



# Government Actuary's Department

## **Isle of Man public service pension schemes**

Accounting figures as at 31 March 2014

Statement by the Actuary

Date: 13 June 2014

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## Statement by the Actuary

### Introduction

1. This statement has been prepared by the Government Actuary's Department at the request of the Finance Division of the Treasury.
2. We understand that the figures and disclosures in this statement may be published in either the Statutory or Management accounts of the Isle of Man public service pension schemes as at 31 March 2014.
3. The figures in this statement have been compiled in accordance with our understanding of the requirements of Financial Reporting Standard 17 ('FRS17'). This report has been prepared solely for the purposes of providing figures for your accounts and the results are not appropriate for other purposes, such as, for example, the setting of contribution rates or possible consideration of benefit changes.
4. As requested by Treasury, this statement is based on the results of a valuation of the Isle of Man pension schemes based on data as at 31 March 2013, with an approximate updating to 31 March 2014 to allow for general changes such as salary growth and pension increases over the period to 31 March 2014.
5. These results rely on updated membership data as at 31 March 2013, whereas last year's results were based on membership data as at 31 March 2011.
6. The membership data for this year's figures is the first to include explicit data in respect of members of the Government Unified Scheme ("GUS") which came into effect from 1 April 2012. This, in itself, should have had little effect on the results since the results as at 31 March 2013 were based on membership data as at 31 March 2011 and an assumption that the terms for converting past service into the GUS were cost-neutral.
7. The schemes included are listed in Table A7 of the Appendix.

### Membership data

8. The individual membership data used to prepare this assessment was provided by the Public Sector Pensions Authority (PSPA). The majority of the data was delivered in November and December 2013, with the remainder in February 2014. The effective date of this data was 31 March 2013.
9. As agreed, we initially checked this membership data only to the point of being satisfied that it is reasonable and broadly consistent with that used for previous estimates of the Isle of Man pension scheme liabilities. In this regard, the numbers of members and their salaries and pension data appeared broadly consistent with the corresponding numbers as at 31 March 2011.



10. However, on reconciling the results from using the updated data with results determined using data as at 31 March 2011, the liabilities assessed using this data appeared lower than we expected. After more detailed analysis, it appears that the service records for active members' have changed significantly, both in respect of many individuals and on average. The average service period of active members in most of the larger schemes has decreased by about 2 years. This results in the liabilities for active members being around 10% lower than we would have expected based on the membership data as at 31 March 2011.
11. With regards to the service issue discussed in Paragraph 10, the PSPA has confirmed that the data as at 31 March 2013 is the most accurate available and that they understand the changes will have had an impact on the results in this statement.
12. We have allowed for general changes such as average increases to salaries and pensions over the period from 31 March 2013 to 31 March 2014. We have assumed, as directed by Treasury, that average salaries have increased by ½% and that pensions have increased by 2.2% over the period from 31 March 2013 and 31 March 2014 (as confirmed by PSPA).
13. The data used in this assessment is summarised in Table A6, split by the Isle of Man pension schemes covered. A list of the schemes covered is set out in Table A7.

#### **The Government Unified Scheme ("GUS")**

14. The figures in this statement are the first to have directly used GUS membership data; the figures as at 31 March 2013 were based on the data as at 31 March 2011 that is, prior to the introduction of the GUS.
15. The GUS came into effect for service on or after 1 April 2012. The terms of the scheme apply to active members from most of the public service pension schemes that existed in the Isle of Man at 31 March 2012, as well as employees who would have been eligible to join those schemes in the future.
16. Service in the GUS is based on a "Standard" set of terms applicable to all members. However, members in service at 31 March 2012 had a one-off option to pay additional contributions to receive a higher level of "Protected" benefits for future accrual. This broadly enabled members to continue accruing benefits in line with the terms of the scheme that they were members of as at 31 March 2012.
17. Benefits accrued before 1 April 2012 have now been converted to GUS benefits on terms which were designed to be fair to members by preserving the value of those benefits.
18. Table A3 shows the Standard Contribution Rate for the GUS split between "Standard" and "Protected" sections. For active members of the GUS we are able to identify if a member is in the Standard or a Protected section so are able to show this split.



19. Table A2 shows past service liabilities for the GUS as a whole. We have not been able to provide the same split as for the Standard Contribution Rate (ie split into Standard or Protected sections) as there is effectively no such distinction once members have left or retired; that is, for deferred or pensioner members in the GUS.

### **Methodology**

20. The value of the liabilities has been determined using the projected accrued benefit method. This method values accrued and future benefits separately. Accrued benefits are shown as a Past Service liability. The cost of the benefits accruing in the following year is determined as a Standard Contribution Rate. The projected accrued benefit method allows for expected future pay increases in respect of active members.
21. The standard contribution rate for accruing costs in the year ended 31 March 2015 was determined using the same principles outlined above for accrued liabilities.
22. The figures allow for the range of benefits normally provided by the Isle of Man pension schemes, including normal retirement benefits, ill-health retirement benefits and benefits applicable following the death of the member.

### **Financial assumptions**

23. The key financial assumptions are the assumed rates of return in excess of prices and in excess of salaries. These assumptions are used to discount benefits for the period they are linked to price and salary increases respectively.
24. The financial assumptions have been determined using a measurement date of 31 January, ie in advance of the effective date of the calculations. This approach is necessary to ensure the results are produced within timescales which would not be possible if the assumptions were determined using a measurement date of 31 March. This approach is consistent with that used for previous years' figures.
25. Based on financial conditions as at 31 January, the assumed rate of return in excess of prices, as measured by the change in the Consumer Price Index (CPI), is 2.10% a year, and the assumed long-term rate of return in excess of earnings is 0.10% a year (slightly higher than the real rate of -0.10% used for the figures as at 31 March 2013).
26. The long-term assumption for general earnings growth is that earnings will increase by 4.20% a year. This represents a real rate of 2.00% a year in excess of CPI, consistent with historical data which shows a close and broadly stable link between earnings growth and inflation.
27. The real rate of 2.00% a year is however a reduction from the real rate of 2.25% a year in excess of CPI used for the figures as at 31 March 2013 (and for prior years) reflecting the effect of recent pay restraint on the observed historic long-term rates of earnings growth (relative to inflation) and the likelihood that earnings growth may continue to be subdued in the future.



28. You have instructed that the figures as at 31 March 2014 should not include any allowance for any current short-term pay restraint policies in the Isle of Man. This contrasts with the figures as at 31 March 2013 which assume that earnings would increase in line with the rate of CPI only for the following 5 years. The removal of the 5 year short term salary growth is the main reason for the change in financial assumptions from 31 March 2013 of £94m.
29. The contribution rate used to determine the accruing cost in 2014-15 is based on the financial (and demographic) assumptions applicable at the start of the year i.e. as at 31 March 2014.
30. The table below lists the financial assumptions used as at 31 March 2014 (with corresponding assumptions as at 31 March 2013). A condensed version is shown in Table A1 of the Appendix.

	<b>31 March 2014</b>	<b>31 March 2013</b>
Gross discount rate	4.30% pa	4.40% pa
Inflation (CPI)	2.20% pa	2.25% pa
Real return (over CPI pension increases)	2.10% pa	2.15% pa
General earnings inflation	4.20% pa*	4.50% pa*
Real return (over earnings inflation)	0.10% pa*	-0.10% pa*

\* But see paragraph 28 regarding allowance for short term earnings growth in 2012/2013.

### **Demographic assumptions**

31. The demographic assumptions adopted were derived from our experience of pension schemes with similar membership profiles, and are unchanged from the assumptions used in the figures as at 31 March 2013. However, some simplification was necessary to determine suitable demographic assumptions for the GUS given the membership relates to a number of different former schemes and employment types.



## Liabilities

32. Table 1 summarises the capital value as at 31 March 2014 of benefits accrued in the Isle of Man pension schemes prior to 31 March 2014 based on the data, methodology and assumptions described in paragraphs 3 to 30.

**Table 1**

### Past service liabilities as at 31 March 2014

Value of liability in respect of	£ million
Pensions in payment	836
Deferred pensions	181
Active members (past service)	1,301
<b>Total</b>	<b>2,318</b>

33. Table A2 in the Appendix contains details of the total past service liability split by scheme.

## Assets

34. FRS17 requires that any assets backing the pension promises are shown at fair market value.
35. You have indicated that there are no such assets to be taken into account for these results. In particular, you and your auditors have previously concluded that the Public Service Employees Pension Reserve (PSEPR) is not ring-fenced to provide pension benefits and should not therefore be shown as an asset. We have assumed that this position is unchanged.

## Accruing costs

36. The cost of benefits accruing in the year (the 'Current Service Cost') is determined at the start of the year and is shown in Table 2. The cost of benefits accruing for each year of service is met by the employer and the employees. The Isle of Man schemes have varying level of employer contributions.

The standard contribution rates which will be used to determine the Current Service Cost in the 2015 accounts are shown below:

**Table 2**

### Current Service Cost 2014-15

Current Service Cost	Percentage of pensionable pay
Total Standard Contribution Rate	32.6%
Member contribution rate (average)	7.0%
Employer share of standard rate	25.6%



37. Table A3 in the Appendix contains details of the current service cost for 2014-15 split by scheme.
38. The employers' share of the standard contribution rate determined for the purposes of the accounts may differ to that actually charged to employers.

### Sensitivity

39. The figures in this statement are heavily dependent upon the underlying assumptions used. Table 3 below illustrates the approximate effects on the results of using different values for some of the main assumptions:

**Table 3**

#### Sensitivities

Assumption	Effect on Past Service Liabilities	Effect on Total Standard Contribution Rate
	<b>£2,318m</b>	<b>36.6%</b>
Discount rate (in excess of CPI) decreasing by ½% pa	+ £230m	+ 4.2%
Mortality assumption altered so that members exhibit the mortality currently assumed for someone one year younger	+ £60m	+ 0.7%
Long-term earnings growth decreasing by ½% pa	- £75m	- 2.0%

40. Table 3 shows that the approximate effects of reducing the discount rate by ½% pa would be to increase the past service liability by £230m to £2,548m and the total standard contribution rate by 4.2% to 36.8%.

### Disclosures (see Appendix)

41. Table A4 shows the Balance Sheet as at 31 March 2014.
42. Table A5 shows the form of the Profit and Loss disclosure. This reconciles the Balance Sheet item as at 31 March 2014 with that at 31 March 2013.
43. The experience gain of £175m broadly reflects a gain from salary increases over the year from 31 March 2013 to 31 March 2014 of around £50m and a further gain of around £125m resulting from using the new data as at 31 March 2013.



44. The service data issue discussed in Paragraphs 10 and 11 would broadly appear to explain most of this £125m experience gain from the new data. However there will be other factors which have either contributed to this gain or indeed may have produced an off-setting loss. For example, some experience gains or losses (for example, due to mortality experience) between 31 March 2011 (the date of the previous data) and 31 March 2013 would come through into these results. It would be difficult, without significant additional data and resources, to analyse this experience gain in more detail

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**13 June 2014**





## Appendix

**Table A1 – Financial assumptions**

<b>Assumption</b>	<b>31 March 2014</b>	<b>31 March 2013</b>
Rate of return (discount rate)	4.30%	4.40%
Rate of return in excess of:		
General earnings inflation	0.10%*	-0.10%*
Pension increases*	2.10%	2.15%
Inflation		
General earnings inflation	4.20%*	4.50%*
Price inflation (CPI)	2.20%	2.25%

\* But see paragraph 28 regarding allowance for short term earnings growth in 2012/2013.

**Table A2 – Total Past Service Liability as at 31 March 2014**

<b>Value of liability in respect of scheme</b>	<b>£million</b>
Government Unified Scheme	1,733
Teachers	383
Judicial Pension Schemes	7
Tynwald Pension Schemes	19
Police Pension Scheme	166
Manual Workers No1 Scheme	7
Other non GUS Schemes**	3
<b>Total</b>	<b>2,318</b>

\*\* This refers to a number of small, closed, schemes consisting only of pensioner members. Details of these schemes are provided in Table A7. PSPA have confirmed that these schemes are not part of the GUS.



**Table A3 – Current Service Cost 2014-15**

Scheme	Current Service Cost as a percentage of pensionable pay		
	Total standard contribution rate	Members contribution rate (average)	Employer share of standard rate
Government Unified Scheme:	31.4%	6.3%	25.1%
Standard Section	23.4%	4.9%*	18.5%
Protected Sections	34.2%	6.8%	27.4%
Teachers	33.4%	9.7%	23.7%
Judicial Pension Schemes	46.8%	3.0%	43.8%
Tynwald Pension Schemes	43.8%	0.0%	43.8%
Police Pension Scheme	59.4%	13.9%	45.5%
Manual Workers No1 Scheme	31.3%	5.0%	26.3%
<b>Total</b>	<b>32.6%</b>	<b>7.0%</b>	<b>25.6%</b>

\* The overall employee rate for Standard Section members is currently slightly less than the 5% rate generally payable due to the transitional arrangements which limit any increase in employee contributions (from the rates that were being paid by members prior to the introduction of the GUS) to a maximum of 1% a year. By 2015/2016 all Standard Section members will be paying 5%.

**Table A4 – Balance sheet disclosures**

	<b>31 March 2014</b> £ million
<b>Total market value of assets</b>	0
<b>Value of liabilities</b>	2,318
<b>Surplus (deficit)</b>	(2,318)
<b>of which recoverable by employers</b>	n/a



**Table A5 – Profit & loss disclosures**

	<b>Year ending 31 March 2014</b>
	£ million
<b>Analysis of amount charged to pension cost</b>	
Current service cost (net of employees' contributions)	(70)
Past service cost	
<b>Total operating charge</b>	<b>(70)</b>
<b>Analysis of the amount debited from other finance income</b>	
Expected return on scheme assets	
Interest on pension liabilities (@ 4.40%)	(97)
<b>Net return</b>	<b>(97)</b>
<b>Analysis of amount recognised in other comprehensive net expenditure</b>	
Actual return less expected return on scheme assets	-
Experience gains and losses arising on pension liabilities	175
Changes in mortality assumptions	-
Changes in demographic assumptions (other than mortality)	-
Changes to financial assumptions from 31 March 2013	(94)
<b>Actuarial gain (loss) recognised in other comprehensive net Expenditure</b>	<b>81</b>
<b>Movement in surplus during the year</b>	
Surplus at 31 March 2013	(2,291)
Current service cost (net of employees' contributions)	(70)
Employees' contributions towards current service cost	(18)
Benefits paid during the year	77
Past service costs	-
Other finance income	(97)
Actuarial gain (loss)	81
<b>Surplus at 31 March 2014</b>	<b>(2,318)</b>



**Table A6 – Summary of data as at 31 March 2013 used in this assessment at 31 March 2014**

**Active member summary**

<b>Scheme</b>	<b>Active members</b>	<b>Average age at 31 March 2013</b>	<b>Total Salaries at 31 March 2013 (£m)</b>	<b>Total adjusted Salaries at 31 March 2013 (£m)</b>
Teachers	1,098*	43	40.0	40.6**
Judicial Pension Schemes	7	55	1.0	1.0
Tynwald Pension Schemes	33	57	1.3	1.3
Police Pension Schemes	220	39	8.0	8.0
Manual Workers No1 Scheme	6	62	0.1	0.1
GUS	6,961	46	224.4	226.2**
<b>Total</b>	<b>8,325</b>	<b>45</b>	<b>274.8</b>	<b>277.2**</b>

\* We have been notified that there were a further 17 teachers who were members of the Teacher's schemes' during 2012/13 but who have not as yet accrued any benefits, but may do in future. For the avoidance of doubt these members are not included in the figures above.

\*\* This data included several members for whom no salary data was provided. We have assumed that these members are earning in line with the average salary for their pension scheme section.

<b>GUS section</b>	<b>Active members</b>	<b>Average age at 31 March 2013</b>	<b>Total Salaries at 31 March 2013 (£m)</b>	<b>Total adjusted Salaries at 31 March 2013 (£m)</b>
1	2,116	41	57.1	57.8**
2	3,743	49	128.8	129.5**
3	732	45	24.7	24.8**
4	244	41	6.5	6.8**
5	49	49	4.3	4.3
6	2	41	0.1	0.1
7	75	43	2.9	2.9
<b>Total</b>	<b>6,961</b>	<b>46</b>	<b>224.4</b>	<b>226.2**</b>

\*\* This data included several members for whom no salary data was provided. We have assumed that these members are earning in line with the average salary for their pension scheme section.

**Deferred member summary**

<b>Scheme</b>	<b>Deferred members</b>	<b>Total Deferred Pensions at 31 March 2013 (£m)***</b>
Teachers	378	1.3
Judicial Pension Schemes	-	-
Tynwald Pension Schemes	3	0.0
Police Pension Schemes	36	0.2
Manual Workers No1 Scheme	11	0.0
GUS	2,568	7.1
<b>Total</b>	<b>2,996</b>	<b>8.7</b>

\*\*\* These figures show the deferred pensions, revalued from each member's date of leaving up to March 2013.



**Pensioner member summary**

<b>Scheme</b>	<b>Pensioners members</b>	<b>Total current pensions at 31 March 2013 (£m)</b>
Teachers	818	9.8
Judicial Pension Schemes	6	0.3
Tynwald Pension Schemes	39	0.6
Police Pension Schemes	208	4.1
Manual Workers No1 Scheme	59	0.3
Other non-GUS*	47	0.3
GUS	3,773	29.6
<b>Total</b>	<b>4,950</b>	<b>45.0</b>

\* This section is made up of a number of small, closed, schemes consisting only of pensioner members. Details of these schemes are provided in Table A7. PSPA have confirmed that these schemes are not part of the GUS.

**Table A7 – Isle of Man Pension Schemes included in this assessment at 31 March 2014**

**Public Sector Pension Schemes**

Government Unified Scheme  
 Teachers Superannuation Scheme  
 Police Pension Regulations 1991 and 2010  
 Judicial Pension Schemes 1992 and 2004  
 Tynwald Pension Schemes 1985 and 1995  
 Superannuation (Manual Workers) (No 1) Pension Scheme  
 Electricity Board (Officers of Board) 1960\*\*  
 Electricity Board Manual Workers 1976\*\*  
 Manx Electricity Authority Local Government Optants\*\*  
 Superannuation (traffic wardens) scheme 1989\*\*  
 The Leisure Services Superannuation Scheme 2000\*\*

\*\* These schemes are small, closed, public sector schemes which were not taken into the GUS. They consist only of pensioner members. PSPA have confirmed that these schemes are not part of the GUS.