April 2010

# Thales UK Pension Scheme – Section 2

# Actuarial valuation as at 31 December 2008

# **MERCER**



Mercer Limited is authorised and regulated by the Financial Services Authority Registered in England No. 984275 Registered Office: 1 Tower Place West, Tower Place, London EC3R 5BU

Consulting. Outsourcing. Investments.

# Summary

An initial actuarial valuation of Section 2 of the Thales UK Pension Scheme ("the Section") has been carried out as at 31 December 2008.

The key conclusions from the valuation are:

- The Section showed a deficit of £73m at the valuation date based on the assumptions made for calculating its technical provisions. This measure compares the Section's assets with the value of the past service benefits at 31 December 2008. It represents a funding level of 81% relative to the Section's funding target.
- Based on the assumptions used to assess the technical provisions, the cost to the Employer of the CARE benefits accruing for future service was 12.8% of CARE Salaries.
- If the Section had been discontinued at the valuation date, there would have been insufficient Section assets to buy out all the benefits with an insurance company. The estimated wind-up funding level at the valuation date was 49%.
- Thales UK Limited ("the Employer") and the Trustees have agreed that the Employer will contribute as follows:
  - 12.8% of members' CARE Salaries (Pensionable Salary for former Category 1 Thomson Pension Plan members), plus
  - £6 million per annum, payable in monthly instalments for the period 1 April 2010 to 31 December 2022, plus
  - Amount equal to the PPF levies.
  - No additional contributions are required from the Employer to meet the death benefit insurance costs or expenses since allowance for these is included in the amounts above.

- Contributions will generally be paid monthly in arrears with each payment due by the 19<sup>th</sup> of each month. The PPF levy costs will be paid annually as required.
- In determining the funding target and the above pattern of Employer contributions, the Trustees have taken account of guarantees provided by Thales Holdings UK Plc and Thales SA.
- Member contributions or Employer contributions in respect of the Pay Conversion salary sacrifice arrangement are payable in addition to the above, at the rates set out in the Scheme Rules. Contributions will be paid by the 19<sup>th</sup> of the month following the month of sacrifice or contribution deduction (as appropriate) from members' salaries.
- If the assumptions made for assessing the recovery plan are borne out in practice, these contributions will eliminate the shortfall of £73 m against the technical provisions by 31 December 2022 and will improve the wind-up funding position of the Section.
- These contributions are set out in the schedule of contributions and recovery plan enclosed as appendices.
- The recovery plan, the schedule of contributions and a summary of the valuation will be submitted to the Pensions Regulator.

Signature	Oal Cat	,
Scheme Actuary	M Condron	
Date of signing		1 April 2010
Qualification	Fellow of the Faculty of Act	uaries

Con	tents		age
1.	Introduction	on	1
2.	Funding re	esults – technical provisions	3
3.	Funding re	esults – contribution requirements	4
4.	Method ar	nd assumptions	7
5.	Wind-up fo	unding results	10
6.	Pension P	Protection Fund (PPF)	13
7.	Variability	and risks	14
Appei	ndix A.	Assets and financial transactions	17
Appei	ndix B.	Benefits	19
Appei	ndix C.	Membership data	20
Appei	ndix D.	Statement of Funding Principles	22
Appei	ndix E.	Recovery Plan	30
Appei	ndix F.	Schedule of Contributions and Certification	32
Certif	ication	Certificate of technical provisions	36

This report is addressed to the Thales Pension Trustees Limited ("the Trustees") and has been prepared in accordance with the version of the Board for Actuarial Standards' *Guidance Note 9: Funding Defined Benefits – Presentation of Actuarial Advice* current at the date this report is signed.

The calculations in the report use methods and assumptions appropriate for reviewing the financial position of the Section and determining the appropriate contribution rate for the future. Mercer does not accept liability to any third party in respect of this report; nor does Mercer accept liability to the Trustees if the advice is used for any purpose other than that stated (for example for company accounting or corporate mergers/acquisitions).

The report may be disclosed to members and others who have a statutory right to see it. It may also be disclosed to any participating employer and, if the Trustees and Mercer consent, it may be disclosed to other third parties.



#### Introduction

1.1 This report sets out the results of the initial actuarial valuation of Section 2 of the Thales UK Pension Scheme ("the Section") as at 31 December 2008 and is addressed to Thales Pension Trustees Limited ("the Trustees").

#### **Purpose of the valuation**

- 1.2 The primary aims of the valuation are to review the financial position of the Section and to determine appropriate Employer contributions to the Section for the future. In particular, the valuation aims to:
  - Assess the Section's funding position relative to the statutory funding objective.
  - Assess whether the Section would have sufficient resources were it to discontinue.
  - Determine the appropriate future level of Employer contributions, taking the above into account.
- 1.3 The Thales UK Pension Scheme's Deed and Rules require the Trustees to agree the contributions with the Employer. In accordance with the Pensions Act 2004, the Trustees and Employer have agreed on the funding policy, assumptions, statement of funding principles, recovery plan and schedule of contributions.
- 1.4 The valuation has been carried out on the instruction of the Trustees, and in accordance with Rule 21.1 of the Second Definitive Deed and Rules and Section 224 of the Pensions Act 2004.
- 1.5 This is the first actuarial valuation of Section 2 of the Thales UK Pension Scheme since it came into effect on 9 January 2008.
- 1.6 Benefit accrual under the Section commenced on 1 July 2008 following the bulk transfer, on 30 June 2008, of all assets and liabilities of the following schemes:

- Thomson Pension Plan
- Thomson Retirement Benefits Scheme
- W Vinten Limited Pension Scheme
- Avimo Pension Scheme (active members only)

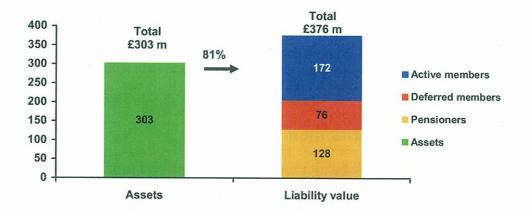
#### **Funding objective**

- 1.7 The Pensions Act 2004 and the Scheme Funding Regulations issued in 2005 require schemes to adopt the statutory funding objective to have sufficient and appropriate assets to cover their "technical provisions". The technical provisions are an estimate of the assets needed to make provision for benefits already accrued under a scheme.
- 1.8 The Trustees have decided on a funding objective, and agreed it with the Employer. This is set out in the statement of funding principles, enclosed as Appendix D.
- 1.9 In summary, the agreed funding objective is to reach, and then maintain, assets equal to the technical provisions, assessed on an ongoing basis allowing for future salary increases and CARE revaluations for active members.
- 1.10 Under legislation, the assumptions underlying the technical provisions are set by the Trustees with the agreement of the Employer. The assumptions include margins for prudence that the Trustees consider appropriate given the Employer's willingness and ability to support the Section (the "employer covenant"). I have provided advice to the Trustees on margins for prudence. This advice took account of the information on the employer covenant provided separately by the Employer and the Trustees' advisors.
- 1.11 It has been agreed by the parties that Thales Holdings UK Plc ("Holdings"), the UK parent of Thales UK Limited, will guarantee the deficit contributions payable by the Employer (and any section 75 debt on wind up), subject to a maximum of £73m, reducing from 31 December 2008 by deficit contributions actually paid.
- 1.12 It has also been agreed that Thales SA, the French-listed holding company in France, will extend an existing guarantee up until 31 December 2011, which is the effective date of the next formal valuation of the Section. This guarantee will effectively back up the Holdings guarantee mentioned in 1.11 above such that a failure of Holdings to pay under its guarantee would trigger payment by Thales SA, subject to a maximum of £11.125m, reducing from 31 December 2008 by deficit contributions actually paid.
- 1.13 The above guarantees have been taken into consideration by the Trustees in determining the funding objective and the statement of funding principles.

2

# Funding results - technical provisions

2.1 The market value of the Section's assets at the valuation date is compared with the Section's technical provisions below.



- 2.2 The shortfall against the technical provisions at the valuation date was £73m. This represents a funding level of 80% relative to the technical provisions.
- 2.3 The technical provisions are not the same as the cost of securing the benefits on a wind-up. The wind-up position is described in Section 5.

3

### Funding results - contribution requirements

- 3.1 The contributions payable by the Employer have been agreed and details are set out in the recovery plan (Appendix E) and the schedule of contributions (Appendix F).
- 3.2 These contributions are made up of the following elements:
  - A contribution to cover the cost of the future service accrual (plus life assurance cover, expenses and PPF levies) over the year.
  - An adjustment to address the shortfall against the technical provisions.

#### **Normal contribution**

3.3 The table below shows the first of these elements. This cost is calculated as the value of benefits expected to accrue to the membership in respect of one year's service based on revalued CARE salaries or, in the case of former Category 1 Thomson Pension Plan members, projected Pensionable Salaries. To this are added the cost of insured death benefits and expenses. The figures are expressed as percentages of CARE Salaries and apply for the period to the next formal actuarial valuation. Throughout the rest of this report all references to CARE Salaries should be taken to mean Pensionable Salaries in respect of former Category 1 Thomson Pension Plan members.

	31 December 2008	
Pension benefits	16.1	
Death benefits	1.7	
Expenses	1.5	
Total	19.3	
Less members' contributions	(6.5)	
Employer's normal contribution	12.8	

3.4 In addition, the Employer will reimburse the Trustees for PPF levies paid.

#### **Contributions to address shortfall**

- 3.5 The recovery plan and the schedule of contributions set out the overall contribution rates agreed, including those to meet the shortfall against the Section's technical provisions over the recovery period of 14 years. Details of the timing and frequency of contributions are given, together with the date on which the revised contributions commence.
- 3.6 The contributions agreed for the period to the next formal actuarial valuation include the following amounts towards the shortfall against the Section's technical provisions:
  - £0.5 million per annum to 31 March 2010;
  - £6 million per annum from 1 April 2010 to 31 December 2011.
- 3.7 Over the longer term (i.e. beyond the next formal actuarial valuation) and on the assumptions set out in the statement of funding principles, the contributions required to meet the Section's funding objective are as follows:
  - £6 million per annum until 31 December 2022.

#### **Limitations on advice**

- 3.8 I have drawn the Trustees' attention to the issues they should consider when setting the recovery plan and contribution rate under paragraphs 75, 79 and 102 of the Pensions Regulator's Code of Practice No. 3 (Funding defined benefits). Having informed the Trustees in advance, I have not provided advice on the following matters:
  - The Employer's business plans and the likely effect any potential recovery plan would have on the future viability of the Employer.

- The ability of the Trustees to pursue an employer to make good a deficiency in the event of a Section wind-up. If the Trustees might have difficulty pursuing an employer to recover a debt (for example, if the employer or its parent is based overseas), they should usually seek a shorter recovery period.
- The Employer's expenditure commitments. For example, some "back-end loading" might be acceptable when the Employer's payments towards redeeming a commercial mortgage are due to end in the near future or a vital one-off investment in new equipment is being made in the next year.
- The value of any contingent security provided by the Employer bearing in mind both the term and enforceability. A longer recovery period or one structured with a degree of back-end loading may be appropriate where security has been provided in the event of insolvency.
- Whether there are any impending member movements which would have a potentially significant effect on funding, such as major retirements or bulk transfers (in or out).
- The anticipated level of the risk-based element of the Pension Protection Fund levy, year on year, over the course of the recovery period and how this is met by the Employer.



# **Method and assumptions**

#### **Funding method**

- 4.1 The funding method adopted is known as the projected unit method, under which the salary increases and the revaluation increases to salary assumed for each member are projected until the member is assumed to leave active service.
- 4.2 If the membership profile remains stable in terms of age and sex, and the assumptions are borne out, then the normal contribution rate (as a percentage of salaries) will remain stable. The method therefore implicitly allows for new entrants replacing leavers.
- 4.3 Since the Section is closed to new entrants, over time the normal contribution rate would be expected to rise. However, the membership is expected to reduce so that the total Employer contributions in monetary terms will gradually reduce.

#### **Assumptions**

4.4 The financial and demographic assumptions used to assess the technical provisions, the normal contribution and the recovery plan are set out in the statement of funding principles (Appendix D).

4.5 The table below sets out a summary of the market yields at the valuation date:

	31 December 2008
Long-dated gilt yield	3.8% p.a
Long-dated index-linked gilt yield	0.9% p.a
Market expectation for inflation (long-term)	2.9% p.a
Long-dated corporate bond yield	5.8% p.a

4.6 The assumptions to which the valuation results are particularly sensitive are shown below.

	31 December 2008 technical provisions
Investment return	
Pre-retirement	5.8% p.a.
Post-retirement	4.8% p.a.
Price inflation (RPI)	2.7% p.a.
Salary increases	3.7% p.a.
Pension increases in payment	
LPI (5% maximum)	2.6% p.a.
LPI (2.5% maximum)	2.1% p.a.

Demographic	31 December 2008 technical provisions
Retirement	Benefit accrual prior to 1 January 2008 has been valued at the Normal Retirement Age under the member's former scheme.
	Benefit accrual after 31 December 2007 has been valued using a Normal Retirement Age of 65.
Mortality – base table	93% (male) and 102% (female) SAPS Normal tables using year of birth
Future improvements to Mortality	Medium cohort projections with 0.75% minimum improvement per annum (starting from 2003)
Commutation	The maximum permissible under HMRC Rules based on current commutation factors.

The contributions payable under the recovery plan are calculated using the same assumptions as those used to calculate the technical provisions except for equity—type investments where the assumed returns are 1% p.a in excess of the pre-retirement investment return assumption.

4.7 As an illustration of the mortality rates assumed the further life expectancies at 65 for male and female members currently aged 45 and 65 are shown below:

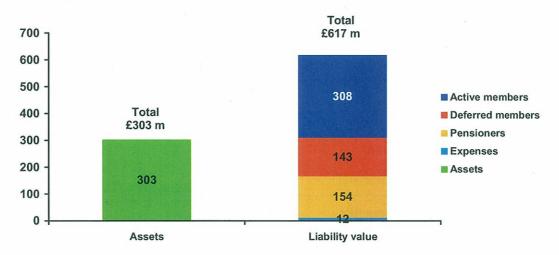
	Males	Females
Non-retired member (age 45 currently)	22.8 years	24.9 years
Retired member (age 65 currently)	21.2 years	23.4 years

4.8 The basis of valuing the assets (market value) is consistent with that of valuing the liabilities.

5

# Wind-up funding results

5.1 The wind-up funding level of the Section at the valuation date has been estimated as 49%.



- 5.2 Had the statutory funding objective been exactly met on the valuation date (i.e. assets equal to technical provisions), the wind-up funding level would have been 61%.
- 5.3 As the Section is less than 100% funded on the wind-up basis at 31 December 2008, not all members could have received their full benefits from the assets had the Section wound up on that date.
- 5.4 If the Section had been wound up on the valuation date, the priority order currently applicable would have had the following approximate impact on the different categories of benefit.

Benefit category	Coverage of benefits
Benefits up to level covered by PPF	63%
Any other benefits above those covered by PPF	0%

- 5.5 There is now a liability on employers on wind-up of a scheme based on the cost of meeting benefits in full. The estimated shortfall at the valuation date amounted to £314 million.
- 5.6 The above measures look at the Section's funding on the assumption that it had been discontinued on the valuation date and the benefits bought out with an insurance company.
- 5.7 In doing this, it is assumed that no further benefits accrue, no further contributions are paid and active members are entitled to benefits on the basis they had left service on the valuation date. There is no allowance for any discretionary benefits being paid in the future.
- 5.8 Given the Trustees' current investment policy, the wind-up position on a given date may be significantly different from the position estimated at the valuation date.
- The funding level is only an estimate since it is not based on an actual quotation. The true position could only be established by completing a buy-out.
- 5.10 The assessments above have been carried out using experience of recent buyout quotations and understanding of the factors affecting this market. A detailed analysis of the reserves that would need to be held has not been carried out. Consideration has been given to the market terms for the financial instruments in which providers would be expected to invest, and an approximate allowance has been made for the reserves a provider would maintain to cover the risks involved and the statutory reserving requirements. These results are, therefore, only a guide to the wind-up position and should not be taken as a quotation. Market changes, both in interest rates and in supply and demand for buy-out business, mean that if a buy-out ultimately proceeds, actual quotations may differ. The assumptions used are as follows:

Financial		
Investment return		
Non-pensioners (pre retirement)	3.7% p.a.	
Non-pensioners (post retirement)	3.8% p.a.	
Pensioners	4.0% p.a.	
Pension increases		
LPI (5% maximum) Non pensioners / pensioners	3.2%/2.9% p.a.	
LPI (2.5% maximum) Non pensioners /pensioners	2.3%/2.0% p.a.	

Demographic	
Retirement	Earliest age at which member can elect to take each tranche of benefits without actuarial reduction
Mortality – base table	PA92 tables using year of birth
Mortality – future improvements	
Males	Medium cohort projections with 1.5% minimum improvement per annum starting from 2007
Females	Medium cohort projections with 1% minimum improvement per annum starting from 2007
Commutation	No allowance
Proportion married	90% (males) 80% (females)
Spouse's age	Wives are 3 years younger than their husbands

- 5.11 An allowance for wind-up expenses of 2% of the liabilities of the Section has been made.
- 5.12 If the assumptions used for the recovery plan are borne out over the next three years, the agreed contributions are paid and there are no changes to the wind-up assumptions, the wind-up funding level at the next formal actuarial valuation (as at 31 December 2011) is estimated to be 52%. It is expected that the proportion of benefits in each priority class will have changed to the figures shown below.

Benefit category	Coverage of benefits
Benefits up to level covered by PPF	66%
Any other benefits above those covered by PPF	0%



# **Pension Protection Fund (PPF)**

- 6.1 If the Section winds up when the Employer is insolvent, it may be eligible for the PPF. The Section's assets and liabilities would only transfer to the PPF if the assets were insufficient to buy out the benefits provided by the PPF.
- 6.2 The benefits that the PPF could provide would be broadly 100% of pension for members over pension age and 90% of a capped amount of pension for members under pension age. Under the current PPF provisions:
  - Pensions in payment will be increased annually, at the lower of 2.5% and the change in the retail prices index (RPI), in respect of service after 5 April 1997 only. Pensions accrued before April 1997 are not increased.
  - All deferred pensions will be revalued over the period to retirement in line with the increase in the RPI over the same period, or 5% per annum if less.
  - Spouses' pensions will be 50% of members' PPF benefits.
  - The pensions of members aged less than their scheme's normal pension age when the scheme enters the PPF will be capped. The cap depends on the member's age and will increase in line with earnings. For example, in 2009/10 the cap is £31,936 at age 65 so that the maximum amount of compensation for members retiring at age 65 will be 90% of this, i.e. £28,742.
- 6.3 Based on the PPF benefits, and the financial and demographic assumptions prescribed by the PPF, the Section is estimated to be 65% funded at the valuation date.
- 6.4 In this case, had an insolvency event occurred (and no employer debt payment been recovered), it is likely that the PPF would have been required to assume responsibility for the Section.

1

### Variability and risks

- 7.1 The Employer contributions set out in the recovery plan and schedule of contributions are based on the valuation results set out in sections 3 and 4 of this report. These in turn depend on the financial and demographic assumptions set out in the statement of funding principles.
- 7.2 It is likely, especially in the short term, that these assumptions will not be borne out in practice. It is therefore important to consider the potential impact on the funding position and the Employer contribution rate of actual experience differing from what has been assumed.

#### Sensitivity to key assumptions

- 7.3 Investment return, inflation and life expectancy assumptions impact significantly on both the funding position and the cost of the benefits accruing over the year.
- 7.4 The following table illustrates the sensitivity to variations in these key assumptions over the long term. The starting points are the technical provisions of £376 million shown in section 2.1 and the Employer normal contribution of 12.8% shown in section 3.3. Each row of the table considers one change in isolation, with all other assumptions being unaltered. An equivalent change in the assumption in the opposite direction would decrease the liability value by the same amount.

Change in assumption	Increase in technical provisions at 31 December 2008	Increase in Employer normal contribution at 31 December 2008
,	£ m	% of CARE Salaries
Pre-retirement investment return reduced by 0.25% p.a.	+6	+0.4
Post-retirement investment return reduced by 0.25% p.a.	+10	+0.4
Price inflation increased by 0.25% p.a.	+13	+0.5
Life expectancy increased by one year	+10	+0.5

7.5 To put the above into context, the table below illustrates how the funding position at the valuation date would vary for given movements in gilt/bond yields and equity markets.

	Change in gilt/bond yields		
Change in equity	-1% p.a. (Yield = 2.8%)	No change (Yield = 3.8%)	+1% p.a. (Yield = 4.8%)
values			
-20%	68%	74%	82%
No change	74%	81%	90%
+20%	79%	87%	97%

#### Risks that the statutory funding objective will not be met

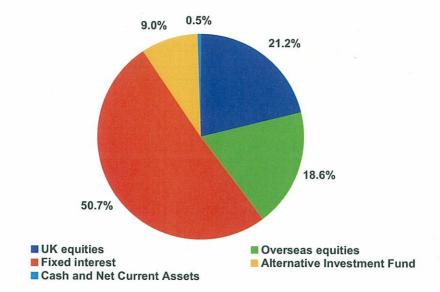
- 7.6 The Trustees' policy for meeting the Section's statutory funding objective carries a number of risks outside the Trustees' control. The following paragraphs comment on some potentially material risks.
- 7.7 If the Employer becomes unable to pay contributions or to make good deficits in the future and if the valuation assumptions are borne out in practice, the Section's assets will be lower than expected and the funding level will be worse than expected. If the reason for the Employer not paying the agreed contributions is one of financial difficulties, the Trustees' focus would switch to the results on the wind-up basis, as set out in section 5.
- 7.8 If the future investment return on assets falls short of the rates assumed in the calculation of the technical provisions and the recovery plan, the wind-up position of the Section may be worse than expected. It is likely that an increase in future Employer contributions will be required.

- 7.9 If gilt yields change such that the liability values increase by more (or decrease by less) than the assets, the funding position against the technical provisions and on the wind-up basis may be worse than expected. An increase in Employer contributions will be expected as a result. A quantitative illustration of such a change was shown by the sensitivity analyses in paragraph 7.4.
- 7.10 If improvements in mortality are faster than assumed, the cost of benefits will increase because members are living longer than expected. This will mean the funding position against the technical provisions and on the wind-up basis will be worse than expected, and an increase in Employer contributions will be expected as a result. A quantitative illustration of such a change was shown by the sensitivity analyses in paragraph 7.4.
- 7.11 If members make decisions around their options which increase the Section's liabilities, the wind-up funding position and the progress towards the statutory funding objective would be worse than expected. As a result, future Employer contributions may need to be increased. An example would be if members do not commute the maximum possible pension for cash, as is being assumed.
- 7.12 A material proportion of the Section's assets are equities or equity-type investment. The value of these assets may be volatile and is unlikely to move in line with the Section's liabilities, especially in the shorter term. This potentially results in some volatility in the funding position and could give rise to a need for higher Employer contributions in future. To a lesser extent this risk is also present in the Section's corporate bond investments as their value may fluctuate as market views on probability of default vary.

Appendix A

#### **Assets and financial transactions**

- A.1 The market value of the Section's assets (excluding additional voluntary contributions (AVCs) which are separately invested) was £302,869,000 on the valuation date.
- A.2 The distribution of the assets by asset class is shown below:



- A.3 The details of the assets at the valuation date have been obtained from the audited accounts for the Thales UK Pension Scheme.
- A.4 Following the inception of the Thales UK Pension Scheme it was agreed that the Employer would pay the following contributions into Section 2:
  - 10.7% of CARE Salaries from 1 July 2008 to 31 December 2017
  - £0.1 million by 31 December 2008
  - £0.5 million between 1 January 2009 and 31 December 2010
  - £4.5 million per annum between 1 January 2011 and 31 December 2017

- A.5 The audited accounts confirm that contributions have been paid at these rates since 1 July 2008.
- A.6 The Trustees hold a group life insurance policy with Legal & General which insures the lump sum benefit payable on death-in-service and a group life insurance policy with Canada Life which insures spouses' death-in-service pensions.
- A.7 The detailed asset information is shown below:

Market value at valuation date	£000s
Bonds:	,
Fixed interest	153,557
Equities:	
UK	64,348
Overseas	56,376
Alternative investments	27,126
Net current assets/(liabilities)	1,462
Гotal	302,869

Appendix B

#### **Benefits**

- B.1 The benefits valued are as set out in the Second Definitive Deed and Rules dated 30 June 2008 plus supplemental deeds.
- B.2 The benefits that will emerge from AVCs paid by members, and the pensions being paid by insurers have been excluded from the valuation, as have the corresponding assets.
- B.3 UK and European law requires pension schemes to provide equal benefits to men and women in respect of service after 17 May 1990 (the date of the "Barber" judgement). There is still no general agreement on whether this applies to inequalities caused by Guaranteed Minimum Pensions (GMPs) and, if it does, what adjustments have to be made to scheme benefits to correct these inequalities. The valuation makes no allowance for removal of these inequalities. It is consequently possible that additional funding will be required for equalisation once the law has been clarified. It is recommended that the Trustees seek further professional advice if they are concerned about this issue.

Appendix C

# **Membership data**

C.1 The membership data at the valuation date is summarised below.

Active members	
Number	1,992
Total CARE Salaries (£000s p.a.)	75,931
Average CARE Salary (£ p.a.)	38,118
Average age	50.1
Average past service (years)	10.4

<b>Deferred pensioners</b>	
Number	1,976
Total deferred pensions (£000s p.a. revalued to valuation date)	6,118
Average deferred pension (£ p.a.)	3,096
Average age	51.4

Pensioners		
Number	1,817	
Total pensions payable (£000s p.a.)	7,719	
Average pension (£ p.a.)	4,248	
Average age	69.7	

C.2 Pensions in payment were increased as guaranteed under the Rules of the Thales UK Pension Scheme.

C.3 Data in relation to members of the Section was provided by the Trustees, via the Thales UK Pension Scheme's administrator, and its accuracy has been relied on. Whilst reasonableness checks on the data have been carried out, they do not guarantee the completeness or the accuracy of the data. Consequently Mercer does not accept any liability in respect of its advice where it has relied on data which is incomplete or inaccurate.



### **Statement of Funding Principles**

This statement of funding principles sets out the policies of Thales Pension Trustees Limited ("the Trustees") as trustees of the Thales UK Pension Scheme ("the Scheme") for securing that the statutory funding objective is met for Section 2 of the Scheme ("the Section").

It has been prepared by the Trustees to satisfy the requirements of section 223 of the Pensions Act 2004, after obtaining the advice of the Scheme Actuary. It will be taken into account in the actuarial valuation as at the effective date of 31 December 2008, unless it is revised before the completion of that valuation.

This statement of funding principles has been agreed by Thales UK Limited ("the Employer"), acting on behalf of the participating employers in the Section.

#### The statutory funding objective

The statutory funding objective is that the Section has sufficient and appropriate assets to pay its benefits as they fall due (the technical provisions).

#### **Calculation of the technical provisions**

The principal method and assumptions to be used in the calculation of the technical provisions are set out in the Appendix.

The general principles adopted by the Trustees are that the assumptions used, taken as a whole, will be sufficiently prudent for pensions and benefits already in payment to continue to be paid, and to reflect the commitments which will arise from members' accrued pension rights. The basis will include appropriate margins to allow for the possibility of events turning out worse than expected and will only be adopted after considering how it compares with the assumptions used to assess the Section's solvency position.

In particular, a prudent margin will be included in the discount rate and demographic assumptions will be based on prudent principles. Other assumptions will be based on best estimates of future experience, within the constraint of the basis being prudent overall. However, the Trustees do not intend for the method and assumptions to remove completely the risk that the technical provisions could be insufficient to provide benefits in the future.

Mercer 22

In determining what is "prudent" the Trustees will take into account their objective assessment of the Employer's covenant.

#### Policy on discretionary increases and funding strategy

No allowance has been included in the assumptions for paying discretionary benefits or making increases to benefits that are not guaranteed under the Scheme's Second Definitive Deed and Rules ("the Rules"). The Trustees will not provide discretionary benefits unless the Employer pays any additional contributions required under Clause 6 of the Rules.

#### Rectifying a failure to meet the statutory funding objective

If the assets of the Section are less than the technical provisions at the effective date of any actuarial valuation, a recovery plan will be put in place, which requires additional contributions from the Employer to meet the shortfall. The Trustees and the Employer have agreed that any such funding shortfalls should be eliminated as quickly as the Employer can reasonably afford.

Additional contributions will be expressed as level monetary amounts.

In determining the actual recovery period at any particular valuation, the Trustees will take into account the following factors:

- the size of the funding shortfall and the Section's asset and liability structure;
- the business plans of the Employer;
- the Trustees' objective assessment of the financial covenant of the Employer;
- any contingent security offered by the Employer, the parent company or any other Thales Group company.

Assuming the assumptions are borne out in practice, the recovery period over which the shortfall calculated for the 31 December 2008 valuation will be met will end on 31 December 2022.

The assumptions to be used in these calculations are set out in the Appendix.

#### **Calculating the normal cost of the Section**

Contributions required to meet the cost of benefits accruing by members after the valuation date will be calculated using the method and assumptions set out in the Appendix.

#### Arrangements for other parties to make payments to the scheme

Payments towards the Section may be paid by a guarantor under the circumstances set out in the relevant guarantee.

#### Policy on reduction of cash equivalent transfer values (CETVs)

At each valuation, the Trustees will ask the Scheme Actuary to report on the extent to which assets are sufficient to provide CETVs for all members. If the assets are insufficient to provide 100% of benefits on that basis, so that payment of full CETVs would adversely affect the

security of the remaining members' benefits, and the Employer is unable or unwilling to provide additional funds, the Trustees will consider reducing CETVs as permitted under legislation.

If, at any other time, the Trustees are of the opinion that payment of CETVs at a previously agreed level could adversely affect the security of the remaining members' benefits, the Trustees will commission a report from the Scheme Actuary and will use the above criteria to decide whether, and to what extent, CETVs should be reduced.

#### **Payments to the Employer**

If the Section is not being wound-up and the assets of the Section exceed the Scheme Actuary's estimate of the cost of buying out the benefits of all beneficiaries from an insurance company, including the expenses involved in buying out, the Employer may request a refund of the excess, under Clause 21.5 of the Rules. If the Scheme Actuary certifies that the requirements of the Pensions Act 1995 have been met and certifies the maximum amount that may be paid, the Trustees will consider whether a payment would be in the interest of the members. If so, the Trustees will give notice to the members of the proposal.

#### Frequency of valuations and circumstances for extra valuations

An actuarial valuation is being carried out as at 31 December 2008 and subsequent valuations will in normal circumstances be carried out every three years thereafter. An actuarial report on developments affecting the Section's technical provisions and funding level since the previous valuation will be obtained as at 31 December each other year.

The Trustees may call for a full actuarial valuation instead of an actuarial report when, after considering the Scheme Actuary's advice, they are of the opinion that events have made it inappropriate to continue to rely on the results of the previous valuation as the basis for future contributions.

The Trustees will consult the Employer before carrying out an early valuation. Commissioning a valuation will not be necessary if agreement can be reached with the Employer to revise the schedule of contributions and/or recovery plan in a way satisfactory to the Trustees on the advice of the Scheme Actuary.

This statement of funding principles, dated 1 April 2010 has been agreed by the Employer,

0, ,	, dated 17 pm 2010 has been agreed by the Employe
Thales UK Limited, and the Trustee	s of the Thales UK Pension Scheme, Thales Pension
Trustees Limited:	
	DIA
0: 1 1 1 1 1 1 1 1	1 the last
Signed on behalf of the Employer	
(4.0	
Name	K. JENKINS
Ivaille	
Position	DIRECTOR
1 dollari	
Date	1 APRIL 2010
Bato	

24

Mercer

#### Actuarial valuation as at 31 December 2008

Thales UK Pension Scheme - Section 2

Signed on behalf of the Trustees of the Thales UK Pension Scheme

Date

This statement of funding principles, dated 1 April 2010 has been agreed by the Trustees of the Thales UK Pension Scheme after obtaining actuarial advice from the Scheme Actuary:

Signed

Name Position

Name

Position

Date

M Condron

Scheme Actuary to the Thales UK Pension Scheme

1 April 2010

# Method and assumptions used in calculating the technical provisions

# Summary of decisions made as to method and key assumptions used for calculating technical provisions as at 31 December 2008

The method used was the Projected Unit method.

Principal actuarial assumptions for valuation as at 31 December 2008		
Investment return pre-retirement	5.80% p.a.	
Investment return post-retirement	4.80 % p.a.	
RPI price inflation	2.70 % p.a.	
Salary increases	3.70 % p.a	
Pension increases in payment		
- RPI up to 5%	2.60 % p.a	
- RPI up to 2.5%	2.10 % p.a	
Mortality – base table	93% (male) /102% (female) SAPS Normal (YoB) tables	
Mortality - Future improvements	Medium cohort with 0.75% p.a. minimum improvement underpin (starting from 2003)	

The derivation of these key assumptions and an explanation of the other assumptions to be used in the calculation of the technical provisions is set out below.

#### Method

The actuarial method to be used in the calculation of the technical provisions is the Projected Unit method, under which the salary and revaluation increases on the CARE salary assumed for each member are projected until that member is assumed to leave active service by death, retirement or withdrawal from service.

#### **Financial assumptions**

#### Investment return pre-retirement (discount rate)

An estimate of the yield available on a notional portfolio of UK Government conventional gilt stocks whose cashflows approximately match the Section's estimated benefit cashflows plus an additional 2.0% p.a. to reflect the prudent allowance the Trustees have agreed for additional investment returns.

Mercer 26

#### Investment return post-retirement (discount rate)

An estimate of the yield available on a notional portfolio of UK Government conventional gilt stocks whose cashflows approximately match the Scheme's estimated benefit cashflows plus 50% of the margin between long-term AA-rated corporate bonds and gilt yields.

#### Inflation

The investment market's expectation for inflation as indicated by the difference between an estimate of the yields available on notional portfolios of conventional and index-linked UK Government bonds whose cashflows approximately match the Section's estimated benefit cashflows less a 0.2% p.a. adjustment to reflect the existence of an "inflation risk premium."

#### Salary increases

The assumption for real salary increases (salary increases in excess of price inflation) has been set to be 1.0% p.a. No additional allowance has been made for promotional increases.

#### **Pension increases**

Increases to pensions in line with inflation subject to an annual minimum and/or maximum increase are set based on the inflation assumption described above but adjusted to allow for the effect of the minimum/maximum annual increase.

#### **Demographic assumptions**

#### Mortality

The mortality assumptions are based on an investigation into the mortality experience of the Scheme which was commissioned by the Trustees, making allowance for future improvements in longevity and the experience of the Scheme. The standard mortality tables and adjustments to them are set out above.

#### **Early retirement**

Benefit accrual prior to 1 January 2008 has been valued at the Normal Retirement Age under the member's former scheme.

Benefit accrual after 31 December 2007 has been valued using a Normal Retirement Age of 65.

#### III health retirement

No allowance has been made

#### Withdrawals

This assumption relates to those members who leave the Section with an entitlement to a deferred pension or transfer value. It has been assumed that active members will leave the Scheme at the following sample rates:

	% leaving per annum	% leaving per annum
Age	Males	Females
35	7.0	7.0
45	3.0	3.0
55	0.0	0.0

#### Commutation

It has been assumed that all members take the maximum cash allowed at retirement under HMRC Rules based on the Section's current commutation factors.

#### Proportion married and age difference

It has been assumed that 90% of male members and 80% of female members will have an eligible spouse/civil partner at the time of retirement or earlier death, and that wives/civil partners are two years younger, on average, than their husbands/civil partners and husbands/partners are 3 years older, on average, than their wives/civil partners.

#### **Expenses**

The Trustees meet the expenses of the Section. This is allowed for by an addition to the contributions in respect of the normal cost of benefit accrual included in the schedule of contributions. Investment-related expenses have been allowed for implicitly in determining the investment return assumptions.

The Employer will also reimburse the Trustees for levies paid to the Pension Protection Fund.

# Assumptions used in calculating contributions payable under the recovery plan

The contributions payable under the recovery plan will be calculated using the same assumptions as those used to calculate the technical provisions, with the exception of the following during the period of the recovery plan:

#### Investment return on existing assets and future contributions

The contributions payable under the recovery plan are calculated using the same assumptions as those used to calculate the technical provisions except for equity—type investments where the assumed returns are 1% p.a in excess of the pre-retirement investment return.

# Method and assumptions used in calculating the cost of future accrual

#### Method

The actuarial method to be used in the calculation of the cost of future accrual will be the Projected Unit method.

# Financial assumptions

The cost of future accrual will be calculated using the same assumptions as those used to calculate the technical provisions.



### **Recovery Plan**

This recovery plan has been prepared by Thales Pension Trustees Limited ("the Trustees") on 1 April 2010 to satisfy the requirements of section 226 of the Pensions Act 2004, after obtaining the advice of the Scheme Actuary to the Thales UK Pension Scheme ("the Scheme"). It is part of the Trustees' plan for meeting the statutory funding objective (defined in section 222 of the Pensions Act 2004) for Section 2 of the Thales UK Pension Scheme ("the Section"), which is that the Section must have sufficient and appropriate assets to cover its technical provisions.

After discussions between the Trustees and Thales UK Limited ("the Employer"), acting on behalf of the participating employers in the Section, this recovery plan has been agreed by the Employer.

The recovery plan follows the actuarial valuation of the Section as at 31 December 2008, which revealed a shortfall in the assets, when measured against the Section's technical provisions, of £73 million. It will be reviewed, and may be revised, following the Trustees' next valuation under section 224 of the Pensions Act 2004, or earlier if the Trustees and the Employer agree.

#### Steps to be taken to ensure that the statutory funding objective is met

To correct the shortfall the Employer has paid a contribution of £0.5 million per annum from 1 January 2009 to 31 March 2010. The Employer will then contribute £6 million per annum for the period from 1 April 2010 to 31 December 2022. The payments will normally be made monthly, but the Trustees and Employer can agree for payments to be made earlier if appropriate.

#### Period in which the statutory funding objective should be met

The shortfall is expected to be eliminated in 14 years from the valuation date of 31 December 2008, which is by 31 December 2022. This expectation is based on the following assumptions:

The technical provisions will be calculated according to the method and assumptions set out in the statement of funding principles dated 1 April 2010.

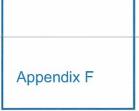
Mercer

The return on existing assets and the return on new contributions during the period will be as set out in the statement of funding principles dated 1 April 2010, in the section headed "Assumptions used in calculating contributions payable under the recovery plan".

It is expected that 50% of the above additional contributions will be paid in 7 years and 7

#### Progress towards the statutory funding objective being met

months, which is by 31 July 2015.	ICO		
Signed on behalf of the Employer	(Return		
Name	K. JENKINS		
Position	DIRECTOR		
Date	1 APRIC 2010		
Signed on behalf of the Trustees of the Thales UK Pension Scheme	Vonest		
Name	PAUL DURRANT		
Position	TRUSTEE DIRECTOR		
Date	1 APRIL 2010		
This recovery plan, dated 1 April 2010 has been agreed by the Trustees of the Thales UK Pension Scheme after obtaining actuarial advice from the Scheme Actuary:  Signed			
Name	M Condron		
Position	Scheme Actuary to the Thales UK Pension Scheme		
Date	1 April 2010		



#### **Schedule of Contributions and Certification**

#### Status of this document

This schedule has been prepared by Thales Pension Trustees Limited ("the Trustees") to satisfy the requirements of section 227 of the Pensions Act 2004, after obtaining the advice of the Scheme Actuary to the Thales UK Pension Scheme ("the Scheme") appointed by the Trustees.

This document is the first formal schedule of contributions put in place for Section 2 of the Scheme ("the Section"). It supersedes the interim schedule of contributions currently in place.

After discussions, a pattern of contributions was agreed by the Trustees and Thales UK Limited ("the Employer") acting on behalf of the participating employers in the Section.

The Trustees and the Employer have signed the third page of this schedule to indicate that it represents an accurate record of the agreed pattern of contributions.

The schedule is effective from the date it is certified by the Scheme Actuary on the fourth page.

#### Contributions to be paid to the Section from 1 April 2010 to 31 December 2022

#### Contributions in respect of members

All members, except former members of Category 1 of the Thomson Pension Plan, contribute at the following rates:

- 6% of CARE Salary for that part of CARE Salary up to £40,040 and;
- 9% of CARE Salary for that part (if any) of the CARE Salary in excess of £40,040.

Former members of Category 1 of the Thomson Pension Plan contribute at the following rates:

Mercer

- 1.5% of Pensionable Salary for Ex-PCSPS Classic members and;
- 3.5% of Pensionable Salary for Ex-PCSPS Premium and Classic Plus members.

The Employer must pay monthly contributions to the Section of an amount equal to the sums sacrificed by the members from their salaries through the Pay Conversion salary sacrifice arrangements.

Members who do not participate in Pay Conversion must contribute monthly at the rates detailed above.

Contributions shall be paid by the 19<sup>th</sup> of the month following the month of sacrifice or contribution deduction (as appropriate) from members' salaries.

# Employer's contributions in respect of future accrual of benefits and administration costs

The Employer will normally pay contributions as set out below but can, where agreed with the Trustees, pay contributions earlier than indicated.

The Employer shall pay contributions no less frequently than monthly, at least on the following basis:

 12.8% of CARE Salary (or Pensionable Salary for former members of Category 1 of the Thomson Pension Plan).

Contributions shall fall due on the last day of each calendar month in respect of that month, and shall be paid by the 19th of the subsequent month.

# Employer's contributions in respect of the shortfall in funding as per the recovery plan of 1 April 2010

The Employer shall contribute £6 million per annum for the period 1 April 2010 to 31 December 2022. As above, these contributions shall normally fall due on the last day of each calendar month in respect of that month, and shall be paid by the 19th of the subsequent month. However, the Trustees and Employer can agree for payments to be made earlier than their due dates if appropriate.

#### Employer's contributions in respect of benefit augmentations

In addition the Employer shall pay the cost, as determined by the Scheme Actuary, of any benefit augmentations granted by the Employer.

#### Employer's contributions in respect of other costs

The Employer shall reimburse the Trustees for any levies from the Pension Protection Fund.

#### **CARE/Pensionable Salary**

CARE Salary (or Pensionable Salary for former members of Category 1 of the Thomson Pension Plan) is defined in accordance with the Second Definitive Deed and Rules and any subsequent amendments.

The monthly contributions are calculated using monthly CARE/Pensionable Salaries determined as one-twelfth of the annual amounts.

Pensionable Salary is defined in accordance with the Second Definitive Deed and Rules and any subsequent amendments.

The monthly contributions are calculated using monthly Pensionable Salaries determined as one-twelfth of the annual amounts.

#### Arrangements for other parties to make payments to the Scheme

Payments towards the Section may be paid by a guarantor under the circumstances set out in the relevant guarantee.

#### Dates of review of this schedule

This schedule of contributions will be reviewed by the Trustees and the Employer no later than 15 months after the effective date of each actuarial valuation, due every three years.

#### **Employer and Trustees' agreement**

This schedule of contributions has been agreed by the Employer, Thales UK Limited, and the Trustees of the Thales UK Pension Scheme, Thales Pension Trustees Limited.

Signed on behalf of the	Employer KACA			
Name	K. JENICINS			
Position	DIRECTOR			
Date of signing	1 APRIL 2010			
Signed on behalf of the Trustees of the Thales UK Pension Scheme				
Name	PAUL DURRANT			
Position	TRUSTEE DIRECTOR			
Date of signing	IAPRIL 2010			

#### **Certification of schedule of contributions**

Name of Scheme and name of section

Thales UK Pension Scheme - Section 2

#### Adequacy of rates of contributions

1. I certify that, in my opinion, the rates of contributions shown in this schedule of contributions are such that the statutory funding objective can be expected to be met by the end of the period specified in the recovery plan dated 1 April 2010.

#### Adherence to statement of funding principles

2. I hereby certify that, in my opinion, this schedule of contributions is consistent with the statement of funding principles dated 1 April 2010.

The certification of the adequacy of the rates of contributions for the purpose of securing that the statutory funding objective can be expected to be met is not a certification of their adequacy for the purpose of securing the section's liabilities by the purchase of annuities, if the section were to be wound up.

Signature	Ngh bis	
Scheme Actuary	M Condron	
Date of signing		1 April 2010
Name of employer	Mercer Limited	
Address	Tower Place West London, EC3R 5BU	
Qualification	Fellow of the Faculty of Actuaries	

Certification

# **Certificate of technical provisions**

Name of Scheme and name of Section

Thales UK Pension Scheme - Section 2

#### **Calculation of technical provisions**

I certify that, in my opinion, the calculation of the Section's technical provisions as at 31 December 2008 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the trustees of the Scheme and set out in the statement of funding principles dated 1 April 2010.

Signature	I fall bush		
Name	M Condron		
Date of signing		1 April 2010	
Address	Mercer Limited		
	Tower Place West,		
	London, EC3R 5BU		
Qualification	Fellow of the Faculty of	Fellow of the Faculty of Actuaries	

# **MERCER**



Mercer Limited Tower Place London EC3R 5BU 020 7626 6000