



Akzo Nobel (CPS) Pension Scheme

**Report on the actuarial  
valuation as at  
31 March 2012**

18 March 2013

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Throughout this document:

- “Scheme” refers to the Akzo Nobel (CPS) Pension Scheme
- “Trustee” refers to Akzo Nobel (CPS) Pension Scheme Trustee Limited
- “Company” refers to Akzo Nobel UK Limited and other participating companies
- “Scheme Rules” refers to the Trust Deed and Rules dated 15 September 1997, as subsequently amended

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

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## Section 1: Introduction

- 1.1 This is my report on the *actuarial valuation* of the Akzo Nobel (CPS) Pension Scheme as at 31 March 2012. It is addressed to the Trustee and the Company.
- 1.2 The *actuarial valuation* is required under the terms of Clause 12 of the Scheme Rules and Part 3 of the Pensions Act 2004. Both the Trustee and the Company have an interest in the valuation process and, as required by law, a copy of the report must be provided to the Company within 7 days of its receipt by the Trustee.
- 1.3 The main purposes of the *actuarial valuation* are to review the financial position of the Scheme relative to its *statutory funding objective*, as required under the Pensions Act 2004, and to determine the appropriate level of future contributions.
- 1.4 The report explains the financial health of the Scheme as at 31 March 2012 using several different measures of the liabilities. It explains how the funding position has changed since the previous valuation as at 31 March 2009. It also describes the strategy that has been agreed between the Trustee and the Company for financing the Scheme in future and provides projections of the funding position at the expected date of the next valuation. Finally it describes the approach adopted for managing the risks to which the Scheme is exposed.
- 1.5 The Scheme has a guarantee from the Company's parent company, Akzo Nobel NV, which covers the obligations of the Company, subject to certain conditions.
- 1.6 This valuation is based on the *Statement of Funding Principles* agreed by the Trustee and Company dated 15 March 2013.
- 1.7 The Trustee is required to disclose to members, in a *summary funding statement*, certain outcomes of this *actuarial valuation* within a reasonable period.
- 1.8 The financial position of the Scheme and the level of Company contributions to be paid will be reviewed at the next *actuarial valuation*, which is expected to be carried out as at 31 March 2015. However, in intervening years the Trustee will obtain annual *actuarial reports* or developments affecting the Scheme's assets and *technical provisions*. The next such report, which will have an effective date of 31 March 2013, must be completed by 31 March 2014.

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18 March 2013

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## Section 2: Limitations and Compliance

### Third parties

I have written this report for the Trustee and the Company, as required under Clause 12 of the Scheme Rules. I have prepared it to satisfy both the requirements of the Scheme Rules and the statutory requirements of section 224 of the Pensions Act 2004. It has not been prepared for any other purpose. As such, it should not be used or relied upon by any other person for any other purpose, including, without limitation, by individual members of the Scheme for individual investment or other financial decisions, and those persons should take their own professional advice on such investment or financial decisions. Neither I nor Towers Watson Limited accepts any responsibility for any consequences arising from a third party relying on this report.

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

### Data supplied

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

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

### Assumptions

The choice of assumptions, as set out in the Scheme's *Statement of Funding Principles* dated 15 March 2013, is the responsibility of the Trustee, in agreement with the Company, after taking my advice. They are only assumptions; they are not predictions and there is no guarantee that they will be borne out in practice. In fact I would expect the Scheme's experience from time to time to be better or worse than that assumed. The Trustee and the Company must be aware that there are uncertainties and risks involved in any course of action they choose based on results derived from these assumptions.

## Actuarial standards

This report falls within the scope of several Technical Actuarial Standards (TASs) published by the Board for Actuarial Standards, namely:

- *Pensions TAS*
- *TAS R: Reporting Actuarial Information*
- *TAS D: Data, and*
- *TAS M: Modelling.*

I confirm that this report complies with these TASs. In particular it complies with the requirements for a Scheme Funding report set out in section E.3 of the Pensions TAS.



## Section 3: Funding position

- 3.1 The Trustee's *funding objective* is the *statutory funding objective*, which is to have sufficient and appropriate assets to cover the Scheme's *technical provisions* (ie the amount that the Trustee has determined with the Company's agreement to be required to make provision for the Scheme's liabilities).
- 3.2 The *technical provisions* are a measure of the Scheme's liabilities calculated as the present value of the projected benefits earned up to and including the valuation date, together with an allowance for prospective pensionable earnings increases for employed members at the valuation date. The benefits taken into account in this *actuarial valuation* are described in Appendix A of this report. They are mostly pension payments after each member's retirement.
- 3.3 The *technical provisions* are calculated by first projecting the benefits expected to be paid in each year after the valuation date and then discounting the resulting cashflows to obtain a present value. The projections allow for benefit payments being made from the Scheme over the next 80 or so years. Most of these payments depend on future increases in price inflation as measured by the Consumer Prices Index (CPI) or Retail Prices Index (RPI), subject to certain limits.
- 3.4 The method and assumptions for calculating the *technical provisions* as at 31 March 2012 have been agreed between the Trustee and Company, and are documented in the *Statement of Funding Principles* dated 15 March 2013. These methods and assumptions implicitly assume that the Scheme is not discontinued.
- 3.5 The table below summarises the key assumptions used to calculate the Scheme's *technical provisions* for this and the previous *actuarial valuation*. The *financial assumptions* at each valuation date were determined in the light of investment and economic conditions as at the effective valuation date.

Financial assumptions	31 March 2012	31 March 2009
	% pa	% pa
Pre-retirement <i>discount rate</i>	5.76	6.72
Post-retirement <i>discount rate</i>	4.52	5.32
Price inflation (RPI)	3.50	3.20
Price inflation (CPI)	2.80	n/a
Pensionable earnings increases	4.50	4.95
Pension increases:		
- CPI, maximum 5%, minimum 0%	2.80	n/a
- CPI, maximum 5%, minimum 0%, underpinned by 70% RPI	3.10	n/a
- CPI, maximum 3%, minimum 0%	2.80	n/a
- RPI, maximum 5%, minimum 0% :	3.50	3.20
- RPI, maximum 5%, minimum 3%	3.80	3.60
- 70% of RPI, minimum 0%	2.45	2.24

Demographic assumptions	31 March 2012	31 March 2009
Mortality base tables:		
- Male pensioners	99% of S1PMA (CPS actives and pensioners, all widowers) 102% of S1PMA (ex-UK Scheme actives and pensioners, all deferreds)	97% of S1PMA with medium cohort improvements to 2009
- Female pensioners	97% of S1PFA (former members) 96% of S1DFA (widows)	87.3% S1PFA with medium cohort improvements to 2009
All the base tables include improvements to 2012 in line with CMI_2011 with a long term trend of 1.5% pa		
Future improvements in longevity	CMI_2011 with long term trend of 1.5% pa from 2012	Medium cohort with 1.25% floor from 2009
Proportion of pension exchanged for a lump sum at retirement	20%	20%

A full description of the assumptions can be found in the *Statement of Funding Principles*.

- 3.6 The table below shows the Scheme's *technical provisions* at 31 March 2012 with the market value of the Scheme's assets and the corresponding figures from the previous *actuarial valuation* as at 31 March 2009:

Valuation statement	31 March 2012	31 March 2009
	£m	£m
Amount required to provide for the Scheme's liabilities of:		
Employed members, in respect of service up to 31 March 2012	228	201
Deferred pensioners	774	764
Pensioners and dependants	1,652	1,369
Reserve for McPherson members	14	13
Longevity swap	18	-
AVCs and other money purchase benefits	12	16
<i>Technical provisions</i>	(2,698)	(2,363)
Excluding Escrow account:		
Market value of assets	2,355	1,679
Past service surplus (deficit) ( <i>technical provisions</i> less assets)	(343)	(684)
Funding level (assets ÷ <i>technical provisions</i> )	87%	71%
Including Escrow account:		
Market value of assets	2,478	1,838
Past service surplus (deficit) ( <i>technical provisions</i> less assets)	(220)	(525)
Funding level (assets ÷ <i>technical provisions</i> )	92%	78%

- 3.7 The funding level has increased from 78% to 92% since the previous valuation, including allowance for the Escrow account. The main factors contributing to this increase are shown below.

	31 March 2012 £m
<b>Surplus/(deficit) as at 31 March 2009</b>	<b>(525)</b>
Interest on deficit	(99)
Investment gain	452
Deficit contributions	206
Experience over the period	76
Change in demographic assumptions	(7)
Statutory pension increases linked to CPI rather than RPI	126
Change in financial assumptions	(440)
Reduction in real salary increases	14
Adding a reserve for the supplement for CPS pensioners	(15)
Cost of longevity swap on 2012 basis	(18)
Reduction in <i>technical provisions</i> due to Enhanced Transfer Value exercise	10
<b>Surplus/(deficit) as at 31 March 2012</b>	<b>(220)</b>

#### Future service contribution rates

- 3.8 The Company contribution rate required, in addition to Scheme members' normal contributions, to meet the cost of the benefits that are expected to be earned between this valuation and the next is 32.8% of members' Pensionable Earnings. This rate has been calculated using the method and assumptions described in the *Statement of Funding Principles*. It does not relate to the payment of Additional Voluntary Contributions.
- 3.9 The Trustee and the Company have agreed that the Company will pay future service contributions of 32.8% of Pensionable Earnings from 1 April 2013, with payments being made by the nineteenth day of the month after the month in which they fall due. This compares to the current rate of 34.0% of Pensionable Salaries. In addition, the Company will meet the administration expenses (apart from investment manager fees) and the *Pension Protection Fund* and other levies with effect from 1 April 2013.
- 3.10 The Company future service contribution rate under paragraph 3.8 has been calculated as the rate required, in addition to the contributions payable by members, over the four years following the valuation date to meet the cost of benefits expected to be accrued over that period. On this basis, this rate will be sufficient, if the assumptions are borne out in practice, to cover the accrual of benefits in the future provided the age, gender and pensionable earnings profile of the employed membership remains stable.
- 3.11 As the Scheme is closed to new entrants, the average age of its active membership is expected to rise in future. When this happens, the contribution rate required to cover accruing benefits is very likely to rise as there will then be a shorter period over which investment returns can be earned on the contributions. By contrast, the cash amount required to meet this cost may

eventually fall because the number of members to whom the rate applies will fall as active members leave service, retire or die.

### Recovery Plan

3.12 As there were insufficient assets in relation to the Scheme's *technical provisions* at the valuation date, the regulations require the Trustee and the Company to agree a *recovery plan*. This specifies how, and by when, the *statutory funding objective* is expected to be met.

3.13 The Trustee and the Company have agreed a *recovery plan* such that:

- the Company will pay additional contributions of £42 million a year for six years, with the first payment due by 31 March 2013 and the last payment by 31 March 2018;
- it has been agreed that the above amounts may be reduced in certain circumstances to reflect the impact on the deficit of Section 75 payments as set out in the *recovery plan* and *schedule of contributions*;
- transfers from the existing Escrow account into the Scheme of £25 million each year (or the maximum amount on which the Company can receive tax relief if higher) will continue to 31 March 2017, or until the account is emptied if earlier. Any balance in the Escrow account will then be paid into the Scheme (subject to the Payment Ceiling); and
- an allowance is included for additional interest returns on the assets above the technical provisions assumptions of 0.07% per annum.

If the assumptions documented in the *Statement of Funding Principles* are borne out in practice, the deficit will be removed by 31 March 2018.

## Section 4: Solvency

- 4.1 In the event that the Scheme is discontinued, employed members would become deferred pensioners with no entitlement to future service benefits. The Scheme would then have liabilities comprising:
- the pensions payable to pensioners and deferred pensioners (and contingent pensions payable to their dependants);
  - future increases in the deferred pensions;
  - future increases to pensions whilst in payment; and
  - future expenses.
- 4.2 If the discontinuance is not the result of the insolvency of the Company, current legislation imposes a debt ("the employer debt") on the Company equal to any shortfall between the *Scheme Actuary's* estimate of the full cost of securing an accrued benefit with an insurance company (including expenses) and the value of the Scheme's assets. The Trustee would then normally try to make the benefits secure by buying insurance policies to provide the benefit payments. The Trustee may, however, decide to run the Scheme as a closed fund for a period of years before buying such policies if it is confident that doing so is likely to produce higher benefits for members or if there are practical difficulties with buying insurance policies, such as lack of market capacity.
- 4.3 If the discontinuance is a result of the insolvency of the Company, the Scheme will probably be assessed for possible entry to the *Pension Protection Fund* ("*PPF*"). In this case, it is also unlikely that any employer debt could be paid in full by the Company, though the Trustee would seek to recover the employer debt under the NV Guarantee. If the assets (including any recoveries under the NV Guarantee) were not sufficient to secure benefits equal to the *PPF* compensation, the Scheme would then apply for entry to the *PPF*. Otherwise the Scheme would be required to *wind-up*.
- 4.4 Under Section 179 of the Pensions Act 2004, the Trustee is required to provide the *PPF* with a valuation of the Scheme that the *PPF* can use to determine the levy it charges. This valuation uses assumptions specified by the *PPF* and covers only benefits similar to the *PPF* compensation benefits. I calculate that at 31 March 2012 the Scheme's assets (excluding the Escrow account) covered 94% of the Section 179 liabilities.

## Solvency estimate

- 4.5 The Pensions Act 2004 requires that I provide the Trustee with an estimate of the solvency of the Scheme at the valuation date. Normally, this means an estimate of the proportion of the benefits described in paragraph 4.1 that could have been secured by buying insurance policies. For this purpose I have assumed that no further payments are received from the Company or under the NV Guarantee.
- 4.6 I have assumed that the insurance company price would be calculated on an actuarial basis similar to that implied by bulk annuity quotations seen by Towers Watson at around the valuation date. I have assumed the cost of implementing the *winding-up* to be in line with the approach used for a Section 179 valuation for the PPF (broadly 1% of the liabilities plus a per member charge), leading to assumed *winding-up* costs of £58 million.
- 4.7 The table below summarises the key assumptions used to estimate the Scheme's solvency position at this and the previous *actuarial valuation*. In addition, for the purpose of this estimate, I have assumed that the Scheme's ReAssure longevity swap would be surrendered (though in practice it may be novated to the bulk annuity insurer).

Financial assumptions	31 March 2012 % pa	31 March 2009 % pa
Pensioner <i>discount rate</i>	Gilts + 0.1%	Gilts + 0.3%
Non-pensioner <i>discount rate</i>	Gilts - 0.4%	Gilts - 0.4%
Deferred pension revaluation	3.50	3.60
Pension increases:		
- RPI minimum 0, maximum 5%	3.50	3.60
- CPI minimum 0, maximum 5%	3.50 *	n/a

\* I have assumed that insurers will price CPI-linked benefits at the same price as RPI-linked benefits, based on quotations seen by Towers Watson and the lack of CPI-linked investments.

Demographic assumptions	31 March 2012	31 March 2009
Mortality base tables:	As technical provisions	As technical provisions
Future improvements in longevity	CMI_2011 with long term trend of 1.75% pa	Medium cohort with a 1.5% pa floor
Proportion of pension commuted at retirement	nil	nil

- 4.8 My estimate of the solvency position of the Scheme at 31 March 2012 is that the assets of the Scheme would have met 63% of the cost of buying insurance policies to secure the benefits at that date. Further details are set out in the table below alongside the corresponding details as at the previous valuation date:

	31 March 2012 £m	31 March 2009 £m
Solvency liabilities	3,944	3,318
Assets (including the escrow account)	2,478	1,838
<b>Solvency deficit</b>	<b>(1,466)</b>	<b>(1,480)</b>
<b>Solvency level</b>	<b>63%</b>	<b>55%</b>



- 4.9 The change in the solvency level from 55% to 63% is due mainly to the deficit contributions paid and the investment performance of the Scheme's assets being better than assumed in the solvency estimate, which more than offset the estimated increase in insurance company prices.
- 4.10 The solvency estimate should not be relied upon to indicate the position on a future *winding-up*. Changes in market interest rates and in the supply and demand for annuities mean that the actual position at any particular point in time can be established only by buying the insurance policies required to secure the benefits.
- 4.11 The coverage for particular benefits depends on where they fall in the *statutory priority order* below. However, money purchase liabilities, such as those arising from members' Additional Voluntary Contributions (AVCs), are excluded from the *statutory priority order*. Their treatment is determined by the Scheme's own rules and would normally be that they are secured in full before any other benefits.) The priority order is:
- category 1 – benefits relating to certain pension annuities secured by the Scheme before 6 April 1997;
  - category 2 – the cost to the Scheme of securing the liabilities for the compensation benefits that would be payable by the *PPF* if the Company became insolvent;
  - category 3 – benefits in respect of defined benefit AVCs not dealt with above;
  - category 4 – all other pensions and benefits due under the Scheme, including pension increases (where these exceed those under the *PPF*).
- 4.12 If the Company were insolvent at 31 March 2012, and no payments were received under the NV Guarantee, as the Scheme's assets did not cover the value of the Section 179 liabilities as at 31 March 2012 – see paragraph 4.4 - the Scheme would probably have qualified for entry to the *PPF*. In this situation, the members would have received *PPF* compensation in place of their benefits.

#### Relationship between the technical provisions and the solvency liabilities

- 4.13 My estimate of the value of the Scheme's solvency liabilities of £3,944m is £1,246m higher than the Scheme's *technical provisions* of £2,698m. This means that the cost of securing the Scheme's benefits with an insurer is higher than the amount that the Trustee has determined, with the Company's agreement, to be required to make provision for the Scheme's liabilities. This is because the *technical provisions* are intended to be a *prudent* assessment of the assets required under the Scheme's investment strategy to meet future benefit payment; by contrast the estimated value of the solvency liabilities takes into account different issues such as supply and demand, return on capital, statutory reserving requirements and investment constraints.
- 4.14 If the *statutory funding objective* had been exactly met on 31 March 2012 (ie there had been no funding surplus or deficit), I estimate that the solvency level of the Scheme would have been approximately 68%, including the Escrow account. This compares with 71% at the 31 March 2009 *actuarial valuation*, which means that the Trustee's *funding target* has increased/fallen relative to the solvency liabilities since the previous valuation.





## Section 5: Projections and risks

- 5.1 Based on the assumptions underlying the *Recovery Plan and* calculation of the Scheme's *technical provision* as at 31 March 2012 (as summarised in Section 3), and allowing for contributions to be paid to the Scheme in accordance with the agreed *Schedule of Contributions* (as summarised in Section 3), the funding and solvency levels are projected to develop as follows by the expected date of the next *actuarial valuation*.

	31 March 2012 %	31 March 2015 %
Funding level	92%	96%
Solvency level	63%	66%

- 5.2 The table below illustrates the sensitivity of the *technical provisions* as at 31 March 2012 to variations of individual key assumptions. (If more than one assumption is varied, the effect may be greater than the sum of the changes from varying individual assumptions.)

Assumption	Adopted for the technical provisions % pa	Alternative for illustration % pa	Revised funding level %
Pre-retirement <i>discount rate</i>	5.76	5.51	91%
Post-retirement <i>discount rate</i>	4.52	4.27	89%
Pensionable Earnings increases	4.50	5.25	91%
Future improvements in mortality	CMI_2011 with long term trend of 1.5% pa	CMI_2011 with long term trend of 1.75%	91%

- 5.3 The table below illustrates the sensitivity of the solvency position as at 31 March 2012 to variations of individual key assumptions. (Again if more than one assumption is varied, the effect may be greater than the sum of the changes from varying individual assumptions.)

Assumption	Adopted for the solvency estimate % pa	Alternative for illustration % pa	Revised solvency level %
Pensioner <i>discount rate</i>	3.50	3.25	61%
Non-pensioner <i>discount rate</i>	2.98	2.73	60%
Future improvements in mortality	CMI_2011 with long term trend 1.75%	CMI_2011 with long term trend 2.00%	62%

- 5.4 The table below summarises the key risks to the financial position of the Scheme and the actions taken to manage them:

Risk	Approach taken to risk
Company unable to pay contributions or make good deficits in the future	<p>At each valuation the Trustee takes covenant advice from an independent specialist on the ability of the Company to pay contributions to the Scheme and, in particular, to make good any shortfall that may arise if the experience of the Scheme is adverse.</p> <p>This advice is taken into account when determining the level of <i>technical provisions</i> and in considering the appropriateness of any <i>recovery plan</i> to remove a deficit relative to the <i>technical provisions</i>.</p> <p>Between valuations the Trustee monitors the Company's financial strength regularly.</p>
Future investment returns could be insufficient to meet the Trustee's <i>funding objectives</i>	<p>The Trustee takes advice from the <i>Scheme Actuary</i> on possible assumptions for future investment. For the calculation of the Scheme's <i>technical provisions</i>, the Trustee has adopted <i>discount rates</i> that are lower than the expected returns on the Scheme assets.</p> <p>The Trustee is able to agree further contributions with the Company at subsequent valuations if future returns prove insufficient.</p>
Investment returns on future income could be lower than the returns available at the valuation date	<p>The Trustee takes this risk into account when determining the Scheme's <i>technical provisions</i>, by incorporating a level of <i>prudence</i> into the investment return assumptions.</p>
Price inflation could be different from that assumed which could result in higher liabilities	<p>The Trustee invests in assets that are expected to be correlated to future inflation in the longer term (sometimes referred to as "real" assets). This means that, over the longer term, such assets are expected to keep pace with inflation. Such assets include equities, property and index-linked bonds.</p> <p>The Scheme does not currently hedge its exposure to inflation risk.</p>
Falls in asset values may not be matched by similar falls in the value of the Scheme's liabilities	<p>The Trustee considers this risk when determining the Scheme's investment strategy. It consults with the Company in order to understand the Company's appetite for bearing this risk and takes advice on the Company's ability to make good any shortfall that may arise.</p> <p>To the extent that such falls in asset values result in deficits at future valuations, the Company would be required to agree a <i>recovery plan</i> with the Trustee to restore full funding over a period of time.</p>

Risk	Approach taken to risk
Scheme members live longer than assumed	<p>The Trustee has purchased a longevity swap to cover around 40% of the Scheme's liabilities.</p> <p>For the calculation of the <i>technical provisions</i>, the Trustee has adopted mortality assumptions that it regards as <i>prudent</i> estimates of the life expectancy of members so that higher reserves are targeted in respect of the risk than are expected to be necessary.</p>
Options exercised by members could lead to increases in the Scheme's liabilities	<p>The Trustee sets the terms for converting benefits in respect of member options on the basis of actuarial advice with the view to avoiding strains on the Scheme's finances as far as is reasonably possible without disadvantaging member.</p> <p>The terms are kept under regular review, generally following each <i>actuarial valuation</i>.</p>
Legislative changes could lead to increases in the Scheme's liabilities	<p>The Trustee takes legal and actuarial advice on changes in legislation and consult with the Company, where relevant.</p>



## Appendix A: Summary of Scheme benefits

The Scheme is a registered pension scheme under the Finance Act 2004 and is contracted-out of the State Second Pension.

The table below summarises the benefits payable to members of the CPS Section.

<b>Normal Retirement Age (NRA):</b>	Age 65 for men and women, but active members at 1 April 1993 have the right to retire from 60 with unreduced benefits.
<b>Fund Earnings:</b>	As defined by the Company but broadly basic annual salary plus overtime, less the discard. The discard was £2,800 as at 31 March 2012.
<b>Average Fund Earnings:</b>	The highest average Fund Earnings over any one of the final five tax years of membership, or the average of the best 3 consecutive pensionable earnings figures within the last 13 years before retirement or leaving pensionable service if higher.
<b>Pensionable service:</b>	Service as a contributing member of the Scheme plus 10% of the period to 31 March 2000 taken to the nearest month.
<b>Retirement at NRA:</b>	A pension equal to one-sixtieth of Average Fund Earnings for each year of pensionable service. A supplement is payable in addition as either a lump sum and/or temporary pension.
<b>Retirement before NRA:</b>	An immediate pension calculated as for retirement at NRA but reduced to reflect early payment.
<b>Lump sum at retirement:</b>	On retirement part of the pension may be exchanged for a lump sum.
<b>Death after retirement:</b>	A dependant's pension equal to one-half of the pension which would have been in payment at the date of death assuming no pension was exchanged for a lump sum at retirement. Children's allowances are also paid.
<b>Death in service:</b>	A lump sum of 4 times Fund Earnings plus a refund of the member's contributions.  A dependant's pension equal to one-half of the pension which the member would have received had he remained in pensionable service until NRA and Average Fund Earnings remain unchanged. Children's allowances are also paid.
<b>Leaving service:</b>	Members who have completed more than two years' pensionable service are entitled to a deferred pension calculated as for retirement at NRA but based on pensionable service up to the date of leaving.  A pension of one-half of the member's deferred pension is paid to a surviving spouse on death before NRA.
<b>Pension increases in deferment:</b>	All members: <ul style="list-style-type: none"> <li>- Benefits accrued before 1 April 1999      70% RPI</li> <li>- Benefits accrued on or after                      nil</li> </ul> 1 April 1999  The benefits are underpinned by the requirements of the preservation, revaluation and anti-franking legislation. The GMP part of a deferred pension is increased between leaving and GMP payment age by fixed rate revaluation.

Pension increases in payment:	Pre 1 April 1993 entrants	
	- Benefits accrued before 1 April 1999 in excess of GMP	higher of LPI5 and 70% RPI
	- Benefits accrued on or after 1 April 1999	LPI5
	Post 1 April 1993 entrants	
	- Benefits accrued before 6 April 1997 in excess of GMP	70% RPI
	- Benefits accrued between 6 April 1997 and 31 March 1999	higher of LPI5 and 70% RPI
	- Benefits accrued between 1 April 1999 and 5 April 2005	LPI5
	- Benefits accrued after 5 April 2005	LPI2.5
	"LPI 5" is increases in line with CPI capped at 5% a year. "LPI 2.5" is increases in line with CPI capped at 2.5% a year.	
Contributions by, or on behalf of, members:	Members pay 5% of their Fund Earnings. Members may also pay additional voluntary contributions to increase their benefits.	
	Some members have opted for salary sacrifice, in which case the member contributions are paid by their Employer	
	The Employers pay the balance of the cost of meeting the Scheme's benefits.	

Different benefits are payable to members of the other sections, which are summarised in the booklets issued to the members:

- New Section - booklet dated July 2003
- NBI Section - Nobel Industries UK Pension Scheme booklet
- Macpherson Section – Macpherson Plc Retirement Benefits Plan booklet dated 1988
- Chemicals Section – Akzo Chemicals Pension Scheme Explanatory sheets for employees dated March 1990 and September 1992
- Fibres Section – Akzo Fibres Ltd Employee Pension Scheme members' handbook dated March 1992
- Akcros Section – Harrisons & Crosfield Group Pension Scheme members handbook dated July 1999
- Coatings Section – Akzo Coatings plc Employee Benefits Plan members' handbook dated February 1994.

### Discretionary benefits

No discretionary benefits have been allowed for in the calculation of the *technical provisions*.

**Uncertainty about the benefits**

There are a number of areas where the benefits were not certain at the valuation date, for example in relation to the benefits payable to spouses of the CPS Section members who retired early or late, and in relation to possible changes to the benefits that may be required to ensure that the Scheme provisions in respect of Guaranteed Minimum Pensions do not unlawfully discriminate between male and female members. In addition, a review of the administration practices compared to the Rules is currently being undertaken by the Scheme's lawyers. No allowance has been included in the *technical provisions* for any increase in the Scheme's liabilities due to these uncertainties, but the Trustee and Company will consider how any increase in liabilities will be met when the impact is known, which may be in advance of the next valuation.

A reserve of £15 million has been included to cover the extension of the supplement to CPS Section pensioners.





## Appendix B: Membership information

The Trustee's membership information, as supplied to us by the Scheme's administrator for the purposes of the *actuarial valuation*, is summarised below; the corresponding information for the previous valuation is shown for comparative purposes.

The average ages are weighted by salary for actives and accrued pension for other members.

Actives	Number	Pensionable earnings at valuation date £000s	Average age	Number	Pensionable earnings at previous valuation date £000s
<b>Total</b>	<b>753</b>	<b>29,917</b>	<b>48.2</b>	<b>960</b>	<b>34,300</b>

Deferreds	Number	Deferred pension at valuation date £000s	Average age	Number	Deferred pension at previous valuation date £000s
<b>Total</b>	<b>19,922</b>	<b>42,381</b>	<b>50.8</b>	<b>12,370</b>	<b>47,200</b>

The deferred pensions shown above include increases awarded between the date of leaving the Scheme and the valuation date. The 2012 deferreds figures include the ex-members of the old Works Scheme with very small pensions and/or lump sums whereas the 2009 figures exclude Works only members.

Retirees	Number	Pension at valuation date £000s	Average age	Number	Pension at previous valuation date £000s
<b>Total</b>	<b>15,426</b>	<b>83,925</b>	<b>71.0</b>	<b>16,190</b>	<b>77,700</b>

Dependants	Number	Pension at valuation date £000s	Average age	Number	Pension at previous valuation date £000s
<b>Total</b>	<b>5,233</b>	<b>17,487</b>	<b>78.7</b>	<b>5,285</b>	<b>15,700</b>

The data in the electronic records inherited from the previous administrator for the contingent spouses' benefits in the CPS section is not always reliable. In practice, when a member dies the benefits are calculated manually by referring to the paper files. For the valuation, I have made an assumption for

the level of contingent spouses' benefits, based on the analysis of the rate of spouse's benefits put into payment with that recorded in the electronic data prior to the member's death, for the deaths over the period 2004-2011. There is a similar issue for the ex-UK sections, and so the contingent spouses' benefits for pensioners were estimated from the current rate of pension and information supplied about the proportion of pension commuted.

The GMP data for pensioners is not complete, particularly for members below GMP payment age. I have valued the data that was received, as I do not have any information to make a more reliable estimate. In most cases not allowing for a GMP will be prudent, as the increases to pensions in payment are lower on GMP benefits than on non-GMP benefits, though in some cases this may underestimate the increases required to pensions to meet statutory requirements at GMP payment age.

In a small number of cases accrued pensions were missing, and these were estimated based on the average for the remaining members. There was insufficient data to calculate the statutory minimum pensions in the CPS section for pensioners, and so an approximate allowance has been included for the potential additional liabilities.

## Appendix C: Asset information

The audited accounts supplied as at 31 March 2012 show that the market value of the Scheme's assets excluding the Escrow account was £2,354.8 million. This includes Additional Voluntary Contributions (AVCs) which amounted to £11.6 million. The change in the Scheme's assets (excluding AVCs) from £1,663.7 million as at 31 March 2009 to £2,343.2 million at 31 March 2012 is detailed in the Trustee's Report and Financial Statements over that period. The table below summarises a broad reconciliation of the change:

	£m	£m
<b>Assets at 31 March 2009</b>		<b>1,675.2</b>
Contributions paid:		305.2
- Company's normal contributions	32.1	
- Company's augmentation contributions	0.5	
- Company's deficit contributions	270.0	
- Members' normal contributions	2.6	
Benefits paid:		(347.3)
- Pension payments	287.0	
- Lump sums at retirement	48.3	
- Other benefits	12.0	
Expenses and PPF levies		(13.4)
Other payments		0.5
Changes in market value of investments and investment income		734.6
<b>Assets at 31 March 2012</b>		<b>2,354.8</b>

In addition, the Escrow account had a value of £123.5m as at 31 March 2012.

The contributions paid have been in line with the Schedule of contributions dated 12 July 2010.

The Trustee's investment policy is set out in its Statement of Investment Principles dated June 2012, and is summarised below:

Asset class	Benchmark weighting %
UK equities	6.0
Global equities	21.0
Property	8.0
Re-insurance	3.5
Emerging market currencies	3.5
UK gilts	15.0
UK corporate bonds	20.5
Index-linked bonds	20.5
Cash	2.0

The assets, excluding AVCs and the Escrow account, were invested as summarised below at 31 March 2012 and 31 March 2009:

	Market value as at 31 March 2012		Market value as at 31 March 2009	
	£m	%	£m	%
Equities	672.5	28.6	596.6	35.9
Fixed interest securities and index linked securities	1,225.6	52.0	756.2	45.5
Property	168.9	7.2	136.7	8.2
Fund of hedge fund	0		97.1	5.8
Emerging Markets Currency Fund	49.8	2.1		
Cash deposits and other investments	238.0	10.1	77.0	4.6
<b>Total</b>	<b>2,354.8</b>	<b>100.0</b>	<b>1,663.6</b>	<b>100.0</b>

### Summary of Significant Events since the last valuation

Since the last valuation:

- The Trustee has de-risked by moving its benchmark from 50% return-seeking assets to 42% return-seeking assets, with the balance in gilts and bonds.
- The Trustee purchased a longevity swap with ReAssure in May 2012, which covers the CPS Section pensioners who had retired before 1 August 2011. Although this was completed after the valuation date, the difference between the premiums due and the *technical provisions* for the liabilities covered by the swap has been included as part of the technical provisions.
- An enhanced transfer value exercise was undertaken in 2011/12, and 572 members transferred out of the Scheme. The total amount paid out was £32 million, which includes additional contributions paid by the Company of £6

million. The *technical provisions* include an adjustment to reflect the difference between the technical provisions for the members who transferred out and the transfer values paid.

- The CPS Section rules were amended to extend the supplement to certain non-pensioner members. An estimate of the liabilities for further extending this to pensioners has been included in the *technical provisions*.



## Appendix D: Statutory certificate

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

Name of scheme: **Akzo Nobel (CPS) Pension Scheme**

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

I certify that, in my opinion, the calculation of the Scheme's technical provisions as at 31 March 2012 is made in accordance with regulations under section 222 of the Pensions Act 2004. The calculation uses a method and assumptions determined by the Trustee of the Scheme and set out in the Statement of Funding Principles dated 15 March 2013.



Jeremy Trezise  
Fellow of the Institute and Faculty of Actuaries  
18 March 2013

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## Appendix E: Glossary

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

**Actuarial report:** A report prepared by the *Scheme Actuary* in years when an *actuarial valuation* is not carried out that provides an update on developments affecting the Scheme's assets and *technical provisions* over the year.

**Actuarial valuation:** A report prepared by the *Scheme Actuary* that includes the results of the calculation of the *technical provisions* based on the assumptions specified in the *Statement of Funding Principles* and assesses whether the assets are sufficient to meet the *statutory funding target*.

**Contingent asset:** An arrangement separate from the assets already held by the trustees under trust (or agreed and documented in the *schedule of contributions*) that provides for the trustees to receive certain assets should certain pre-defined events takes place.

**Covenant:** This represents an employer's legal obligation and its ability to provide the financial support to the scheme that may be required now and in the future. The trustees' assessment of the sponsor's *covenant* will inform both investment and funding decisions.

**Demographic assumptions:** Assumptions relating to social statistics for scheme members, which can affect the form, level or timing of benefits members or their dependents receive. This can include levels of mortality experienced by the scheme and the proportion of members electing to exercise benefit options.

**Discount rates:** Assumptions used to place a capital value at the valuation date on projected future benefit cash flows from the scheme. The lower the *discount rate* the higher the resulting capital value.

**Financial assumptions:** Assumptions relating to future economic factors which will affect the funding position of the scheme, such as inflation and investment returns.

**Funding target/objective:** An objective to have a particular level of assets relative to the accrued liabilities of the scheme. See also *statutory funding objective*.

**Pension Protection Fund (PPF):** Provides compensation to members of an eligible occupational scheme in the event that the scheme is wound up with insufficient assets and the employer is insolvent. The level of PPF compensation provided would not usually be at the full level of the benefits that would otherwise have been due from the scheme.

**Prudence:** Regulations require that assumptions are chosen *prudently* when assessing the level of *technical provisions*, although they do not define this term. We have interpreted *prudence* to be the level of conservatism in the assumptions. Where this is interpreted quantitatively, assumptions said to be *prudent* would result in higher *technical provisions* than a "best estimate" assumption (where a "best estimate" assumption is one where there is a 50% chance that the actual outcome will be higher or lower than assumed).

**The Pensions Regulator:** The regulatory supervisor for occupational pension schemes with statutory objectives to protect members' benefits and the *Pension Protection Fund*, and statutory powers to take interventionist action.

**Recovery plan:** A document required where an *actuarial valuation* discloses that the *statutory funding objective* is not met (i.e. the assets held are less than the *technical provisions*). It is a formal agreement<sup>1</sup> between the trustees and the employer that sets out the steps to be taken to achieve the *statutory funding objective* by the end of an agreed period (the "recovery period").

**Schedule of contributions:** A document that sets out in detail the agreed<sup>1</sup> contributions payable to a scheme by members and the employers and the dates by which such contributions are to be paid. It includes, but is not limited to, contributions agreed under a *recovery plan*.

**Scheme Actuary:** The individual actuary appointed (under the Pensions Act 1995) by the trustees to perform certain statutory duties for the scheme.

**Scheme-Specific Funding Regime:** A term used to refer to the legislative and regulatory rules that stem from the Pension Act 2004 and which govern the funding of occupational defined benefit pension schemes in the UK.

**Statement of Funding Principles (SPF):** The SFP sets out the trustees' policy for ensuring that the *statutory funding objective* and any other *funding objectives* are met and, in particular, the assumptions for calculating the *technical provisions* at the effective date of the *actuarial valuation*. The trustees are responsible for preparing and maintaining this document, taking into account the advice or recommendations, as appropriate, of the *Scheme Actuary* and seeking the agreement<sup>1</sup> of the employer.

**Statement of Investment Principles (SIP):** The SIP sets out the trustees' policy for investing the scheme's assets. The trustees are responsible for preparing and maintaining this document, taking into account written investment advice from the appointed investment advisor and consulting the employer.

**Statutory estimate of solvency:** An estimate of the cost of discharging a scheme's liability to pay benefits through the purchase of insurance policies in respect of each member's full benefit entitlement under the scheme (unless the actuary considers that it is not practicable to make an estimate on this basis, in which case the estimate of solvency can be prepared on a basis that the actuary considers appropriate).

**Statutory funding objective:** To have sufficient and appropriate assets to cover a scheme's *technical provisions*.

**Statutory priority order:** The order in which the assets of a scheme must be applied in securing the benefits of different members in the event of the scheme being wound up. The order is consistent with the *Pension Protection Fund* (PPF) because benefits covered by the PPF are the highest priority class of defined benefit liabilities.

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<sup>1</sup>Agreement between the trustees and employer is needed in the majority of cases. However, in certain circumstances because of the interaction of the scheme's legal documentation with the provisions of the Pensions Act 2004 it is necessary only to consult with the employer and possibly to take into account the recommendations of another party.

**Summary funding statement:** An update sent to members following the completion of each *actuarial valuation* or *actuarial report* informing them of the assessed financial position of the scheme.

**Technical provisions:** The amount of assets required to make provision for the accrued liabilities of the scheme. The technical provisions are calculated using the method and assumptions set out in the *Statement of Funding Principles*.

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

