
STATES OF JERSEY



PUBLIC EMPLOYEES CONTRIBUTORY RETIREMENT SCHEME (PECRS): ACTUARIAL VALUATION AT 31ST DECEMBER 2013 – SCHEME FUNDING REPORT

**Presented to the States on 13th March 2015
by the Chief Minister**

STATES GREFFE

REPORT OF THE CHIEF MINISTER

1. Article 3(3) of the Public Employees (Retirement) (Jersey) Law 1967 (L.11/67) requires the appointment of an Actuary to review the operation of the Public Employees' Contributory Retirement Scheme. Under Regulation 6(1) of the Public Employees (Contributory Retirement Scheme) (General) (Jersey) Regulations 1989 ([Revised Edition chapter 16.650.36](#)), the Scheme's Committee of Management has obtained a report from the Actuary for the period to 31st December 2013.
2. In accordance with Regulation 6(2) of the Public Employees (Contributory Retirement Scheme) (General) (Jersey) Regulations 1989, this accompanying report from the Chief Minister presents to the States the Actuary's report (see **Appendix 1**).
3. The Scheme's Committee of Management and the States Employment Board have formally accepted the report, which was signed by the Scheme's Actuary on 31st October 2014.
4. In particular, the Actuary has concluded that the Scheme had a slight surplus of £92.7 million based on the provisions of the Scheme at the valuation date.

Valuation result

5. The main conclusions from the valuation are that –
 - There is a past service surplus of £93.7 million as at December 2013.
 - The anticipated future contributions are less than the value of future benefits in respect of active members as at 31st December 2013. Assuming the proposed Scheme changes are implemented with effect from 1st January 2016 as planned, the future service deficiency is £1.0 million.
 - Putting these two elements together, the Scheme's overall surplus as at 31st December 2013 is £92.7 million, equivalent to a funding ratio of 105.5%.
6. The Scheme Actuary has highlighted that the funding position is sensitive to changes in market conditions, and that since the valuation date the funding position has worsened. It is, of course, not known whether this worsened funding position will be reflected in the next valuation of the Scheme, but it does highlight the importance of retaining any temporary surplus to offset future adverse experience.

Dealing with a surplus

7. The treatment of any surplus disclosed by a valuation is covered by Regulation 6(3)(a), (b) and (c) of the Public Employees (Contributory Retirement Scheme) (General) (Jersey) Regulations 1989.

- (a) Firstly, full reimbursement will be made to those surviving members who have suffered a reduction in pension increases, excluding those members under the 1967 Regulations and the Former Hospital Scheme Regulations who will have received a top-up payment from their former employer.
 - (b) Secondly, the benefits for all current deferred pensioners, and pensioners, will be restored to the amount that would have applied had the pension increases been equal to the full increase of the Jersey Cost of Living Index.
- 8. Members of the States Assembly may remember that the 2007 valuation disclosed a deficiency of £63.2 million. As there was no agreement between the Chief Minister and the Joint Negotiating Group (JNG) on how to deal with the deficiency, the default position applied and all future pension increases were decreased by 0.3% per annum.
- 9. The 2010 actuarial valuation concluded that the Scheme had a slight surplus of £40.6 million based on the provisions of the Scheme at the valuation date, and where a surplus is disclosed at a valuation, the Regulations governing the Scheme require the Committee of Management to restore any previous reduction or cancellation of increase in pension or deferred pension which has taken effect in the previous 6 years.
- 10. In order to utilise the surplus under the 2010 valuation, the Scheme Actuary calculated that all future pension increases to pensions and deferred pensions due on or after January 2013 should be based on the annual increase in the Jersey Cost of Living less 0.15% per annum.
- 11. The surplus of £92.7 million as at December 2013 will be dealt with in the following way –
 - (a) Firstly, full reimbursement will be made to those surviving members who have suffered a reduction in pension increases paid from the Scheme during 2013 and 2014, excluding those members under the 1967 Regulations and the FHS Regulations who received a top-up payment from their former employer.
 - (b) Secondly, the benefits for all current deferred pensioners and pensioners will be restored to the amount that would have been applied had the pension increases granted on January 2013 and January 2014 been equal to the full increase in Jersey RPI (i.e. assuming the 0.15% p.a. reduction in pension increases had not applied).
 - (c) Finally, future increases in pensions and deferred pensions due on or after 1st January 2015 will be assumed to equal the annual increase in Jersey RPI.

12. The reimbursement of the 0.15% reduction was applied to member benefits in November 2014 in accordance with the Regulations. The surplus remaining after the restoration of pension increases outlined above is £54.6 million, equivalent to a funding ratio of 103.2%.
13. If a surplus remains after the restoration of previous pension increase reductions, then the provisions of the Scheme require the Chief Minister, within 3 months of this report being laid before the States, to submit to the States proposals for disposing of the remaining surplus. The proposals may, with the agreement of the Committee of Management, consist of the following –
 - if the surplus appears to be of a temporary nature, a recommendation that no action be taken;
 - the retention of a surplus no larger than the Actuary advises is a prudent reserve; or
 - an increase in the benefits under the Existing Members Regulations and the New Members Regulations.
14. In the Scheme Actuary's opinion, the surplus at the valuation date should be considered temporary and based on the assumptions consistent with those adopted for this valuation and, after allowing for the restoration of pension increases to the full Jersey RPI level, the Scheme would have a deficiency as at 30th September 2014 if a more up-to-date valuation were being carried out as at that date.
15. The Scheme Actuary therefore recommends the remaining surplus is retained as a buffer against future adverse experience. The Chief Minister is in agreement with this recommendation.

Notes on the Valuation

16. The overall approach adopted for the 2013 valuation was the same as for the 2010 valuation. In particular, the Actuary continued to use best estimate assumptions whereby the future outcome is just as likely to be better or worse than assumed. The rationale for using best estimate assumptions is covered in Appendix 4 of the valuation report. The assumptions adopted for the valuation are described in detail in Appendices 6 and 7 of the valuation report.
17. The Actuary has calculated that over the 3 years since the previous valuation, the main factors affecting the past service funding position have been lower actual pension and salary increases than assumed at the previous valuation and changes to demographic assumptions.
18. At the 2010 valuation, the Scheme Actuary determined that after the partial restoration of the pension increase the Scheme had a past service surplus of £30 million. The past service funding position has improved to £93.7 million over the last 3 years due to –

- Lower pension increases than expected: favourable impact £25 million;
- Lower salary increases than expected: favourable impact £44 million;
- Changes in demographic assumptions: favourable impact £29 million;
- Other demographic experience and other factors: favourable impact £13 million;
- Changes in financial assumptions: adverse impact £34 million;
- Lower investment returns than expected: adverse impact £13 million.

Proposed Scheme Changes

19. The States Employment Board has proposed changes to the Scheme, which include a move to a Career Average Revalued Earnings (CARE) benefit structure. The 2013 actuarial valuation has concluded that there continues to be a contribution shortfall. This shortfall is expected to increase over time. The proposed changes aim to ensure that the Scheme is sustainable, affordable and fair in the long term. The CARE proposals ensure that future service benefits are fully funded by future contributions from the planned implementation date.
20. For the purpose of the valuation, the Scheme Actuary has assumed the changes will be implemented as planned. In particular, he has assumed that future service benefits will be fully funded by future contributions from the planned implementation date. If the proposed changes were not implemented on 1st January 2016, the surplus at the valuation date, based on the best estimate assumptions outlined in the valuation report, would be sufficient to restore pension increases as outlined above. However, the remaining surplus after the pension increase restoration would be reduced by over £30 million.

Employer's Actuary review of the 2013 Valuation

21. Following receipt of the valuation report, the Employer's Actuary was requested to review the assumptions used by the Scheme Actuary and provide comments. Details of the Employer's Actuary review are shown at **Appendix 2** to this report. The Employer's Actuary observations on the valuation results include –
 - The demographic assumptions adopted in the 2013 actuarial valuation appear reasonable, as they reflect local experience and the longevity improvement assumption reflects mainstream actuarial views in that area.
 - The assumptions as a whole are within an acceptable best estimate range.
 - The future service benefits cannot be afforded out of the Employer's contribution rate, and this highlights the need for reform of the Scheme.

- Agreement with the Scheme Actuary's view that, under the best estimate approach used, it is expected the Scheme would be in a shortfall at 30th September 2014 if a valuation had been undertaken at that date based on full restoration of pension increases.
 - The fact that under the current Regulations a surplus that no longer exists at the date the valuation is signed must be used to reinstate pension increases is further evidence of a need for reform of the Scheme.
22. The Employer's Actuary has highlighted that traditionally defined benefit pension schemes, such as PECRS, are costed using prudent rather than best estimate assumptions. All costings for the CARE Scheme have been prepared using prudent assumptions. The Employer's Actuary has confirmed that these prudent assumptions were based on a similar level of prudence as used by the UK public sector schemes. This makes benchmarking with the UK easier, and provides a comparable public service pension scheme required to attract workers from the UK to deliver key front-line services.
23. Importantly, the Employer's Actuary's report included the following conclusions –
- The case for reform is not undermined by the results of the 2013 valuation, or by the recently announced pension changes in the UK.
 - The 2013 valuation has not changed the arguments for a move to a CARE Scheme.
 - Caution is needed to ensure that the level of prudence used in the funding strategy for the CARE Scheme is not diminished to levels which put the stability of the CARE Scheme at risk.
 - Any proposals to materially ratchet back on the proposed provisions of the new Scheme would cause benchmarking issues with the UK Schemes.

Summary

24. The 2013 Valuation report has determined that, using best estimate assumptions, the Scheme has a surplus of £92.7 million at 31st December 2013, and the Regulations therefore require the restoration of previous 0.15% reduction to pension increases.
25. The surplus after restoration of the pension increase was £54.6 million as at 31st December 2013. Since the valuation date, the returns on assets have been below those assumed in the valuation and the funding position has worsened.
26. In the Scheme Actuary's opinion, the surplus at the valuation date is temporary, and therefore recommends the surplus is retained as a buffer against future adverse experience. The Chief minister is in agreement with this recommendation.

27. The future service deficiency as at the valuation date was £1 million. If the CARE Scheme is not implemented on 1st January 2016, the future service liability at the valuation date would be £30 million higher.
28. The 2013 valuation confirms the case for reform of the Scheme. The Employer's Actuary has reviewed the valuation assumptions and confirmed that the case for reform is not undermined by the results of the 2013 actuarial valuation and the arguments for a move to a CARE Scheme have not changed. The Employer's Actuary has also highlighted the need to ensure the level of prudence in the CARE Scheme is not diminished to levels which would put the stability of the CARE Scheme at risk.

Actuarial Report

29. The 2013 actuarial valuation was signed by the Scheme Actuary on 31st October 2014. A copy of every report, signed by the Scheme Actuary, must be laid before the States by the Chief Minister as soon as possible.

Actuarial valuation at 31 December 2013 Scheme funding report

Public Employees Contributory Retirement Scheme
(PECRS)



Prepared for The PECRS Committee of Management
Prepared by Jonathan Teasdale
Date 31 October 2014
Signed

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Executive Summary

The key conclusions from the actuarial valuation at 31 December 2013 are set out below.

There was a surplus of £92.7M based on the assumptions adopted for the valuation

We have carried out a valuation of the Public Employees Contributory Retirement Scheme (the Scheme) as at 31 December 2013. The purpose of the valuation is to review the operation of the Scheme since the previous valuation, and to report on the financial condition of the Scheme and the adequacy or otherwise of the contributions to support the benefits of the Scheme.

Following advice from ourselves, the Committee of Management has confirmed that the assumptions adopted to determine the funding target for the Scheme should be best estimate assumptions. Under best estimate assumptions the future outcome is just as likely to be better or worse than assumed. The rationale for using best estimate assumptions is discussed in Appendix 4.

The main conclusions from the valuation are that:

- There is a past service surplus of £93.7M as at 31 December 2013.
- The anticipated future contributions are less than the value of future service benefits in respect of active members as at 31 December 2013. Assuming the proposed scheme changes are implemented with effect from 1 January 2016 as planned, the future service deficiency is £1.0M.
- Putting these two elements together, the Scheme's overall surplus as at 31 December 2013 is £92.7M, equivalent to a **funding ratio** of 105.5%.

Developments since the valuation date

Since the valuation date, the returns on the Scheme's assets have been below those assumed at this valuation, and the funding position of the Scheme has worsened. The chart below illustrates how the estimated funding position based on pension increases equal to Jersey RPI minus 0.15% p.a. has changed since the valuation date. To illustrate how sensitive the funding position is to changes in market conditions we have also shown how the funding ratio has changed since the previous valuation at 31 December 2010.



It is, of course, not known whether the current worsened funding position will persist until the next valuation. The experience so far, and other future experience up to the next valuation date, will be reflected in the next valuation of the Scheme.

The surplus is sufficient to restore pension increases to 100% of Jersey RPI

The surplus of £92.7M as at 31 December 2013 is based on the provisions of the Scheme at that date and therefore assumes that future increases in pensions and deferred pensions will be based on the annual increase in the All Items Retail Prices Index for Jersey (Jersey RPI) minus 0.15% p.a.. The reduction of 0.15% p.a. was calculated at the previous valuation.

Where a surplus is disclosed at a valuation, the Regulations governing the Scheme require the Committee of Management to restore any previous reduction or cancellation of increase in pension or deferred pension which has taken effect in the previous six years. In accordance with the Regulations, the Committee of Management will therefore apply the surplus as follows:

- Firstly, full reimbursement will be made to those surviving members who have suffered a reduction in pension increases paid from the Scheme during 2013 and 2014, excluding those members under the 1967 Regulations and FHS Regulations who received a top-up payment from their former employer.
- Secondly, the benefits for all current deferred pensioners and pensioners will be restored to the amount that would have applied had the pension increases granted on 1 January 2013 and 1 January 2014 been equal to the full increase in Jersey RPI (i.e. assuming the 0.15% p.a. reduction in pension increases had not applied).
- Finally, future increases in pensions and deferred pensions due on or after 1 January 2015 will be assumed to equal the annual increase in Jersey RPI.

The surplus remaining after the restoration of pension increases outlined above is £54.6M, equivalent to a funding ratio of 103.2%.

The remaining surplus may be retained as a buffer against future adverse experience

If a surplus remains after the restoration of previous pension increase reductions then the provisions of the Scheme require the Chief Minister, within 3 months of this report being laid before the States, to submit to the States proposals for disposing of the remaining surplus. The proposals may, with the agreement of the Committee of Management, consist of the following:

- If the surplus appears to be of a temporary nature, a recommendation that no action be taken;
- The retention of a surplus no larger than the Actuary advises is a prudent reserve; or
- An increase in the benefits under the Existing Members Regulations and New Members Regulations.

Our advice to the Committee of Management is that the remaining surplus of £54.6M is no larger than we would advise is a prudent reserve against future adverse experience.

Furthermore, in our opinion, the surplus at the valuation date should be considered temporary. Based on assumptions consistent with those adopted for this valuation and after allowing for the restoration of pension increases to the full Jersey RPI level, the Scheme would have a deficiency as at 30 September 2014 if a more up-to-date valuation were being carried out as at that date.

We therefore recommend the remaining surplus is retained as a buffer against future adverse experience.

Proposed scheme changes

The States Employment Board has proposed changes to the Scheme which include a move to a Career Average Revalued Earnings (CARE) benefit structure. The proposed changes will ensure future service benefits are fully funded by future contributions from the planned implementation date of 1 January 2016. Further details of the proposed changes can be found on the States of Jersey website.

For the purpose of the valuation, we have assumed the changes will be implemented as planned. In particular, we have assumed that future service benefits will be fully funded by future contributions from the planned implementation date.

Even if the proposed changes were not implemented, the surplus at the valuation date, based on the best estimate assumptions outlined in this report, would be sufficient to restore pension increases as outlined above. However, the remaining surplus after the pension increase restoration would be reduced by the order of £30M.

Actuarial valuation at 31 December 2013

Scheme funding report

Public Employees Contributory Retirement Scheme (PECRS)

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Introduction

This report has been prepared for the Committee of Management. It considers the financial position of the Scheme as at 31 December 2013.

Legislation

In accordance with Article 3(3) of the Public Employees (Retirement) (Jersey) Law, 1967 and Regulation 6(1) of the Public Employees (Contributory Retirement Scheme) (General) (Jersey) Regulations, 1989 we have carried out a valuation of the Public Employees Contributory Retirement Scheme (the Scheme) as at 31 December 2013.

Under the legislation, valuations of the Scheme are required at least once every five years. However, it is the policy of the Committee of Management to require valuations once every three years so as to keep the finances of the Scheme under more frequent scrutiny.

The results of the valuation are based on the Regulations of the Scheme in force at the date of signature of this report.

Purpose

The purpose of the valuation is to review the operation of the Scheme since the previous valuation, and to report on the financial condition of the Scheme and the adequacy or otherwise of the contributions to support the benefits of the Scheme.

Previous valuation

Our previous valuation report dated 23 May 2012 considered the financial position of the Scheme as at 31 December 2010.

Contributions since the previous valuation

Since the previous valuation contributions have continued to be paid at the rates specified in the Scheme's Regulations from time to time. The contributions that have been paid in respect of JPL and JTL employees are set out in Appendix 13 and Appendix 14 respectively.

Next valuation

In accordance with the policy of the Committee of Management, the next valuation is due to be carried out as at 31 December 2016. This valuation will be brought forward if the scheme changes proposed by the States of Jersey are implemented before that date.

Scope of advice

The report is prepared for the Committee of Management. Please see Appendix 1 for further details of the scope of advice.

Words used

Our report includes some technical pension terms. The words shown in **bold print** are explained further in the glossary.

For brevity, we have also used the following shorthand:

Shorthand	What it means
Jersey RPI	All Items Retail Prices Index for Jersey
Regulations	See Appendix 2
Salaries, Service	As defined in the Regulations
Scheme	Public Employees Contributory Retirement Scheme
Valuation date	31 December 2013

Snapshot view

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

Developments since the previous valuation

This section summarises the key developments since the previous valuation.

The financial health of the Scheme depends fundamentally on how much cash is paid in, how well the assets perform, and on what benefits are paid out. The key developments since the previous valuation therefore include:

- The amount of contributions paid to the Scheme.
- The actual returns on the Scheme's investments.
- Whether there are changes to future expectations of benefit payments or investment returns.

These items are discussed later in this report. As well as these high level points, please note the developments below.

Dealing with the 2010 valuation surplus – pension increases partially restored

The valuation as at 31 December 2010 revealed a surplus of £40.6M. This assumed that future increases in pensions and deferred pensions would be based on the annual increase in the Jersey RPI minus 0.3% p.a..

Where a surplus is disclosed at a valuation, the Regulations governing the Scheme require that the Committee of Management restores any previous reduction or cancellation of increase in pension or deferred pension which has taken effect in the previous 6 years. As well as compensating for past reductions to pension increases, the surplus at the 2010 valuation was utilised so that all future increases to pensions and deferred pensions due on or after 1 January 2013 would be based on the annual increase in Jersey RPI minus 0.15% p.a. (subject to review at future valuations).

Pre-1987 debt repayments

The existence of, and arrangements for dealing with the "pre-1987 debt" are covered in the next section.

Prior to the valuation date, Les Amis Incorporated (including Maison Variety), an Admitted Body participating in the Scheme, paid its share of the pre-1987 debt through a lump sum payment of £100,916 on 17 December 2012.

Additional repayments totalling £1M were made by the States in 2013. Further additional repayments have been planned in line with the States Medium Term Financial Plan 2013 – 2015 (MTFP):

- £2M to be paid in 2014; and
- £3M to be paid in 2015, and the same amount in subsequent years, increased in line with the average pay increases of Scheme members who are States employees.

On the assumption that the additional debt repayments under the MTFP outlined above continue to be paid in future, we have advised the Committee of Management that the States' share of the pre-1987 debt would be repaid by 17 July 2053.

Amendments to Regulations

To enable the Scheme to retain its recognition by Her Majesty's Revenue and Customs as a Qualifying Recognised Overseas Pension Scheme (QROPS), the Regulations were amended for Category A uniformed members with effect from 9 February 2011. For members who became Category A uniformed members before 1 March 2009, who have taken a transfer-in from a registered pension scheme in the UK and who retire on or after 9 February 2011, the part of their pension which relates to the transfer-in may not be taken until age 55.

The Scheme Regulations were amended on 20 March 2012 so that benefits may now be provided to surviving civil partners following a member's death.

Amendments have also been made to the Regulations to introduce benefit changes for States of Jersey Prison Officers with effect from 1 February 2013. The key changes being as follows:

- The Normal Retiring Age for States of Jersey Prison Officer members was increased from age 55 to age 60, but the option for certain prison officer members to retire or take a deferred pension from age 50 or from age 55 was preserved; and
- A new category of prison officer member (Category C) was introduced for all prison officers whose employment in the prison service commenced on or after 1 February 2013. Category C members have a Normal Retiring Age of 60, with the option to retire with an actuarially reduced pension from age 55, and an accrual rate of 1/70ths.

A number of other minor amendments have been made to the Regulations but none of these changes have had a material impact on the funding position of the Scheme.

Insurance of death in service benefits

Lump sum death in service benefits have been insured since 1 September 2012.

Proposed scheme changes

The States Employment Board has proposed changes to the Scheme which include a move to a Career Average Revalued Earnings (CARE) benefit structure. The proposed changes will ensure future service benefits are fully funded by future contributions from the planned implementation date of 1 January 2016. Further details of the proposed changes can be found on the States of Jersey website.

For the purpose of the valuation, we have assumed the changes will be implemented as planned. In particular, we have assumed that future service benefits will be fully funded by future contributions from the planned implementation date.

Information used

The information used for the valuation is summarised below.

To carry out the valuation, we have obtained information on:

- The assets held by the Scheme.
- How benefit entitlements are calculated.
- Member data.

This section sets out a high level summary of the information used. Further details are included in Appendices 2, 3, 11 and 12.

Assets

The Scheme's assets had an audited market value of £1,600.8M at the valuation date.

For further details, please see the Asset Data section.

Benefits valued

Members are entitled to benefits defined in the Regulations. We are not aware of any established practice of granting additional discretionary benefits and no allowance for such benefits has been made in this valuation. A summary of the benefits valued is set out in Appendix 2.

Pre-1987 debt

In 2003, agreement was reached between the Policy & Resources Committee (Act of Committee dated 20 November 2003) and the Committee of Management for dealing with the pre-1987 debt. By “pre-1987 debt” we mean the shortfall transferred to the Scheme arising from the changes made to the Scheme in 1987.

The contribution framework agreed between the Policy & Resources Committee and the Committee of Management for dealing with the pre-1987 debt was as follows:

- The employers' overall contributions were increased with effect from 1 January 2002, from 15.16% to the equivalent of 15.60% of members' salaries.
- Of this sum, the equivalent of 2.0% of members' salaries was converted into a cash sum increasing each year in line with the average pay increase of PECRS members employed by the States, payable for 82 years (this stream of payments being earmarked to pay off the pre-1987 debt). On this basis, the employers' contribution rate was re-expressed with effect from 1 January 2002 as 13.60% of members' salaries, plus an appropriately defined indexed cash sum paid over a finite period.
- The employers' contribution rate was due to revert to 15.16% of members' salaries from 1 January 2084.

The provisions of the agreement were reflected in changes to the Scheme's Regulations approved by the States of Jersey on 27 September 2005. Full details of the agreement are included in Appendix 10.

As noted in the previous section, additional repayments have been planned in line with the States Medium Term Financial Plan 2013 – 2015 (MTFP). On the assumption that the additional debt repayments under the MTFP continue to be paid in future, we have advised the Committee of

Management that the States' share of the pre-1987 debt would be repaid by 17 July 2053. For the purpose of the valuation, we have assumed that the pre-1987 debt will be repaid under this revised repayment structure.

Membership data

The valuation calculations use membership data supplied by the Dedicated Pensions Unit of the States Treasury Department at 31 December 2013.

The following chart illustrates how the membership profile (including JTL and JPL active members) is evolving. Please see Appendix 3 for a more comprehensive summary of the data excluding JPL and JTL active members. Summaries of the JPL and JTL active member data are set out in Appendices 11 and 12 respectively.



Note: The number of pensioners shown in the above illustration excludes spouses and dependants.

The illustration shows that there has been an increase in the number of members in each of the membership categories since the last valuation.

Reliability of information

We have carried out general checks to satisfy ourselves that:

- The information used for this valuation is sensible compared with the information used for the previous valuation.
- The results of this valuation can be traced from the results of the previous valuation.

However, the results in our report rely entirely on the accuracy of the information supplied.

Our checks on the data identified that there were some member records missing from the membership figures shown in the Scheme's 2013 Annual Report. The membership figures in this report do not therefore agree with the membership figures shown in the 2013 Annual Report.

Valuation approach

This section describes the approach taken for the valuation calculations.

Adequacy of contributions

The contributions to the Scheme are specified in the Regulations governing the Scheme and are paid so as to provide the benefits which will become payable to members when they retire or otherwise leave the Scheme.

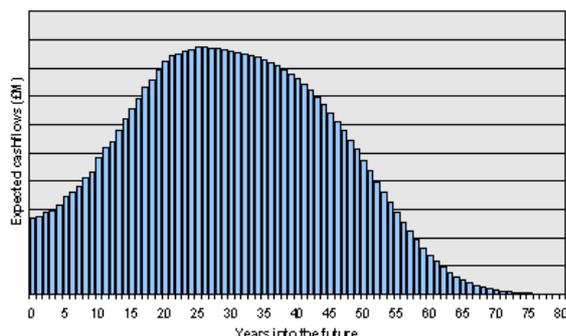
The factors affecting the Scheme's finances are open to changing circumstances. Consequently it is necessary to review the operation of the Scheme from time to time, by means of an actuarial valuation, to determine the adequacy or otherwise of the contributions to support the benefits payable under the Scheme.

Funding target and funding objective

In our review we start with the known facts about the Scheme at the valuation date, i.e. the benefit and contribution structure, the membership and the assets. We then must make assumptions about the factors affecting the Scheme's future finances such as investment returns, pay increases and rates of mortality, leaving service and retirement.

In order to calculate the value placed on the benefits, the benefits paid out by the Scheme are estimated for each year into the future. The estimated benefit payments are then 'discounted back' to the valuation date using an assumed investment return known as the discount rate.

The benefit payments from the Scheme are expected to be made for a very long period and Scheme cashflows are linked to future levels of inflation – the chart below shows the cashflow pattern for a typical pension scheme.



For the purpose of assessing whether the contributions are adequate to support the current benefits, it is appropriate to set a “**funding target**” and “funding objective”.

The terms “surplus” and “deficiency” are referred to in the Scheme's Regulations but are not explicitly defined. In practice, we say there is a surplus if the **funding target** is more than fully met and we say there is a deficiency if the **funding target** is less than fully met.

After receiving and taking account of advice from ourselves as Actuary, the Committee of Management determined the following **funding target** and funding objective:

- The **funding target** is that, based on best estimate assumptions, the assets and future contributions should be sufficient over the long term to support the benefits payable from the Scheme in respect of the current members of the Scheme.

- The funding objective is that the **funding target** should be met and that any variations in outcome should be dealt with following each valuation in accordance with the PECRS Regulations, by adjustments to contributions and/or benefits or by carrying forward surpluses and deficiencies where appropriate.

Under best estimate assumptions the future outcome is just as likely to be better or worse than assumed. The rationale for using best estimate assumptions is discussed in Appendix 4.

For the purposes of assessing suitable assumptions at this valuation, the Committee of Management agreed that the Actuary should make allowance for continued future investment in growth assets, such as equities, by assuming that pre-retirement liabilities will be backed 90% by growth assets and 10% by bond-like assets, and that post-retirement liabilities will be backed $\frac{1}{3}$ by growth assets and $\frac{2}{3}$ by bond-like assets.

Changes from previous valuation

The funding objective is unchanged from the previous valuation although there have been changes to the assumptions used, as discussed below. In particular, the pre-retirement discount rate now assumes that pre-retirement liabilities will be backed 90% by growth assets and 10% by bond-like assets whereas the previous valuation assumed that pre-retirement liabilities would be backed 100% by growth assets. This change has been made to ensure consistency between the **funding target** and the strategic investment benchmark at the valuation date.

The Scheme changes proposed to be implemented with effect from 1 January 2016 will (if enacted), ensure future service benefits are fully funded by future contributions for service from that date. The valuation results therefore consider future service benefits, and future contributions, in relation to service up to the effective date of the Scheme changes (rather than all future service for current active members, as used for the previous valuation).

Valuation methods

A description of the methods used for the main valuation calculations, and for the separate JPL and JTL sub-fund valuations, is set out in Appendix 5. This includes a description of the separate **funding target** and funding objective which apply for the JPL and JTL sub-fund valuations.

Valuation assumptions

The results of a valuation are very sensitive to the assumptions made. The financial assumptions have a significant effect on the results of a valuation. However, the other assumptions, particularly the mortality assumptions, are also very important.

Use of market-led financial assumptions

In both this and the previous valuation of PECRS we have adopted a market-led approach, which involves:

- market-led financial assumptions for valuing the liabilities, future contributions and future pre-1987 debt repayments; and
- valuing the assets at market value.

Key financial assumptions

The following table shows the key financial assumptions used for this valuation, with the assumptions used for the previous valuation shown alongside for comparison. Important points to bear in mind are:

- The differences between the rates have a bigger impact on the results of the valuation than the absolute levels of each assumption.
- The assumptions were derived from market yields at the valuation date to ensure compatibility with the market value of the assets.

We have derived the **discount rates** prior to and after retirement by adding margins of 3.6% p.a. (before retirement) and 1.9% p.a. (after retirement) over the returns available on fixed interest gilts at the valuation date. These margins reflect the Scheme's investment consultant's best estimate at the valuation date of the out-performance the Scheme may obtain through the assets assumed to be held.

The derivation of financial assumptions in this way is compatible with taking assets at market value.

	2013 %	2010 %
Discount rate (investment return):		
▪ For valuing liabilities over the period prior to retirement and for valuing future service contributions	7.3	8.2
▪ For valuing liabilities over the period after retirement	5.6	6.1
▪ For valuing future pre-1987 debt repayments	6.06	6.75
Jersey RPI	3.4	3.8
Increases to pensions in payment and deferred pensions	3.25	3.5
General salary increases (in addition to promotional increases)	4.4	4.8

Full details of the financial assumptions used for this valuation, and the reasons for the changes compared to the previous valuation, are set out in Appendix 6 to this report.

Comparison of financial assumptions with 2010 valuation

Overall (ignoring any changes to the demographic assumptions), the financial assumptions we have used result in a lower surplus than if the assumptions used for the 2010 valuation had been retained. The main reason for this is the reduction in the discount rates (relative to Jersey RPI) used to value the liabilities.

Demographic assumptions

Other important assumptions used to value the liabilities include:

- the assumed future rates of mortality;
- the allowance made for the extent to which members will choose to exchange pension for a cash lump sum at retirement (at the rate of £13.50 cash lump sum for each £1 annual pension given up);
- the allowance for additional increases to salaries due to promotion, service or seniority; and
- the allowance made for the range of ages at which members in each membership category will retire in future.

Comparison of demographic assumptions with 2010 valuation

We have reviewed the extent to which the demographic assumptions adopted for the 2010 valuation of the Scheme remain appropriate for the current valuation as at 31 December 2013 after analysing the experience of PECRS during the 3 years 2011-2013 and taking account of other relevant data. Full details of the demographic assumptions used for this valuation, and the reasons for any changes compared to the previous valuation, are set out in Appendix 7 to this report.

In the light of this review we have made a number of changes to the demographic assumptions. The overall effect of these changes is to increase the surplus. The most financially significant change we have made is to increase the assumed retirement age for non-uniformed members (excluding female members under the 1967 and FHS Regulations) from age 62 to age 63.

General comments on the assumptions

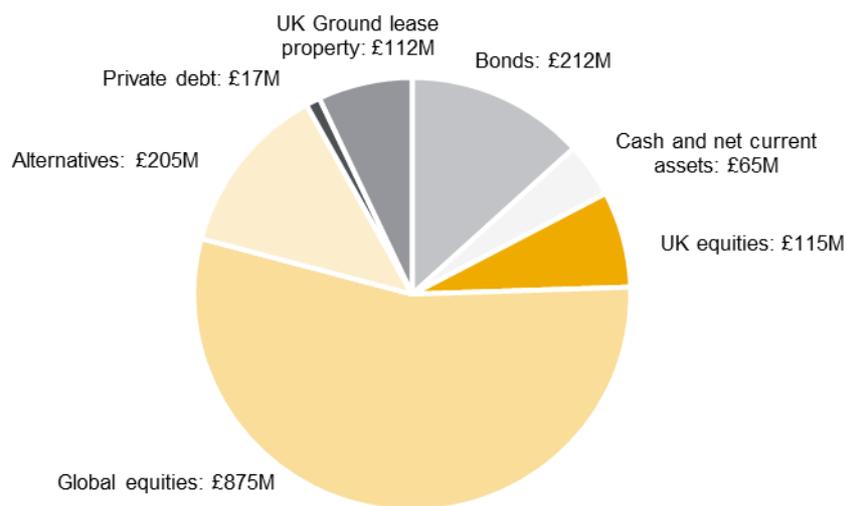
In our opinion, the financial and demographic assumptions, taken as a whole, are an entirely reasonable best estimate basis for assessing the funding of the Scheme.

Asset data

The audited accounts for the Scheme for the year ended 31 December 2013 show the assets were £1,600.8M.

The Scheme's assets are held separately from those of the States of Jersey. The audited Scheme accounts for the year ended 31 December 2013 show its assets as £1,600.8M. This figure covers the whole of the Scheme's assets including those notionally attributable to JPL's and JTL's employees.

The assets can be categorised as follows:



The value of the assets notionally attributable to JTL's and JPL's employees at 31 December 2013 was £38.7M and £25.4M respectively. The scheme also holds insurance policies (not included in the Scheme accounts asset value) which we have valued at £0.4M.

After disregarding the assets notionally attributable to JPL's and JTL's employees and adding the value of the Scheme's insurance policies the value of the Scheme's assets taken into account for the purposes of this valuation was £1,537.1M.

Valuation results

Based on the assumptions set out in the Valuation Approach section, the Scheme surplus at 31 December 2013 is £92.7M, equivalent to a funding ratio of 105.5%.

A detailed breakdown of the results of the main valuation calculations is given below. The results of the JPL and JTL sub fund calculations are set out in Appendices 13 and 14.

	£M
Current actives (excluding JPL/JTL)	642.8
Current deferred pensioners	163.5
Current pensioners	883.3
Value of past service benefits	1,689.6
Value of assets (excluding JPL/JTL asset shares)	1,537.1
Value of future pre-1987 debt repayments	246.2
Total value of assets	1,783.3
Past service surplus / (deficiency)	93.7
Future service surplus / (deficiency)*	(1.0)
Scheme surplus / (deficiency)	92.7
Funding ratio	105.5%

* Relates to service up to 31 December 2015.

The above table shows there is a past service surplus of £93.7M at 31 December 2013.

There is also a future service deficiency of £1.0M covering the period 1 January 2014 to 31 December 2015, i.e. the contributions anticipated from employers and employees over that period are £1.0M less than the value of current members' benefit accrual over the same period.

Putting this together, the overall Scheme surplus at 31 December 2013 is £92.7M, equivalent to a **funding ratio** of 105.5%.

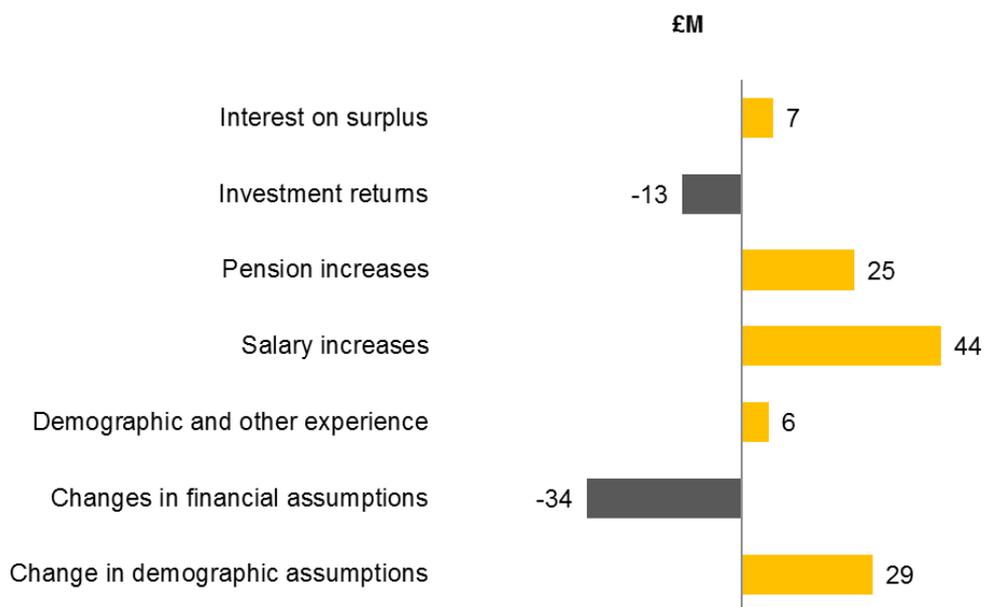
Reasons for change in funding position

The past service funding position has improved from a surplus (after allowing for the partial restoration of pension increases) of £30.0M at 31 December 2010 to a surplus of £93.7M at 31 December 2013.

The partial restoration of pension increases implemented following the 31 December 2010 valuation fully eliminated the surplus at that date. There remained a past service surplus of £30M but this was exactly counterbalanced by a future service deficiency of £30M relating to service of current members over the lifetime of the Scheme.

In this valuation, we make allowance for proposed Scheme changes to take effect from 31 December 2015 and so almost all of the future service deficiency, which would otherwise have arisen at this valuation, falls away.

Focusing on past service in isolation, the chart below shows the key reasons for the change in past service funding position between 31 December 2010 and 31 December 2013.



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

- lower actual pension and salary increases than assumed at the previous valuation; and
- changes in demographic assumptions (in particular, the change to assumed retirement age for non-uniformed members)

These factors have improved the position but have been partially offset by the changes in financial assumptions which have worsened the position.

Discontinuance test

The discontinuance funding ratio at 31 December 2013 is 58%.

Even though the Regulations governing the Scheme do not envisage the Scheme's discontinuance (i.e. the future accrual of benefits and payment of contributions into the Scheme being discontinued), it is our practice at valuations also to review what the financial position of the Scheme would have been had discontinuance occurred on the valuation date. This is done by comparing the value of the basic accrued benefits as at 31 December 2013 with the value of the Scheme's existing assets at that date.

By basic accrued benefits we mean:

- a) benefits in respect of current pensioners and their spouses and dependants;
- b) retirement and death benefits in respect of former employees entitled to deferred pensions;
- c) accrued retirement and death benefits in respect of current members (including JTL and JPL members) based on pensionable pay at 31 December 2013, no allowance being made for pay increases after that date.

We have taken the value of the basic accrued benefits on discontinuance at the valuation date as an estimate of the terms that might be offered by insurance companies for determining the cost of immediate and deferred annuities, plus a provision to cover expenses.

In practice, if the Scheme were ever to be discontinued, it is possible that the Scheme would continue as a closed fund.

Assumptions

In setting the assumptions for the hypothetical discontinuance test we have taken into account actual buy-out terms available in the market at the valuation date. However, we have not carried out a detailed analysis of the cost of risks that might apply specifically to the Scheme and so our estimate is only a guide. Market changes to both interest rates, and demand and supply for this type of business, mean that no reliable estimate can be made, and that ultimately the actual true position can only be established by completing a buy-out.

We have set the **discount rate** for this estimate equal to:

- Current pensioners: the yield on fixed interest gilts of appropriate term at the valuation date.
- Future pensioners: the yield on fixed interest gilts of appropriate term at the valuation date less 0.25% p.a. (this applies over the period before and after retirement).

The allowance we have made for expenses is separate.

We have made an allowance for increases to pensions before and during payment in line with UK RPI. This differs from the provisions under the Regulations governing the Scheme which provide for annual increases in line with Jersey RPI, although lower increases may be paid where an actuarial review has disclosed that the financial condition of the Scheme is no longer satisfactory.

The reason we have not made allowance for increases in line with the actual Scheme increases is that, based on the principles an insurer might use, these would be, at best, extremely expensive, and at worst, impossible to reserve for, as there are no available assets which match the increases in Jersey RPI. Therefore, it is unlikely to be possible to purchase annuities in the market based on the Scheme increases.

More details on the assumptions used for the discontinuance test are set out in Appendix 9.

Discontinuance test results

We have considered the discontinuance position on the assumption that in the event of the Scheme's discontinuance the capitalised value of the outstanding pre-1987 debt contributions would be assessed at the point of discontinuance and would be paid off in full by the States of Jersey at that point or over a period of time. This is consistent with the agreed arrangements for dealing with the pre-1987 debt, as set out in Appendix 10.

The results of the hypothetical discontinuance valuation are as follows:

	£M
Market value of assets	1,601.2
Value of pre-1987 debt	246.2
Total value of assets	1,847.4
Total value of accrued benefits (including expenses)	3,187.5
Discontinuance funding ratio (value of assets / value of accrued benefits)	58%

Even after allowing for the outstanding pre-1987 debt contributions to be paid off in full by the States of Jersey, the Scheme's assets are therefore insufficient to cover the cost of members' discontinuance together with pension increases in line with UK inflation in this hypothetical situation.

Comparison with discontinuance at previous valuation

The discontinuance funding ratio of 58% compares with a corresponding ratio of 58% at the 2010 valuation.

The value of accrued benefits on discontinuance has increased since the last valuation. This reflects an increase in the estimated costs of buying out benefits with an insurance company due to the reduction in gilt yields since the last valuation. The effect on the discontinuance funding ratio of the increase in the value of accrued benefits has been offset by the increase in the value of assets.

Risks and sensitivity analysis

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

This section comments on some of the key risks faced by the Scheme. It concentrates on the deterioration to the Scheme's finances that may arise in various hypothetical downside scenarios (where the actual experience is less favourable than the assumptions made at this valuation).

However, as the assumptions used to determine the **funding target** are best estimate assumptions, it needs to be recognised that upside scenarios (where the experience is more favourable than the assumptions) are just as likely.

Key risks

Here is a recap of some of the key factors that could lead to deficiencies in future:

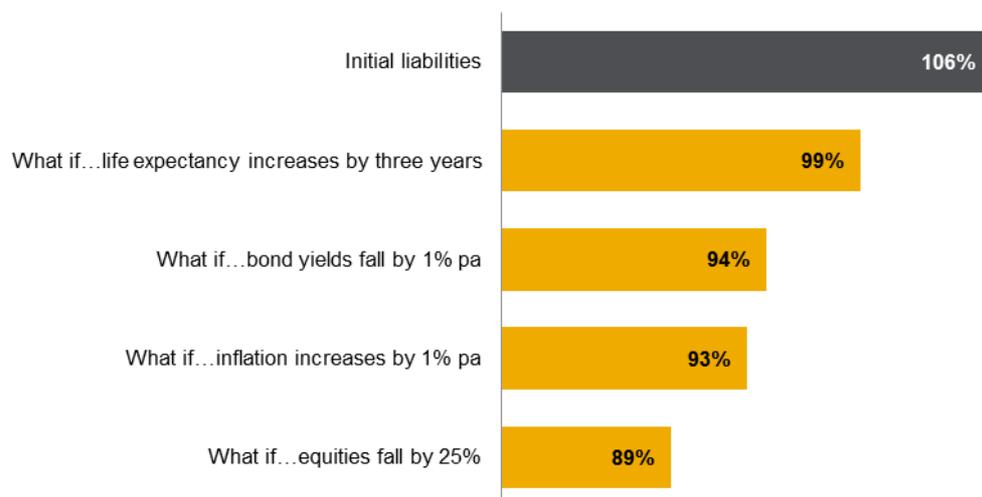
- Investment performance—the return achieved on the Scheme's assets may be lower than allowed for in the valuation.
- Investment volatility—the assets may not move in line with the value of benefits. The Scheme invests in assets (e.g. equities) that are expected to achieve a greater return than the assets (i.e. index-linked gilts and investment grade derivatives) that most closely match the expected benefit payments. The less matched the investment strategy is, the greater the risk that the assets may not move in line with the value of benefits.
- Mortality—members could live longer than foreseen, for example, as a result of a medical breakthrough. This would mean that benefits are paid for longer than assumed, resulting in a higher cost of providing the benefits.
- Options for Members—members may exercise options resulting in unanticipated extra costs. For example, members could swap less of their pension for cash at retirement than is assumed.

Quantifying the risks

To help the Committee of Management understand the susceptibility of the funding position on the valuation assumptions, we have considered the hypothetical impact on the liabilities of the following one-off step changes.

- Life expectancy at age 60 is three years greater than anticipated (with corresponding increases at other ages).
- Yields on both gilts and corporate bonds decrease by 1% p.a. (with no change in equity markets and assuming the anticipated outperformance of the Scheme assets over gilt yields remains the same).
- 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.
- The market value of equities and alternatives falls by 25% (with no change in bond markets).

Please see the chart below for the results.



The accrued benefits position is similarly sensitive to these factors.

The scenarios considered are not “worst case” scenarios, and could occur in combination (rather than in isolation). Opposite step changes, such as what happens if bond yields rise by 1% p.a. for example, would improve the funding position by broadly similar amounts to the reductions identified above.

Investment strategy

The Scheme’s liabilities are influenced by Jersey inflation either directly via pension increases or indirectly via pay increases. The assets that most closely match the Scheme’s liabilities are index-linked gilts and investment grade derivatives. However, a large proportion of the Scheme’s assets are invested in asset classes such as equities which are expected to produce higher returns over the long term than those more closely matching assets.

The Committee of Management recognises the degree of risks, as well as the potential rewards, that this holds for the Scheme. In particular the financial position of the Scheme can be affected by sudden (or gradual) changes in market values of equities and/or changes in bond yields, as illustrated above.

The investment strategy of the Scheme is set by the Committee of Management and is kept under regular review. In particular, the Committee of Management has considered the investment strategy in light of the proposed changes to the Scheme.

Pre-1987 debt repayments

It is important that the pre-1987 debt repayments are made over an appropriate period. In particular, assuming the proposed Scheme changes are implemented, the pre-1987 debt repayments should be made sufficiently early so that they can be treated as an asset backing the liabilities built up prior to the effective date of the proposed changes. This will be the case if additional payments are made in line with the States Medium Term Financial Plan 2013 – 2015 (as set out on page 4 of this report).

Implications

The analysis in this section emphasises that the Scheme is highly susceptible to:

- Equity markets falling, or bond yields falling. This risk arises because the Scheme is not invested in the assets that most closely match the expected future cashflows (i.e. index-linked gilts and investment grade derivatives); and
- Members living longer than expected.

Summary and conclusions

The surplus remaining after the restoration of pension increases to the full Jersey RPI level is £54.6M, equivalent to a funding ratio of 103.2%. We recommend that this surplus is retained as a buffer against future adverse experience.

The headlines at the valuation date are:

- There is a past service surplus of £93.7M.
- The overall surplus, after allowing for the anticipated shortfall in future contributions up to the planned effective date of the proposed Scheme changes, is £92.7M. This corresponds to a **funding ratio** of 105.5%.

The surplus of £92.7M will need to be dealt with in accordance with the terms of the Scheme's Regulations.

Developments since the valuation date

The valuation results reflect the financial position of the Scheme as at the valuation date, 31 December 2013.

Since the valuation date, the returns on the Scheme's assets have been below those assumed at this valuation, and the funding position of the Scheme has worsened.

The chart below illustrates how the funding position based on pension increases equal to Jersey RPI minus 0.15% p.a. has changed since the valuation date. To illustrate how sensitive the funding position is to changes in market conditions we have also shown how the estimated funding position has changed since the last valuation at 31 December 2010 (the chart is based on assumptions consistent with those adopted for the 2013 valuation adjusted for changes in market conditions).



It is, of course, not known whether the current worsened funding position will persist until the next valuation. The experience so far, and other future experience up to the next valuation date, will be reflected in the next valuation of the Scheme.

Dealing with the surplus

The surplus of £92.7M as at 31 December 2013 is based on the provisions of the Scheme at that date and therefore assumes that future increases in pensions and deferred pensions will be based on the annual increase in the Jersey RPI minus 0.15% p.a.. The reduction of 0.15% p.a. was calculated at the previous valuation.

Where a surplus is disclosed at a valuation, the Regulations governing the Scheme require the Committee of Management to restore any previous reduction or cancellation of increase in pension or deferred pension which has taken effect in the previous six years. In accordance with the Regulations, the Committee of Management will therefore apply the surplus as follows:

- Firstly, full reimbursement will be made to those surviving members who have suffered a reduction in pension increases paid from the Scheme during 2013 and 2014, excluding those members under the 1967 Regulations and FHS Regulations who received a top-up payment from their former employer.
- Secondly, the benefits for all current deferred pensioners and pensioners will be restored to the amount that would have applied had the pension increases granted on 1 January 2013 and 1 January 2014 been equal to the full increase in Jersey RPI (i.e. assuming the 0.15% p.a. reduction in pension increases had not applied).
- Finally, future increases in pensions and deferred pensions due on or after 1 January 2015 will be assumed to equal the annual increase in Jersey RPI.

The surplus remaining after the restoration of pension increases outlined above is £54.6M, equivalent to a funding ratio of 103.2%.

If a surplus remains after the restoration of previous pension increase reductions then the provisions of the Scheme require the Chief Minister, within 3 months of this report being laid before the States, to submit to the States proposals for disposing of the remaining surplus. The proposals may, with the agreement of the Committee of Management, consist of the following:

- If the surplus appears to be of a temporary nature, a recommendation that no action be taken;
- The retention of a surplus no larger than the Actuary advises is a prudent reserve; or
- An increase in the benefits under the Existing Members Regulations and New Members Regulations.

Our advice to the Committee of Management is that the remaining surplus of £54.6M is no larger than we would advise is a prudent reserve against future adverse experience.

Furthermore, in our opinion, the surplus at the valuation date should be considered temporary. Based on assumptions consistent with those adopted for this valuation and after allowing for the restoration of pension increases to the full Jersey RPI level, the Scheme would have a deficiency as at 30 September 2014 if a more up-to-date valuation were being carried out as at that date.

We therefore recommend the remaining surplus is retained as a buffer against future adverse experience.

JPL sub-fund

The revised certificate in Appendix 15 sets out the required employer contribution rate for JPL of 8.27% of salaries effective from 1 December 2014. This compares with the rate of 8.14% currently being paid.

The required JPL employer contribution rate of 8.27% of salaries comprises:

- The "standard" contribution rate of 16.70% of salaries which is the rate required to support future service benefits of JPL's current active members over their future working lifetimes in PECRS; less
- An adjustment of 8.43% of salaries to eliminate the past service surplus in the JPL sub-fund over a period of around 10 years.

A revised Actuary's Certificate is included in Appendix 15 to this paper.

JTL sub-fund

The revised certificate in Appendix 16 sets out the required employer contribution rate for JTL of 7.07% of salaries effective from 1 December 2014. This compares with the rate of 7.19% currently being paid.

The required JTL employer contribution rate of 7.07% of salaries comprises:

- The "standard" contribution rate of 14.20% of salaries which is the rate required to support future service benefits of JTL's current active members over their future working lifetimes in PECRS; less
- An adjustment of 7.13% of salaries to eliminate the past service surplus in the JTL sub-fund over a period of around 13 years.

A revised Actuary's Certificate is included in Appendix 16 to this paper.

Appendix 1: Scope of advice

This report is prepared under the terms of the Actuary Agreement dated 26 November 2007 between Hewitt Bacon & Woodrow Limited (now Aon Hewitt Limited) and the Committee of Management, on the understanding that it is for the benefit of the addressees.

Unless prior written consent has been given by 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, Aon Hewitt Limited does not accept or assume any responsibility to anyone other than the addressees of this report.

Appendix 2: Provisions of scheme

Regulations

The Scheme is governed by Regulations made under the Public Employees (Retirement) (Jersey) Law, 1967 (as amended). At the valuation date, the provisions of the Scheme were specified in the following Regulations, namely:

- a) The Public Employees (Contributory Retirement Scheme) (Former Hospital Scheme) (Jersey) Regulations, 1992 (as amended) - known as the FHS Regulations
- b) The Public Employees (Contributory Retirement Scheme) (Jersey) Regulations, 1967 (as amended) - known as the 1967 Regulations
- c) The Public Employees (Contributory Retirement Scheme) (Existing Members) (Jersey) Regulations, 1989 (as amended) - known as the Existing Members Regulations
- d) The Public Employees (Contributory Retirement Scheme) (New Members) (Jersey) Regulations, 1989 (as amended) - known as the New Members Regulations.

In addition, the provisions of the Scheme which are common to each of the above Regulations are specified in the Public Employees (Contributory Retirement Scheme) (General) (Jersey) Regulations, 1989 (as amended) - known as the General Regulations.

History

All members joining the Scheme after 30 August 1989 (1 January 1990 for former members of the Former Hospital Scheme) are subject to the New Members Regulations. However, members joining the Scheme on or before that date were given the following options:

- a) Members who joined the Scheme prior to 1 January 1988 (1 January 1990 for former members of the Former Hospital Scheme) were given the option either to elect for benefits under the Existing Members Regulations or the New Members Regulations, or to remain subject to the 1967 Regulations (FHS Regulations for former members of the Former Hospital Scheme).
- b) New entrants to the Scheme between 1 January 1988 and 30 August 1989 inclusive had the choice of benefits under the Existing Members Regulations or the New Members Regulations.
- c) Special arrangements were made for employees who were not previously eligible for membership of either the Scheme or the Former Hospital Scheme (e.g. part-timers).

Main features

The main features of the Scheme in force at the valuation date are summarised on the following pages where the term “uniformed” members includes members of the Police, Fire, Prison, Airport Fire Service, Port Control Unit, Air Traffic Control and Emergency Ambulance Services.

	1967 or FHS Regulations	Existing Members or New Members Regulations
Normal Retiring Age		
“Uniformed” Members	55 or 60 as appropriate	55 or 60 as appropriate
“Non-uniformed” Members	65 (males) 60 (females)	65 (males <u>and</u> females)
Note: Normal Retiring Age was increased to age 60 for prison officers with effect from 1 February 2013. The existing early retirement options were retained for those prison officers employed before 1 February 2013.		
Average Salary		
	Average salary received during the 3 years prior to retirement	Salary received in best successive 365 days during the 3 years prior to retirement
Normal Retirement Pension		
“Uniformed” Members	1/45 th of average salary for each year of reckonable service <u>Note:</u> “Uniformed” members cannot be subject to the FHS Regulations	<u>Existing Members Regulations</u> 1/45 th of average salary for each year of pensionable service <u>New Members Regulations</u> 1/60 th (or 1/70 th for category C prison officers) of average salary for each year of pensionable service
“Non-uniformed” Members	<u>FHS Regulations (females)</u> 1/80 th of average salary for each year of reckonable service <u>1967 & FHS Regulations (males)</u> 1/60 th of average salary for each year of reckonable service	<u>Existing Members Regulations</u> 1/60 th of average salary for each year of pensionable service <u>New Members Regulations</u> 1/80 th of average salary for each year of pensionable service
Cash at retirement		
	<u>FHS Regulations (females)</u> A tax free cash sum of 3/80ths of average salary for each year of reckonable service <u>1967 & FHS Regulations (males)</u> Not available	Option to exchange up to 25% of commencing pension for a tax free cash sum of £13.50 for each £1 of pension given up.

	1967 or FHS Regulations	Existing Members or New Members Regulations
Optional Retirement	<p>Any time up to 5 years before normal retiring age subject to 10 years' reckonable service</p> <p>Note: Under the FHS Regulations, the prior approval of the employer is required</p>	<p>Generally any time up to 5 years before normal retiring age subject to 10 years' pensionable service, but in certain circumstances special provisions apply</p> <p>Non-uniformed members can retire after age 60 if they have completed 2 years' qualifying service. Members who became Category A members on or after 1 March 2009 may not retire before age 55.</p> <p>Members who are first employed on or after 1 January 2006 who opt to retire before normal retiring age will have their pension reduced by 2.4% for each year the pension is being taken early.</p>
Ill-Health Retirement	<p>Subject to 10 years' reckonable service, immediate benefits on ground of serious ill health or incapacity. Benefits based on reckonable service up to date of retirement only</p>	<p>Subject to 2 years' qualifying service, immediate benefits on grounds of serious ill health or incapacity. Benefits based on enhanced pensionable service in most cases</p>
Death in Service	<p>1. Cash sum – paid to spouse, child, dependant or estate according to circumstances:</p> <p>a) Less than 5 years' reckonable service: a refund of contributions with 3% p.a. interest**</p> <p>b) At least 5 years' reckonable service: one year's current salary or a refund of contributions with 3% p.a. interest**, whichever gives the greater amount</p>	<p>1. Cash sum – paid to spouse, child, dependant or estate according to circumstances:</p> <p>a) Less than 5 years' qualifying service: a cash sum of 2/5ths of current salary for each year of service</p> <p>b) At least 5 years' qualifying service: a cash sum of twice current salary</p>

	1967 or FHS Regulations	Existing Members or New Members Regulations
Death in Service (continued)	<p>2. Widow's Pension</p> <p>Subject to 10 years' reckonable service: 50% of member's pension, based on salary at death and reckonable service to normal retiring age</p> <p>3. Dependant's Pension</p> <p>None</p> <p>4. Children's Pension</p> <p>Subject to 10 years' reckonable service: a flat rate allowance of £100 p.a. (1967 Regulations) or £80 p.a. (FHS Regulations) per child, if there is a widow. If the spouse is also deceased, or on the subsequent death of the spouse, the allowance is £150 p.a. (1967 Regulations) or £110 p.a. (FHS Regulations) per child</p> <p>** less 10%, being the tax levied by the Comptroller of Income Tax in regard to tax relief which may have been enjoyed when the contributions were paid</p>	<p>2. Spouse's Pension (widow/widower/civil partner)</p> <p>Subject to 2 years' qualifying service: 50% of member's pension, based on salary at death and pensionable service to normal retiring age</p> <p>3. Dependant's Pension</p> <p>Subject to 2 years' qualifying service: an amount equal to a spouse's pension may be paid to an adult dependant (male or female) – except that no dependant's pension can be awarded where a spouse's pension is payable</p> <p>4. Children's Pension</p> <p>Subject to 2 years' qualifying service: a pension is payable to each eligible child. The total payable is restricted to the equivalent of the spouse's pension, but no one child may receive more than half of that sum. The child's pension is doubled if a spouse's or dependant's pension is not payable.</p>
Death after Retirement	<p>1. Widow's Pension</p> <p>From date of death, 50% of member's pension</p>	<p>1. Spouse's Pension (widow/widower/civil partner)</p> <p>From date of death, 50% of member's pension, ignoring any reduction for lump sum taken at retirement.</p>

	1967 or FHS Regulations	Existing Members or New Members Regulations
Death after Retirement (continued)	<p>2. Dependant's Pension None</p> <p>3. Children's Pension Provided retirement is due to ill health: a flat rate allowance of £100 p.a. (1967 Regulations) or £80 p.a. (FHS Regulations) per child, if there is a widow. If the spouse is also deceased, or on the subsequent death of the spouse, the allowance is £150 p.a. (1967 Regulations) or £110 p.a. (FHS Regulations) per child</p>	<p>2. Dependant's Pension An amount equal to a spouse's pension may be paid to an adult dependant (male and female) – except that no dependant's pension can be awarded where a spouse's pension is payable</p> <p>3. Children's Pension A pension is payable to each eligible child. The total payable is restricted to the equivalent of the spouse's pension, but no one child may receive more than half that sum. The child's pension is doubled if a spouse's or dependant's pension is not payable</p>
Leaving Service	<p>Refund of contributions with 3% p.a. interest**</p> <p>or</p> <p>subject to 10 years' reckonable service and over age 50 (45 in the case of women and "uniformed" members) a deferred pension (and, for women under FHS Regulations, a deferred cash sum) payable at normal retiring age</p> <p>or</p> <p>a transfer value payable to a new employer's pension scheme or to a personal pension scheme</p>	<p>Refund of contributions with 3% p.a. interest** (not available if joined after 1 August 2000 and left with 2 or more years' qualifying service)</p> <p>or</p> <p>subject to 2 years' qualifying service at any age: a deferred pension payable at age 60 or normal retiring age, if earlier</p> <p>or</p> <p>a transfer value payable to a new employer's pension scheme or to a personal pension scheme</p>
	<p>** less 10%, being the tax levied by the Comptroller of Income Tax in regard to tax relief which may have been enjoyed when the contributions were paid</p>	

	1967 or FHS Regulations	Existing Members or New Members Regulations
Voluntary Early Retirement	Subject to being over age 55 (or 50 in special circumstances) and not being entitled to an immediate pension from the Scheme: the employer may offer a supplementary pension, equal to the member's deferred pension entitlement (which may be enhanced), payable until the date the deferred pension is due, provided that: a) the member has volunteered to retire in consequence of abolition of office, or to make possible the continued employment of another member of staff, or in the interests of efficiency; and b) the employer pays the capital cost of the supplementary pension to the Scheme	
Additional Voluntary Contributions	Not available (except under the FHS Regulations by certain special arrangements made prior to 1 January 1990)	May be paid to purchase extra years of pensionable service
Increases to Pensions	Annual increases in line with the Jersey RPI guaranteed by the States (or the member's former employer). The first increase will be proportionate to the period of retirement in the first year	Annual increases in line with the Jersey RPI, but not guaranteed where actuarial review has disclosed the financial condition of the Scheme is no longer satisfactory. Following the valuation of the Scheme at 31 December 2010, pension increases on or after 1 January 2013 were set equal to the increase in Jersey RPI less 0.15% p.a. The first increase will be proportionate to the period of retirement in the first year.
Contributions by members	6% of salary less a fixed sum of 61 pence per week (women 58 pence per week)	<u>Existing Members Regulations</u> 6.25% of salary <u>New Members Regulations</u> 5% of salary

	1967 or FHS Regulations	Existing Members or New Members Regulations
Contributions by Employers	13.6% of salary***	13.6% of salary***
	<p>*** <i>Except for Admitted Bodies, where the contributions payable are those certified by the Actuary. Additional Contributions are payable to cover the cost of Emergency Ambulance Service benefit improvements, as certified by the Actuary.</i></p> <p>The Employers' contribution rate of 13.6% of salary, together with "pre-1987 debt contributions" required in accordance with the changes to the Scheme's Regulations approved by the States of Jersey on 27 September 2005, is payable until 31 December 2083. After that date, the Employers' contribution rate is due to increase to 15.16% of salary.</p>	
Note:	<ul style="list-style-type: none"> ▪ Category A member means a front line officer of the uniformed services such as the States of Jersey Police Force, the States of Jersey Fire and Rescue Service, the States of Jersey Prison Service, the States of Jersey Airport Rescue and Firefighting Service and the States of Jersey Ambulance Service. ▪ Category B member means a Chief Officer of the States of Jersey Police Force, the Prison Governor, the Chief Fire Officer, the Chief and Deputy Chief of the Airport Fire Service or the Chief or Assistant Chief Ambulance Officer or an Air Traffic Control Officer. ▪ Category C member means a prison officer whose employment in the prison service commenced on or after 1 February 2013. 	

Appendix 3: Membership data

Active members at 31 December 2013 (31 December 2010)

Active members		Number	Average age	Total salaries (£000 p.a.) (see note 1)	Average salaries (£ p.a.) (see note 2 for median)	Average service (years)
Men	2013	2,718	46.1	121,490	44,698	12.7
	2010	2,660	45.9	112,816	42,412	11.9
Women	2013	4,204	45.8	127,883	30,419	8.4
	2010	4,102	45.5	113,130	27,579	7.3
Total	2013	6,922	45.9	249,373	36,026	10.1
	2010	6,762	45.6	225,946	33,414	9.1

Notes:

- 1) Figures shown include actual salaries (not full-time equivalent salaries) for part-timers. Additional data relating to the pensionable allowances which give rise to added years of pensionable service is not included in the salaries shown in this table.
- 2) The average salaries shown in the summary above are mean salaries. The median salary for active members at 31 December 2013 is £31,764 p.a. (£38,968 p.a. for males and £27,671 p.a. for females).
- 3) JTL and JPL members are not included in the 2010 or 2013 summaries.
- 4) Average service includes service credits from transfers-in (but excludes added years arising from additional voluntary contributions).

Deferred pensioners at 31 December 2013 (31 December 2010)

Deferred pensioners		Number	Average age	Total pensions (£000 p.a.)	Average pension (£ p.a.)
Men	2013	848	45.9	5,821	6,864
	2010	635	45.5	4,415	6,953
Women	2013	1,728	46.0	5,700	3,299
	2010	1,235	45.0	3,677	2,977
Total	2013	2,576	46.0	11,521	4,472
	2010	1,870	45.2	8,092	4,327

Note: The pension amounts quoted include pension increases up to and including the following 1 January.

Pensioners at 31 December 2013 (31 December 2010)

Pensioners		Number	Average age	Total pensions (£000 p.a.)	Average pension (£ p.a.)
Men	2013	1,887	70.2	37,128	19,675
	<i>2010</i>	<i>1,709</i>	<i>70.0</i>	<i>31,066</i>	<i>18,178</i>
Women	2013	1,565	69.4	12,527	8,004
	<i>2010</i>	<i>1,250</i>	<i>69.2</i>	<i>9,126</i>	<i>7,301</i>
Dependants	2013	647	71.3	6,124	9,465
	<i>2010</i>	<i>590</i>	<i>69.9</i>	<i>4,950</i>	<i>8,389</i>
Total	2013	4,099	70.1	55,779	13,608
	<i>2010</i>	<i>3,549</i>	<i>69.7</i>	<i>45,142</i>	<i>12,720</i>

Notes:

- 1) The pension amounts quoted include pension increases up to and including the following 1 January.
- 2) "Dependants" consists of spouses, civil partners, children and adult dependants in receipt of a pension.

Breakdown of active members at 31 December 2013 (31 December 2010)

1967 Regulations		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Men	2013	62	56.2	2,344	37,371	30.6
	<i>2010</i>	<i>86</i>	<i>54.9</i>	<i>3,060</i>	<i>35,581</i>	<i>29.1</i>
Women	2013	4	55.5	180	45,018	33.2
	<i>2010</i>	<i>12</i>	<i>57.0</i>	<i>492</i>	<i>41,038</i>	<i>29.7</i>
Total	2013	66	56.2	2,525	38,251	30.8
	<i>2010</i>	<i>98</i>	<i>55.2</i>	<i>3,552</i>	<i>36,250</i>	<i>29.2</i>

Notes:

- 1) The 1967 Regulations do not have provisions for pensionable allowances giving rise to added years.
- 2) All the remaining active members under the 1967 Regulations are non-uniformed, except for 2 men who are entitled to Category A benefits.
- 3) JTL and JPL members are not included in the 2010 or 2013 summaries.
- 4) Average service includes service credits from transfers-in.

FHS Regulations		Number	Average age	Total salaries (£000 p.a.) (see note 2)	Average salaries (£ p.a.) (see note 2)	Average service (years)
Total	2013	9	52.6	324	36,035	28.7
	<i>2010</i>	<i>14</i>	<i>52.8</i>	<i>547</i>	<i>39,049</i>	<i>26.1</i>

Notes:

- 1) All members of the Former Hospital Scheme Regulations are non-uniformed. There is 1 man and 8 women.
- 2) Additional data relating to the pensionable allowances which give rise to added years of pensionable service is not included in the salaries shown in this table.
- 3) JTL and JPL members are not included in the 2010 or 2013 summaries.
- 4) Average service includes service credits from transfers-in.

Breakdown of active members at 31 December 2013 (31 December 2010) (continued)

Existing Members Regulations		Number	Average age	Total salaries (£000 p.a.) (see note 1)	Average salaries (£ p.a.) (see note 1)	Average service (years)
Category A						
- Men	2013	30	50.1	1,732	57,728	26.1
- Women	2013	5	48.8	282	56,408	23.6
- Total	2013	35	49.9	2,014	57,539	25.7
Category B						
- Men	2013	8	50.6	688	86,047	28.5
- Women	2013	-	-	-	-	-
- Total	2013	8	50.6	688	86,047	28.5
Non-uniformed						
- Men	2013	299	55.7	15,233	50,945	26.9
- Women	2013	215	54.7	7,755	36,070	23.2
- Total	2013	514	55.3	22,988	44,723	25.4
Overall						
- Men	2013	337	55.1	17,653	52,382	26.8
	2010	446	53.4	23,180	51,973	26.2
- Women	2013	220	54.6	8,037	36,532	23.3
	2010	306	53.7	10,219	33,395	22.4
- Total	2013	557	54.9	25,690	46,122	25.4
	2010	752	53.5	33,399	44,414	24.6

Notes:

- 1) Additional data relating to the pensionable allowances which give rise to added years of pensionable service is not included in the salaries shown in this table.
- 2) JTL and JPL members are not included in the 2010 or 2013 summaries.
- 3) Average service includes service credits from transfers-in.
- 4) See Appendix 2 for definition of Category A and Category B members.

Breakdown of active members at 31 December 2013 (31 December 2010) (continued)

New Members Regulations (Pre-2006 joiners)		Number	Average age	Total salaries (£000 p.a.) (see note 1)	Average salaries (£ p.a.) (see note 1)	Average service (years)
Category A						
- Men	2013	197	43.8	10,360	52,591	15.0
- Women	2013	58	41.9	2,765	47,680	11.8
- Total	2013	255	43.4	13,126	51,474	14.3
Category B						
- Total	2013	12	39.1	970	80,854	13.3
Non-uniformed						
- Men	2013	1,111	48.8	48,304	43,478	14.6
- Women	2013	2,264	49.1	67,551	29,837	10.5
- Total	2013	3,375	49.0	115,854	34,327	11.8
Overall						
- Men	2013	1,317	48.0	59,396	45,099	14.7
	2010	1,460	46.2	61,107	41,854	12.2
- Women	2013	2,325	49.0	70,554	30,346	10.5
	2010	2,660	47.1	72,398	27,217	8.6
- Total	2013	3,642	48.6	129,950	35,681	12.0
	2010	4,120	46.8	133,505	32,404	9.9

Notes:

- 1) Additional data relating to the pensionable allowances which give rise to added years of pensionable service is not included in the salaries shown in this table.
- 2) There are currently 9 men and 3 women in category B membership.
- 3) JTL and JPL members are not included in the 2010 or 2013 summaries.
- 4) Average service includes service credits from transfers-in.
- 5) See Appendix 2 for definition of Category A and Category B members.

Breakdown of active members at 31 December 2013 (31 December 2010) (continued)

New Members Regulations (Post-2006 joiners)		Number	Average age	Total salaries (£000 p.a.) (see note 1)	Average salaries (£ p.a.) (see note 1)	Average service (years)
CAT A,B&C						
- Men	2013	134	35.3	6,035	45,044	5.2
- Women	2013	48	32.3	1,974	41,119	4.3
- Total	2013	182	34.6	8,009	44,008	5.0
Non-uniformed						
- Men	2013	867	40.8	36,005	41,529	4.0
- Women	2013	1,599	40.3	46,869	29,311	3.2
- Total	2013	2,466	40.5	82,874	33,607	3.5
Overall						
- Men	2013	1,001	40.0	42,041	41,999	4.2
	2010	666	39.0	25,276	37,952	3.1
- Women	2013	1,647	40.1	48,842	29,655	3.2
	2010	1,112	39.0	29,669	26,681	2.4
- Total	2013	2,648	40.1	90,884	34,322	3.6
	2010	1,778	39.0	54,944	30,902	2.7

Notes:

- 1) Additional data relating to the pensionable allowances which give rise to added years of pensionable service is not included in the salaries shown in this table.
- 2) The "Category A, B and C" figures include 7 male and 1 female Category B members and 6 male and 2 female Category C members. All other members are Category A.
- 3) JTL and JPL members are not included in the 2010 or 2013 summaries.
- 4) Average service includes service credits from transfers-in.
- 5) See Appendix 2 for definition of Category A, Category B and Category C members.

Appendix 4: Rationale for best estimate assumptions

Best estimate assumption

Following advice from ourselves, the Committee of Management has confirmed that the assumptions adopted to determine the **funding target** should be best estimate assumptions. The rationale for using best estimate assumptions is discussed below.

Range of assumptions

The results of a valuation are sensitive to the assumptions made and therefore the choice of appropriate assumptions is important.

There is a wide range of assumptions that could be used ranging from optimistic, through best estimate to cautious:

- Under optimistic assumptions the future outcome is more likely to be worse than assumed;
- Under cautious assumptions the future outcome is more likely to be better than assumed;
- Under best estimate assumptions the future outcome is just as likely to be better or worse than assumed.

The Committee of Management has a duty to protect members' benefits. Therefore it would not be appropriate to use optimistic assumptions when determining the adequacy or otherwise of the contributions to support the benefits payable under the Scheme.

This leaves a choice of assumptions in the range from best estimate to cautious. The more cautious the valuation assumptions, the greater the valuation liabilities will be and consequently the greater the possibility of members' benefits or future pension increases having to be cut back (or members' or employers' contributions having to be increased) if there is a deficiency.

Advantages of using best estimate assumptions (and disadvantages of using more cautious assumptions)

The advantage of using best estimate assumptions is that it complies with the principle of only cutting back on the members' pensions where this appears genuinely necessary.

Using more cautious assumptions would lead to a larger deficiency, which may potentially trigger reductions to benefits or future pension increases (or increases to members' or employers' contributions). In the long term, given the extra returns targeted under the Scheme's investment strategy, there would be quite a high probability that experience would prove more favourable than assumed, leading to surpluses at later valuations. Therefore, using more cautious assumptions may result in cutting back benefits (or increasing contributions) in a way that with hindsight was unnecessary.

Disadvantages of using best estimate assumptions (and advantages of using more cautious assumptions)

The disadvantage of using best estimate assumptions is that it leads to a larger chance of actual scheme experience being worse than assumed than if more cautious assumptions are used. This increases the likelihood of deficiencies arising at later valuations which have to be dealt with through future reductions in benefits, or by increasing members' or employers' contributions. If experience is

adverse, the reductions in benefits (or increases in contribution) eventually required may need to be bigger at that time than if they had been made earlier (and therefore impacting disproportionately on a later “generation” of members). Although there is no provision in the Regulations for the Scheme to be discontinued, this could be particularly problematic if the Scheme were discontinued. It could be equally problematic if the financial strength of the States of Jersey were to become poor. Significant benefit reductions may be required in such situations.

A further potential disadvantage of using best estimate assumptions is that it involves anticipating a degree of outperformance from growth assets, which may limit the Committee of Management’s scope to reduce the Scheme’s investment allocation to growth assets in future.

Recommendation

Following advice from ourselves, the Committee of Management has confirmed that the assumptions used to determine the **funding target** should be best estimate because:

- It complies with the principle of only cutting back on members' pensions where this appears genuinely necessary, and
- The Committee of Management does not currently consider the financial strength of the States of Jersey to be poor.

Appendix 5: Valuation method

Valuation method

The valuation method for the main valuation calculations is known as the “aggregate funding” method. To establish whether the **funding target** is met, we have compared the value of the benefits payable in respect of all current members (including pensioners and deferred pensioners), based on service over the period until the proposed Scheme changes are planned to be implemented, with the sum of the following:

- the value of the Scheme’s existing assets
- the value of the future pre-1987 debt repayments (assumed to be paid by the States over the period up to 17 July 2053 and by the Admitted Bodies employers over the period up to 31 December 2083)
- the value of future contributions due from and in respect of current active members over the period until the proposed Scheme changes are planned to be implemented.

This approach involves taking credit for the future pre-1987 debt repayments anticipated over the periods set out above.

Value of liabilities and future contributions

To calculate “the value” of the benefits payable we use our assumptions to estimate the payments which will be made from the Scheme throughout the future lifetimes of current members, pensioners, deferred pensioners and their dependants. We then calculate the amount of money which, if invested now, would be sufficient to make these payments in future, using our assumptions about investment returns. The same technique is adopted to value future contributions to the Scheme.

Value of assets

We have taken the assets into account at their market value.

Value of insurance policies

The insurance policies that were transferred from the Former Hospital Scheme at the end of 1992 have been valued in the same way as the corresponding liabilities, by calculating the discounted value of the anticipated payments. The value of insurance policies valued in this way amounts to £0.4M.

JPL / JTL valuation method

The funding objective used for the valuation of the JPL and JTL sub-funds is the objective set out within the Terms of Admission Document for JPL and the Terms of Participation Document for JTL. Because of the requirements of these documents, the funding objective is different to that used for the main valuation of PECRS as at 31 December 2013.

The funding objective prescribed within the Terms of Admission and Participation Documents is that the assets held in the relevant sub-fund should be sufficient to meet the "Employer’s funding target". The "Employer’s funding target" is the liabilities attributable to the sub-fund's current active members based on pensionable service up to the valuation date calculated on the actuarial assumptions adopted for the main valuation of the PECRS. The funding target includes full allowance for projected future salary and pension increases in accordance with the actuarial assumptions.

We have determined the employer's contributions as:

- A standard contribution rate sufficient to support future service benefits for the current active members; plus
- An allowance to cover the sub-fund's share of the future administration expenses incurred by the Scheme; plus
- An adjustment to reflect any excess or shortfall in the sub-fund relative to the funding target. The objective of this adjustment is to bring the assets of the sub-fund into line with the funding target over the average expected future working lifetime of the sub-fund's current active members.

The adjustment will be either to reduce the employer's contributions if there is an excess in the sub-fund relative to the funding target or to increase the employer's contributions if there is a shortfall in the sub-fund relative to the funding target.

This method for determining the employer's contribution rate is consistent with the requirements of the Terms of Admission and Participation Documents.

The employer's contribution rate for JPL and JTL will remain stable if the funding objective and assumptions remain unchanged, there are no new entrants to the sub-fund and all assumptions made are borne out in practice. In practice, to the extent that experience is not in line with the assumptions, the contribution rate is likely to change.

If there are new entrants to the sub-funds then we would expect the profile of the membership to change, with a higher proportion of the members being subject to the New Members Regulations, resulting in a decrease in the contribution rate over time.

Appendix 6: Financial assumptions

Introduction

In this appendix we describe the financial assumptions. The financial assumptions that have been chosen are consistent with the **funding target** and each assumption is intended to represent a reasonable best estimate of the future.

When assessing a set of financial assumptions, greater importance should be attached to the relative differences between the assumptions, rather than to the individual assumptions in isolation. This is because the differences have a greater effect on the results of the valuation than the absolute values of each assumption.

Discount rate (investment return)

The most important individual assumption in terms of its impact on the overall valuation results is the choice of **discount rate**, i.e. assumed future investment returns. The discount rate is used to value payments due out of the Scheme (benefit payments) and into the Scheme (future contributions and pre-1987 debt repayment instalments).

For valuing the liabilities, an assumption which could be described as “low risk” would be to discount future benefit payments at the market yields available on index-linked gilts at the valuation date. This approach recognises that a good matching asset for the Scheme’s cash flows is obtained by investing in index-linked gilts of appropriate term.

It is common for UK occupational schemes to adopt a **funding target** which incorporates a higher discount rate than the returns available on gilts. The consequence of using a higher discount rate is that a lower **funding target** is adopted. This does not mean that the actual cost of providing the benefits is reduced, but it does result in an increase in disclosed surpluses or decrease in disclosed deficiencies.

The **funding target** adopted requires that the assumptions chosen should be reasonable best estimates. In principle, we need to set the discount rate at this valuation by considering the best estimate returns available on the Scheme's invested assets, over the period starting now and ending in the long-term future. The expected returns depend critically on what asset classes are assumed to be held.

The Scheme's investment consultants have supplied their best estimate of investment returns over the next 10 years as at 31 December 2013. For the purposes of assessing suitable assumptions, the Committee of Management has agreed that the Actuary should ensure consistency with the current return on the strategic investment benchmark, by assuming that pre-retirement liabilities are backed 90% by growth assets and 10% by bond-like assets and that post-retirement liabilities are backed $\frac{1}{3}$ by growth assets and $\frac{2}{3}$ by bond-like assets. This differs in one respect from the previous valuation, where it was assumed that pre-retirement liabilities were backed 100% by growth assets. The change has been made in order to ensure consistency between the **funding target** and the strategic investment benchmark at the valuation date.

For this valuation we have derived discount rates using a reference gilt yield equal to the single fixed interest gilt yield that would give approximately the same value of liabilities as using the full Aon Hewitt fixed interest gilt yield curve, which is 3.7% p.a. This differs from the previous valuation where the reference gilt yield used was the fixed interest gilt yield at a duration of 20 years (which is approximately equal to the mean term of the liabilities).

For valuing the liabilities, we have used discount rates for this valuation at the following levels:

- reference gilt yield plus 3.6% p.a. for the period prior to members' retirement; and
- reference gilt yield plus 1.9% p.a. for the period after members' retirement;

where the reference gilt yield is the single fixed interest gilt yield that would give approximately the same value of liabilities as using the full Aon Hewitt fixed interest gilt yield curve.

These margins reflect the Scheme's investment consultant's best estimate at the valuation date of the out-performance the Scheme may obtain through the assets assumed to be held.

For valuing future contributions, we have used a discount rate of the reference gilt yield plus 3.6% p.a.. This is consistent with the discount rate used for valuing the liabilities over the period prior to members' retirement.

For valuing pre-1987 debt repayments, we have used a discount rate of 2.36% p.a. more than the reference gilt yield. This is the discount rate that would give the same liabilities as the above pre-retirement/post-retirement discount rate approach. We have also assumed that the debt repayments increase in line with general salary increases plus allowance for promotional increases.

Increases to pensions in payment and deferred pensions

Following the 2010 valuation, the Scheme provides for annual increases to pensions in payment and deferred pensions in line with increases in the Jersey RPI less 0.15% p.a..

The Bank of England produces data, based on UK fixed and index-linked gilt markets, which can be used to calculate market-implied ("break-even") UK RPI inflation. At 31 December 2013, the single break-even UK RPI inflation assumption that would give approximately the same value of liabilities as using the full Aon Hewitt UK RPI curve is 3.65% p.a..

Aon Hewitt's view is that at the valuation date, break-even inflation over the duration of the liabilities overstates likely inflation over that period, due to supply/demand distortions in the gilt market. Our best estimate is that actual inflation over the duration of the liabilities will be around 0.25% p.a. below break-even inflation (this difference is called an "inflation risk premium"). We have allowed for this in the valuation.

We have therefore assumed increases in UK RPI inflation will be 3.40% p.a..

In deciding on an appropriate assumption for Scheme increases, it is necessary to take a view on the likely relationship between Jersey RPI inflation and UK RPI inflation.

Over the period since 1990 there have been periods where Jersey RPI inflation has been considerably higher than UK RPI inflation. However, the gap between UK and Jersey RPI has continued to fall and, in recent years, the 5 year average of Jersey RPI has been lower than the 5 year average of UK RPI.

Given that the two economies have a tied currency and the same interest rates, our view is that over the medium to long term, Jersey inflation can be expected to be fairly close to UK inflation. In light of recent experience, we have assumed for this valuation that Jersey RPI inflation will on average be equal to UK RPI inflation (due to the difference in methodologies for calculating RPI in Jersey and the UK, this is consistent with assuming that underlying inflation in Jersey will be a little higher than in the UK). This differs from the previous valuation when we assumed that Jersey RPI inflation would be 0.25% p.a. higher than UK RPI inflation.

General salary increases

In recent years, States pay awards have generally been at or below Jersey RPI and the long-term difference between general salary increases and Jersey RPI, measured over the period 1991 to 2013, has fallen to around 0.7% p.a.. However, this has been heavily influenced by experience in the past 4-5 years where increases in RPI have tended to exceed increases in average earnings.

On the basis that recent experience may not be representative of the long-term future we have retained an allowance for general salary inflation of 1% p.a. above Jersey RPI, in line with the assumption adopted for the previous valuation.

Promotional salary increases

In addition to the allowance for general salary increases, an explicit age-related promotional scale was adopted at the 2010 valuation (the same scale for males as for females).

Based on our analysis of Scheme experience, our view is that the overall allowance made in the 2010 valuation for salary increases remains reasonable.

The allowance included for promotional salary increases (in addition to general salary increases) at specimen ages is:

Age	Promotional salary increases
20	7.1% p.a.
25	5.3% p.a.
30	4.2% p.a.
35	1.8% p.a.
40	0.0% p.a.

Expenses

Excluding investment-related expenses (which are taken into account in the net investment return assumption), we have analysed the expenses of administering the Scheme during 2011-2013 and compared this with the assumption of 0.6% of salaries adopted at the 2010 valuation. Our analysis confirms that the 2010 valuation assumption remains appropriate.

Appendix 7: Demographic assumptions

Introduction

In this appendix, the demographic assumptions are described and we comment on how they compare with actual experience. The demographic assumptions that have been chosen are consistent with the **funding target** set out in the “Valuation approach” section of this report and each assumption is intended to represent a reasonable best estimate of the future.

Mortality rates before retirement

For mortality before retirement we have compared the mortality experience of the Scheme over the period 2008-2013 against expected rates of mortality based on the tables used for the 2010 valuation, which were 75% of the standard tables AM92 for males and AF92 for females. The experience analysis suggested that the actual number of deaths over the six year period has been consistently lower than assumed.

We have therefore assumed mortality in line with 70% of the standard tables AMC00 for males and AFC00 for females (for comparison with the 2010 valuation assumptions, these assumptions are broadly similar to 55% of AM92 / AF92).

Mortality rates after retirement – current mortality rates

We have analysed the mortality experience of the Scheme over the three year period from 1 January 2011 to 31 December 2013. We have set out below the ratio of actual deaths to expected deaths over the period (weighted by pension amount), with expected deaths based on the SAPS S1 standard tables (used for the 2010 valuation) and the new SAPS S2 standard tables. We also show an approximate 90% confidence interval—this provides an indication of the result's statistical credibility.

Mortality assumption	Males	Females
100% of SAPS S1 "All lives"	108% ± 19%	109% ± 21%
100% of SAPS S2 "All lives"	108% ± 19%	105% ± 20%

We have also had regard to experience over the previous three year period to 31 December 2010 which was similar to that shown for males (around 110% of the rates assumed under SAPS S1 "All lives" tables) but mortality rates were lower than assumed for females (around 90% of the rates assumed under SAPS S1 "All lives" tables).

Taking account of experience over the six years to 31 December 2013, we have assumed current mortality rates in line with the SAPS S2 "All lives" tables (S2PXA) with 100% scaling factor.

Mortality rates after retirement – allowance for future improvements

It is not straightforward to make an assumption about future rates of mortality improvement. In forming a best estimate assumption, we believe it is appropriate to have regard to:

- Current trends;
- Long-term trends;
- Observed generational differences, which suggest faster improvements within certain generations of pensioner (known as the cohort effect); and
- The outlook for future medical advances.

However, the allowance made must inevitably be subjective.

We have reviewed the continuing appropriateness of adopting "UK-based" improvement assumptions for a Jersey-based scheme. Our conclusion is that there is no reason not to continue using "UK-based" improvement assumptions, particularly given that Jersey population projections allow for future improvements in mortality in line with the improvements assumed for the UK population projections.

In determining an allowance for future improvements in life expectancy, it makes sense to consider the near future and longer term separately:

- Recent improvements in life expectancy are likely to be the best guide for what will happen in the near future and so improvements in the near future are best modelled by continuing recent trends.
- The forces driving longer term improvements may be very different to those behind recent improvements. This means that the assumption for long-term improvements is more subjective and should take into account analysis of historic long-term rates of improvements (and what has caused them) as well as opinions on what might happen in the future.

In November 2009, the Continuous Mortality Investigation (CMI), a group set up by the UK Actuarial Profession, published its Mortality Projections Model. The model uses complex methods for taking recent rates of mortality improvements and blending these to the long-term rate of improvements. The latest annual update to the model was published in September 2013. Projections from the 2013 version of the CMI's model are known as the 'CMI_2013' projections.

Apart from the long-term rate of improvements, the CMI has provided default values for the model inputs which are known as the 'Core Projections'.

Our analysis suggests that future long-term improvements in mortality rates of between 1.0% p.a. and 2.0% p.a. for both men and women may be considered reasonable.

We have therefore assumed future improvements in mortality rates in line with the CMI_2013 Core Projections with a long-term rate of future improvements in mortality rates of 1.50% p.a..

Retirement in normal health

We have assumed that active members will retire at the ages set out in the following table:

Membership category	Normal retiring age	Assumed age at retirement
Category A members (male & female)	55	53*
Category B and C members (male & female)	60	58
Non-uniformed male members	65	63
Non-uniformed female members:		
- Existing and New Members Regulations	65	63
- 1967 and Former Hospital Scheme regulations	60	59

* Except post 1 March 2009 entrants to category A status who are assumed to retire at age 55.

The analysis of the retirement experience over the period 2011-2013 for the uniformed membership categories shows the average retirement ages over the period 2011-2013 to be in line with the assumptions adopted for the 2010 valuation.

For non-uniformed members (excluding females who fall under the 1967 and Former Hospital Scheme Regulations) experience over the last 3 years suggests increasing the assumed retirement age for these members from 62 to 63. Furthermore given the increase in pension age under the proposed Scheme changes we might expect members to retire later in future, assuming the proposed changes are implemented.

There have been only 7 retirements of non-uniformed females who fall under the 1967 and Former Hospital Scheme Regulations so we have retained the assumption used for the 2010 valuation.

Retirement in ill-health

An explicit allowance has been made for retirements in ill-health.

Over the period 2011-2013, the overall levels of ill-health retirement across the non-uniformed membership have been slightly higher than those implied by the assumptions adopted for the previous valuation. Experience over the 3 years prior to the 2010 valuation was similar to the 2010 valuation assumptions. Having regard to the last 6 years' experience, we have retained the 2010 valuation assumptions for this valuation.

The analysis for the uniformed membership categories suggests that the assumptions adopted for the 2010 valuation remain appropriate.

Specimen rates of retirement due to ill-health assumed at this valuation are set out below:

Age	Number leaving service each year per thousand members at age last birthday as shown	
	Uniformed members	Non-Uniformed members
30	2.60	0.33
35	2.96	0.37
40	4.60	0.58
45	8.28	1.04
50	15.12	1.89
55	27.00	3.38

Allowance for commutation

The 2010 valuation made allowance for members covered by the Existing Members and the New Members Regulations to commute 17.5% of their pension.

Recent experience has been that members have commuted a higher proportion of their pension than was assumed at the 2010 valuation. In addition, it is expected that the maximum proportion of pension that can be commuted in the Scheme will be increased from 25% to 30%. In light of this, we have assumed that 21% of pension is commuted on retirement (i.e. 70% of the anticipated new maximum proportion).

Withdrawal rates

Over the period 2011-2013, the actual number of withdrawals of non-uniformed members was considerably higher than the expected numbers implied by the assumptions.

A significant number of the members who have left service were over age 50 but the withdrawal scale used for the 2010 valuation makes no allowance for withdrawals over age 50. We have therefore amended the assumption for withdrawals from service to assume that the rates assumed at age 45 for the 2010 valuation apply to all members between ages 45 to 59.

The withdrawal rates have been set such that we expect actual withdrawal rates to be around 110% of those assumed. Setting the assumption at a slightly lower level than that likely to be experienced is intended to make explicit allowance for leavers that are subsequently readmitted to the scheme and are re-credited with their original pensionable service.

Based on experience over the 3 year period to 2013, our analysis suggests the assumptions for members under age 50 remain appropriate.

We have carried out a similar analysis for uniformed members. The analysis suggests that the assumptions adopted for the 2010 valuation remain appropriate.

Specimen rates of withdrawal assumed at this valuation are as follows:

Age	Uniformed members		Non-Uniformed members	
	Men	Women	Men	Women
30	3.29	3.75	8.21	11.25
35	2.13	2.81	5.33	8.44
40	1.23	1.88	3.08	5.63
45	0.52	0.94	1.30	2.81
50	0.00	0.00	1.30	2.81
55	0.00	0.00	1.30	2.81
59	0.00	0.00	1.30	2.81
60	0.00	0.00	0.00	0.00

Family assumptions

Family assumptions cover:

- the proportions of deaths of members and pensioners which give rise to a spouse's, civil partners' or dependant's pension;
- the age difference between the member and spouse/dependant at date of death; and
- the allowance for children's pensions.

There is not sufficient data to carry out a detailed analysis by age of the proportion of cases which give rise to a spouse's/dependant's pension but we have reviewed the assumptions having regard to:

- Office for National Statistics data on expected proportions of people married (or having a dependant) in the UK population, both now and in the future;
- Other UK government data on the extent to which economically active individuals are more likely to be married;
- The definition of "dependant" in the Scheme Regulations, which requires dependency on the member "for the provision of all or most of the ordinary necessities of life"; and
- The provisions in the Scheme's Regulations that, in determining entitlement to a spouse's pension, marriages after the member's normal retirement age are disregarded.

The data available does not suggest the assumptions adopted for the 2010 valuation are unreasonable. We have therefore retained the assumption that 80% of male members and 70% of females under the New/Existing Members Regulations are married, or have a dependant (widowers' and dependants' pensions are not provided under the 1967 and FHS Regulations).

We have assumed that husbands are aged 3 years older than their wives on average. A 10% loading is applied to death before retirement liabilities in the Existing and New Members Regulations to cover children's pensions.

Appendix 8: Summary of assumptions

Financial assumptions

Discount rate	<p>For valuing liabilities over the period prior to retirement and for valuing future service contributions: 7.3% p.a. (i.e. reference gilt yield plus 3.6% p.a.)</p> <p>For valuing liabilities over the period after retirement: 5.6% p.a. (i.e. reference gilt yield plus 1.9% p.a.)</p> <p>For valuing pre-1987 debt repayments: 6.06% p.a. (i.e. reference gilt yield plus 2.36% p.a.)</p>
UK RPI inflation	3.40% p.a. (i.e. UK gilt market break-even inflation less 0.25% p.a.)
Jersey RPI inflation	3.40% p.a. (i.e. UK RPI inflation)
Rate of pension and deferred pension increases	3.25% p.a. (i.e. Jersey RPI inflation less 0.15% p.a.)
Rate of salary increases	4.40% p.a. (i.e. 1.0% p.a. above Jersey RPI Inflation) plus an allowance for promotional increases
Management expenses (other than investment related expenses)	0.6% of members' salaries

Demographic assumptions

Pre-retirement mortality	Males: 70% of standard table AMC00 Females: 70% of standard table AFC00
Post-retirement mortality	SAPS S2 "All lives" tables (S2PMA for males and S2PFA for females) with 100% scaling factor allowing for year of birth. Future improvements in line with CMI_2013 Core Projections and a long-term rate of future improvements in mortality of 1.5% p.a.
Withdrawals	Allowance is made for withdrawals from service (see sample rates in Appendix 7)
Early retirements	Allowance has been made for active members to retire before Normal Retiring Age in normal health and in ill-health (see tables in Appendix 7) Deferred members are assumed to retire at the earliest age at which they can retire with unreduced benefits
Commutation	Members under the Existing Members and New Members Regulations are assumed to commute 21% of their pension on retirement
Family details	80% of male members and 70% of female members married at retirement (or a dependant's pension is payable), with percentage reducing in line with the mortality assumptions for current pensioners Husbands are aged 3 years older than their spouse/dependant 10% loading applied to death before retirement liabilities in the Existing and New Members regulations to cover children's pensions

Appendix 9: Assumptions for discontinuance test

Derivation of assumptions

In setting the assumptions for the discontinuance test we have taken into account actual buy-out terms available in the market at the valuation date. However, we have not carried out a detailed analysis of the cost of risks that might apply specifically to the Scheme and so our estimate is only a guide. Market changes to both interest rates, and demand and supply for this type of business, mean that no reliable estimate can be made, and that ultimately the actual true position can only be established by completing a buy-out.

We have set the **discount rate** for this estimate equal to:

- Current pensioners: the yield on fixed interest gilts of appropriate term at the valuation date;
- Future pensioners: the yield on fixed interest gilts of appropriate term at the valuation date minus 0.25% p.a. (this applies over the period before and after retirement).

The allowance we have made for expenses is separate.

We have made an allowance for increases to pensions before and during payment in line with the UK Retail Prices Index. This differs from the provisions under the Regulations governing the Scheme which provide for annual increases in line with the Jersey RPI, although lower increases may be paid where an actuarial review has disclosed that the financial condition of the Scheme is no longer satisfactory.

The reason we have not made allowance for increases in line with the actual Scheme increases is that, based on the principles an insurer might use, these would be, at best, extremely expensive, and at worst, impossible to reserve for, as there are no available assets which match the increases in the Jersey RPI. Therefore, it is unlikely to be possible to purchase annuities based on such increases in the market.

Expenses

The reserve for expenses allows for deductions to allow for the cost of forced sales of equity, bond and property holdings, 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.

For the purposes of disclosure in the valuation, assets are taken at their audited market value. The above allowances for expenses are therefore all presented as additions to the liabilities.

Summary of assumptions

The table below shows the main assumptions underlying the discontinuance test, where these are different from those used for the main valuation basis.

Pensioner discount rate	Fixed interest gilt yield curve
Non-pensioner discount rate (before and after retirement)	Fixed interest gilt yield curve less 0.25% pa
Increase in UK RPI	Derived from the difference between the fixed and index-linked gilt yield curves
Pension and deferred pension increases	Equal to UK RPI
Withdrawals	All members assumed to immediately withdraw from service with entitlement to deferred pension
Commutation	No allowance
Post-retirement mortality	As for the main valuation basis except the long-term rate of future improvements in mortality is 1.75% p.a.

Appendix 10: Agreed arrangements for dealing with the pre-1987 debt

The framework agreed between the Policy and Resources Committee and the Committee of Management for dealing with the pre-1987 debt was documented in a ten-point agreement approved by Act of the Policy and Resources Committee dated 20 November 2003. The provisions of the agreement, which have subsequently been reflected in Regulations approved by the States of Jersey on 27 September 2005, enable us to treat the pre-1987 debt as an asset of the Scheme for valuation purposes. The text of the agreement is reproduced below.

- “1. The States confirms responsibility for the Pre-1987 Debt of £192.1 million as at 31 December 2001 and for its servicing and repayment with effect from that date on the basis that neither the existence of any part of the outstanding Debt nor the agreed method of servicing and repayment shall adversely affect the benefits or contribution rates of any person who has at any time become a member of the Scheme.*
- 2. At the start of the servicing and repayment period, calculated to be 82 years with effect from 1 January 2002, the Employers’ Contribution rate will be increased by 0.44% to the equivalent of 15.6%. These contributions will be split into 2 parts, namely a contribution rate of 13.6% of annual pensionable salary and an annual debt repayment. The Employer’s Contribution rate will revert to 15.16% after repayment in full of the Debt.*
- 3. During the repayment period the annual Debt repayment will comprise a sum initially equivalent to 2% of the Employers’ total pensionable payroll, re-expressed as a cash amount and increasing each year in line with the average pay increase of Scheme members.*
- 4. A statement of the outstanding debt as certified by the Actuary to the Scheme is to be included each year as a note in the States Accounts.*
- 5. In the event of any proposed discontinuance of the Scheme, repayment and servicing of the outstanding Debt shall first be rescheduled by the parties on the advice of the Actuary to ensure that paragraph (1) above (“Point 1”) continues to be fulfilled.*
- 6. For each valuation the States Auditor shall confirm the ability of the States to pay off the Debt outstanding at that date.*
- 7. If any decision or event causes the Actuary at the time of a valuation to be unable to continue acceptance of such servicing and repayment of the Debt as an asset of the Scheme, there shall be renegotiation in order to restore such acceptability.*
- 8. In the event of a surplus being revealed by an Actuarial Valuation, negotiations for its disposal shall include consideration of using the employers’ share to reduce or pay off the Debt.*
- 9. As and when the financial position of the States improves there shall be consideration of accelerating or completing repayment of the Debt.*
- 10. The recent capital payment by JTL of £14.3m (plus interest) reduced the £192.1m total referred to in (1) by £14.3m and if any other capital payments are similarly made by other Admitted Bodies these shall similarly be taken into account.”*

Medium Term Financial Plan 2013-2015 (MTFP)

As from 2013, additional repayments under the States Medium Term Financial Plan 2013-2015 (MTFP) are being made to accelerate repayment of the pre-1987 debt.

Appendix 11: JPL membership data

1967 Regulations		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Total	2013	12	54.8	344	28,688	29.5
	2010	24	55.3	676	28,186	29.4

Note: In 2010, and 2013, there were no female members.

Existing Members Regulations		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Total	2013	32	53.1	1,061	33,171	29.4
	2010	44	51.7	1,493	33,943	27.0

Note: In 2010, and 2013, there were no female members.

New Members Regulations (Pre-2006 joiners)		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Men	2013	94	48.2	2,801	29,798	14.5
	2010	140	45.9	4,312	30,803	11.9
Women	2013	28	47.4	828	29,568	9.9
	2010	41	44.1	1,150	28,049	9.1
Total	2013	122	48.0	3,629	29,745	13.4
	2010	181	45.5	5,462	30,179	11.2

New Members Regulations (Post-2006 joiners)		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Men	2013	23	41.7	688	29,904	4.9
	2010	25	39.3	685	27,408	2.7
Women	2013	17	43.3	443	26,066	4.8
	2010	21	41.1	641	30,526	3.7
Total	2013	40	42.4	1,131	28,273	4.9
	2010	46	40.1	1,326	28,831	3.2

Summary for all JPL members		Number	Total salaries (£000 p.a.)
Men	2013	161	4,895
	2010	233	7,167
Women	2013	45	1,271
	2010	62	1,791
Total	2013	206	6,166
	2010	295	8,959

Notes:

- 1) The 2013 figures are data at 31 December 2013. The 2010 figures are data at 31 December 2010 (although for consistency with the calculation of the JPL sub-fund asset value at 31 December 2010, the value we had placed on past service benefits for JPL includes the liability for 7 JPL members who left service on 31 December 2010 and are excluded from the above summary).
- 2) The JPL members are all non-uniformed.
- 3) Additional data relating to the pensionable allowances which gives rise to added years of pensionable service is not included in the salaries shown in the table.
- 4) Average service includes service credits from transfers-in (but excludes added years arising from additional voluntary contributions).

Appendix 12: JTL membership data

1967 Regulations		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Total	2013	3	51.3	124	41,451	31.0
	2010	4	47.0	196	48,960	26.9

Note: In 2013 there was one female member, and in 2010 there was one female member.

Existing Members Regulations		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Total	2013	38	52.0	1,693	44,543	29.0
	2010	49	50.1	2,102	42,891	27.1

Note: In 2013 there were two female members, and in 2010 there were five female members.

New Members Regulations (Pre-2006 joiners)		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Men	2013	116	42.6	5,184	44,688	14.1
	2010	138	39.5	5,857	42,446	11.0
Women	2013	47	45.1	1,840	39,142	12.4
	2010	60	43.5	2,271	37,852	10.5
Total	2013	163	43.3	7,023	43,089	13.6
	2010	198	40.7	8,129	41,054	10.8

New Members Regulations (Post-2006 joiners)		Number	Average age	Total salaries (£000 p.a.)	Average salaries (£ p.a.)	Average service (years)
Men	2013	39	35.1	1,890	48,462	5.2
	2010	48	32.3	2,177	45,344	2.2
Women	2013	20	34.5	690	34,504	4.9
	2010	27	31.5	903	33,461	2.2
Total	2013	59	34.9	2,580	43,730	5.1
	2010	75	32.0	3,080	41,066	2.2

Summary for all JTL members		Number	Total salaries (£000 p.a.)
Men	2013	193	8,784
	2010	233	10,125
Women	2013	70	2,637
	2010	93	3,382
Total	2013	263	11,421
	2010	326	13,506

Notes:

- 1) The 2013 figures are data at 31 December 2013. The 2010 figures are data at 31 December 2010 (although for consistency with the calculation of the JTL sub-fund asset value at 31 December 2010, the value we had placed on past service benefits for JTL includes the liability for 2 JTL members who left service on 31 December 2010 and are excluded from the above summary).
- 2) The JTL members are all non-uniformed.
- 3) Additional data relating to the pensionable allowances which gives rise to added years of pensionable service is not included in the salaries shown in the table.
- 4) Average service includes service credits from transfers-in (but excludes added years arising from additional voluntary contributions).

Appendix 13: Valuation of JPL sub-fund

Introduction

Jersey Post Limited (JPL) has participated in the Public Employees Contributory Retirement Scheme (PECRS) as an Admitted Body with effect from 1 July 2006, subject to special arrangements including a notional ringfencing of the assets and liabilities attributable to its employees.

A Terms of Admission Document, dated 10 May 2007, describes how the contributions to and assets of JPL's notional sub-fund are to be determined under this ringfencing approach.

Under the Terms of Admission Document the contributions payable by JPL must be redetermined following the completion of each PECRS valuation. The results of the formal valuation of PECRS as at 31 December 2013 are set out in the main body of this report.

In this Appendix we set out the results of the valuation of the JPL sub-fund. A revised Actuary's Certificate prepared in accordance with Regulation 9(1)(c)(ii) of the Public Employees (Contributory Retirement Scheme)(General)(Jersey) Regulations 1989 (the "General Regulations") is set out in Appendix 15.

Purpose

The purpose of the JPL sub-fund valuation is to review the financial position of the JPL sub-fund and the JPL employer contribution rate. The valuation identifies:

- The past service funding position of the JPL sub-fund as at 31 December 2013 i.e. the comparison of the value of the past service liabilities in respect of JPL's active members and the assets attributable to the JPL sub-fund as at 31 December 2013.
- The future contribution rate required from JPL to be included in the Actuary's Certificate.

Current contribution rate

Following the valuation as at 31 December 2010, the contribution rate for JPL was determined as 8.14% of salaries (this has been paid since 1 July 2012).

Assumptions

In accordance with the Terms of Admission Document we have used actuarial assumptions consistent with those used for the main valuation of PECRS as at 31 December 2013 to carry out the JPL sub-fund valuation.

A summary of the assumptions used for the main valuation is given in Appendix 8.

The only difference in the assumptions used for the sub-fund valuation relates to the assumption for pension and deferred pension increases. For the purpose of the JPL sub-fund calculations we have reflected the full restoration of pension increases and have assumed future increases will be based on the annual increase in the Jersey Cost of Living Index. We have therefore assumed pension and deferred pension increases will be 3.40% p.a., rather than the 3.25% p.a. used for the main valuation.

Assets

The assets attributable to the JPL sub-fund as at 31 December 2013 were £25.4M. This value was determined in accordance with the principles set out in the Terms of Admission Document. Details of the calculation of the sub-fund as at 31 December 2013 are set out in our paper “Ongoing tracking of the Jersey Post Limited Sub-Fund” dated 18 July 2014, prepared for the Committee of Management.

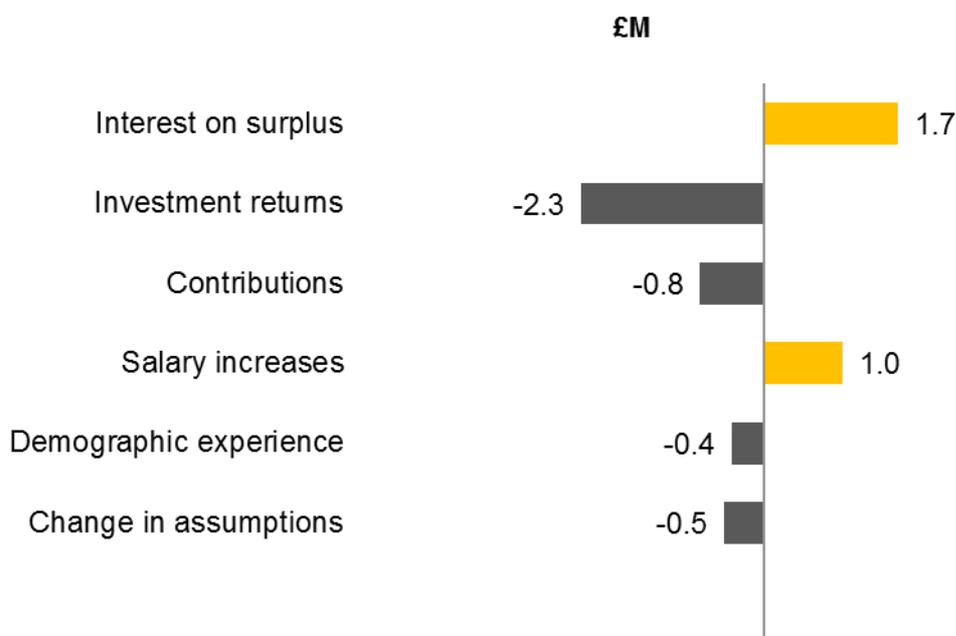
Past service funding position

The past service position for the JPL sub-fund as at 31 December 2013 is as follows:

	£M
Value of assets (the JPL sub-fund)	25.4
Less: value of past service benefits for JPL's current active members	20.5
Past service surplus	4.9
Past service funding ratio (assets divided by liabilities)	124%

As at 31 December 2010 the sub-fund had a past service surplus of £6.2M. The past service surplus has therefore decreased by £1.3M over the three years since 31 December 2010. We have analysed the reasons for the change indicating the impact of each factor on the valuation result this time.

Sources of change in past service position:



The funding position has therefore worsened, primarily due to the lower than assumed investment returns. However, this has been partially offset by lower than assumed salary increases.

Actuarial certificate and contribution rate

The Terms of Admission Document describes how, for the purpose of preparing the Actuary's certificates in accordance with Regulation 9(1)(c), the future contribution rate required by JPL should be determined. We have prepared a revised Actuary's certificate on that basis. The revised Certificate is included in Appendix 15.

JPL's contribution rate has been calculated as 8.27% of salaries.

The rate of 8.27% of salaries comprises a "standard" contribution rate of 16.70% of salaries less an adjustment of 8.43% of salaries.

The standard contribution rate of 16.70% of salaries is the rate which is sufficient to support future service benefits for JPL's current active members measured over their future working lifetimes in PECRS. This compares with the corresponding standard contribution rate of 15.07% of salaries previously determined as at 31 December 2010. The main reason for the increase in the standard contribution rate is the changes in the assumptions used.

The adjustment of 8.43% of salaries meets the objective of bringing JPL's share of the assets into line with JPL's funding target over the future average expected working lifetime of JPL's active members (around 10 years at 31 December 2013). This compares with an adjustment to the standard contribution rate of 6.93% of salaries determined as at 31 December 2013. The main reason for the higher adjustment to the standard contribution rate is the reduction in payroll.

Allowance for expenses

The standard contribution rate includes allowance for the future expenses of administering the Scheme as a whole, which we assumed in the main PECRS valuation would amount to 0.6% of members' salaries, plus the estimated additional costs of administering JPL's sub-fund including the initial costs incurred when the sub-fund was established, which we have previously assumed would amount to 0.5% of members' salaries.

In setting the assumption for the additional costs of administering JPL's sub-fund we have analysed the actual initial legal and actuarial fees incurred in setting up the sub-fund as well as the ongoing actuarial and audit fees incurred since the sub-fund was established. Our analysis shows that the additional contributions of 0.5% of salaries paid since 1 July 2006 have been more than sufficient to cover the annual ongoing costs of administering the sub-fund but have not yet been sufficient to cover the initial set-up costs as well. Therefore it is appropriate to continue to make an allowance for these expenses of 0.5% of salaries. We will review this again at the next valuation of the sub-fund.

Therefore, included in the standard contribution rate are allowances of:

- a) 0.60% of salaries, to reflect JPL's share of the ongoing PECRS administrative expenses, plus
- b) 0.50% of salaries, to reflect the whole of the estimated additional costs of administering JPL's sub-fund.

Discontinuance test

Even though the Regulations governing the Scheme do not envisage the possibility of the Scheme being discontinued, it is our practice at valuations to review what the financial position of the Scheme would have been had discontinuance occurred at the valuation date. In this hypothetical scenario, we have assumed that the assets of the JPL sub-fund would be amalgamated with the rest of the Scheme assets.

The results of our discontinuance test for the Scheme as a whole are set out in the main report.

Risks and sensitivity analysis

We have commented in the main report on some of the factors that could lead to deterioration to the Scheme's finances in various hypothetical downside scenarios. The key factors that could lead to deterioration in the JPL sub-fund's finances are the same.

In the risks and sensitivity analysis section of this report we have estimated the possible percentage change in the Scheme's overall funding ratio if certain adverse scenarios did arise. In proportionate terms, the percentage change in the JPL sub-fund's past service funding ratio in such scenarios would be quite similar.

Recommended contributions

The revised certificate included in Appendix 15 sets out the required new employer contribution rate of 8.27% of salaries effective from 1 December 2014.

The Terms of Admission Document does not contain provisions to back-date a change of contributions to the effective date of the valuation. To the extent that the actual contributions paid by JPL since 1 January 2014 have been lower than the new rate, this will be reflected in the determination of the assets attributable to the JPL sub-fund and then consequently in the determination of the employer's contribution rate at the next valuation of the sub-fund.

Contribution rate subject to review

The Terms of Admission provide for JPL's contribution rate to be re-determined following the completion of each PECSRS actuarial valuation. The next such valuation will be no later than 31 December 2016.

Appendix 14: Valuation of JTL sub-fund

Introduction

Jersey Telecom Limited (JTL) has participated in the Public Employees Contributory Retirement Scheme (PECRS) as an Admitted Body with effect from 1 January 2003, subject to special arrangements including a notional ringfencing of the assets and liabilities attributable to its employees.

A Terms of Participation Document, dated 10 May 2007, describes how the contributions to and assets of JTL's notional sub-fund are to be determined under this ringfencing approach.

Under the Terms of Participation Document the employer's contributions payable by JTL must be redetermined following the completion of each PECRS valuation. The results of the formal valuation of PECRS as at 31 December 2013 are set out in the main body of this report.

In this Appendix we set out the results of the valuation of the JTL sub-fund. A revised Actuary's Certificate prepared in accordance with Regulation 9(1)(c)(ii) of the Public Employees (Contributory Retirement Scheme)(General)(Jersey) Regulations 1989 (the "General Regulations") is set out in Appendix 16.

Purpose

The purpose of the JTL sub-fund valuation is to review the financial position of the JTL sub-fund and the JTL employer contribution rate. The valuation identifies:

- The past service funding position of the JTL sub-fund as at 31 December 2013 i.e. the comparison of the value of the past service liabilities in respect of JTL's active members and the assets attributable to the JTL sub-fund as at 31 December 2013.
- The future contribution rate required from JTL to be included in the Actuary's Certificate.

Current contribution rate

Following the valuation as at 31 December 2010, the contribution rate for JTL was determined as 7.19% of salaries (this has been paid since 1 July 2012).

Assumptions

In accordance with the Terms of Admission Document we have used actuarial assumptions consistent with those used for the main valuation of PECRS as at 31 December 2010 to carry out the JPL sub-fund valuation.

A summary of the assumptions used for the main valuation is given in Appendix 6 and Appendix 7.

The only difference in the assumptions used for the sub-fund valuation relates to the assumption for pension and deferred pension increases. For the purpose of the JTL sub-fund calculations we have reflected the full restoration of pension increases and have assumed future increases will be based on the annual increase in the Jersey Cost of Living Index. We have therefore assumed pension and deferred pension increases will be 3.40% p.a., rather than the 3.25% p.a. used for the main valuation.

Assets

The assets attributable to the JTL sub-fund as at 31 December 2013 were £38.7M. This value was determined in accordance with the principles set out in the Terms of Participation Document. Details of the calculation of the sub-fund as at 31 December 2013 are set out in our paper “Ongoing tracking of the Jersey Telecom Limited Sub-Fund” dated 18 July 2014, prepared for the Committee of Management.

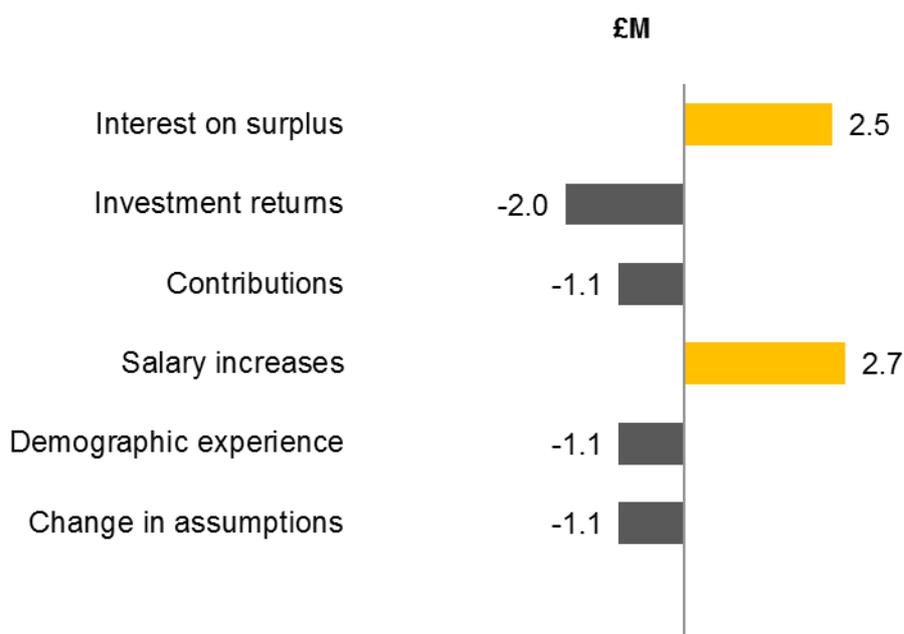
Past service funding

The past service position for the JTL sub-fund as at 31 December 2013 is as follows:

	£M
Value of assets (the JTL sub-fund)	38.7
Less: value of past service benefits for JTL's current active members	29.5
Past service surplus	9.2
Past service funding ratio (assets divided by liabilities)	131%

As at 31 December 2010 the sub-fund had a past service surplus of £9.3M. The past service surplus has therefore reduced slightly over the three years since 31 December 2010. We have analysed the reasons for the change indicating the impact of each factor on the valuation result this time.

Sources of change in past service position:



The funding position is broadly similar to the position at the last valuation. It has worsened due to investment returns being lower than assumed but this has been offset by lower than assumed salary increases.

Actuarial certificate and contribution rate

The Terms of Participation Document describes how, for the purpose of preparing the Actuary's certificates in accordance with Regulation 9(1)(c), the future contribution rate required by JTL should be determined. We have prepared a revised Actuary's certificate on that basis. The revised Certificate is included in Appendix 16.

JTL's contribution rate has been calculated as 7.07% of salaries.

The rate of 7.07% of salaries comprises a "standard" contribution rate of 14.20% of salaries less an adjustment of 7.13% of salaries.

The standard contribution rate of 14.20% of salaries is the rate which is sufficient to support future service benefits for JTL's current active members measured over their future working lifetimes in PECRS. This compares with the corresponding standard contribution rate of 13.14% of salaries previously determined as at 31 December 2010. The main reason for the increase in the standard contribution rate is the changes in the assumptions used.

The adjustment of 7.13% of salaries meets the objective of bringing JTL's share of the assets into line with JTL's funding target over the future average expected working lifetime of JTL's active members (around 13 years at 31 December 2013). This compares with an adjustment to the standard contribution rate of 5.95% of salaries determined as at 31 December 2010. The main reason for the higher adjustment to the standard contribution rate is the reduction in payroll.

Allowance for expenses

The standard contribution rate includes allowance for the future expenses of administering the Scheme as a whole, which we assumed in the main PECRS valuation would amount to 0.6% of members' salaries, plus the estimated additional costs of administering JTL's sub-fund, which we have previously assumed would amount to 0.15% of members' salaries.

Our analysis shows that the additional contributions of 0.15% of salaries to cover the annual ongoing costs of administering JTL's sub-fund continue to be appropriate. We will review this again at the next valuation of the sub-fund.

Therefore, included in the standard contribution rate are allowances of:

- a) 0.60% of salaries, to reflect JTL's share of the ongoing PECRS administrative expenses, plus
- b) 0.15% of salaries, to reflect the whole of the estimated additional costs of administering JTL's sub-fund.

Discontinuance test

Even though the Regulations governing the Scheme do not envisage the possibility of the Scheme being discontinued, it is our practice at valuations to review what the financial position of the Scheme would have been had discontinuance occurred at the valuation date. In this hypothetical scenario, we have assumed that the assets of the JPL sub-fund would be amalgamated with the rest of the Scheme assets.

The results of our discontinuance test for the Scheme as a whole are set out in the main report.

Risks and sensitivity analysis

We have commented in the main report on some of the factors that could lead to deterioration to the Scheme's finances in various hypothetical downside scenarios. The key factors that could lead to deterioration in the JTL sub-fund's finances are the same.

In the risks and sensitivity analysis section of this report we have estimated the possible percentage change in the Scheme's overall funding ratio if certain adverse scenarios did arise. In proportionate terms, the percentage change in the JTL sub-fund's past service funding ratio in such scenarios would be quite similar.

Recommended contributions

The revised certificate included in Appendix 16 sets out the required new employer contribution rate of 7.07% of salaries effective from 1 December 2014.

The Terms of Participation Document does not contain provisions to back-date a change of contributions to the effective date of the valuation. To the extent that the actual contributions paid by JTL since 1 January 2014 have been higher than the new rate, this will be reflected in the determination of the assets attributable to the JTL sub-fund and then consequently in the determination of the employer's contribution rate at the next valuation of the sub-fund.

Contribution rate subject to review

The Terms of Participation provide for JTL's contribution rate to be re-determined following the completion of each PECRS actuarial valuation. The next such valuation will be no later than 31 December 2016.

Appendix 15: Actuary's Certificate for JPL

Participation of Jersey Post Limited in the Public Employees Contributory Retirement Scheme (PECRS) – Regulation 9(1)(c) certificate

In accordance with Regulation 9(1)(c)(ii) of the General Regulations, we have reviewed the certificate as to the amount to be contributed to the Public Employees Contributory Retirement Scheme (“the Scheme”) by Jersey Post Limited (“the Employer”) issued in accordance with Regulation 9(1)(c)(ii) of the General Regulations on 23 May 2012. This certificate is the new certificate issued in accordance with Regulation 9(1)(c)(ii).

We hereby certify that the Employer shall pay to the Scheme, at such regular intervals as the Chief Minister shall specify:

1. with effect from 1 December 2014, contributions at the rate of 8.27% of the salary of each of its employees who is a member
2. the contributions payable to the Scheme by each of its employees who is a member
3. such contributions as may be required under Regulations 7, 17 or 18 of the 1989 New Members Regulations or the 1989 Existing Members Regulations
4. such contributions as may be required under Regulation 16 of the 1967 Regulations.

The contributions in 1 above shall, where appropriate, be subject to the provisions of Regulations 2(13) and 3(4) of the 1989 New Members Regulations and Regulations 2(11) and 3(4) of the 1989 Existing Members Regulations.

Where the above contributions or repayments are paid after the specified dates, they shall be subject to the addition of interest at the rate of 7.3% per annum compound or such other basis as shall be notified from time to time.

In this certificate:

“General Regulations” means the Public Employees (Contributory Retirement Scheme) (General) (Jersey) Regulations, 1989, as amended;

“1967 Regulations” means the Public Employees (Contributory Retirement Scheme) (Jersey) Regulations, 1967, as amended;

“1989 Existing Members Regulations” means the Public Employees (Contributory Retirement Scheme) (Existing Members)(Jersey) Regulations, 1989, as amended;

“1989 New Members Regulations” means the Public Employees (Contributory Retirement Scheme) (New Members) (Jersey) Regulations, 1989, as amended;

the terms “employee”, “member”, and “salary” have the meaning given in Regulation 1 of the 1989 New Members Regulations, the 1989 Existing Members Regulations or the 1967 Regulations, as appropriate.

For Aon Hewitt Limited

J F Teasdale FIA

31 October 2014

Appendix 16: Actuary's Certificate for JTL

Participation of Jersey Telecom Limited in the Public Employees Contributory Retirement Scheme (PECRS) – Regulation 9(1)(c) certificate

In accordance with Regulation 9(1)(c)(ii) of the General Regulations, we have reviewed the certificate as to the amount to be contributed to the Public Employees Contributory Retirement Scheme (“the Scheme”) by Jersey Telecom Limited (“the Employer”) issued in accordance with Regulation 9(1)(c)(ii) of the General Regulations on 23 May 2012. This certificate is the new certificate issued in accordance with Regulation 9(1)(c)(ii).

We hereby certify that the Employer shall pay to the Scheme, at such regular intervals as the Chief Minister shall specify:

1. with effect from 1 December 2014, contributions at the rate of 7.07% of the salary of each of its employees who is a member
2. the contributions payable to the Scheme by each of its employees who is a member
3. such contributions as may be required under Regulations 7, 17 or 18 of the 1989 New Members Regulations or the 1989 Existing Members Regulations
4. such contributions as may be required under Regulation 16 of the 1967 Regulations.

The contributions in 1 above shall, where appropriate, be subject to the provisions of Regulations 2(13) and 3(4) of the 1989 New Members Regulations and Regulations 2(11) and 3(4) of the 1989 Existing Members Regulations.

Where the above contributions or repayments are paid after the specified dates, they shall be subject to the addition of interest at the rate of 7.3% per annum compound or such other basis as shall be notified from time to time.

In this certificate:

“General Regulations” means the Public Employees (Contributory Retirement Scheme) (General) (Jersey) Regulations, 1989, as amended;

“1967 Regulations” means the Public Employees (Contributory Retirement Scheme) (Jersey) Regulations, 1967, as amended;

“1989 Existing Members Regulations” means the Public Employees (Contributory Retirement Scheme) (Existing Members)(Jersey) Regulations, 1989, as amended;

“1989 New Members Regulations” means the Public Employees (Contributory Retirement Scheme) (New Members) (Jersey) Regulations, 1989, as amended;

the terms “employee”, “member”, and “salary” have the meaning given in Regulation 1 of the 1989 New Members Regulations, the 1989 Existing Members Regulations or the 1967 Regulations, as appropriate.

For Aon Hewitt Limited

J F Teasdale FIA

31 October 2014

Glossary

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

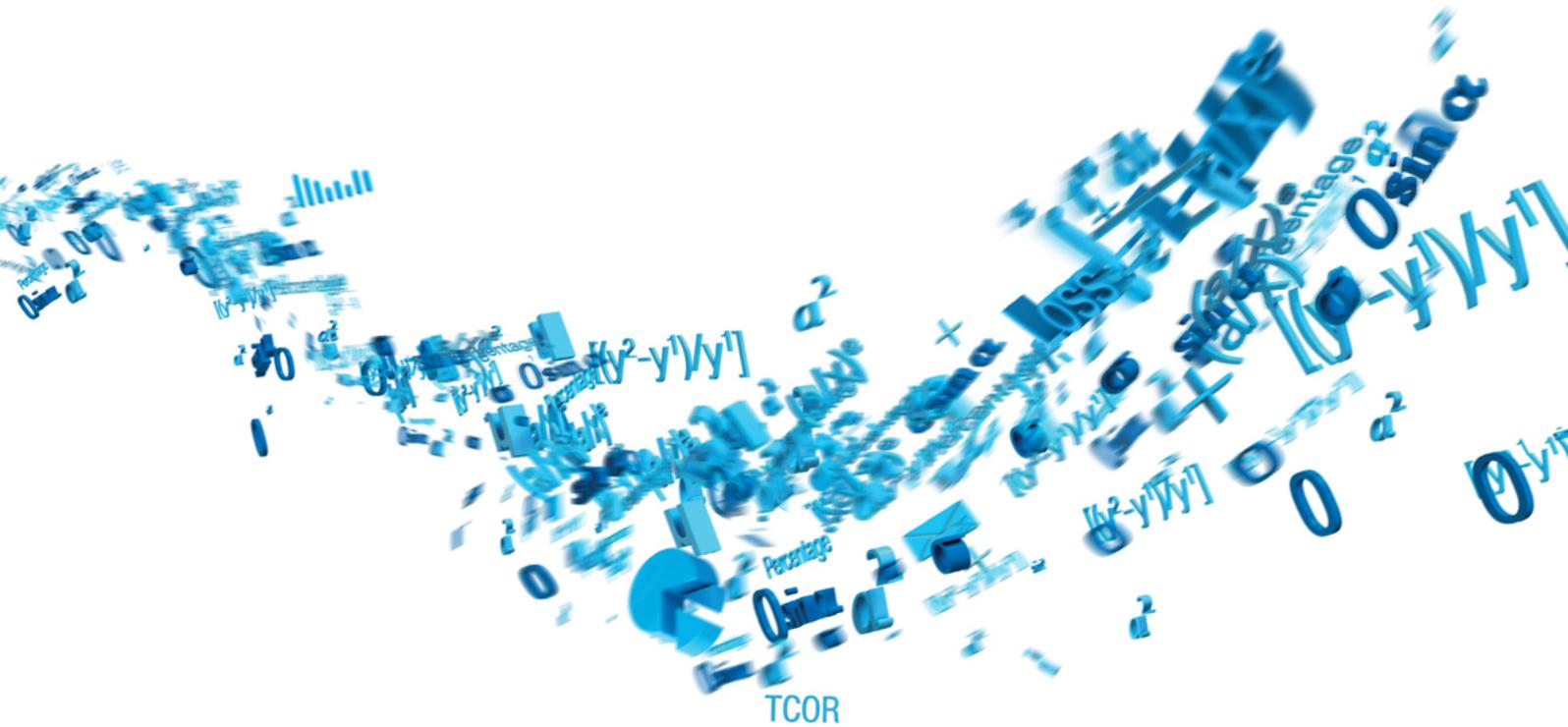
This is the ratio of the resources of the Scheme (its assets, plus the value of the future pre-1987 debt repayment supplements) to the resources that would be required to meet the **funding target**.

Funding target

This is that, based on best estimate assumptions, the assets and future contributions should be sufficient over the long term to support the benefits payable from the Scheme in respect of the current members of the Scheme. The resources of the Scheme required to meet the **funding target** are determined by assessing the **present value** of the benefits that will be paid from the Scheme in the future, based on pensionable service prior to the valuation date, plus the extent to which the **present value** of future service benefits for current members exceeds the **present value** of anticipated future service contributions for such members.

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.



Comments on 2013 Valuation of the PECRS

Prepared for Graham Chidlow

Prepared by Joel Duckham FIA
 Chris Archer FIA

Date 18 November 2014

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Overview from the Employer's Actuary

Introduction

This document provides comments from the Employer's actuary on the outcome of the 2013 valuation (the Valuation) of the Public Employees Contributory Retirement Scheme (the Scheme) and the implications, if any, for the current process of reform. We consider:

- the assumptions used in the Valuation, including comments on how the best estimate assumptions may have changed subsequent to the valuation date
- the use of prudent assumptions for the costing of the new scheme
- relevant external changes since the last 'review' from us in November 2012, and
- changes in the Jersey environment

2013 valuation assumptions

The Scheme Actuary has undertaken the Valuation using assumptions he considers to be best estimate at the valuation date with the assumed level of investment returns being based on advice by Mercer in their role of Investment Adviser to the Committee of Management. The Valuation disclosed a surplus and recommended that pension increases be restored to the full rate of Jersey Price Inflation.

It should be noted that setting best estimate assumptions is not an exact science and there will be a range of views held by different actuaries. The adoption of slightly more conservative views on best estimate assumptions in the 2013 valuation could have meant that no surplus is disclosed and pension increases continue to be reduced.

We are comfortable with the demographic assumptions chosen as they reflect local experience. We confirm that the assumptions made for longevity improvements reflect current studies and mainstream actuarial views.

The financial assumptions are the more critical area.

Assuming Jersey inflation is the same as inflation in the UK is sensible as it reflects recent trends. We understand the assumption for Pay increases has been based on the views of the States economics data unit.

We have undertaken a financial modelling exercise which concludes that the discount rate assumption is set slightly on the cautious side, however this is within an acceptable best estimate range taking into account the different views / models used by different actuaries.

Overall, we are comfortable that the assumptions as a whole are within an acceptable best estimate range.

Whilst we are comfortable with the return assumptions used, the rather more basic assumption of the split between growth-like assets and bond-like assets pre and post retirement used in deriving the discount rate lacks evidence. In particular, any perceived evolution or 'end game' may have changed with the advent of the 2015 scheme but these basic assumptions seem to have barely changed since those adopted for the 2010 valuation. Going forward we suggest that the COM is required to provide more evidence in this area.

**2013 valuation –
comments on use of
surplus**

The Employer should note that the 2013 valuation concluded that future service benefits could not be afforded out of the Employer's contribution rate of 13.6%. This highlights the need for reform.

Despite this, the surplus in the Scheme at the valuation (after taking into account the expected deficiency arising from the insufficient payment of contributions towards future service), was sufficient to afford the restoration of pension increases back to full Jersey Price Inflation.

The valuation report also indicated that financial conditions since the valuation date had been unfavourable and, as at 30 September 2014, the Scheme had fallen back in to deficiency (after restoration of full pension increases).

The fact that, under the current regulations, a surplus that no longer exists at the date the valuation report is signed must be used to reinstate pension increases is further evidence of a need for change.

**Evolution of the best
estimate assumptions**

Views on best estimate assumptions will change frequently in response to financial conditions and new emerging data.

We have tested whether the approximate updated funding position shown in the valuation report, as at 30 September 2014, continues to be measured on 'best estimate' assumptions at that date.

We are not aware of any new data concerning the demographic assumptions since the valuation date, so the use of the valuation's demographic assumptions in the funding update appears appropriate.

We have updated our financial modelling exercise to 30 September 2014 to test the level of prudence in the financial assumptions underlying the Scheme Actuary's funding update. In our view the assumptions adopted are of a similar level of prudence as those adopted at the valuation date (i.e. on the cautious side of a best estimate range).

We would therefore expect a shortfall in the Scheme at 30 September 2014 if a valuation had been undertaken at that date based on full restoration of pension increases, and assuming the Scheme Actuary adopted his best estimate assumptions at that date (with the assumed level of investment returns being based on advice by Mercer).

Costing the new scheme using prudent assumptions

The proposals are to cost the new scheme using prudent assumptions.

Defined Benefit schemes are traditionally costed using prudent assumptions as insurance policy for both scheme sponsor and members – the impact of inadvertently over providing benefit levels is potentially far worse for employees (who could suffer an unexpected loss versus expectations if assets are not sufficient to meet liabilities), than of under-provision (where the benefit level is more secure, and against which members can plan additional provision if required).

The cost projections prepared to date are based on a similar level of prudence as used by the UK Government to cost the UK schemes. This means that benchmarking with the UK is easier and the outcomes will be aligned. This is helpful given the States recruitment pool which includes UK public sector workers and the tendency of the unions to benchmark against UK.

Even if the scheme were to be costed using best estimate assumptions, it would be appropriate to include a margin within those because setting assumptions is not a precise science and there is scope for error and bias.

The upshot is that use of prudent assumptions is less likely to lead to reductions in member benefits and increases to employer contributions which is a desirable feature of the reformed scheme.

The use of prudent assumptions provides some scope for flexibility since there is a wide range of prudence that could be adopted.

Relevant external changes since our last 'review' in November 2012

Since our previous review of the new Scheme in November 2012 there have been a number of changes in the UK. These include:

- the implementation of the LGPS from 1 April 2014, and continuing progress on the reforms to the other public sector schemes which are expected to be open from 1 April 2015,
- development of the HMT cost cap infrastructure , governing the cost management process for all the UK public sector schemes. The LGPS cost management process, which exists within the LGPS Regulations and runs parallel to the HMT process, has become more complex due to the interaction with the HMT process
- the UK government's 'Freedom and mobility' reforms, which provide for more flexibility on the use of funds from defined contribution schemes, including removal of the requirement to purchase an annuity. These have been consulted upon and will come into legislation from 1 April 2015
- confirmation that contracting-out of the state second pension will cease from 1 April 2016

In summary, we do not see anything that affects the case for change or the broad nature of the change in Jersey versus our previous analysis and considerations.

Changes in the Jersey environment

We understand the States government is forecasting a more challenging outlook over 2016-2018 arising from weak economic conditions, with stresses on budgets and implications for provision of services.

Further, the Chief Minister has recently been re-elected, and a new Treasury and Resources Minister has taken office who will wish to gain comfort that the reformed Scheme can be afforded.

These changes may raise questions around what is 'right' for Jersey in terms of the affordability of the new scheme under the current climate and whether the reforms are appropriate. Ultimately these are political and philosophical questions which can only be addressed by the politicians.

In our view the process of reform has been thoroughly considered, scrutinised and well documented. The weaker economic situation should not affect the outcome of those processes to date.

Conclusion

In summary our view is that:

- The case for reform is not undermined by the results of the 2013 valuation, or by events in the UK since the last review by us in November 2012.
 - The valuation, or events in the UK since the last review by us, has not changed the arguments for a move to a CARE Scheme.
 - The cost of the proposed new scheme may come under further scrutiny in light of the emerging challenging financial climate in Jersey, but we note that there is flexibility in the degree of prudence adopted for funding valuations and setting the overall employer cost cap. Caution will however be needed to ensure the level of prudence is not diminished to levels which put the stability of the Scheme at risk. Any attempt to materially ratchet back on the proposed provisions of the new Scheme now would cause benchmarking issues with the UK Schemes.
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