Derbyshire Pension Fund DRAFT Funding Strategy Statement

January 2017

PUBLIC SECTOR

Contents

DRA	AFT Funding Strategy Statement	PAGE
1 2 3 4	Introduction Basic Funding issues Calculating contributions for individual Employers Funding strategy and links to investment strategy	1 4 8 19
App	endices	
App App App	endix A – Regulatory framework endix B – Responsibilities of key parties endix C – Key risks and controls endix D – The calculation of Employer contributions endix E – Actuarial assumptions endix F – Glossary	21 25 27 32 35 37

1 Introduction

1.1 What is this document?

This is the Funding Strategy Statement (FSS) of the Derbyshire Pension Fund ("the Fund"), which is administered by Derbyshire County Council, ("the Administering Authority").

It has been prepared by the Administering Authority in collaboration with the Fund's actuary, Hymans Robertson LLP, and after consultation with the Fund's employers and investment adviser. It is effective from 16th March 2017..

1.2 What is the Derbyshire Pension Fund?

The Fund is part of the national Local Government Pension Scheme (LGPS). The LGPS was set up by the UK Government to provide retirement and death benefits for local government employees, and those employed in similar or related bodies, across the whole of the UK. The Administering Authority runs the Derbyshire Fund, in effect the LGPS for the Derbyshire area, to make sure it:

- receives the proper amount of contributions from employees and employers, and any transfer payments;
- invests the contributions appropriately, with the aim that the Fund's assets grow over time with investment income and capital growth; and
- uses the assets to pay Fund benefits to the members (as and when they retire, for the rest of their lives), and to their dependants (as and when members die), as defined in the LGPS Regulations. Assets are also used to pay transfer values and administration costs.

The roles and responsibilities of the key parties involved in the management of the Fund are summarised in Appendix B.

1.3 Why does the Fund need a Funding Strategy Statement?

Employees' benefits are guaranteed by the LGPS Regulations, and do not change with market values or employer contributions. Investment returns will help pay for some of the benefits, but probably not all, and certainly with no guarantee. Employees' contributions are fixed in those Regulations also, at a level which covers only part of the cost of the benefits.

Therefore, employers need to pay the balance of the cost of delivering the benefits to members and their dependants.

The FSS focuses on how employer liabilities are measured, the pace at which these liabilities are funded, and how employers or pools of employers pay for their own liabilities. This statement sets out how the Administering Authority has balanced the conflicting aims of:

- affordability of employer contributions,
- · transparency of processes,
- · stability of employers' contributions, and
- prudence in the funding basis.

There are also regulatory requirements for an FSS, as given in Appendix A.

The FSS is a summary of the Fund's approach to funding its liabilities, and this includes reference to the Fund's other policies; it is not an exhaustive statement of policy on all issues. The FSS forms part of a framework which includes:

- the LGPS Regulations;
- the Rates and Adjustments Certificate (confirming employer contribution rates for the next three years) which can be found in an appendix to the formal valuation report;
- the Fund's policies on admissions, cessations and bulk transfers;
- actuarial factors for valuing individual transfers, early retirement costs and the costs of buying added service; and
- the Fund's Investment Strategy Statement (see <u>Section 4</u>)

1.4 How does the Fund and this FSS affect me?

This depends who you are:

- a member of the Fund, i.e. a current or former employee, or a dependant: the Fund needs to be sure it is collecting and holding enough money so that your benefits are always paid in full;
- an employer in the Fund (or which is considering joining the Fund): you will want to know how your
 contributions are calculated from time to time, that these are fair by comparison to other employers in the
 Fund, and in what circumstances you might need to pay more. Note that the FSS applies to all employers
 participating in the Fund;
- an Elected Member whose council participates in the Fund: you will want to be sure that the council
 balances the need to hold prudent reserves for members' retirement and death benefits, with the other
 competing demands for council money;
- a Council Tax payer: your council seeks to strike the balance above, and also to minimise cross-subsidies between different generations of taxpayers.

1.5 What does the FSS aim to do?

The FSS sets out the objectives of the Fund's funding strategy, such as:

- to ensure the long-term solvency of the Fund, using a prudent long term view. This will ensure that sufficient funds are available to meet all members'/dependants' benefits as they fall due for payment;
- to ensure that employer contribution rates are reasonably stable where appropriate;
- to minimise the long-term cash contributions which employers need to pay to the Fund, by recognising the
 link between assets and liabilities and adopting an investment strategy which balances risk and return (NB
 this will also minimise the costs to be borne by Council Tax payers);
- to reflect the different characteristics of different employers in determining contribution rates. This involves the Fund having a clear and transparent funding strategy to demonstrate how each employer can best meet its own liabilities over future years; and
- to use reasonable measures to reduce the risk to other employers and ultimately to the Council Tax payer from an employer defaulting on its pension obligations.

1.6 How do I find my way around this document?

In <u>Section 2</u> there is a brief introduction to some of the main principles behind funding, i.e. deciding how much an employer should contribute to the Fund from time to time.

In <u>Section 3</u> we outline how the Fund calculates the contributions payable by different employers in different situations.

In <u>Section 4</u> we show how the funding strategy is linked with the Fund's investment strategy.

In the Appendices we cover various issues in more detail if you are interested:

- A. the regulatory background, including how and when the FSS is reviewed,
- B. who is responsible for what,
- C. what issues the Fund needs to monitor, and how it manages its risks,
- D. some more details about the actuarial calculations required,
- E. the assumptions which the Fund actuary currently makes about the future,
- F. a glossary explaining the technical terms occasionally used here.

If you have any other queries please contact Nigel Dowey, Pensions Manager in the first instance at e-mail address (nigel.dowey@derbyshire.gov.uk).

2 Basic Funding issues

(More detailed and extensive descriptions are given in Appendix D).

2.1 How does the actuary measure the required contribution rate?

In essence this is a three-step process:

- Calculate the ultimate funding target for that employer, i.e. the ideal amount of assets it should hold in order to be able to pay all its members' benefits. See <u>Appendix E</u> for more details of what assumptions we make to determine that funding target;
- 2. Determine the time horizon over which the employer should aim to achieve that funding target. See the table in 3.3 and Note (c) for more details;
- 3. Calculate the employer contribution rate such that it has at least a given probability of achieving that funding target over that time horizon, allowing for different likelihoods of various possible economic outcomes over that time horizon. See 2.3 below, and the table in 3.3 Note (e) for more details.

2.2 What is each employer's contribution rate?

This is described in more detail in Appendix D. Employer contributions are normally made up of two elements:

- a) the estimated cost of benefits being built up each year, after deducting the members' own contributions and including administration expenses. This is referred to as the "*Primary rate*", and is expressed as a percentage of members' pensionable pay; plus
- b) an adjustment for the difference between the Primary rate above, and the actual contribution the employer needs to pay, referred to as the "Secondary rate". In broad terms, payment of the Secondary rate will aim to return the employer to full funding over an appropriate period (the "time horizon"). The Secondary rate may be expressed as a percentage of pay and/or a monetary amount in each year.

The rates for all employers are shown in the Fund's Rates and Adjustments Certificate, which forms part of the formal Actuarial Valuation Report. Employers' contributions are expressed as minima, with employers able to pay contributions at a higher rate. Account of any higher rate will be taken by the Fund actuary at subsequent valuations, i.e. will be reflected as a credit when next calculating the employer's contributions.

2.3 What different types of employer participate in the Fund?

Historically the LGPS was intended for local authority employees only. However over the years, with the diversification and changes to delivery of local services, many more types and numbers of employers now participate. There are currently more employers in the Fund than ever before, a significant part of this being due to new academies.

In essence, participation in the LGPS is open to public sector employers providing some form of service to the local community. Whilst the majority of members will be local authority employees (and ex-employees), the majority of participating employers are those providing services in place of (or alongside) local authority services: academy schools, contractors, housing associations, charities, etc.

The LGPS Regulations define various types of employer as follows:

Scheduled bodies - councils, and other specified employers such as academies and further education establishments. These must provide access to the LGPS in respect of their employees who are not eligible to join another public sector scheme (such as the Teachers Scheme). These employers are so-called because they are specified in a schedule to the LGPS Regulations.

It is now possible for Local Education Authority schools to convert to academy status, and for other forms of school (such as Free Schools) to be established under the academies legislation. All such **academies (or Multi Academy Trusts)**, as employers of non-teaching staff, become separate new employers in the Fund. As academies are defined in the LGPS Regulations as "Scheduled Bodies", the Administering Authority has no discretion over whether to admit them to the Fund, and the academy has no discretion whether to continue to allow its non-teaching staff to join the Fund. There has also been guidance issued by the DCLG regarding the terms of academies' membership in LGPS Funds.

Designating employers - employers such as town and parish councils are able to participate in the LGPS via resolution (and the Fund cannot refuse them entry where the resolution is passed). These employers can designate which of their employees are eligible to join the scheme.

Other employers are able to participate in the Fund via an admission agreement, and are referred to as 'admission bodies'. These employers are generally those with a "community of interest" with another scheme employer – **community admission bodies** ("CAB") or those providing a service on behalf of a scheme employer – **transferee admission bodies** ("TAB"). CABs will include housing associations and charities, TABs will generally be contractors. The Fund is able to set its criteria for participation by these employers and can refuse entry if the requirements as set out in the Fund's admissions policy are not met. (NB The terminology CAB and TAB has been dropped from recent LGPS Regulations, which instead combine both under the single term 'admission bodies'; however, we have retained the old terminology here as we consider it to be helpful in setting funding strategies for these different employers.

2.4 How does the measured contribution rate vary for different employers?

All three steps above are considered when setting contributions (more details are given in Section 3 and Appendix D).

- 1. The **funding target** is based on a set of assumptions about the future, (e.g. investment returns, inflation, pensioners' life expectancies). However, if an employer is approaching the end of its participation in the Fund then its funding target may be set on a more prudent basis, so that its liabilities are less likely to be spread among other employers after its cessation;
- 2. The **time horizon** required is, in broad terms, the period over which any deficit is to be recovered. A shorter period will lead to higher contributions, and vice versa (all other things being equal). Employers may be given a lower time horizon if they have a less permanent anticipated membership, or do not have tax-raising powers to increase contributions if investment returns under-perform; and
- 3. The **probability of achieving** the funding target over that time horizon will be dependent on the Fund's view of the strength of employer covenant and its funding profile. Where an employer is considered to be weaker, or potentially ceasing from the Fund, then the required probability will be set higher, which in turn will increase the required contributions (and vice versa).

For some employers it may be agreed to pool contributions, see 3.4.

Any costs of non ill-health early retirements must be paid by the employer, see 3.6.

Costs of ill-health early retirements are covered in 3.7 and 3.8.

2.5 How is a deficit (or surplus) calculated?

An employer's "funding level" is defined as the ratio of:

- the market value of the employer's share of assets (see <u>Appendix D</u>, section <u>D5</u>, for further details of how this is calculated), to
- the value placed by the actuary on the benefits built up to date for the employer's employees and exemployees (the "liabilities"). The Fund actuary agrees with the Administering Authority the assumptions to be used in calculating this value.

If this is less than 100% then it means the employer has a shortfall, which is the employer's deficit; if it is more than 100% then the employer is said to be in surplus. The amount of deficit or shortfall is the difference between the asset value and the liabilities value.

It is important to note that the deficit/surplus and funding level are only measurements at a particular point in time, on a particular set of assumptions about the future. Whilst we recognise that various parties will take an interest in these measures, for most employers the key issue is how likely it is that their contributions will be sufficient to pay for their members' benefits (when added to their existing asset share and anticipated investment returns).

In short, deficits and funding levels are short term measures, whereas contribution-setting is a longer term issue.

2.6 How does the Fund recognise that contribution levels can affect council and employer service provision, and council tax?

The Administering Authority and the Fund actuary are acutely aware that, all other things being equal, a higher contribution required to be paid to the Fund will mean less cash available for the employer to spend on the provision of services. For instance:

- Higher Pension Fund contributions may result in reduced council spending, which in turn could affect the resources available for council services, and/or greater pressure on council tax levels;
- Contributions which Academies pay to the Fund will therefore not be available to pay for providing education; and
- Other employers will provide various services to the local community, perhaps through housing
 associations, charitable work, or contracting council services. If they are required to pay more in pension
 contributions to the LGPS then this may affect their ability to provide the local services at a reasonable
 cost.

Whilst all this is true, it should also be borne in mind that:

- The Fund provides invaluable financial security to local families, whether to those who formerly worked in the service of the local community who have now retired, or to their families after their death;
- The Fund must have the assets available to meet these retirement and death benefits, which in turn means that the various employers must each pay their own way. Lower contributions today will mean higher contributions tomorrow: deferring payments does not alter the employer's ultimate obligation to the Fund in respect of its current and former employees;
- Each employer will generally only pay for its own employees and ex-employees (and their dependants), not for those of other employers in the Fund;

- The Fund strives to maintain reasonably stable employer contribution rates where appropriate and possible. However, a recent shift in regulatory focus means that solvency within each generation is considered by the Government to be a higher priority than stability of contribution rates;
- The Fund wishes to avoid the situation where an employer falls so far behind in managing its funding shortfall that its deficit becomes unmanageable in practice: such a situation may lead to employer insolvency and the resulting deficit falling on the other Fund employers. In that situation, those employers' services would in turn suffer as a result;
- Council contributions to the Fund should be at a suitable level, to protect the interests of different
 generations of council tax payers. For instance, underpayment of contributions for some years will need
 to be balanced by overpayment in other years; the council will wish to minimise the extent to which
 council tax payers in one period are in effect benefitting at the expense of those paying in a different
 period.

Overall, therefore, there is clearly a balance to be struck between the Fund's need for maintaining prudent funding levels, and the employers' need to allocate their resources appropriately. The Fund achieves this through various techniques which affect contribution increases to various degrees (see 3.1). In deciding which of these techniques to apply to any given employer, the Administering Authority takes a view on the financial standing of the employer, i.e. its ability to meet its funding commitments and the relevant time horizon.

The Administering Authority is building an employer risk assessment framework using a knowledge base which will be regularly monitored and kept up-to-date. This database will include such information as the type of employer, its membership profile and funding position, any guarantors or security provision, material changes anticipated, etc.

For instance, where the Administering Authority has reasonable confidence that an employer will be able to meet its funding commitments, then the Fund will permit options such as stabilisation (see 3.3 Note (b)), a longer time horizon relative to other employers, and/or a lower probability of achieving their funding target. Such options will temporarily produce lower contribution levels than would otherwise have applied. This is permitted in the expectation that the employer will still be able to meet its obligations for many years to come.

On the other hand, where there is doubt that an employer will be able to meet its funding commitments or withstand a significant change in its commitments, then a higher funding target, and/or a shorter deficit recovery period relative to other employers, and/or a higher probability of achieving the target may be required.

The Fund actively seeks employer input, including to its funding arrangements, through various means: see Appendix A.

3 Calculating contributions for individual Employers

3.1 General comments

A key challenge for the Administering Authority is to balance the need for stable, affordable employer contributions with the requirement to take a prudent, longer-term view of funding and ensure the solvency of the Fund. With this in mind, the Fund's three-step process identifies the key issues:

- 1. What is a suitably (but not overly) prudent funding target?
- 2. How long should the employer be permitted to reach that target? This should be realistic but not so long that the funding target is in danger of never actually being achieved.
- 3. What probability is required to reach that funding target? This will always be less than 100% as we cannot be certain of future market movements. Higher probability "bars" can be used for employers where the Fund wishes to reduce the risk that the employer ceases leaving a deficit to be picked up by other employers.

These and associated issues are covered in this Section.

The Administering Authority recognises that there may occasionally be particular circumstances affecting individual employers that are not easily managed within the rules and policies set out in the Funding Strategy Statement. Therefore the Administering Authority may, at its sole discretion, direct the actuary to adopt alternative funding approaches on a case by case basis for specific employers.

3.2 The effect of paying lower contributions

In limited circumstances the Administering Authority may permit employers to pay contributions at a lower level than is assessed for the employer using the three step process above. At their absolute discretion the Administering Authority may:

- extend the time horizon for targeting full funding;
- adjust the required probability of meeting the funding target;
- permit an employer to participate in the Fund's stabilisation mechanisms;
- permit extended phasing in of contribution rises or reductions;
- pool contributions amongst employers with similar characteristics; and/or
- accept some form of security or guarantee in lieu of a higher contribution rate than would otherwise be the case.

Employers which are permitted to use one or more of the above methods will often be paying, for a time, contributions less than required to meet their funding target, over the appropriate time horizon with the required likelihood of success. Such employers should appreciate that:

- their true long term liability (i.e. the actual eventual cost of benefits payable to their employees and exemployees) is not affected by the pace of paying contributions;
- lower contributions in the short term will be assumed to incur a greater loss of investment returns on the
 deficit. Thus, deferring a certain amount of contribution may lead to higher contributions in the long-term;
 and
- it may take longer to reach their funding target, all other things being equal.

Overleaf (3.3) is a summary of how the main funding policies differ for different types of employer, followed by more detailed notes where necessary.

Section 3.4 onwards deals with various other funding issues which apply to all employers.

DERBYSHIRE PENSION FUND 010

HYMANS ROBERTSON LLP

3.3 The different approaches used for different employers

Local Authorities Ongoing, ass Yes - see Note (b) 19 years	Police, Fire, Colleges etc sumes long-term Fu (see Appendix E Yes - see Note (b) 19 years	Academies und participation	Open to new entrants Ongoing, but may	mission Bodies and ng Employers Closed to new entrants move to "gilts basis" - Note (a) D - D.2)	(all) Ongoing, assumes fixed contract term in the Fund (see Appendix E) No
Authorities Ongoing, ass Yes - see Note (b)	Colleges etc sumes long-term Fu (see Appendix E Yes - see Note (b)	und participation Yes - see	Open to new entrants Ongoing, but may see (see Appendix	Closed to new entrants move to "gilts basis" - Note (a) D - D.2)	Ongoing, assumes fixed contract term in the Fund (see Appendix E)
Yes - see Note (b)	Yes - see Note (b)	Yes - see	see (see <u>Appendix</u>	Note (a) (D – D.2)	the Fund (see Appendix E)
Note (b)	Note (b)		,		No
Note (b)	Note (b)		No	No	No
19 years	19 vears				
	,	19 years	12 years	12 years	The lower of 12 years and the outstanding contract term
Monetary amount	Monetary amount	Percentage of Payroll	Monetary amount	Monetary amount	Monetary amount
Covered by stabilisation arrangement	Covered by stabilisation arrangement	Covered by stabilisation arrangement	Primary rate. How	vever, reductions may	Reduce contributions by spreading the surplus over The lower of 12 years and the outstanding contract term
66%	70%	66%	80%	80%	70%
Covered by stabilisation arrangement	Covered by stabilisation arrangement	Covered by stabilisation arrangement	3 years	3 years	None
					Particularly reviewed in last 3 years of contract
n/a	n/a	Note (g)	<u>N</u>	ote (h)	<u>Notes (h)</u> <u>& (i)</u>
New employer n/a Note (g) Cessation of participation: cessation debt payable Cessation is assumed not to be generally possible, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring (machinery of Government changes for example), the cessation debt principles		admission agreer will be calculated to the circumstand	ment. Cessation debt on a basis appropriate ces of cessation – see	Participation is assumed to expire at the end of the contract. Cessation debt (if any) calculated on ongoing basis. Awarding Authority will be liable for future deficits and contributions arising.	
; 8	Monetary amount Covered by stabilisation arrangement 66% Covered by stabilisation arrangement Administering n/a Cessation is as as Schedu participate cessation occhanges for ex	Monetary amount Covered by stabilisation arrangement 66% Covered by stabilisation arrangement Covered by stabilisation arrangement Covered by stabilisation arrangement Administering Authority reserve level of security properties as Scheduled Bodies are legal participate in the LGPS. In the cessation occurring (machinery changes for example), the cessation	Monetary amount Percentage of Payroll Covered by Covered by Stabilisation arrangement arrangement arrangement 66% 70% 66% Covered by Stabilisation arrangement arrangement arrangement arrangement arrangement Administering Authority reserves the right to review level of security provided, at regular in n/a Note (g) Cessation is assumed not to be generally possible, as Scheduled Bodies are legally obliged to participate in the LGPS. In the rare event of cessation occurring (machinery of Government)	Monetary amount Payroll amount Covered by Stabilisation arrangement arrangement arrangement Covered by Stabilisation arrangement Administering Authority reserves the right to review contribution rates a level of security provided, at regular intervals between val n/a Note (g) Can be ceased admission agreed will be calculated to the circumstance changes for example), the cessation debt principles	Monetary amount Payroll Amount Preferred approach: contributions kept at Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions may be permitted by the Admin. Authority Primary rate. However, reductions Primary rate.

Note (a) (Basis for CABs and Designating Employers closed to new entrants)

In the circumstances where:

- the employer is a Designating Employer, or an Admission Body but not a Transferee Admission Body, and
- the employer has no guarantor, and
- the admission agreement is likely to terminate, or the employer is likely to lose its last active member, within a timeframe considered appropriate by the Administering Authority to prompt a change in funding,

the Administering Authority may set a higher funding target (e.g. using a discount rate set equal to gilt yields) by the time the agreement terminates or the last active member leaves, in order to protect other employers in the Fund. This policy will increase regular contributions and reduce, but not entirely eliminate, the possibility of a final deficit payment being required from the employer when a cessation valuation is carried out.

The Administering Authority also reserves the right to adopt the above approach in respect of those Designating Employers and Admission Bodies with no guarantor, where the strength of covenant is considered to be weak but there is no immediate expectation that the admission agreement will cease or the Designating Employer alters its designation.

Note (b) (Stabilisation)

Stabilisation is a mechanism where employer contribution rate variations from year to year are kept within a predetermined range, thus allowing those employers' rates to be relatively stable. In the interests of stability and affordability of employer contributions, the Administering Authority, on the advice of the Fund Actuary, believes that stabilising contributions can still be viewed as a prudent longer-term approach. However, employers whose contribution rates have been "stabilised" (and may therefore be paying less than their theoretical contribution rate) should be aware of the risks of this approach and should consider making additional payments to the Fund if possible. This stabilisation mechanism allows short term investment market volatility to be managed so as not to cause volatility in employer contribution rates, on the basis that a long term view can be taken on net cash inflow, investment returns and strength of employer covenant.

The current stabilisation mechanism applies if:

- the employer satisfies the eligibility criteria set by the Administering Authority (see below) and;
- there are no material events which cause the employer to become ineligible, e.g. significant reductions in
 active membership (due to outsourcing or redundancies), or changes in the nature of the employer (perhaps
 due to Government restructuring), or changes in the security of the employer.

On the basis of extensive modelling carried out for the 2016 valuation exercise (see <u>Section 4</u>), the stabilised details are as follows:

Type of employer	Local Authorities	Police, Fire, Colleges etc.	Academies
Max cont increase	1%	1%	1%
Max cont decrease	0%	0%	-1%

The stabilisation criteria and limits will be reviewed at the 31 March 2019 valuation, to take effect from 1 April 2020. However the Administering Authority reserves the right to review the stabilisation criteria and limits at any time before then, on the basis of membership and/or employer changes as described above.

Note (c) (Maximum time horizon)

The maximum time horizon starts at the commencement of the revised contribution rate (1 April 2017 for the 2016 valuation). The Administering Authority would normally expect the same period to be used at successive triennial valuations, but would reserve the right to propose alternative time horizons, for example where there were no new entrants.

Note (d) (Secondary rate)

For some employers where stabilisation is not being applied, the Secondary contribution rate for each employer covering the three year period until the next valuation will often be set as a percentage of salaries. However, the Administering Authority reserves the right to amend these rates between valuations and/or to require these payments in monetary terms instead, for instance where:

- the employer is relatively mature, i.e. has a large Secondary contribution rate (e.g. above 15% of payroll), or
- there has been a significant reduction in payroll due to outsourcing or redundancy exercises, or
- the employer has closed the Fund to new entrants.

Note (e) (Probability of achieving funding target)

Each employer has its funding target calculated, and a relevant time horizon over which to reach that target. Contributions are set such that, combined with the employer's current asset share and anticipated market movements over the time horizon, the funding target is achieved with a given minimum probability. A higher required probability bar will give rise to higher required contributions, and vice versa.

The way in which contributions are set using these three steps, and relevant economic projections, is described in further detail in Appendix D.

Different probabilities are set for different employers depending on their nature and circumstances: in broad terms, a higher probability will apply due to one or more of the following:

- the Fund believes the employer poses a greater funding risk than other employers,
- the employer does not have tax-raising powers;
- the employer does not have a guarantor or other sufficient security backing its funding position; and/or
- the employer is likely to cease participation in the Fund in the short or medium term.

Note (f) (Regular Reviews)

Such reviews may be triggered by significant events including but not limited to: significant reductions in payroll, altered employer circumstances, Government restructuring affecting the employer's business, or failure to pay contributions or arrange appropriate security as required by the Administering Authority.

The result of a review may be to require increased contributions (by strengthening the actuarial assumptions adopted and/or moving to monetary levels of deficit recovery contributions), and/or an increased level of security or guarantee.

Note (g) (New Academy conversions)

At the time of writing, the Fund's policies on academies' funding issues are as follows:

- i. The new academy will be regarded as a separate employer in its own right and will not be pooled with other employers in the Fund. The only exception is where the academy is part of a Multi Academy Trust (MAT) in which case the academy's figures will be calculated as below but can be combined with those of the other academies in the MAT;
- ii. The new academy's past service liabilities on conversion will be calculated based on its active Fund members on the day before conversion. For the avoidance of doubt, these liabilities will include all past service of those members, but will exclude the liabilities relating to any ex-employees of the school who have deferred or pensioner status:
- iii. The new academy will be allocated an initial asset share from the ceding council's assets in the Fund. This asset share will be calculated using the estimated funding position of the ceding council at the date of academy conversion. The share will be based on the active members' funding level, having first allocated assets in the council's share to fully fund deferred and pensioner members. The asset allocation will be based on market conditions and the academy's active Fund membership on the day prior to conversion;
- iv. The new academy's initial contribution rate will be calculated using market conditions, the council funding position and, membership data, all as at the day prior to conversion;
- v. As an alternative to (iv), the academy will have the option to elect to pay contributions initially in line with the ceding Council instead. However, this election will not alter its asset or liability allocation as per (ii) and (iii) above. Ultimately, all academies remain responsible for their own allocated deficit.

The Fund's policies on academies are subject to change in the light of any amendments to DCLG guidance. Any changes will be notified to academies, and will be reflected in a subsequent version of this FSS. In particular, policies (iv) and (v) above will be reconsidered at each valuation.

Note (h) (New Admission Bodies)

With effect from 1 October 2012, the LGPS 2012 Miscellaneous Regulations introduced mandatory new requirements for all Admission Bodies brought into the Fund from that date. Under these Regulations, all new Admission Bodies will be required to provide some form of security, such as a guarantee from the letting employer, an indemnity or a bond. The security is required to cover some or all of the following:

- the strain cost of any redundancy early retirements resulting from the premature termination of the contract;
- allowance for the risk of asset underperformance;
- allowance for the risk of a fall in gilt yields;
- allowance for the possible non-payment of employer and member contributions to the Fund; and/or
- the current deficit.

Transferee Admission Bodies: For all TABs, the security must be to the satisfaction of the Administering Authority as well as the letting employer, and will be reassessed on an annual basis. See also **Note** (i) below.

Community Admission Bodies: The Administering Authority will only consider requests from CABs (or other similar bodies, such as section 75 NHS partnerships) to join the Fund if they are sponsored by a Scheduled Body with tax raising powers, guaranteeing their liabilities and also providing a form of security as above.

The above approaches reduce the risk, to other employers in the Fund, of potentially having to pick up any shortfall in respect of Admission Bodies ceasing with an unpaid deficit.

Note (i) (New Transferee Admission Bodies)

A new TAB usually joins the Fund as a result of the letting/outsourcing of some services from an existing employer (normally a Scheduled Body such as a council or academy) to another organisation (a "contractor"). This involves the TUPE transfer of some staff from the letting employer to the contractor. Consequently, for the duration of the contract, the contractor is a new participating employer in the Fund so that the transferring employees maintain their eligibility for LGPS membership. At the end of the contract the employees revert to the letting employer or to a replacement contractor.

Ordinarily, the TAB would be set up in the Fund as a new employer with responsibility for all the accrued benefits of the transferring employees; in this case, the contractor would usually be assigned an initial asset allocation equal to the past service liability value of the employees' Fund benefits. The quid pro quo is that the contractor is then expected to ensure that its share of the Fund is also fully funded at the end of the contract: see Note (i).

Employers which "outsource" have flexibility in the way that they can deal with the pension risk potentially taken on by the contractor. In particular there are three different routes that such employers may wish to adopt. Clearly as the risk ultimately resides with the employer letting the contract, it is for them to agree the appropriate route with the contractor:

i) <u>Pooling</u>

Under this option the contractor is pooled with the letting employer. In this case, the contractor pays the same rate as the letting employer, which may be under a stabilisation approach.

ii) Letting employer retains pre-contract risks

Under this option the letting employer would retain responsibility for assets and liabilities in respect of service accrued prior to the contract commencement date. The contractor would be responsible for the future liabilities that accrue in respect of transferred staff. The contractor's contribution rate could vary from one valuation to the next. It would be liable for any deficit at the end of the contract term in respect of assets and liabilities attributable to service accrued during the contract term.

iii) Fixed contribution rate agreed

Under this option the contractor pays a fixed contribution rate and does not pay any cessation deficit.

The Administering Authority is willing to administer any of the above options as long as the approach is documented in the Admission Agreement as well as the transfer agreement. The Admission Agreement should ensure that some element of risk transfers to the contractor where it relates to their decisions and it is unfair to burden the letting employer with that risk. For example the contractor should typically be responsible for pension costs that arise from:

- above average pay increases, including the effect in respect of service prior to contract commencement even if the letting employer takes on responsibility for the latter under (ii) above; and
- · redundancy and early retirement decisions.

Note (j) (Admission Bodies Ceasing)

Notwithstanding the provisions of the Admission Agreement, the Administering Authority may consider any of the following as triggers for the cessation of an admission agreement with any type of body:

- Last active member ceasing participation in the Fund (NB recent LGPS Regulation changes mean that the
 Administering Authority has the discretion to defer taking action for up to three years, so that if the employer
 acquires one or more active Fund members during that period then cessation is not triggered. The current
 Fund policy is that this is left as a discretion and may or may not be applied in any given case);
- The insolvency, winding up or liquidation of the Admission Body;
- Any breach by the Admission Body of any of its obligations under the Agreement that they have failed to remedy to the satisfaction of the Fund;
- A failure by the Admission Body to pay any sums due to the Fund within the period required by the Fund; or
- The failure by the Admission Body to renew or adjust the level of the bond or indemnity, or to confirm an appropriate alternative guarantor, as required by the Fund.

On cessation, the Administering Authority will instruct the Fund actuary to carry out a cessation valuation to determine whether there is any deficit or surplus. Where there is a deficit, payment of this amount in full would normally be sought from the Admission Body; where there is a surplus it should be noted that current legislation does not permit a refund payment to the Admission Body.

For non-Transferee Admission Bodies whose participation is voluntarily ended either by themselves or the Fund, or where a cessation event has been triggered, the Administering Authority must look to protect the interests of other ongoing employers. The actuary will therefore adopt an approach which, to the extent reasonably practicable, protects the other employers from the likelihood of any material loss emerging in future:

- (a) Where a guarantor does not exist then, in order to protect other employers in the Fund, the cessation liabilities and final deficit will normally be calculated using a "gilts cessation basis", which is more prudent than the ongoing basis. This has no allowance for potential future investment outperformance above gilt yields, and has added allowance for future improvements in life expectancy. This could give rise to significant cessation debts being required.
- (b) Where there is a guarantor for future deficits and contributions, the details of the guarantee will be considered prior to the cessation valuation being carried out. In some cases the guarantor is simply guarantor of last resort and therefore the cessation valuation will be carried out consistently with the approach taken had there been no guarantor in place. Alternatively, where the guarantor is not simply guarantor of last resort, the cessation may be calculated using the ongoing basis as described in Appendix E;

(c) Again, depending on the nature of the guarantee, it may be possible to simply transfer the former Admission Body's liabilities and assets to the guarantor, without needing to crystallise any deficit. This approach may be adopted where the employer cannot pay the contributions due, and this is within the terms of the guarantee.

Under (a) and (c), any shortfall would usually be levied on the departing Admission Body as a single lump sum payment. If this is not possible then the Fund would spread they payment subject to there being some security in place for the employer such as a bond indemnity or guarantee.

In the event that the Fund is not able to recover the required payment in full, then the unpaid amounts fall to be shared amongst all of the other employers in the Fund. This may require an immediate revision to the Rates and Adjustments Certificate affecting other employers in the Fund, or instead be reflected in the contribution rates set at the next formal valuation following the cessation date.

As an alternative, where the ceasing Admission Body is continuing in business, the Fund at its absolute discretion reserves the right to enter into an agreement with the ceasing Admission Body. Under this agreement the Fund would accept an appropriate alternative security to be held against any deficit, and would carry out the cessation valuation on an ongoing basis: deficit recovery payments would be derived from this cessation debt. This approach would be monitored as part of each triennial valuation: the Fund reserves the right to revert to a "gilts cessation basis" and seek immediate payment of any funding shortfall identified. The Administering Authority may need to seek legal advice in such cases, as the Body would have no contributing members.

3.4 Pooled contributions

From time to time, with the advice of the Actuary, the Administering Authority may set up pools for employers with similar or complementary characteristics. This will always be in line with its broader funding strategy. The current pools in place within the Fund are as follows:

- Schools generally are also pooled with their funding Council. However there may be exceptions for specialist or independent schools.
- Smaller Transferee Admission Bodies may be pooled with the letting employer, provided all parties (particularly the letting employer) agree.

Those employers which have been pooled are identified in the Rates and Adjustments Certificate.

Employers who are permitted to enter (or remain in) a pool at the 2016 valuation will not normally be advised of their individual contribution rate unless agreed by the Administering Authority.

Community Admission Bodies that are deemed by the Administering Authority to have closed to new entrants are not usually permitted to participate in a pool.

3.5 Additional flexibility in return for added security

The Administering Authority may permit greater flexibility to the employer's contributions if the employer provides added security to the satisfaction of the Administering Authority.

Such flexibility includes a reduced rate of contribution, an extended time horizon, or permission to join a pool with another body (e.g. the Local Authority).

Such security may include, but is not limited to, a suitable bond, a legally-binding guarantee from an appropriate third party, or security over an employer asset of sufficient value.

The degree of flexibility given may take into account factors such as:

- the extent of the employer's deficit;
- the amount and quality of the security offered;
- the employer's financial security and business plan; and
- whether the admission agreement is likely to be open or closed to new entrants.

3.6 Non-ill health early retirement costs

It is assumed that members' benefits are payable from the earliest age that the employee could retire without incurring a reduction to their benefit (and without requiring their employer's consent to retire). (**NB** the relevant age may be different for different periods of service, following the benefit changes from April 2008 and April 2014). Employers are required to pay additional contributions ('strain') wherever an employee retires before attaining this age. The actuary's funding basis makes no allowance for premature retirement except on grounds of ill-health.

Strain costs may be paid in full in the year in which the strain is incurred.

3.7 III health early retirement costs

In the event of a member's early retirement on the grounds of ill-health, a funding strain will usually arise, which can be very large. Such strains are currently met by each employer, although individual employers may elect to take external insurance (see <u>3.8</u> below).

Admitted Bodies will usually have an 'ill health allowance'; Scheduled Bodies may have this also, depending on their agreement terms with the Administering Authority. The Fund monitors each employer's ill health experience on an ongoing basis. If the cumulative cost of ill health retirement in any financial year exceeds the allowance at the previous valuation, the employer will be charged additional contributions on the same basis as apply for non ill-health cases. Details will be included in each separate Admission Agreement.

3.8 External III health insurance

If an employer provides satisfactory evidence to the Administering Authority of a current external insurance policy covering ill health early retirement strains, then:

- the employer's contribution to the Fund each year is reduced by the amount of that year's insurance premium, so that the total contribution is unchanged, and
- there is no need for monitoring of allowances.

The employer must keep the Administering Authority notified of any changes in the insurance policy's coverage or premium terms, or if the policy is ceased.

3.9 Employers with no remaining active members

In general an employer ceasing in the Fund, due to the departure of the last active member, will pay a cessation debt on an appropriate basis (see 3.3, Note (j)) and consequently have no further obligation to the Fund. Thereafter it is expected that one of two situations will eventually arise:

a) The employer's asset share runs out before all its ex-employees' benefits have been paid. In this situation the other Fund employers will be required to contribute to pay all remaining benefits: this will be done by the Fund actuary apportioning the remaining liabilities on a pro-rata basis at successive formal valuations;

- b) The last ex-employee or dependant dies before the employer's asset share has been fully utilised. In this situation the remaining assets would be apportioned pro-rata by the Fund's actuary to the other Fund.
- c) In exceptional circumstances the Fund may permit an employer with no remaining active members to continue contributing to the Fund. This would require the provision of a suitable security or guarantee, as well as a written ongoing commitment to fund the remainder of the employer's obligations over an appropriate period. The Fund would reserve the right to invoke the cessation requirements in the future, however. The Administering Authority may need to seek legal advice in such cases, as the employer would have no contributing members.

3.10 Policies on bulk transfers

The Fund has a separate written policy which covers bulk transfer payments into, out of and within the Fund. Each case will be treated on its own merits, but in general:

- The Fund will not pay bulk transfers greater than the lesser of (a) the asset share of the transferring employer in the Fund, and (b) the value of the past service liabilities of the transferring members;
- The Fund will not grant added benefits to members bringing in entitlements from another Fund unless the asset transfer is sufficient to meet the added liabilities; and
- The Fund may permit shortfalls to arise on bulk transfers if the Fund employer has suitable strength of
 covenant and commits to meeting that shortfall in an appropriate period. This may require the employer's
 Fund contributions to increase between valuations.

4 Funding strategy and links to investment strategy

4.1 What is the Fund's investment strategy?

The Fund has built up assets over the years, and continues to receive contribution and other income. All of this must be invested in a suitable manner, which is the investment strategy.

Investment strategy is set by the administering authority, after consultation with the employers and after taking investment advice. The precise mix, manager make up and target returns are set out in the Investment Strategy Statement (which replaces the Statement of Investment Principles under new LGPS Regulations), which is available to members and employers.

The investment strategy is set for the long-term, but is reviewed from time to time. Normally a full review is carried out as part of each actuarial valuation, and is kept under review annually between actuarial valuations to ensure that it remains appropriate to the Fund's liability profile.

The same investment strategy is currently followed for all employers.

4.2 What is the link between funding strategy and investment strategy?

The Fund must be able to meet all benefit payments as and when they fall due. These payments will be met by contributions (resulting from the funding strategy) or asset returns and income (resulting from the investment strategy). To the extent that investment returns or income fall short, then higher cash contributions are required from employers, and vice versa

Therefore, the funding and investment strategies are inextricably linked.

4.3 How does the funding strategy reflect the Fund's investment strategy?

In the opinion of the Fund actuary, the current funding policy is consistent with the current investment strategy of the Fund. The asset outperformance assumption contained in the discount rate (see Appendix E3) is within a range that would be considered acceptable for funding purposes; it is also considered to be consistent with the requirement to take a "prudent longer-term view" of the funding of liabilities as required by the UK Government (see Appendix A1).

However, in the short term – such as the three yearly assessments at formal valuations – there is the scope for considerable volatility and there is a material chance that in the short-term and even medium term, asset returns will fall short of this target. The stability measures described in <u>Section 3</u> will damp down, but not remove, the effect on employers' contributions.

The Fund does not hold a contingency reserve to protect it against the volatility of equity investments.

4.4 How does this differ for a large stable employer?

The Actuary has developed four key measures which capture the essence of the Fund's strategies, both funding and investment:

Prudence - the Fund should have a reasonable expectation of being fully funded in the long term;

Affordability – how much can employers afford;

Stewardship – the assumptions used should be sustainable in the long term, without having to resort to overly optimistic assumptions about the future to maintain an apparently healthy funding position; and

Stability – employers should not see significant moves in their contribution rates from one year to the next, to help provide a more stable budgeting environment.

The key problem is that the key objectives often conflict. For example, minimising the long term cost of the scheme (i.e. keeping employer rates affordable) is best achieved by investing in higher returning assets e.g. equities. However, equities are also very volatile (i.e. go up and down fairly frequently in fairly large moves), which conflicts with the objective to have stable contribution rates.

Therefore, a balance needs to be maintained between risk and reward, which has been considered by the use of Asset Liability Modelling: this is a set of calculation techniques applied by the Fund's actuary to model the range of potential future solvency levels and contribution rates.

The Actuary was able to model the impact of these four key areas, for the purpose of setting a stabilisation approach (see 3.3 Note (b)). The modelling demonstrated that retaining the present investment strategy, coupled with constraining employer contribution rate changes as described in 3.3 Note (b), struck an appropriate balance between the above objectives. In particular the stabilisation approach currently adopted meets the need for stability of contributions without jeopardising the Administering Authority's aims of prudent stewardship of the Fund.

Whilst the current stabilisation mechanism is to remain in place until 2020, it should be noted that this will need to be reviewed following the 2019 valuation.

4.5 Does the Fund monitor its overall funding position?

The Administering Authority will monitor the relative funding position, i.e. changes in the relationship between asset values and the liabilities value, on an annual basis. It will report this to the regular Pensions Committee meetings, and also to employers through newsletters and Employers Forums.

5 Statutory reporting and comparison to other LGPS Funds

5.1 Purpose

Under Section 13(4)(c) of the Public Service Pensions Act 2013 ("Section 13"), the Government Actuary's Department must, following each triennial actuarial valuation, report to the Department of Communities & Local Government (DCLG) on each of the LGPS Funds in England & Wales. This report will cover whether, for each Fund, the rate of employer contributions are set at an appropriate level to ensure both the solvency and the long term cost efficiency of the Fund.

This additional DCLG oversight may have an impact on the strategy for setting contribution rates at future valuations.

5.2 Solvency

For the purposes of Section 13, the rate of employer contributions shall be deemed to have been set at an appropriate level to ensure solvency if:

- (a) the rate of employer contributions is set to target a funding level for the Fund of 100%, over an appropriate time period and using appropriate actuarial assumptions (where appropriateness is considered in both absolute and relative terms in comparison with other funds); and either
- (b) employers collectively have the financial capacity to increase employer contributions, and/or the Fund is able to realise contingent assets should future circumstances require, in order to continue to target a funding level of 100%; or
- (c) there is an appropriate plan in place should there be, or if there is expected in future to be, a material reduction in the capacity of fund employers to increase contributions as might be needed.

5.3 Long Term Cost Efficiency

The rate of employer contributions shall be deemed to have been set at an appropriate level to ensure long term cost efficiency if:

- i. the rate of employer contributions is sufficient to make provision for the cost of current benefit accrual,
- ii. with an appropriate adjustment to that rate for any surplus or deficit in the Fund.

In assessing whether the above condition is met, DCLG may have regard to various absolute and relative considerations. A relative consideration is primarily concerned with comparing LGPS pension funds with other LGPS pension funds. An absolute consideration is primarily concerned with comparing Funds with a given objective benchmark.

Relative considerations include:

- 1. the implied deficit recovery period; and
- 2. the investment return required to achieve full funding after 20 years.

Absolute considerations include:

- 1. the extent to which the contributions payable are sufficient to cover the cost of current benefit accrual and the interest cost on any deficit;
- 2. how the required investment return under "relative considerations" above compares to the estimated future return being targeted by the Fund's current investment strategy;
- 3. the extent to which contributions actually paid have been in line with the expected contributions based on the extant rates and adjustment certificate; and
- 4. the extent to which any new deficit recovery plan can be directly reconciled with, and can be demonstrated to be a continuation of, any previous deficit recovery plan, after allowing for actual Fund experience.

DCLG may assess and compare these metrics on a suitable standardised market-related basis, for example where the local funds' actuarial bases do not make comparisons straightforward.

Appendix A – Regulatory framework

A1 Why does the Fund need an FSS?

The Department for Communities and Local Government (DCLG) has stated that the purpose of the FSS is:

"to establish a **clear and transparent fund-specific strategy** which will identify how employers' pension liabilities are best met going forward;

to support the regulatory framework to maintain as nearly constant employer contribution rates as possible; and

to take a prudent longer-term view of funding those liabilities."

These objectives are desirable individually, but may be mutually conflicting.

The requirement to maintain and publish a FSS is contained in LGPS Regulations which are updated from time to time. In publishing the FSS the Administering Authority has to have regard to any guidance published by Chartered Institute of Public Finance and Accountancy (CIPFA) (most recently in 2016) and to its Statement of Investment Principles / Investment Strategy Statement.

This is the framework within which the Fund's actuary carries out triennial valuations to set employers' contributions and provides recommendations to the Administering Authority when other funding decisions are required, such as when employers join or leave the Fund. The FSS applies to all employers participating in the Fund.

A2 Does the Administering Authority consult anyone on the FSS?

Yes. This is required by LGPS Regulations. It is covered in more detail by the most recent CIPFA guidance, which states that the FSS must first be subject to "consultation with such persons as the authority considers appropriate", and should include "a meaningful dialogue at officer and elected member level with council tax raising authorities and with corresponding representatives of other participating employers".

In practice, for the Fund, the consultation process for this FSS was as follows:

- A draft version of the FSS was issued to all participating employers, members of the Derbyshire Pension
 Board and published on the Fund's website in February 2017 for comment;
- b) Comments were requested within 20 days;
- c) Following the end of the consultation period the FSS was updated where required and then published, in March 2017.

A3 How is the FSS published?

The FSS is made available through the following routes:

Published on the website

A copy sent by e-mail to each participating employer in the Fund;

A copy sent to by e-mail to the members of the Derbyshire Pension Board.

A link to the FSS is included in the annual report and accounts of the Fund;

A copy sent by email to the Fund's independent investment adviser;

Copies made available on request.

A4 How often is the FSS reviewed?

The FSS is reviewed in detail at least every three years as part of the triennial valuation. This version is expected to remain unaltered until it is consulted upon as part of the formal process for the next valuation in 2019.

It is possible that (usually slight) amendments may be needed within the three year period. These would be needed to reflect any regulatory changes, or alterations to the way the Fund operates (e.g. to accommodate a new class of employer). Any such amendments would be consulted upon as appropriate:

- trivial amendments would be simply notified at the next round of employer communications,
- amendments affecting only one class of employer would be consulted with those employers,
- other more significant amendments would be subject to full consultation.

In any event, changes to the FSS would need agreement by the Pensions Committee and would be included in the relevant Committee Meeting minutes.

A5 How does the FSS fit into other Fund documents?

The FSS is a summary of the Fund's approach to funding liabilities. It is not an exhaustive statement of policy on all issues, for example there are a number of separate statements published by the Fund including the Statement of Investment Principles/Investment Strategy Statement, Governance Strategy and Communications Strategy. In addition, the Fund publishes an Annual Report and Accounts with up to date information on the Fund.

These documents can be found on the web at www.derbyshire.gov.uk/pensions

Appendix B – Responsibilities of key parties

The efficient and effective operation of the Fund needs various parties to each play their part.

B1 The Administering Authority should:-

- 1. operate the Fund as per the LGPS Regulations;
- 2. effectively manage any potential conflicts of interest arising from its dual role as Administering Authority and a Fund employer;
- 3. collect employer and employee contributions, and investment income and other amounts due to the Fund;
- 4. ensure that cash is available to meet benefit payments as and when they fall due;
- 5. pay from the Fund the relevant benefits and entitlements that are due;
- invest surplus monies (i.e. contributions and other income which are not immediately needed to pay benefits) in accordance with the Fund's Statement of Investment Principles/Investment Strategy Statement (SIP/ISS) and LGPS Regulations;
- 7. communicate appropriately with employers so that they fully understand their obligations to the Fund;
- 8. take appropriate measures to safeguard the Fund against the consequences of employer default;
- 9. manage the valuation process in consultation with the Fund's actuary;
- 10. provide data and information as required by the Government Actuary's Department to carry out their statutory obligations (see <u>Section 5</u>);
- 11. prepare and maintain a FSS and a SIP/ISS, after consultation;
- 12. notify the Fund's actuary of material changes which could affect funding (this is covered in a separate agreement with the actuary); and
- 13. monitor all aspects of the fund's performance and funding and amend the FSS and SIP/ISS as necessary and appropriate.

B2 The Individual Employer should:-

- 1. deduct contributions from employees' pay correctly;
- 2. pay all contributions, including their own as determined by the actuary, promptly by the due date;
- 3. have a policy and exercise discretions within the regulatory framework;
- 4. make additional contributions in accordance with agreed arrangements in respect of, for example, augmentation of scheme benefits, early retirement strain; and
- 5. notify the Administering Authority promptly of all changes to its circumstances, prospects or membership, which could affect future funding.

B3 The Fund Actuary should:-

- 1. prepare valuations, including the setting of employers' contribution rates. This will involve agreeing assumptions with the Administering Authority, having regard to the FSS and LGPS Regulations, and targeting each employer's solvency appropriately;
- provide data and information as required by the Government Actuary's Department to carry out their statutory obligations (see <u>Section 5</u>);

- 3. provide advice relating to new employers in the Fund, including the level and type of bonds or other forms of security (and the monitoring of these);
- 4. prepare advice and calculations in connection with bulk transfers and individual benefit-related matters;
- 5. assist the Administering Authority in considering possible changes to employer contributions between formal valuations, where circumstances suggest this may be necessary;
- 6. advise on the termination of employers' participation in the Fund; and
- 7. fully reflect actuarial professional guidance and requirements in the advice given to the Administering Authority.

B4 Other parties:-

- 1. investment advisers (either internal or external) should ensure the Fund's SIP/ISS remains appropriate, and consistent with this FSS;
- 2. investment managers, custodians and bankers should all play their part in the effective investment (and dis-investment) of Fund assets, in line with the SIP/ISS;
- 3. auditors should comply with their auditing standards, ensure Fund compliance with all requirements, monitor and advise on fraud detection, and sign off annual reports and financial statements as required;
- 4. governance advisers may be appointed to advise the Administering Authority on efficient processes and working methods in managing the Fund;
- 5. legal advisers (either internal or external) should ensure the Fund's operation and management remains fully compliant with all regulations and broader local government requirements, including the Administering Authority's own procedures;
- the Department for Communities and Local Government (assisted by the Government Actuary's Department) and the Scheme Advisory Board, should work with LGPS Funds to meet Section 13 requirements.

Appendix C – Key risks and controls

C1 Types of risk

The Administering Authority has an active risk management programme in place. The measures that it has in place to control key risks are summarised below under the following headings:

financial;

demographic;

regulatory; and

governance.

C2 Financial risks

Risk	Summary of Control Mechanisms
Fund assets fail to deliver returns in line with the anticipated returns underpinning the valuation of	Only anticipate long-term returns on a relatively prudent basis to reduce risk of under-performing.
abilities over the long-term.	Assets invested on the basis of specialist advice, in a suitably diversified manner across asset classes, geographies, managers, etc.
	Analyse progress at three yearly valuations for all employers.
	Inter-valuation roll-forward of liabilities between valuations at whole Fund level.
Inappropriate long-term investment strategy.	Overall investment strategy options considered as an integral part of the funding strategy. Used asset liability modelling to measure 4 key outcomes.
	Chosen option considered to provide the best balance.
Fall in risk-free returns on Government bonds, leading to rise in value placed on liabilities.	Stabilisation modelling at whole Fund level allows for the probability of this within a longer term context.
	Inter-valuation monitoring, as above.
	Some investment in bonds helps to mitigate this risk.
Active investment manager under-performance relative to benchmark.	Quarterly investment monitoring analyses market performance and active managers relative to their index benchmark.
Pay and price inflation significantly more than anticipated.	The focus of the actuarial valuation process is on real returns on assets, net of price and pay increases.
	Inter-valuation monitoring, as above, gives early warning.

Risk	Summary of Control Mechanisms
	Some investment in bonds also helps to mitigate this risk.
	Employers pay for their own salary awards and should be mindful of the geared effect on pension liabilities of any bias in pensionable pay rises towards longer- serving employees.
Effect of possible increase in employer's contribution rate on service delivery and admission/scheduled bodies	An explicit stabilisation mechanism has been agreed as part of the funding strategy. Other measures are also in place to limit sudden increases in contributions.
Orphaned employers give rise to added costs for the Fund	The Fund seeks a cessation debt (or security/guarantor) to minimise the risk of this happening in the future.
	If it occurs, the Actuary calculates the added cost spread pro-rata among all employers – (see <u>3.9</u>).

C3 Demographic risks

Risk	Summary of Control Mechanisms
Pensioners living longer, thus increasing cost to Fund.	Set mortality assumptions with some allowance for future increases in life expectancy.
	The Fund Actuary has direct access to the experience of over 50 LGPS funds which allows early identification of changes in life expectancy that might in turn affect the assumptions underpinning the valuation.
Maturing Fund – i.e. proportion of actively contributing employees declines relative to retired employees.	Continue to monitor at each valuation, consider seeking monetary amounts rather than % of pay and consider alternative investment strategies.
Deteriorating patterns of early retirements	Employers are charged the extra cost of non ill-health retirements following each individual decision.
	Employer ill health retirement experience is monitored, and insurance is an option.
Reductions in payroll causing insufficient deficit recovery payments	In many cases this may not be sufficient cause for concern, and will in effect be caught at the next formal valuation. However, there are protections where there is concern, as follows:
	Employers in the stabilisation mechanism may be brought out of that mechanism to permit appropriate

Risk	Summary of Control Mechanisms
	contribution increases (see Note (b) to 3.3).
	For other employers, review of contributions is permitted in general between valuations (see Note (f) to 3.3) and may require a move in deficit contributions from a percentage of payroll to fixed monetary amounts.

C4 Regulatory risks

Risk	Summary of Control Mechanisms
Changes to national pension requirements and/or HMRC rules e.g. changes arising from public sector pensions reform.	The Administering Authority considers all consultation papers issued by the Government and comments where appropriate.
	The results of the most recent reforms were built into the 2013 valuation. Any changes to member contribution rates or benefit levels will be carefully communicated with members to minimise possible optouts or adverse actions.
Time, cost and/or reputational risks associated with any DCLG intervention triggered by the Section 13 analysis (see Section 5).	Take advice from Fund Actuary on position of Fund as at prior valuation, and consideration of proposed valuation approach relative to anticipated Section 13 analysis.
Changes by Government to particular employer participation in LGPS Funds, leading to impacts on funding and/or investment strategies.	The Administering Authority considers all consultation papers issued by the Government and comments where appropriate.
	Take advice from Fund Actuary on impact of changes on the Fund and amend strategy as appropriate.

C5 Governance risks

Risk	Summary of Control Mechanisms
RISK	Summary of Control Mechanisms

Risk	Summary of Control Mechanisms
Administering Authority unaware of structural changes in an employer's membership (e.g. large fall in employee members, large number of retirements) or not advised of an employer closing to new entrants.	The Administering Authority has a close relationship with employing bodies and communicates required standards e.g. for submission of data. The Actuary may revise the rates and Adjustments certificate to increase an employer's contributions between triennial valuations Deficit contributions may be expressed as monetary
	amounts.
Actuarial or investment advice is not sought, or so not heeded, or proves to be insufficient in some way	The Administering Authority maintains close contact with its specialist advisers.
	Advice is delivered via formal meetings involving Elected Members, and recorded appropriately.
	Actuarial advice is subject to professional requirements such as peer review.
Administering Authority failing to commission the Fund Actuary to carry out a termination valuation for a departing Admission Body.	The Administering Authority requires employers with Best Value contractors to inform it of forthcoming changes.
	Community Admission Bodies' memberships are monitored and, if active membership decreases, steps will be taken.
An employer ceasing to exist with insufficient funding or adequacy of a bond.	The Administering Authority believes that it would normally be too late to address the position if it was left to the time of departure.
	The risk is mitigated by:
	Seeking a funding guarantee from another scheme employer, or external body, where-ever possible (see Notes (h) and (j) to 3.3).
	Alerting the prospective employer to its obligations and encouraging it to take independent actuarial advice.
	Vetting prospective employers before admission.
	Where permitted under the regulations requiring a bond to protect the Fund from various risks.
	Requiring new Community Admission Bodies to have a guarantor.
	Reviewing bond or guarantor arrangements at regular

Risk	Summary of Control Mechanisms
	intervals (see Note (f) to 3.3).
	Reviewing contributions well ahead of cessation if thought appropriate (see Note (a) to 3.3).

Appendix D – The calculation of Employer contributions

In <u>Section 2</u> there was a broad description of the way in which contribution rates are calculated. This Appendix considers these calculations in much more detail.

All three steps above are considered when setting contributions (more details are given in <u>Section 3</u> and <u>Appendix D</u>:

- 1. The **funding target** is based on a set of assumptions about the future, eg investment returns, inflation, pensioners' life expectancies. However, if an employer is approaching the end of its participation in the Fund then it's funding target may be set on a more prudent basis, so that it's liabilities are less likely to be spread among other employers after it's cessation of participation;
- 2. The **time horizon** required is, in broad terms, the period over which any deficit is to be recovered. A shorter period will lead to higher contributions, and vice versa (all other things being equal). Employers may be given a lower time horizon if they have a less permanent anticipated membership, or do not have tax-raising powers to increase contributions if investment returns under-perform;
- 3. The required **probability of achieving** the funding target over that time horizon will be dependent on the Fund's view of the strength of employer covenant and its funding profile. Where an employer is considered to be weaker, or potentially ceasing from the Fund, then the required probability will be set higher, which in turn will increase the required contributions (and vice versa).

The calculations involve actuarial assumptions about future experience, and these are described in detail in Appendix E.

D1 What is the difference between calculations across the whole Fund and calculations for an individual employer?

Employer contributions are normally made up of two elements:

- a) the estimated cost of ongoing benefits being accrued, referred to as the "Primary contribution rate" (see <u>D2</u> below); plus
- b) an adjustment for the difference between the Primary rate above, and the actual contribution the employer needs to pay, referred to as the "Secondary contribution rate" (see <u>D3</u> below).

The contribution rate for each employer is measured as above, appropriate for each employer's funding position and membership. The whole Fund position, including that used in reporting to DCLG (see section 5), is calculated in effect as the sum of all the individual employer rates. DCLG currently only regulates at whole Fund level, without monitoring individual employer positions.

D2 How is the Primary contribution rate calculated?

The Primary element of the employer contribution rate is calculated with the aim that these contributions will meet benefit payments in respect of members' **future** service in the Fund. This is based upon the cost (in excess of members' contributions) of the benefits which employee members earn from their service each year.

The Primary rate is calculated separately for all the employers, although employers within a pool will pay the contribution rate applicable to the pool as a whole. The Primary rate is calculated such that it is projected to:

- 1. meet the required funding target for all future years' accrual of benefits*, excluding any accrued assets,
- 2. within the determined time horizon (see note 3.3 Note (c) for further details),

- 3. with a sufficiently high probability, as set by the Fund's strategy for the category of employer (see <u>3.3</u> Note (e) for further details).
- * The projection is for the current active membership where the employer no longer admits new entrants, or additionally allows for new entrants where this is appropriate.

The projections are carried out using an economic modeller developed by the Fund's actuary Hymans Robertson: this allows for a wide range of outcomes as regards key factors such as asset returns (based on the Fund's investment strategy), inflation, and bond yields. The measured contributions are calculated such that the proportion of outcomes meeting the employer's funding target (by the end of the time horizon) is equal to the required probability.

The approach includes expenses of administration to the extent that they are borne by the Fund, and includes allowances for benefits payable on death in service and on ill health retirement.

D3 How is the Secondary contribution rate calculated?

The combined Primary and Secondary rates aim to achieve the employer's funding target, within the appropriate time horizon, with the relevant degree of probability.

For the funding target, the Fund actuary agrees the assumptions to be used with the Administering Authority – see <u>Appendix E</u>. These assumptions are used to calculate the present value of all benefit payments expected in the future, relating to that employer's current and former employees, based on pensionable service to the valuation date only (i.e. ignoring further benefits to be built up in the future).

The Fund operates the same target funding level for all employers of 100% of its accrued liabilities valued on the ongoing basis, unless otherwise determined (see <u>Section 3</u>).

The Secondary rate is calculated as the balance over and above the Primary rate, such that the total is projected to:

- 1. meet the required funding target relating to combined past and future service benefit accrual, including accrued asset share (see <u>D5</u> below)
- 2. within the determined time horizon (see 3.3 Note (c) for further details)
- 3. with a sufficiently high probability, as set by the Fund's strategy for the category of employer (see <u>3.3</u> Note (e) for further details).

The projections are carried out using an economic modeller developed by the Fund Actuary Hymans Robertson: this allows for a wide range of outcomes as regards key factors such as asset returns (based on the Fund's investment strategy), inflation, and bond yields. The measured contributions are calculated such that the proportion of outcomes with at least 100% solvency (by the end of the time horizon) is equal to the required probability.

D4 What affects a given employer's valuation results?

The results of these calculations for a given individual employer will be affected by:

- 1. past contributions relative to the cost of accruals of benefits;
- 2. different liability profiles of employers (e.g. mix of members by age, gender, service vs. salary);
- 3. the effect of any differences in the funding target, i.e. the valuation basis used to value the employer's liabilities;

- 4. any different time horizons;
- 5. the difference between actual and assumed rises in pensionable pay;
- 6. the difference between actual and assumed increases to pensions in payment and deferred pensions;
- 7. the difference between actual and assumed retirements on grounds of ill-health from active status;
- 8. the difference between actual and assumed amounts of pension ceasing on death;
- 9. the additional costs of any non ill-health retirements relative to any extra payments made; and/or
- 10. differences in the required probability of achieving the funding target.

D5 How is each employer's asset share calculated?

The Administering Authority does not account for each employer's assets separately. Instead, the Fund's actuary is required to apportion the assets of the whole Fund between the employers, at each triennial valuation.

This apportionment uses the income and expenditure figures provided for certain cash flows for each employer. This process adjusts for transfers of liabilities between employers participating in the Fund, but does make a number of simplifying assumptions. The split is calculated using an actuarial technique known as "analysis of surplus".

Actual investment returns achieved on the Fund between each valuation are applied proportionately across all employers, to the extent that employers in effect share the same investment strategy. Transfers of liabilities between employers within the Fund occur automatically within this process, with a sum broadly equivalent to the reserve required on the ongoing basis being exchanged between the two employers.

The Fund actuary does not allow for certain relatively minor events, including but not limited to:

- 1. the actual timing of employer contributions within any financial year;
- 2. the effect of the premature payment of any deferred pensions on grounds of incapacity.

These effects are swept up within a miscellaneous item in the analysis of surplus, which is split between employers in proportion to their liabilities.

The methodology adopted means that there will inevitably be some difference between the asset shares calculated for individual employers and those that would have resulted had they participated in their own ring-fenced section of the Fund.

The asset apportionment is capable of verification but not to audit standard. The Administering Authority recognises the limitations in the process, but it considers that the Fund actuary's approach addresses the risks of employer cross-subsidisation to an acceptable degree.

Appendix E – Actuarial assumptions

E1 What are the actuarial assumptions?

These are expectations of future experience used to place a value on future benefit payments ("the liabilities"). Assumptions are made about the amount of benefit payable to members (the financial assumptions) and the likelihood or timing of payments (the demographic assumptions). For example, financial assumptions include investment returns, salary growth and pension increases; demographic assumptions include life expectancy, probabilities of ill-health early retirement, and proportions of member deaths giving rise to dependants' benefits.

Changes in assumptions will affect the measured funding target. However, different assumptions will not of course affect the actual benefits payable by the Fund in future.

The combination of all assumptions is described as the "basis". A more optimistic basis might involve higher assumed investment returns (discount rate), or lower assumed salary growth, pension increases or life expectancy; a more optimistic basis will give lower funding targets and lower employer costs. A more prudent basis will give higher funding targets and higher employer costs.

E2 What basis is used by the Fund?

The Fund's standard funding basis is described as the "ongoing basis", which applies to most employers in most circumstances. This is described in more detail below. It anticipates employers remaining in the Fund in the long term.

However, in certain circumstances, typically where the employer is not expected to remain in the Fund long term, a more prudent basis applies: see <u>Note (a)</u> to <u>3.3</u>.

E3 What assumptions are made in the ongoing basis?

a) Investment return / discount rate

The key financial assumption is the anticipated return on the Fund's investments. This "discount rate" assumption makes allowance for an anticipated out-performance of Fund returns relative to long term yields on UK Government bonds ("gilts"). There is, however, no guarantee that Fund returns will out-perform gilts. The risk is greater when measured over short periods such as the three years between formal actuarial valuations, when the actual returns and assumed returns can deviate sharply.

Given the very long-term nature of the liabilities, a long term view of prospective asset returns is taken. The long term in this context would be 20 to 30 years or more.

For the purpose of the triennial funding valuation at 31 March 2016 and setting contribution rates effective from 1 April 2017, the Fund actuary has assumed that future investment returns earned by the Fund over the long term will be 1.8% per annum greater than gilt yields at the time of the valuation (this is slightly higher than the 1.6% used at the 2013 valuation). In the opinion of the Fund actuary, based on the current investment strategy of the Fund, this asset out-performance assumption is within a range that would be considered acceptable for the purposes of the funding valuation.

b) Salary growth

Pay for public sector employees is currently subject to restriction by the UK Government until 2020. Although this "pay freeze" does not officially apply to local government and associated employers, it has been suggested that they are likely to show similar restraint in respect of pay awards. Based on long term historical analysis of the membership in LGPS funds, and continued austerity measures, the salary increase assumption at the 2016 valuation has been set to be a blended rate combined of:

- 1. 1% p.a. until 31 March 2020, followed by
- 2. the retail prices index (RPI) thereafter.

This is a change from the previous valuation, which assumed a flat assumption of RPI. The change has led to a reduction in the funding target (all other things being equal).

c) Pension increases

Since 2011 the consumer prices index (CPI), rather than RPI, has been the basis for increases to public sector pensions in deferment and in payment. Note that the basis of such increases is set by the Government, and is not under the control of the Fund or any employers.

As at the previous valuation, we derive our assumption for RPI from market data as the difference between the yield on long-dated fixed interest and index-linked government bonds. This is then reduced to arrive at the CPI assumption, to allow for the "formula effect" of the difference between RPI and CPI. At this valuation, we propose a reduction of 1.0% per annum. This is a larger reduction than at 2013, which will serve to reduce the funding target (all other things being equal). (Note that the reduction is applied in a geometric, not arithmetic, basis).

d) Life expectancy

The demographic assumptions are intended to be best estimates of future experience in the Fund based on past experience of LGPS funds which participate in Club Vita, the longevity analytics service used by the Fund, and endorsed by the actuary.

The longevity assumptions that have been adopted at this valuation are a bespoke set of "VitaCurves", produced by the Club Vita's detailed analysis, which are specifically tailored to fit the membership profile of the Fund. These curves are based on the data provided by the Fund for the purposes of this valuation.

It is acknowledged that future life expectancy and, in particular, the allowance for future improvements in life expectancy, is uncertain. There is a consensus amongst actuaries, demographers and medical experts that life expectancy is likely to improve in the future. Allowance has been made in the ongoing valuation basis for future improvements in line with the 2013 version of the Continuous Mortality Investigation model published by the Actuarial Profession and a 1.25% per annum minimum underpin to future reductions in mortality rates. This is a similar allowance for future improvements than was made in 2013.

e) General

The same financial assumptions are adopted for most employers, in deriving the funding target underpinning the Primary and Secondary rates: as described in (3.3), these calculated figures are translated in different ways into employer contributions, depending on the employer's circumstances.

The demographic assumptions, in particular the life expectancy assumption, in effect vary by type of member and so reflect the different membership profiles of employers.

Appendix F - Glossary

Actuarial assumptions/basis

The combined set of assumptions made by the actuary, regarding the future, to calculate the value of **the funding target**. The main assumptions will relate to the **discount rate**, salary growth, pension increases and longevity. More prudent assumptions will give a higher target value, whereas more optimistic assumptions will give a lower value.

Administering Authority

The council with statutory responsibility for running the Fund, in effect the Fund's "trustees".

Admission Bodies

Employers where there is an Admission Agreement setting out the employer's obligations. These can be Community Admission Bodies or Transferee Admission Bodies. For more details (see <u>2.3</u>).

Covenant

The assessed financial strength of the employer. A strong covenant indicates a greater ability (and willingness) to pay for pension obligations in the long run. A weaker covenant means that it appears that the employer may have difficulties meeting its pension obligations in full over the longer term.

Designating Employer Employers such as town and parish councils that are able to participate in the LGPS via resolution. These employers can designate which of their employees are eligible to join the Fund.

Discount rate

The annual rate at which future assumed cashflows (in and out of the Fund) are discounted to the present day. This is necessary to provide a **funding target** which is consistent with the present day value of the assets. A lower discount rate gives a higher target value, and vice versa. It is used in the calculation of the **Primary and Secondary rates**.

Employer

An individual participating body in the Fund, which employs (or used to employ) **members** of the Fund. Normally the assets and **funding target** values for each employer are individually tracked, together with its **Primary rate** at each **valuation**.

Funding target

The actuarially calculated present value of all pension entitlements of all **members** of the Fund, built up to date. This is compared with the present market value of Fund assets to derive the **deficit**. It is calculated on a chosen set of **actuarial assumptions**.

Gilt

A UK Government bond, ie a promise by the Government to pay interest and capital as per the terms of that particular gilt, in return for an initial payment of capital by the purchaser. Gilts can be "fixed interest", where the interest payments are level throughout the gilt's term, or "index-linked" where the interest payments vary each year in line with a specified index (usually RPI). Gilts can be bought as assets by the Fund, but their main use in funding is as an objective measure of solvency.

Guarantee / guarantor

A formal promise by a third party (the guarantor) that it will meet any pension obligations not met by a specified employer. The presence of a guarantor will mean, for instance, that the Fund can consider the employer's **covenant** to be as strong

as its guarantor's.

Letting employer

An employer which outsources or transfers a part of its services and workforce to another employer (usually a contractor). The contractor will pay towards the LGPS benefits accrued by the transferring members, but ultimately the obligation to pay for these benefits will revert to the letting employer. A letting employer will usually be a local authority, but can sometimes be another type of employer such as an Academy.

LGPS

The Local Government Pension Scheme, a public sector pension arrangement put in place via Government Regulations, for workers in local government. These Regulations also dictate eligibility (particularly for Scheduled Bodies), members' contribution rates, benefit calculations and certain governance requirements. The LGPS is divided into 101 Funds which map the UK. Each LGPS Fund is autonomous to the extent not dictated by Regulations, e.g. regarding investment strategy, employer contributions and choice of advisers.

Maturity

A general term to describe a Fund (or an employer's position within a Fund) where the members are closer to retirement (or more of them already retired) and the investment time horizon is shorter. This has implications for investment strategy and, consequently, funding strategy.

Members

The individuals who have built up (and may still be building up) entitlement in the Fund. They are divided into actives (current employee members), deferreds (exemployees who have not yet retired) and pensioners (exemployees who have now retired, and dependants of deceased exemployees).

Primary contribution rate

The employer contribution rate required to pay for ongoing accrual of active members' benefits (including an allowance for administrative expenses). See Appendix D for further details.

Profile

The profile of an employer's membership or liability reflects various measurements of that employer's **members**, ie current and former employees. This includes: the proportions which are active, deferred or pensioner; the average ages of each category; the varying salary or pension levels; the lengths of service of active members vs their salary levels, etc. A membership (or liability) profile might be measured for its **maturity** also.

Rates and Adjustments Certificate

A formal document required by the LGPS Regulations, which must be updated at least every three years at the conclusion of the formal **valuation**. This is completed by the actuary and confirms the contributions to be paid by each employer (or pool of employers) in the Fund for the three year period until the next valuation is completed.

Scheduled Bodies

Types of employer explicitly defined in the LGPS Regulations, whose employers must be offered membership of their local LGPS Fund. These include Councils, colleges, universities, academies, police and fire authorities etc, other than employees who have entitlement to a different public sector pension scheme (e.g. teachers, police and fire officers, university lecturers).

Secondary contribution rate

The difference between the employer's actual and **Primary contribution rates**. In broad terms, this relates to the shortfall of its asset share to its **funding target**. See <u>Appendix D</u> for further details.

Stabilisation

Any method used to smooth out changes in employer contributions from one year to the next. This is very broadly required by the LGPS Regulations, but in practice is particularly employed for large stable employers in the Fund. Different methods may involve: probability-based modelling of future market movements; longer deficit recovery periods; higher discount rates; or some combination of these.

Valuation

An actuarial investigation to calculate the liabilities, future service contribution rate and common contribution rate for a Fund, and usually individual employers too. This is normally carried out in full every three years (last done as at 31 March 2016), but can be approximately updated at other times. The assets value is based on market values at the valuation date, and the liabilities value and contribution rates are based on long term bond market yields at that date also.