FRS102/IAS19 Glossary and FAQs

The purpose of this note is to provide LGPS Fund employers and their advisers with some further explanatory details about the reports we produce in accordance with Financial Reporting Standard 102 (FRS102) and International Accounting Standard 19 (IAS19).

It is divided into a glossary of terms followed by some frequently asked questions (FAQs). Where certain terms are explained in more detail in the glossary these are highlighted in **bold**.

A topical briefing note discussing assumptions and an indication of the likely trend in results is also issued after each of the main accounting dates. In contrast, this briefing note describes the fundamentals of the accounting standards and is only expected to be updated occasionally (e.g. when the standards change). Please get in touch if you would like a copy of any of these notes.

If you have any questions please get in touch with the Fund in the first instance.

Background

Sponsors of defined benefit pension schemes are required to account for the cost of providing retirement benefits and reserve for any outstanding liabilities associated with the schemes they sponsor. They are also required to make certain disclosures about these schemes in the notes to their accounts.

FRS102 and IAS19 are accounting standards that set out the accounting treatment for retirement benefits. For UK listed companies and local authorities IAS19 applies; for other UK entities FRS102 applies. Companies with overseas parents may need to make disclosures under other standards.

A key feature of both standards is the requirement for liabilities to be valued using a discount rate assumption set with reference to yields on "high quality" corporate bonds.

It should be noted that the actual contribution rates required by employers for each Fund are calculated every three years following a triennial actuarial valuation and these are calculated using assumptions set by the Fund Actuary. The discount rate assumption in particular is generally set with reference to expected future investment returns of the Fund unlike the accounting standards which value the liabilities using solely the yields on corporate bonds.

Therefore, the contribution rates paid by employers are not affected by the accounting results.

Glossary of terms

Included in this section:

Actuarial gains & losses

This item reflects the extent to which the movements of the assets and liabilities over the accounting year have not been as assumed at the previous accounting date, and also the effect on the liabilities of changes to the assumptions used to value them.

The components of the actuarial gain or loss on assets are:

- the difference between the actual investment return on the assets over the year, and the interest on assets, plus
- an experience item, if applicable.

The components of the actuarial loss on liabilities are:

- the effect of the change in assumptions used to value the liabilities compared to the previous year, plus
- an experience item, if applicable.

There is a requirement to split the change of assumptions into those of a financial nature (discount rate, assumed future inflation growth etc.) and those of a demographic nature (future mortality rates etc.).

For more details on experience items, please see the "Gains and Losses" section of the FAQs.

Administration expenses

Both accounting standards require the administration expenses to be recognised when the administration services are provided and to be reported as a separate item in the Profit and Loss (P&L) statement.

Contributions by employer including unfunded

This is the total value of the contributions paid by the employer to the Fund including the normal contributions in respect of benefit accrual by active members, contributions towards any deficit and any early retirement strain contributions. If **unfunded benefits** (usually pensions in payment) are paid through the Fund and are to be included in the accounting report, then payments in respect of unfunded benefits are included here as well.

For more information on the inclusion of **unfunded benefits**, please see the "Do I need to include unfunded benefits on my balance sheet?" section of the FAQs.

Current service cost

The **current service cost** represents the cost to the employer of the benefits earned by active members during the accounting year calculated on an FRS102/IAS19 basis. This is added to the liabilities and is not the same figure as the employer contributions paid to meet these 'new' benefits. It is calculated using assumptions at the start of the accounting year which means that it is not a fixed percentage of payroll and it is expected to vary from year to year as assumptions change.

Under both standards this is a component of the **Service cost** in the P&L.

Curtailment

These will typically be the FRS102/IAS19 equivalent of early retirement costs. The actual strain payments to the Fund are calculated by the administering authority using a different set of assumptions and so the calculation of this amount under FRS102/IAS19 is unlikely to be the same as the strain payment cash amounts.

Under both standards the loss on these is a component of the **Service cost** in the P&L.

Defined benefit obligation

This is the value of the past service liabilities, calculated using service to the accounting date (estimated where necessary) and allows for several assumptions such as future increases to salaries, future mortality rates, future inflation rates etc. The key assumption used to calculate these liabilities is the discount rate.

Discount rate

Pensions and lump sums will be paid at some point in the future and so a rate known as the **discount rate** is used in order to express these expected future payments as a single current value.

It is analogous to a rate of interest; to illustrate this, if we put £100 into a savings account today, it is expected to grow with interest every year to become a higher amount in the future. Similarly, if we are aiming to have £100 at a future date then we only need deposit a smaller amount now which will accumulate with interest to give £100 later.

A higher **discount rate** means that the future payments have a smaller value now i.e. a lower pension liability.

The accounting standards prescribe that the **discount rate** should be based on market yields at the reporting date of a 'high-quality corporate bond' of equivalent currency and **term** to the scheme liabilities.

The discount rate can be derived using a number of different approaches. The current Barnett Waddingham approach is to use the Single Equivalent Discount Rate (SEDR) method which replaced the spot rate approach. For more information please see the "What is the difference between the Single Equivalent Discount Rate (SEDR) and Spot rate approach for deriving the discount rate?" section of the FAQs.

Duration

When we talk about the **duration** of the liabilities we mean the average time to payment of benefits. This is used interchangeably with the **term** of the liabilities.

Demographic assumptions

These are the assumptions used to generally provide estimates of the likelihood of benefits and contributions being paid and for how long. This consists of all the non-financial assumptions used to value the liabilities including the mortality assumptions (i.e. how long members are likely to live for), the rates of members retiring early and the rate at which members exchange pension for cash at retirement.

Demographic assumptions are generally consistent with those adopted for the most recent triennial valuation.

Interest cost

Over the accounting year the existing pension benefits come closer to payment than they were at the start, and so the value of the liabilities increases as a year's worth of interest is added on. This forms part of the **net interest on defined liability** (in the P&L).

Interest on assets

The expected return on assets has been replaced with an interest on assets item which is calculated with reference to the **discount rate.** It is therefore based solely on the expected returns on corporate bonds. This forms part of the **net interest on defined liability** (in the P&L).

Liabilities

These are also referred to as the **defined benefit obligation**.

Net interest on defined liability

The accounting standards assume that assets increase in line with the **discount rate**. This is combined with the **interest cost** on liabilities to form the net interest on the defined liability which is a component of the P&L.

Past service cost

Additional benefits granted during the accounting year give rise to a **past service cost**, for example, an employer decision to award additional service to a retiring employee.

Under both standards this is a component of the **Service cost** in the P&L.

Present value of defined benefit obligations

This is also referred to as the past service liabilities. This is the value of the benefits accrued by all members to date, calculated using service to the accounting date and allows for several assumptions such as future increases to salaries, future mortality rates, future inflation rates etc. The key assumption used to calculate the value of these liabilities is the **discount rate**.

Re-measurements

Re-measurements are recognised in Other Comprehensive Income and is effectively the total of the **actuarial gains and losses** from the changes in the assets and liabilities over the accounting period. This will include the investment return on the assets in excess of interest, change in assumptions (financial and demographic) as well as any experience adjustments. More detail about this is in the "Gains and Losses" section of the FAQs.

Service cost

Service cost is a component of the P&L and includes current service cost, past service cost and any actuarial gains or losses on settlements and curtailments.

Settlement

A **settlement** will generally occur where there is a bulk transfer of members in to or out of the Fund or an employer's share of the Fund. The **settlement** loss or gain reflects the difference between transferred asset share, and the value of the transferred liabilities when calculated on an FRS102/IAS19 basis. This value may be different when compared to figures calculated for non-accounting purposes due to different assumptions being used.

Under both standards this is a component of the **Service cost** in the P&L.

Term

Please see definition of **duration** above.

Unfunded benefits

Unfunded benefits are pensions arising from additional service awarded on a discretionary basis e.g. Compensatory Added Years (CAY) pensions. Such benefits are usually charged to the employer as they are paid. Other **unfunded benefits** include gratuities and enhanced teacher's pensions which are recharged to the employer, and pensions in respect of some other public sector pension schemes.

This is in contrast to funded pensions, which are paid for out of the assets of the Fund, and which the employer has responsibility for funding by paying contributions to the Fund.

Frequently asked questions (FAQs)

Included in this section:

Balance sheet

How are my assets calculated?

The assets shown are an estimate of the employer's notional share of the total Fund assets at the accounting date. A full assessment of each employer's asset share is made at each triennial valuation. For interim FRS102/IAS19 reporting the approach is to take the asset share at the start of the accounting year and roll this forward to allow for the employer's own cashflows to and from the Fund during the year and actual (or estimated) Fund returns.

Thus, the employer's asset share is not a fixed percentage of the Fund and is expected to vary over time.

The assets will change from year to year: increasing with contributions paid into the Fund and investment returns earned; and decreasing as benefits (such as lump sums and pensions) are paid out of the Fund.

More details on how we calculate employers' assets can be found in the below Appendix

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What is the Defined Benefit Obligation and how is this calculated?

The Defined Benefit Obligation is the accounting label for what is usually known as the value of the pension liabilities of the employer. The pension liabilities are the promised benefit payments (e.g. pensions, lump sums) due in the future from the Fund to its members. The Defined Benefit Obligation is the value of these liabilities calculated using a set of assumptions on an FRS102/IAS19 basis, which includes how these payments will increase over time both before and after retirement, how long they will be paid out for (i.e. how long each member is likely to live for) and the **discount rate** to apply to them to give a current value.

The Defined Benefit Obligation depends on the amount of the benefits so will increase as benefits are accrued and reduce as benefits are paid out. The value will also increase or decrease as the assumptions used to calculate their value change. For example, if the **discount rate** assumption decreases, the Defined Benefit Obligation will increase. Therefore, even if your assets have performed well, if the Defined Benefit Obligation increases at a rate faster than the assets increase, then the deficit on the balance sheet will increase.

Do I need to include unfunded benefits on my balance sheet?

Unfunded benefits may be paid through the Fund and recharged to the employer.

FRS102 and IAS19 both state that all retirement benefits should be accounted for when the member earns the benefit and not when it is paid by an employer. Therefore when a member retired and was awarded **unfunded benefits** the value of all future payments should have been taken into account at the point of retirement. This value would generally be expected to reduce over time as the benefits are paid out.

We can only value unfunded benefits that we are aware of and usually these will be those that are paid via the Fund.

Assumptions

What is the difference between assumptions for an ongoing funding valuation and an accounting valuation?

Contributions payable by employers are derived using the assumptions from the ongoing funding valuation and this is essentially the purpose of the ongoing valuation. An accounting valuation is prepared to meet statutory disclosure requirements and is included in the employer's annual accounts. Therefore, the purposes are different.

The results from the two valuation types can be significantly different due to the different assumptions used.

The assumptions adopted for an ongoing funding valuation are set by the Fund Actuary following discussion with the administering authority and in line with the LGPS Regulations. Broadly, they are set with reference to the long-term expected cost of providing LGPS benefits and take into account the investment strategy of the Fund and the expected return on each asset class that the Fund invests in.

In contrast, FRS102 and IAS19 are fairly prescriptive accounting standards which aim to allow employers' pension obligations to be compared with each other.

Generally, the demographic assumptions used for both valuations are the same and determined every three years as part of the ongoing triennial valuation. The main area where funding valuations for our Funds and accounting valuations differ is in the derivation of the **discount rate**.

For ongoing valuations, the **discount rate** adopted is based on the expected investment return of the assets actually held by the Fund. For FRS102/IAS19, the **discount rate** is required to be determined with reference to the market yield on 'high quality' corporate bonds and with consideration of the **duration** of the employer's liabilities. Generally, corporate bond yields will be lower than the return assumed for an ongoing valuation as the Fund is likely to invest in a mixture of assets include higher return seeking assets such as equities and property. Therefore we would expect that employers' costs and liabilities under FRS102/IAS19 to be higher than those calculated in an ongoing funding valuation if the **discount rate** used is lower.

However, it is important to note that the accounting position has no bearing on the amounts that the employers actually pay into the Fund, this being determined with reference to the ongoing funding position with contributions being reviewed every three years as part of the triennial valuation.

What is the difference between the single equivalent discount rate (SEDR) and spot rate approach for deriving the discount rate?

The spot rate is derived by looking at each employer's projected cashflows and determining the duration of these cashflows – broadly speaking the number of years until the average benefit payment is made. The duration is typically 15-20 years. We would then take the annualised Merrill Lynch AA rated corporate bond yield curve and look up the yield at that duration on the curve.

The single equivalent discount rate or SEDR approach has been developed over the last few years. Under this approach, rather than discount future cashflows with a single **discount rate** equal to the spot rate on the yield curve, this approach estimates the single equivalent rate that would produce the same liability as discounting each individual projected cashflow using a yield curve for AA rated bonds. So we use the 1 year yield to discount cashflows in year 1, the 2 year yield for cashflows in year 2 and so on and then see what liability value is then generated and then work out what single equivalent discount rate gives you the same answer.

Depending on the shape of the yield curve, what curve you use in the first place, the bonds underlying that curve and how you fit the curve to the data points, you are unlikely to get the same discount rate under each approach although the difference should not usually be that significant.

In our view either of these approaches satisfy the requirement of paragraph 85 of IAS19 as indeed would some other alternatives. Given the nature of the wording in IAS19, and as with most assumption setting processes, there is no singularly "correct" approach.

We have taken a similar approach to the derivation of the inflation assumption which we refer to as the single equivalent inflation rate (SEIR). For more information please see "Why is the inflation assumption different to current inflation levels?"

Why is the inflation assumption different to current inflation levels?

The current level of inflation that is widely reported each month is a measure of how prices have increased in the recent past, usually over the last year. However, in order to project cashflows to and from the Fund over the future lifetime of the Fund, we are interested in what inflation will do in the future and therefore we have to make an assumption about expected future levels of inflation over the long term. We do this by using information published by the Bank of England.

Similar to the SEDR approach, the SEIR adopted is such that the single assumed rate of inflation results in the same liability value (when discounted using the yield curve valuation described above) as that resulting from applying the BoE implied inflation curve.

How much scope is there for 'tweaking' the assumptions?

One of the objectives of FRS102 and IAS19 is to ensure that organisations all account for pension costs on a consistent market-related basis so there is not intended to be a huge amount of scope to deviate away from typical market assumptions. We do provide a recommended set of assumptions but the employer is ultimately responsible for the assumptions that are adopted.

One key area in which the employer can exercise more control is the assumption about future levels of pay increases and they will have more knowledge of likely future pay awards for their staff.

Pension costs

Why is the current service cost different from the contributions paid?

Contributions are required from the employer to meet the cost of the benefits being earned by current employees, and to pay off any past service deficit. Minimum contributions are certified when a new employer joins the Fund and then again at each triennial valuation. These certified contributions are calculated using assumptions made at each valuation and reflect, amongst other things, the return assumed to be earned by the assets actually held by the Fund.

The **current service cost** in FRS102/IAS19 only includes the employer cost of benefits being earned by current employees and does not include the cost of paying off any past service deficit. The assumptions used for FRS102/IAS19 are usually different to those used for the triennial valuation. In particular, the **discount rate** is prescribed by FRS102/IAS19 and is unlikely to reflect the Fund's actual asset allocation. This means the **current service cost** calculated for FRS102/IAS19 is likely to be different to the cost covered by the certified minimum contributions.

Why is the current service cost different from the previous year?

The **current service** cost is the cost of benefits accrued over the period based on the assumptions at the start of the period i.e. the assumptions at the previous accounting date.

Therefore this will be affected by:

- the difference in the assumptions adopted at the previous accounting date compared to the assumptions adopted at the accounting date preceding the previous accounting date; and
- the change in payroll over the accounting period compared to that over the previous accounting period.

What if the reported contributions paid are different to the actual contributions paid?

The discrepancy may be because cashflows for less than the full twelve months were provided in order to enable us to produce figures in the timescales required. We can revise the disclosure to take account of the actual contributions paid but we recommend that you agree with your auditor that this is necessary on the grounds of materiality.

Gains and losses

What is an experience gain or loss?

The first accounting report prepared following a triennial valuation includes an experience item. Accounting reports are prepared each year using a number of estimates and approximations in the roll-forward process on both the assets and the liabilities. This experience adjustment is essentially a correction of the estimates made in the previous accounting reports leading up to the triennial valuation.

What does actual less expected return on Fund assets mean?

The "expected" return on the Fund assets for a year is simply based on the **discount rate** assumption at the start of the year. If actual Fund returns have been higher than the **discount rate** assumption this figure will be positive but if they were lower this will be negative.

Why is there an experience gain or loss on the assets?

To determine the employer asset share for an accounting report we are provided with various pieces of financial information, including contributions received, benefits paid and a recent total Fund value. These cashflows may only be for part of the accounting year, and the total Fund value may be at a date earlier than the accounting date. This total Fund value will not be a fully audited number and is unlikely to be exactly accurate. We pro rata the cashflows if necessary to get full year numbers, and roll forward the assets with market returns to get an estimate of the asset value as at the accounting date.

However, at a triennial valuation we do get full cashflow data for each year and actual audited Fund asset values. We then determine each employer's asset share accurately at the triennial valuation date and the experience item emerges as the difference between the three years' worth of estimated rolled-forward assets and the accurate figure. At the triennial valuation we may also adjust employer assets if necessary to take into account any transfers or outsourcings that may not have been resolved in time to be included in the relevant accounting years.

Why is there an experience gain or loss on the liabilities?

To determine the value of the employer liabilities for an accounting report we roll forward the results from the most recent funding valuation, using the financial and demographic assumptions set for accounting purposes.

Therefore, after each triennial valuation we recalculate the accounting liabilities using up to date membership data and results. An experience item emerges as the difference between the actual experience of the members of the Fund, and the experience that had been assumed for them in the previous accounting reports. For example, if members died earlier than assumed this will result in an **actuarial gain** as the liabilities will be lower than estimated in the roll forward, or if members received higher than assumed salary increases then there will be an **actuarial loss** as the liabilities will be higher than estimated.

What is the change in assumptions?

This shows the impact on the value of the liabilities of any changes in the financial and **demographic assumptions** since the previous accounting date. The financial assumptions are updated every year to allow for changes in market conditions. **Demographic assumptions** are generally updated once every three years following the triennial actuarial valuations of the Fund although some changes may be allowed for annually if it is considered material or if requested.

What is the impact of the recent GMP equalisation ruling?

It is our understanding that HMT have confirmed that the judgement "does not impact on the current method used to achieve equalisation and indexation in public service pension schemes" which is set out here.

Our valuation assumption for GMP is that Funds will pay limited increases for members that have reached SPA by 6 April 2016, with the Government providing the remainder of the inflationary increase. For members that reach SPA after this date, we have assumed that Funds will be required to pay the entire inflationary increase. Therefore we don't believe we need to make any adjustments to the liabilities as a result of the ruling.

Appendix 1 Employer asset allocation

One of the most common questions we are asked by employers is how their asset amount has been calculated. This short paper sets out exactly how we do this and is aimed at both employers and their advisers.

Notional assets

Assets are not separately held for each employer; the Fund holds assets in respect of all the employers in the Fund and each employer has a notional share of these assets. For example, the contributions an employer makes into the Fund are not paid into a separate employer account and invested independently, but are paid into the Whole Fund along with all other employers' contributions and invested as a whole. However, they are taken into account when calculating a notional asset figure for actuarial valuations and employer work.

Asset Calculation – Actuarial Valuations

Assets are fully re-apportioned at each triennial funding valuation. To do this for an employer, we accumulate the notional market value of assets from the previous funding valuation with respect to the Fund's returns from the published accounts. We also allow for the cashflows in respect of the employer which include employer and employee contributions, pensions and retirement lump sums paid, and transfers in and out etc. If we know the exact date of the cashflow then we allow for this in our calculation, otherwise we assume the cashflow occurs halfway through the year. This will include any notional transfers within the Fund between the employers, even though no actual cash has been paid into or out of the Fund.

We also adjust the assets by a smoothing factor to be consistent with our measurement of the liabilities. We essentially look at the asset value over each day for the six month period around the valuation date (based on published market indices) and take the average.

Asset Calculation – Accounting valuations

In order to calculate asset values for accounting valuations, the starting point is the most recent valuation and the process is then similar to the above but may involve approximations. For example, if the Fund's actual returns have not yet been calculated for any period, we will calculate the notional return based on suitable market indices.

We use the estimated market value for FRS102 and IAS19 calculations therefore no smoothing factor is applied.