners (and contingent pensions payable to their dependants);
- future increases in the deferred pensions;
- future increases to pensions whilst in payment; and
- future expenses.

4.3 On discontinuance, the Trustees could seek to meet the Scheme's liabilities either by winding up the Scheme or by continuing it as a closed fund. The appropriate approach would depend mainly on the financial position of the University, the level of the Scheme's assets, whether the Scheme would be eligible for entry to the *Pension Protection Fund* (PPF), and whether a buy out of the liabilities would be possible in practice. In paragraphs 4.6 to 4.12 below, I consider a number of possible eventualities.

4.4 If the Scheme had wound up at 31 July 2010, legislation would impose a debt on the University (the "employer debt") equal to the Scheme Actuary's estimate of the full cost of securing all accrued benefits with an insurance company, allowing for expenses, less the value of the Scheme's assets.

4.5 The amount of any such employer debt that would actually be paid would depend on the University's ability to pay what could be a substantial sum of money. The outcome for the Scheme would then depend significantly on whether the University remained solvent or not, as follows.

Discontinuance when the University is solvent

4.6 If the University paid the employer debt in full, all of the Scheme's benefits would be met. The Trustees might then either buy out the Scheme's liabilities immediately or continue to run the Scheme as a closed fund.

4.7 If the Trustees decided to run the Scheme as a closed fund without winding up, the ability to provide members' accrued benefits in full from the assets of the Scheme would depend on future experience, in particular the future investment returns achieved and the longevity of the members. Running the Scheme as a closed fund might be considered appropriate, for example, if the Trustees believe that this approach is likely to produce higher benefits for members or there are practical or financial restrictions on buying out the Scheme's liabilities with an insurance company.

4.8 A decision to run the Scheme as a closed fund might well lead the Trustees to change their investment strategy for the Scheme. For example, the Trustees might reduce the equity content of the investment policy, choosing instead further exposure to financial instruments with lower volatility such as index-linked and fixed-interest bonds.

4.9 Given the size of the Scheme and the associated risks, in particular in relation to investment, it is likely that the Trustees would only decide to run the Scheme as a closed fund for a limited period before deciding to buy out the members' accrued benefits with an insurance company.

Discontinuance when the University is insolvent

4.10 If the University had been, or had become, insolvent, any such employer debt due may have a low or nil rate of recovery. The Scheme would then have been assessed for possible entry to the PPF.

4.11 If the assets were insufficient to secure the benefits at PPF compensation levels the Scheme would be likely to enter the PPF.

4.12 If the full PPF compensation was covered, the Scheme would have been required to wind up and the Trustees could not choose to run it as a closed fund instead. If in practice the Trustees were unable to buy out the benefits, the Scheme would be called a 'closed scheme' under the legislation, but must operate as if it were in wind-up, cutting back benefits where necessary to comply with the *statutory priority order*.

Pension Protection Fund

4.13 The Government introduced the PPF in April 2005 to ensure that members of private sector occupational defined benefit schemes receive compensation (the "PPF compensation") if the scheme sponsor becomes insolvent. The level of compensation provided would not normally be at the full level promised by the Scheme. A summary of the current PPF compensation is provided in Appendix B.

4.14 The Trustees are required by Section 179 of the Pensions Act 2004 to submit routinely an assessment of the Scheme's discontinuance position, based on assumptions specified by the PPF Board and accrued benefit entitlements similar in form to the PPF compensation. The results of the Section 179 valuation for the Scheme as at 31 July 2010 reveal that the Scheme's assets covered approximately 77% of this measure.

4.15 As the level of cover for PPF compensation was less than 100% at the valuation date, the Scheme would have been expected, on discontinuance with an insolvent employer at that date, to enter the PPF, as described in paragraph 4.11. This would mean that the members would receive 100% of the PPF compensation but no other benefits.

Estimate of the solvency of the Scheme

4.16 I am required to provide the Trustees with an estimate of the solvency of the Scheme. Normally, this means an estimate of the level of cover of accrued benefits if the Trustees were to secure (or buy out) the Scheme's liabilities with an insurance company, on the premise that no further contributions would be available from the University.

4.17 To estimate this cost, I have assumed that:

- the funds would have been invested at the valuation date in a portfolio of gilts, matched as far as possible with the liabilities;
- around £4 million of the Scheme's assets would be set aside to cover the expenses of winding up;
- a further reserve would be required for the remaining investment and other uncertainties, which I have allowed for by assuming the investment return on the assets to be 0.1% a year less and 0.7% less than that available on gilts as at 31 July 2010 for the pensioners and non-pensioners respectively. The resulting *discount rate* assumed is 3.3% per annum for non-pensioners and 3.9% per annum for pensioners; and
- other relevant assumptions are as set out in the *Statement of Funding Principles* in Appendix C.

4.18 My estimate of the solvency of the Scheme at 31 July 2010 is that the assets of the Scheme would have met 52% of the cost of buying annuities to meet the accrued benefits at that date. The coverage for particular benefits depends on where they fall in the *statutory priority order*, for which four categories are identified in Appendix B. I estimate that 100% of the benefits in category 1, approximately 70% of the benefits in category 2, and none of the benefits in categories 3 and 4 would have been covered on this basis.

4.19 This figure is only an estimate of the position at the valuation date and should not be relied upon to indicate the position on a future winding up. Changes in market interest rates and in the supply and demand for annuities mean that the actual position at any particular point in time can be established only by completing a buy out.

4.20 The corresponding level of cover at the previous valuation was approximately 68%. The decrease in the estimated buy out cover is due mainly to the investment return achieved on the Scheme's assets being lower than the rate that was assumed and the strengthening in the assumptions used to determine the solvency position.

4.21 The solvency position of the Scheme is expected to improve slightly from the valuation date if the assumptions are borne out in practice and University contributions are paid as set out in Section 3 above. On this basis, at the actuarial valuation due at 31 July 2013, I estimate that coverage will continue to cover 100% of the benefits in category 1 with a marginal improvement in category 2.

Relationship between the technical provisions and the buyout liabilities

4.22 If the *statutory funding objective* had been exactly met on 31 July 2010 (ie there had been no shortfall), I estimate that the solvency of the Scheme would have been approximately 63%.

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Section 5: Sensitivity of the results

5.1 The assumptions used to determine the Scheme's funding and discontinuance positions each represent only one possible scenario of future events. To the extent that the actual experience turns out to be different from the assumptions the financial position of the Scheme will be affected.

5.2 The results of the valuation are especially sensitive to the assumptions made regarding investment returns and longevity.

Sensitivity to investment conditions

5.3 The assumed future investment returns are unlikely to be precisely borne out. The possible variation in outcomes is considerable, particularly given the substantial proportion of the assets expected to be invested in 'return-seeking' assets (eg equities) the value of which may not move in line with the value of the liabilities. The Trustees and the University should therefore be aware of the sensitivity of the results to future investment conditions.

5.4 If future investment returns over the long term are lower than assumed, then other things being equal the cost of providing the benefits will be higher than calculated in this valuation, which means that unless contributions are adjusted to reflect the experience, the funding position of the Scheme will fall short of the expected position.

5.5 To illustrate this we have considered the following examples:

- If bond yields at the valuation date had been lower by 0.5% per annum, with a corresponding impact on the Scheme's bond assets held but without any change in other asset values; or
- If the value of the return-seeking investments, such as equities fell by 20%, assuming no movement in the value of the other assets held and therefore making no allowance for a corresponding adjustment to the assumed *discount rate* for determining the technical provisions.

	Actual funding level at 31 July 2010	Funding level assuming 0.5% pa fall in bond yields	Funding level assuming 20% fall in equity values
Technical provisions	84%	78%	72%
Estimated solvency	52%	49%	45%

5.6 'Catastrophic' investment conditions which would produce significantly worse funding positions than those shown in the above table are also possible.

Sensitivity to mortality experience

5.7 The future financial position of the Scheme is also particularly susceptible to future variations in the mortality experience of its pensioners relative to the assumptions adopted for the valuation. For example, if the long-term improvement trend was 1.5% per annum instead of 1.25% per annum, this would add 0.3 years to the life expectancy of a member currently aged

65 and around 0.7 years to the life expectancy of a member aged 65 in 20 years time. The Scheme's funding level relative to the technical provisions would then fall to approximately 83% at the valuation date.

Appendix A: The information supplied

The information supplied to us for the purposes of the valuation is summarised below; the corresponding 2007 figures are shown for comparative purposes.

Employed members	31 July 2010			31 July 2007		
	Number	Pensionable Salary £m pa	Average age*	Number	Pensionable Salary £m pa	Average age*
Males	236	5.29	50	222	4.71	50
Females	523	9.35	46	444	7.52	47
Total	609	14.64	47	666	12.23	48

Deferred pensioners	31 July 2010			31 July 2007		
	Number	Deferred pension at date of leaving £m pa	Average age*	Number	Deferred pension at date of leaving £m pa	Average age*
Males	153	0.28	52	146	0.26	52
Females	404	0.48	48	395	0.43	47
Total	557	0.76	49	541	0.69	49

Pensioners	31 July 2010			31 July 2007		
	Number	Pension £m pa	Average age*	Number	Pension £m pa	Average age*
Males	293	1.37	74	277	1.10	71
Females	609	1.74	71	574	1.31	70
Total	902	3.11	72	851	2.41	70

*Average age for actives is weighted by salary. Average age for deferred pensioners is weighted by deferred pension and average age for pensioners is weighted by pension.

Assets

According to the audited accounts supplied as at 31 July 2010, the market value of the Scheme's assets was £81.2 million. The market value excluding money purchase Additional Voluntary Contributions (AVCs) funds was £81.0 million.

The assets, excluding AVCs, were invested as follows:

	Market value as at 31 July 2010		Market value as at 31 July 2007	
	£m	%	£m	%
Overseas equities	35.5	44	28.9	38
UK equities	23.0	28	24.9	33
Fixed interest securities	9.9	12	10.3	14
Index linked securities	9.6	12	10.3	13
Cash and net current assets	3.0	4	1.3	2
Total	**81.0**	**100**	**75.7**	**100**

Appendix B: Relevant legislation

Funding requirements

The Pensions Act 2004 replaced the prescriptive statutory funding test (the Minimum Funding Requirement) with a scheme-specific standard for actuarial funding valuations with an effective date on or after 22 September 2005. The legislation was supplemented with regulations and Regulatory codes of practice. This is the second *actuarial valuation* of the Scheme under this funding regime. Central to the funding regime are:

- *Statutory funding objective* – this is a requirement that the Scheme has sufficient and appropriate assets to meet its *technical provisions*. The *technical provisions* mean the Actuary's assessment, calculated on the scheme-specific assumptions determined by the Trustees, of the amount required to meet the Scheme's liabilities as they fall due;

- *Statement of Funding Principles*: this is a document prepared by the Trustees which must set out its policy for ensuring that the *statutory funding objective* is met. That is, it must in particular set out the Trustee's choice of methods and assumptions for determining the Scheme's *technical provisions*, after taking advice from the Actuary. The regulations require the Trustees to consult with the University on the content of the *Statement of Funding Principles*.

The principal purpose of the *actuarial valuation* is to assess whether the Scheme meets its *technical provisions* at the effective date of the valuation, based upon the method and assumptions specified in the *Statement of Funding Principles*. The Actuary has to certify that the calculation of the *technical provisions* at the valuation was in accordance with the prescribed requirements.

It is important to note that the legislation does not require schemes to fund at a level sufficient to meet the buy out cost of the liabilities, or even the buy out cost of the 'protected liabilities' under the *Pension Protection Fund*. The Trustee is required, however, to obtain the Actuary's estimate of the Scheme's solvency position at the effective date of the valuation.

If the valuation reveals that the Scheme does not have sufficient assets to cover its *technical provisions*, the Trustee is required to prepare a *recovery plan* to bring the Scheme back to full funding (ie sufficient assets to cover the *technical provisions*) over a certain time frame. The *recovery plan* must be based upon advice from the Actuary and have regard to the nature and circumstances of the Scheme. The Trustees must also consult the University.

On receiving the report on the *actuarial valuation*, the Trustees, having consulted the University, must prepare a *schedule of contributions* which specifies the contributions to be paid to the Scheme by the members and the University and the dates by which they are required to be paid. This schedule must be certified by the Actuary.

Reporting to members

The Trustees are required to disclose to members, in a *summary funding statement,* certain outcomes of this *actuarial valuation* within a reasonable period.

Pension Protection Fund (PPF)

The Pensions Act 2004 introduced the *Pension Protection Fund* with effect from 6 April 2005. The PPF is intended to ensure that members of private sector occupational defined benefit pension schemes can be assured that they will receive a certain level of compensation if their employer's business fails. That is, on an insolvency event of the employer a pension scheme will be assessed for possible admission to the PPF and if it meets prescribed criteria (in particular, but not limited to, the scheme having insufficient assets to secure the minimum level of benefits on a prescribed actuarial basis) then the PPF will absorb the scheme's assets and provide compensation to members currently as described below:

- For non-pensioner members younger than normal pension age: a deferred pension equal to 90% of the pension built up to date, subject to a maximum amount and payable from normal pension date;
- For non-pensioner members over normal pension age: the full deferred pension;
- For pensioners younger than normal pension age who retired in normal health: 90% of the pension in payment subject to a maximum amount which varies by age;
- For other pensioners and dependants the pension in payment;
- Deferred pensions are increased in line with price inflation (capped at 5% a year) between the assessment date and normal pension age;
- Pensions built up before 6 April 1997 will receive no increases in payment. Pensions built up on or after that date will increase in line with price inflation (capped at 2.5% a year);
- Survivor benefits are provided if they were provided under the Scheme Rules, but at the rate of 50% of the member's benefit.

In the above, normal pension age is essentially the earliest age at which members can receive an unreduced pension under the Scheme rules.

Consequently, the PPF does not in general provide compensation at the same level as the benefits provided by the Scheme.

The PPF is funded through a combination of scheme-based and risk-based levies on UK occupational defined benefit pension schemes; although in the event of it having insufficient funds to meet its liabilities it can decide to reduce the compensation payments. In order for the PPF Board to calculate levies for individual schemes, pension scheme trustees are required under Section 179 of the Pensions Act 2004 to submit routinely an assessment of their scheme's discontinuance position, based on assumptions specified by the PPF Board and accrued benefit entitlements in a similar form to the compensation payments that would be provided by the PPF.

The Government established the PPF Board to oversee the fund and also to collect annual levies from defined benefit schemes to finance its liabilities and its running costs. The government also introduced *the Pensions Regulator*, one of whose roles is to protect the PPF.

Statutory priority orders

Since 6 April 2005, on winding up a scheme, the scheme's benefits must be secured in broadly the following order of priority (after allowing for expenses and any potential debts to third parties):

- Category 1 – benefits relating to certain pension annuities secured by the scheme before 6 April 1997;
- Category 2 – the cost to the scheme of securing the liabilities for pensions and other accrued benefits that would be payable by the PPF (if the scheme were eligible for entry to the PPF);
- Category 3 – benefits in respect of defined benefit AVCs not already covered above (money purchase liabilities are to be excluded from the priority order and should therefore normally be secured in full);
- Category 4 – all other pensions and benefits provided by the scheme, including pension increases (where these exceed those under the PPF).

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Appendix C: Statement of Funding Principles

Introduction

This statement has been prepared by the Trustees of the University of Aberdeen Superannuation & Life Assurance Scheme ("the Scheme") to satisfy the requirements of Section 223 of the Pensions Act 2004, after obtaining the advice of the Scheme Actuary, David Gordon. The Trustees have consulted the University of Aberdeen ("the University") in preparing this statement.

This statement covers the Scheme's statutory funding objective, the principles used in determining that objective, and the policy for securing that it is met. It contains other information required under the Act, and applies to the actuarial valuation as at 31 July 2010.

Statutory funding objective

The statutory funding objective is that the Scheme should have sufficient and appropriate assets to cover its technical provisions and this statement sets out the Trustees' policy for securing that this objective is met.

Method and assumptions

The Trustees having consulted the University have decided that the technical provisions for the Scheme 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 Pensionable Salary increases for those members in active service at that date i.e. the accrued liabilities. This method of calculating technical provisions is defined in the professional actuarial guidance GN26: pension fund terminology as the projected unit method. The contribution rate in respect of the cost of accruing benefits under this method will remain stable provided that the overall membership profile remains stable.

The Trustees, having consulted the University, have further decided that:

- the discount rate used to calculate the capital value of future cashflows will be based on a prudent estimate of the long term return expected on the Scheme's assets. At the 2010 valuation the Trustees determined this by including a margin over index-linked gilts to allow for a prudent level of asset outperformance over a risk free rate.
- the future Pensionable Salary increase assumption for active members will be taken as price inflation plus a margin to be determined after consultation with the University at each valuation.
- future retail price inflation (RPI) will be set by considering the market expectation of future inflation levels. Such expectations are derived by reference to the Bank of England's implied long term inflation statistics appropriate to the term of the liabilities. In addition, an allowance could be made for the 'inflation risk premium'.
- consumer price inflation (CPI) will be set with reference to the retail price inflation (RPI) assumption, adjusting to allow for the different methodologies for calculating the indices, and differences in the goods and services covered.

- the RPI and CPI price inflation assumptions will be used as the basis for determining the pension increase and revaluation assumption, after making suitable allowance for any minimum or maximum increase limits or other features of the Scheme's pension increase policies.

- demographic assumptions will have regard to an analysis of recent changes in the Scheme's membership and those of other schemes with a similar profile and views about how these may change in future.

Taken together, the assumptions derived as described above are prudent given the current investment allocation of the Scheme, and are consistent with the Trustees' desired confidence that assets equal to the technical provisions will prove adequate to meet accrued benefits as they fall due without the need for further contributions from the University.

The Trustees, after consulting with the University, have agreed to adopt the same methodology and assumptions to determine the cost of ongoing benefit accrual in respect of active members as for determining the technical provisions.

Discretionary benefits

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

- Under Part V, Rule 3.4.3 (i), members aged over 60 who retire from the University with its consent with more than five years Pensionable Service may do so with no actuarial reduction being applied. The University will pay special contributions to meet the cost of waiving this actuarial reduction.

- There are a number of further discretions that enable members to convert their benefit from one form into another, but these do not have a material impact on the determination of the technical provisions.

Assumptions as at 31 July 2010

The actuarial assumptions are shown in the appendix to this document.

Expenses

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

Administrative and other non-investment expenses are included within the ongoing contribution rate. An allowance for Pension Protection Fund and other statutory levies is also included within the ongoing contribution rate. The University meets the costs of life assurance premiums in addition.

Assets

The assets are taken into account at their market value at the valuation date excluding money purchase AVC funds. The economic assumptions are set by reference to market conditions at the valuation date, for consistency with the asset valuation.

Eliminating a shortfall

The Trustees having consulted the University have decided that any shortfall of funds below the statutory funding objective should be made good as quickly as is reasonable, taking into account the size of the shortfall and the overall financial position of the Scheme and the University.

The shortfall contributions are assessed using the technical provisions basis, together with an allowance for additional investment returns over the recovery period.

In order to support the Recovery Plan, The Trustees are working with the University to put in place a contingent asset that would become available to the Scheme in the event of a wind-up, or a material adverse effect on the ability of the University to meet its obligations to the Scheme.

Frequency of actuarial valuations

Each actuarial valuation should be made no more than three years after the preceding one. As at each 31 July between valuations the scheme actuary will provide the Trustees with an estimate of the up-to-date financial position of the Scheme relative to the statutory funding objective.

The Trustees recognise that there is likely to be short-term volatility between the value of the assets and the technical provisions, and the updates provided by the scheme actuary will not normally lead to changes in the required contributions ahead of the next valuation unless, after discussion, the Trustees and University agree upon them.

The Trustees, after having considered the scheme actuary's opinion, may call for a valuation if they are of the opinion that events have made it inappropriate to continue to rely upon the results of the previous valuation. The Trustees may wish to consider doing so

- following a request from the University
- if there is a significant fall in the value of the assets
- if there is any event which might have a significant effect upon the University covenant
- if there is a significant change in the membership for any reason.

Arrangements for other parties to make payments to the Scheme

There are no arrangements for a person other than the University or a member of the Scheme to contribute to the assets held by the Scheme.

Paying funding surpluses to the University

The Rules do not include provision for the Trustees to make payments to the University out of funds held unless a surplus exists following the winding up of the Scheme.

Cash equivalent transfer value calculations and policy on reduction

The Trustees will ask the scheme actuary to advise it at each valuation of the extent to which assets are sufficient to provide cash equivalent transfer values to members without adversely affecting the

security of the benefits of other members and beneficiaries. The Trustees' policy is to reduce cash equivalent transfer values paid to members if the scheme actuary advises that the assets are not sufficient to provide cash equivalent transfer values in full to all members, on the method and assumptions adopted for that purpose.

Dates of review of this Statement

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

- within 15 months after the effective date of each actuarial valuation; or
- within a reasonable period after any occasion on which the Pensions Regulator has
  - used its powers to modify future accrual of the Scheme,
  - 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 Trustees may also elect to review, and if necessary revise, this statement at other times.

Date of preparation of statement: 30 March 2011

Signed on behalf of the University:	Signed on behalf of the Trustees:
Signature: [signature]	Signature: [signature]
Print name: Irene Bews	Print name: Brian Paterson
Position: Director of Finance	Position: Trustee
Date: 30-03-11	Date: 31/03/11

Appendix to the statement of funding principles

Actuarial assumptions for the 31 July 2010 valuation

This appendix details the financial and statistical assumptions that are used to calculate the technical provisions for the purposes of the 31 July 2010 actuarial valuation of the Scheme.

Financial assumptions as at 31 July 2010

The Trustees, having taken the advice of the Scheme Actuary and consulted the University, have adopted assumptions for the valuation as at 31 July 2010. These assumptions are as follows.

Financial assumptions as at 31 July 2010	Real % per annum	Nominal % per annum
Discount rate	2.7	5.8
Price inflation (RPI)	-	3.1
Price inflation (CPI)	(0.5)	2.6
Final Salary Benefits		
Pensionable Salary increases[1]	1.5	4.6
Increases to pensions in deferment	(0.5)	2.6
Pension increases	0.2	3.3
CARE Benefits		
Increases to pre-retirement pensions	(0.6)	2.5
Pension increases	(0.5)	2.6

1. For the first three years salary increases of 2.0% pa have been assumed. After three years a long term assumption of 1.0% pa real has been assumed.

Statistical assumptions as at 31 July 2010

The statistical assumptions set out in this appendix are:

- Mortality
- In service statistical assumptions
- Proportion married and age differences of members and dependants
- Normal retirement
- Commutation

Mortality

Mortality is assumed to follow the standard "S1" all pensioners table with a 105% multiplier for males and 100% multiplier for females, based on amounts, projected to the valuation date, using medium cohort improvements. For each individual, the set of mortality rates used is based on the individual's year of birth.

Future improvements in post-retirement mortality rates are anticipated by allowing for the 2009 CMI projection model with long term improvement trend of 1.25% per annum.

In service statistical assumptions

Age	Withdrawal rate		Ill-health retirement		Mortality rates	
	Men	Women	Men	Women	Men	Women
25	90	125	0.3	0.5	0.4	0.3
30	66	105	0.4	1.2	0.5	0.5
35	46	80	1.1	2.1	0.7	1.0
40	27	55	2.0	3.0	1.2	1.8
45	12	30	3.5	4.6	1.9	2.6
50	-	10	6.5	8.7	2.9	3.5
55	-	-	14.1	16.8	4.0	4.0
60	-	-	29.5	33.9	5.8	4.6

Rates are per 1,000 members per year at each age

Proportion married and age differences of members and dependants

The proportion of members assumed to leave dependants eligible for pensions is 90% of males and females at retirement.

Males are assumed to be three years older than their partners and females are assumed to be three years younger than their partners.

Normal retirement

Employees and deferred pensioners who joined the Scheme after 31 July 1994 are assumed to retire at age 65.

Employees in Pensionable Service on 31 July 1994 are assumed to retire at age 62 with unreduced benefits (with the exception of males in this category whose benefits derived from Pensionable Service completed before 17 May 1990 are reduced for early payment).

Deferred pensioners with Pensionable Service over the period 17 May 1990 to 31 July 1994 are assumed to retire at age 60 with unreduced benefits (with the exception of males in this category whose benefits derived from Pensionable Service completed before 17 May 1990 are reduced for early payment).

Deferred pensioners whose Pensionable Service ceased before 17 May 1990 are assumed to retire at age 60 (females) or 65 (males).

Commutation

10% of the member's lifetime pension is assumed to be commuted for an additional lump sum at retirement, based on the Scheme's commutation rates.

Appendix D: Statutory certificate

Actuarial certification for the purposes of regulation 7(4)(a) of the Occupational Pension Schemes (Scheme Funding) Regulations 2005

Name of scheme: **University of Aberdeen Superannuation & Life Assurance Scheme**

Calculation of technical provisions

I certify that, in my opinion, the calculation of the Scheme's technical provisions as at 31 July 2010 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustees of the Scheme and set out in the Statement of Funding Principles dated 30 March 2011.

David A Gordon
Fellow of the Institute and Faculty of Actuaries
30 March 2011

Towers Watson Limited
2 Lochrin Square
96 Fountainbridge
Edinburgh
EH3 9QA

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Appendix E: Glossary

This glossary describes briefly the terminology of the new regime for funding defined benefit pension schemes as introduced by the Pensions Act 2004. Defined terms are in *italics*.

Actuarial report: this is a financial check carried out by the scheme actuary in between *actuarial valuations* to estimate the level of coverage of the *technical provisions*. This financial check is carried out using more approximate methods than for an *actuarial valuation*. The estimates are based upon the assumptions set out in the *Statement of Funding Principles*

Actuarial valuation: this is a financial check carried out by the scheme actuary that assesses whether the assets are sufficient to meet the *funding target*. It also determines the contributions required to meet the target both in respect of benefits built up to date for all members and the benefits that are building up to employed members. The calculations are based upon a number of assumptions.

Discount rate: this is the investment return expected to be achieved on the scheme's assets in the future. The lower the investment return assumed the more cautious the assumption.

Employer covenant: this is the ability and willingness of the sponsoring employer to support the scheme; under the new funding regime the Trustee is required to take this into consideration in making funding decisions.

Funding target/objective: this is a policy to achieve, by the end of a specified period, the minimum amount of assets expected to be sufficient to pay benefits built up to date as they fall due over the lifetime of the scheme. It is usually based on a scenario that requires assumptions to be made about the future.

Pension Protection Fund (PPF): established by the Pensions Act 2004, this provides compensation to members of an occupational scheme in the event that the scheme is wound up with insufficient assets and the employer has gone insolvent.

Recovery plan: this will be drawn up where an *actuarial valuation* discloses that the assets held are less than the *technical provisions*. It sets out the steps to be taken with the aim to ensure there are sufficient assets to cover the *technical provisions* at the end of an agreed period.

Schedule of contributions: this is a document that sets out the agreed contributions payable into a scheme by members and the University and the dates by which such contributions are to be paid. It includes, but is not limited to, contributions agreed under a *recovery plan*.

Statement of Funding Principles: the Trustees are responsible for preparing and maintaining this document (having consulted the University and taking into account the advice of the actuary). It sets out the Trustees' policy for ensuring that the *statutory funding* is met and in particular the method for determining the assumptions for calculating the *technical provisions*.

Statement of Investment Principles: the Trustees are responsible for preparing and maintaining this document. It sets out the policy for investing the Scheme's assets.

Statutory funding objective: every pension scheme is subject to the *statutory funding objective*, which is to have sufficient and appropriate assets to cover its *technical provisions*. The Trustees may establish other funding objectives in addition to the *statutory funding objective*.

Statutory Priority Order: this sets out the order in which the assets of a scheme should be applied in securing the benefits of different members in the event of a wind-up. In broad terms it requires that, after allowing for expenses, a scheme first secures benefits that are in line with those that would be provided by the *Pension Protection Fund* with any remaining assets then being used to secure any other benefits.

Summary funding statement: the Trustees must issue a statement to members following each *actuarial valuation* and each *actuarial report* to disclose the Scheme's funding position and certain other information.

Technical provisions: this is the amount of assets required to make provision for the accrued liabilities of the Scheme. Over the lifetime of the Scheme, this amount is expected to be sufficient to pay all of the benefits built up to date as they fall due, based upon the method and assumptions set out in the *Statement of Funding Principles*.

The Pensions Regulator: the statutory body established with the aim to ensure the security of members' benefits and reduce the claims for compensation from the *Pension Protection Fund*. As part of this role it monitors the funding plans of all occupational defined benefit schemes and has wide ranging powers to ensure these are adequate.

Wind-up*:* a particular method of discharging a scheme's liability to pay benefits. It typically arises where the employer no longer provides financial support to the scheme (for example if it becomes insolvent) and would usually involve using the scheme's assets to buy a policy with an insurance company that pays as much of the scheme's benefits as possible in accordance with the *statutory priority order*.