Technical guide 6: Tracking notional assets and liabilities

STONEPORT
PENSIONS

Forward

Stoneport is a consolidation vehicle for occupational defined benefit pension schemes in the UK with fewer than 1,000 members.

For schemes that join, it will dramatically **improve the security of members' benefits** and deliver substantial improvements in governance, whilst **significantly reducing the running costs** incurred by employers. These enhancements are achieved by operating Stoneport as one large centralised scheme.

This guide is part of a series of technical guides, aimed at pension professionals who advise trustees and/or employers, covering the full range of issues we think a consultant might wish to discuss with a client who is considering joining Stoneport. However, should you have any questions, please do not hesitate to contact the team at enquiries@stoneport.co.uk.

In this sixth guide in the series you will find a description of the allocation of liabilities between employers on centralisation and the tracking of notional asset accounts and notional liabilities thereafter. It also provides some simplified worked examples of the funding mechanism in order to aid understanding.

The other guides in this series are as follows:

- The first guide provides a brief explanation of what Stoneport is, who it is aimed at, its conceptual origins and the key benefits it provides.

- The second guide describes Stoneport's structure, how it will operate before centralisation, the centralisation process and what happens if Stoneport fails to centralise. It also covers the regulation of Stoneport.

- Guide three details the cost savings that Stoneport will bring to the schemes that join. It also considers the potential upside on investment returns that improved governance can bring.

- The fourth guide covers the reduction in risk for employers and members alike, including the improvement in benefit security, the reduction in idiosyncratic risk and the reduction in risk that Stoneport will deliver by adopting higher standards of governance.

- The fifth guide in the series sets out Stoneport's funding and investment strategy, including the flexibilities that exist within them. It also covers the valuation process and the provisions for employers wishing to exit the structure if necessary.

- Guide seven describes how the member option terms will be set.

- The eighth and final guide covers the entry terms and joining process.

Our technical guides are quite detailed, reflecting their intended audience. Separate guides specifically tailored for trustees and for employers can be found on the Stoneport website at www.stoneport.co.uk.

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1. Introduction

Under Stoneport, once centralised, the assets and liabilities will be fully comingled. Each employer will swap the specific liabilities they transfer in for a proportionate share of the larger and more diverse set of liabilities of Stoneport as a whole.

In this guide we begin by explaining how each employer's share of the overall liabilities of Stoneport will be calculated at the point it is centralised.

Each employers' share of the liabilities would remain unchanged for the lifetime of Stoneport in the absence of any employers exiting Stoneport. In the event of the insolvency of an employer, or a voluntary exit, the initial allocations will need be adjusted to cover the share of the liabilities that had previously been allocated to the exiting employer. We explain this in section 5.

Stoneport will also need to track the notional assets of each employer to reflect the items that each is individually responsible for and/or have paid to Stoneport. This is explained in section 3.

The financial position of each employer's share of Stoneport will be tracked in a way that is fair, but also simple to operate. The chosen method reflects the non-sectionalised, comingled nature of Stoneport post centralisation, which is designed to eliminate idiosyncratic liability risk by spreading the experience evenly across all the liabilities.

Appropriate allowance has to be made however for any specific actions of individual employers, including their ability to choose the level of investment risk taken through time and the pace at which they fund their liabilities. We also allow for any individual employer actions that should reasonably be allocated to that employer alone. This is explained in section 4.

The need to allocate items proportionately has been balanced with the need to achieve the necessary simplicity to avoid adding undue costs and ensure the timely and accurate administration of the notional accounts.

We have specified the proposed tracking mechanism as far as possible, recognising it may be necessary to afford the Trustees a degree of flexibility over its ultimate operation, to ensure fairness between employers through time. Stoneport's notional asset account rule therefore requires the Trustees to consider fairness between employers in the operation of the tracking mechanism and the allocations made to the notional asset accounts of each employer.

2. Allocation of assets and liabilities on centralisation

To achieve the benefit of diversification of the idiosyncratic risk inherent in smaller pension schemes, it is necessary to pool the liabilities of Stoneport. To ensure fairness to all employers, the share of the overall liabilities of Stoneport that is attributed to each of them must be allocated using a consistent methodology. The allocation process will form part of the statutory funding valuation of Stoneport that will be carried out at Centralisation Date.

The share of Stoneport's liabilities attributed to each employer as part of that process will have the same expected net present value as the liabilities originally transferred in from their own pension scheme. By entering Stoneport, employers will in effect be choosing to trade the specific liabilities of their scheme for a proportion of a larger and more diverse set of liabilities.

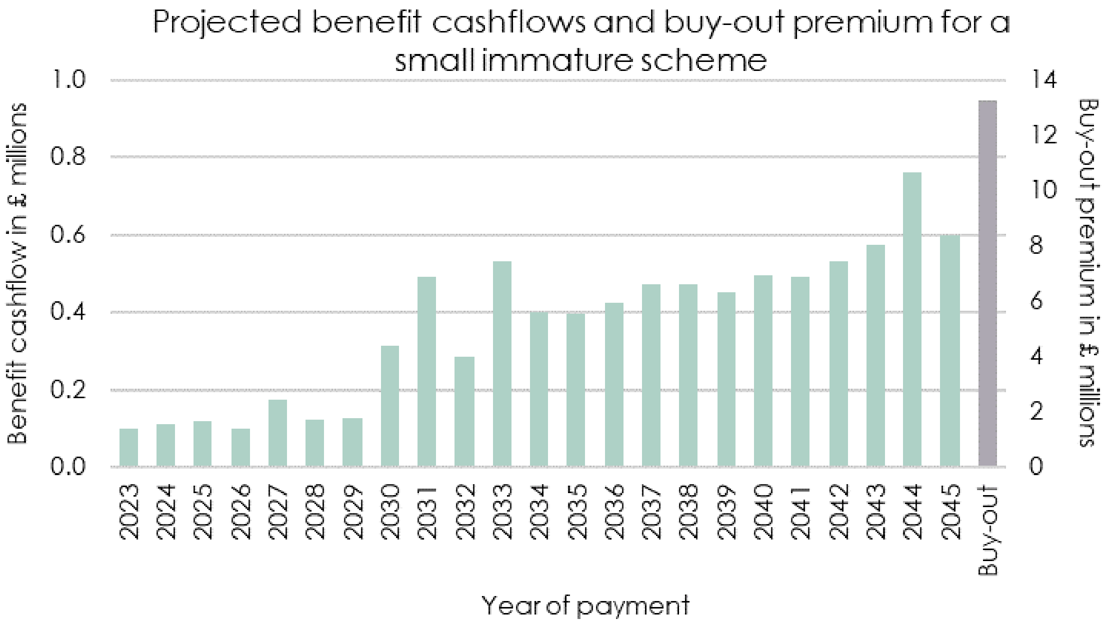
2.1. Liability valuation approach

The valuation carried out for the purpose of allocating Stoneport's liabilities between the employers at the Centralisation Date will reflect the aim for Stoneport to be fully funded on a buy-out basis by the Target Date of 31 December 2045.

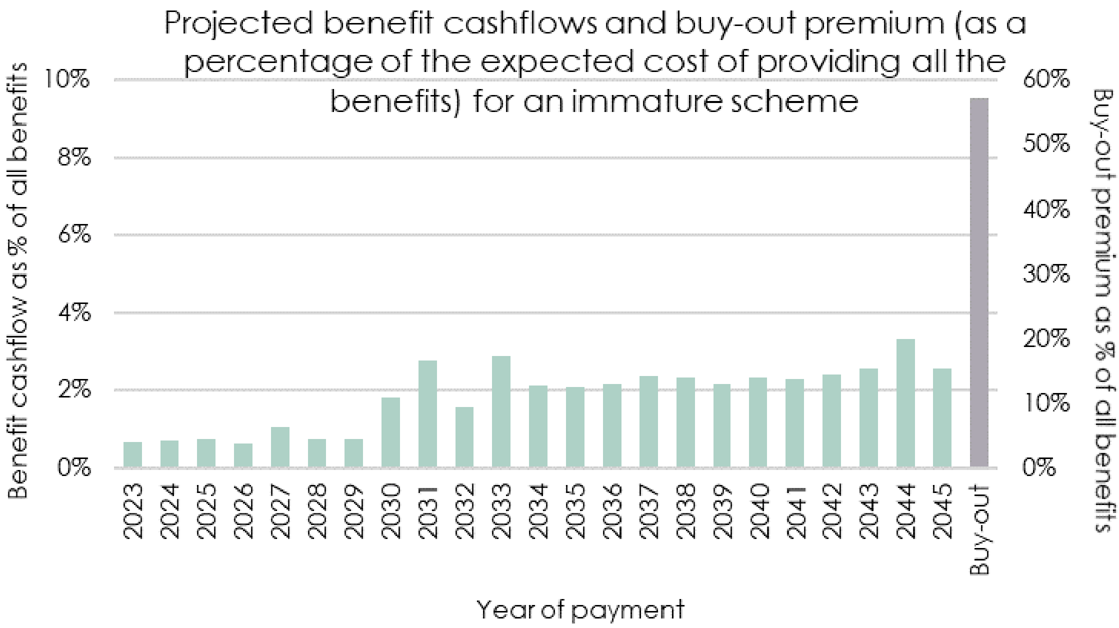
This will be achieved by projecting individually the benefit cashflows for each scheme joining Stoneport over the period from Centralisation Date to the Target Date. The projected benefit cashflows will be calculated using best estimate assumptions, derived using the same methodology for all pension schemes that join Stoneport.

In addition, the cost of the buy-out of the residual liability at the Target Date will be estimated, using the Trustees' estimate of the cost for securing a large and mature portfolio of liabilities. The Trustees estimate will be made at Centralisation Date based on their view of the cost of a buy-out at the Target Date. The residual benefits to be paid will be based on projecting the cashflows for the period to the Target Date in line with best-estimate expectations and thereafter on the Trustees' expectations for buy-out pricing of the residual benefits assuming a buy-out at the Target Date.

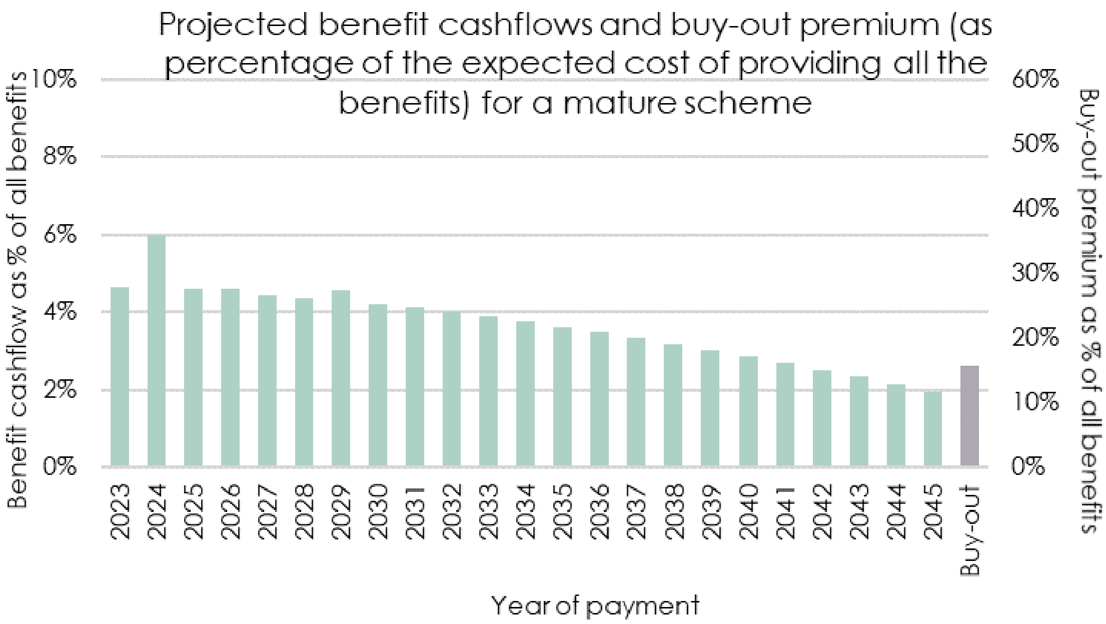
The graph on the next page provides an illustrative example of the projected benefit cashflows in each future year (shown in green and plotted against the axis on the left) and the projected buy-out premium (shown in grey and plotted against the axis on the right) for a small immature scheme:



For an immature scheme, the estimated cost of the residual buy-out is a large proportion of the expected cost of providing its benefits within Stoneport. For illustrative purposes, were the projected cashflows and residual buy-out cost shown in the graph above to be discounted at 4% per annum, the residual buy-out premium would equate to approximately 55% of the total expected cost. This is illustrated in the graph below:



The position for an employer with a mature scheme would be quite different. Calculated on a consistent basis (to the approach set out for the immature scheme above), we estimate that the residual buy-out premium for a mature scheme will represent around 15% of the expected cost of meeting its benefits within Stoneport. The corresponding proportion of the total expected cost to the employer of a mature scheme meeting Stoneport's funding target that would fall in each future year is set out in the graph below:



It is clear from these illustrative examples that significant difference will exist between the shape of the projected cashflow profiles of the different pension schemes that are likely to join Stoneport. In pooling liabilities across Stoneport, it would not be fair or equitable to individual employers if all pension schemes' obligations were in effect, treated as being the same, by allocating each employer a fixed proportion of all future benefit obligations. Indeed, doing so could significantly change the risk profile for individual employers.

Furthermore, each £ of pension that forms part of the residual buy-out is expected to cost significantly more than the corresponding cost of each £ of pension paid out of Stoneport before then. The cost differential arises as a result of the stringent capital requirements imposed upon insurers as well as the insurer's profit motive.

The funding target of Stoneport therefore necessitates the use of an approach to allocating the liabilities which reflects the inherent differences in the profile of the liabilities of the pension schemes that join.

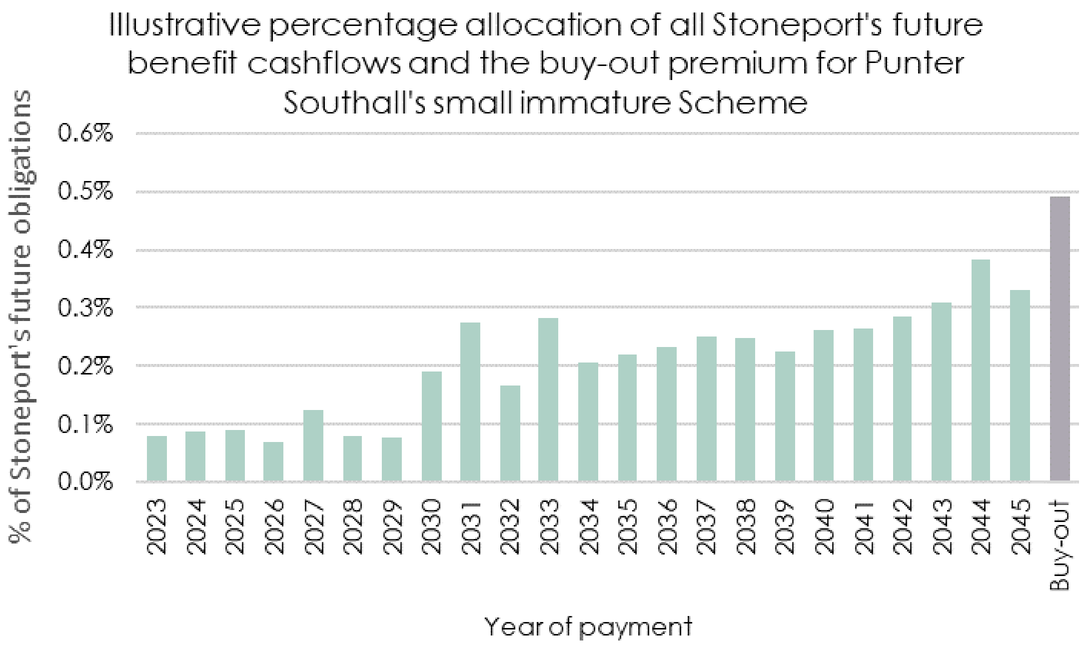
2.2. Allocation of liabilities to individual employers

After the projected cashflows in each future year and the estimated buy-out premium have been calculated for each individual scheme's members, they will be aggregated across Stoneport as a whole. Each employer will then be allocated a proportionate share of each future years' benefit payments and a proportionate share of the residual buy-out premium based on their members' liabilities to Stoneport as a whole.

In other words, every employer will be allocated a percentage of the aggregate benefit payments that are going to be made by Stoneport in 2023, based on their proportionate share of the projected cashflow in that year for Stoneport as a whole, calculated as part of the Centralisation Date valuation. Similarly, each employer will be allocated a (different) percentage of the aggregate benefit payments that are going to be made by Stoneport in 2024, and in each future year of Stoneport's operation, based on its proportionate share of the projected cashflow in that year for Stoneport as a whole. Finally, each employer will be allocated a percentage of the aggregate residual buy-out premium, based on its proportionate share of the projected buy-out cost at the Centralisation Date valuation.

We refer to the percentages calculated as part of the Centralisation Date valuation as (and moreover the TD&R defines them as) the "Funding Target Cash Flow Shares". They will remain fixed until such time as an employer exits Stoneport, for whatever reason. The recalculation of the percentages in the case of an employer's exit for the remaining employers is covered in section 5.

The graph below provides an illustrative example of the Funding Target Cash Flow Shares for Punter Southall's small immature scheme after centralisation on 31 December 2022:



The graph shows that the projected Funding Target Cash Flow Shares would be expected to trend upwards for Punter Southall, because the profile of its liability is very immature. The projected Funding Target Cash Flow Shares that would be expected to apply to a scheme with average maturity would be broadly flat, whilst the projected Funding Target Cash Flow Shares that would be expected to apply for a mature scheme would trend downwards (in each case ignoring the proportion of the residual buy-out cost, which is a separate aspect).

As part of the Centralisation Date valuation process, we will notify each employer of its Funding Target Cash Flow Shares (arising from its share of the benefit cashflows in each future year of Stoneport's operation and of the residual buy-out premium at the Target Date).

In the event that the Target Date were deferred, the allocation of the buy-out cost as at 31 December 2045 will be used as the basis for allocating benefit cashflows after 31 December 2045 and the ultimate buy-out premium at the revised Target Date.

2.3. Method and assumptions for calculating and allocating liabilities

The projected benefit cashflows and the estimate of the residual buy-out cost calculated for the purpose of determining the Funding Target Cash Flow Shares, for the allocation of the overall liabilities of Stoneport between the employers, will be calculated for each scheme joining Stoneport based on market conditions at the Centralisation Date (the effective date of the valuation).

In setting the necessary best-estimate assumptions, the Trustees will have regard to the following two key characteristics of each scheme's members:

- The assumptions for future benefit increases will be set having regard to the relevant inflation indices and taking account of any maximum and minimum levels of increase that apply.

- The assumption for future mortality rates will be set having regard to the risk factors of the membership by making an adjustment to the base table for each individual member based on their postcode and pension size.

All other best-estimate assumptions set by the Trustees will be applied across Stoneport as a whole. This is because the smaller schemes that join Stoneport will not have sufficient volumes of experience data upon which to set appropriate, statistically credible, scheme specific assumptions. Furthermore, we expect these assumptions to have a relatively modest impact on the value placed on the liabilities and hence the allocation between employers.

2.4. Adjusting the allocations over time

The Funding Target Cash Flow Shares set at the Centralisation Date would remain unchanged for the lifetime of Stoneport in the absence of any employers exiting Stoneport. However, in the event of the insolvency of an employer (or on the occurrence of a voluntary exit), the Funding Target Cash Flow Shares will be adjusted to cover the share of the liabilities that had previously been allocated to the exiting employer. In other words, the unallocated liabilities following the exit will be re-spread across the remaining employers to restore the sum of each of the Funding Target Cash Flow Shares to 100%.

Each employer that remains in Stoneport will therefore see a proportionate increase to each of the Funding Target Cash Flow Shares previously allocated to it. The remaining employers will then all have (slightly) higher Funding Target Cash Flow Shares going forward. The adjusted Funding Target Cash Flow Shares will remain unchanged until such time as another employer exits Stoneport. An illustration of how this will work in practice is set out in the worked example at the end of this guide.

2.5. Using the allocations

A tracking mechanism will be used to adjust the notional asset account of each employer between statutory funding valuations of Stoneport. The Funding Target Cash Flow Shares calculated at the Centralisation Date, and the revised Funding Target Cash Flow Shares calculated from time to time as required on the exit of an employer, will be used in the tracking mechanism. In particular, the relevant allocation of the aggregate benefits paid from Stoneport in any period will be debited to each employer's notional asset account. Details of the tracking mechanism are provided in section 3. The allocations will also be used in future statutory funding valuations of Stoneport.

2.6. Creation of notional asset accounts

On the Centralisation Date, a notional asset account will be created for each employer. A system of credits and debits will then be used to adjust the notional assets of each employer to reflect the items for which the individual employers are responsible, as explained in the next section.

3. Items to be adjusted for in tracking the notional asset accounts

As employers joining Stoneport will in effect be choosing to trade the specific liabilities of their own scheme for a proportion of a larger and more diverse set of liabilities, there will be no need to track member experience and to adjust for it in the system of credits and debits. Indeed, were we to do so one of the material benefits to employers and to members of consolidation in Stoneport, namely the pooling and diversification of actuarial risks, would be lost. It would also add an unwelcome layer of complexity to the administration and management of Stoneport.

Therefore, only the following items will be tracked and adjusted for in the notional asset accounts of each employer:

- The contributions paid by each employer.
- The return achieved, net of investment management expenses, on the mix of the Investment Fund and the Matching Fund that the employer has requested that the Trustees hold in respect of their notionally allocated assets.
- The employer’s share of that time period’s benefit cashflows, expenses and levies, including the fees charged by SPML for the advisory services it provides to the Trustees of Stoneport.
- The share of the running cost savings the employer will benefit from by joining Stoneport that is payable to SPML, plus any fees incurred by Stoneport for any special projects resulting from individual employer’s actions.

We consider each of the four items in detail in the next section.

4. Methodology for adjusting the notional asset accounts

We will undertake a calculation every month to roll forward and adjust the notional asset account attributed to each employer in Stoneport. The calculation will be performed with an effective date of the last day of the previous month.

We note that the methodology we will use which is described below contains a number of approximations to simplify the administration process, reduce the risk of errors, and keep costs low. The use of these approximate will mean that in each month, some employers will be credited with less investment return (positive or negative) than they should theoretically be, whilst others will be credited with more. The "winners and losers" from this process will differ from month to month and would be expected to broadly balance out over the lifetime of Stoneport. Furthermore, the impact of these approximations is expected to be insignificant in the context of the pooling of the liabilities which takes place under Stoneport.

4.1. Contributions

Any contributions paid during the month will be assumed to be paid at the end of the month in which they were received by Stoneport when credited to the relevant notional asset account.

We consider this simplified approach to be necessary to control costs and to tie in with the likely reporting requirements of the investment managers (i.e. we do not anticipate being able to apply investment returns on a daily basis). We recognise that this will mean those employers which make payments before the end of each calendar month will miss out on being credited with any positive or negative investment return on those contributions for the period between payment and the end of the month. However, alongside a number of other similar approximations we intend to make in order to achieve simplicity, we do not believe this approach will significantly impact on the employers over the long-term.

Firstly, we should note that the impact of any approximation would be small and could be positive or negative compared to the wholly accurate approach. Secondly, such approximations will be undertaken on a monthly basis over the extended period between the Centralisation Date and the Target Date, so Employers that suffer from the approximations in some periods would be expected to benefit from the approximations in other periods.

4.2. Investment return

We will credit or debit the notional asset account with the investment performance (positive or negative) over the month based on the employer's chosen allocation to the Investment Fund and the Matching Fund and the returns achieved on those funds, net of all investment management expenses.

If an employer's allocation between the Investment Fund and the Matching Fund is altered during the month, for the sake of administrative ease, we will assume that the change is effective at the start of the month in question for the purpose of allocating investment returns.

In most cases where the allocation between the Investment Fund and the Matching Fund is changed, we anticipation that it will result in a reduction in the former in favour of an increase in the latter. Indeed, that will be a natural consequence of the requirement in the TD&R for the allocation to the Investment Fund to be (reduced to) 0% by the Target Date of 31 December 2045. As the expected long-term return on the Investment Fund will be higher than the expected long-term return on the Matching Fund, the proposed approach should result in employers being credited with less investment return than is earned on the underlying assets. However, we do not anticipate the loss of credited investment return to be significant relative to amount credited as a whole.

4.3. Benefit cashflows and expenses

Each employer's notional asset account will be debited each month with its share of that calendar year's benefit payments. Notional asset accounts will also be debited with a share of the administrative expenses and levies incurred by Stoneport during the month, plus the fees charged by SPML for the advisory services it provides to the Trustees. These costs will be allocated in proportion to the benefit payments.

For ease of administration, we will assume that the benefit payments and expense are paid at the beginning of the month in which they are due to be paid by Stoneport. We recognise that this will mean benefit and expense payments made after the beginning of each calendar month will not be credited with any investment return on the monies set aside to meet those cashflows during the period between the start of the month and the date they are actually paid. However, we do not anticipate the loss of credited investment return to be significant relative to the benefits and expenses being paid.

4.4. SPML share of the running cost saving and special project fees

We will treat the share of the cost savings employers achieve that is payable to SPML and any fees incurred for special projects as an expense which will be deducted from the notional asset account of the employer in question. It will be deducted at the beginning of the month in which the expense was incurred.

It will not be possible for employers in Stoneport to take steps directly to amend, alter or reshape members benefits in any way, for example by undertaking a liability management exercise in respect of their share of the liabilities. Such matters would only be carried out by the Trustees and would apply across the whole of Stoneport. Nor will it be possible for employers to change the way in which Stoneport is funded, or its assets are invested, except as part of the consultation process run for each actuarial valuation of Stoneport. We therefore anticipate that special projects giving rise to additional fees will only occur in fairly limited circumstances. The two main areas anticipated are as follows:

- When corporate events have a material impact on the covenant that an employer provides in respect of its share of Stoneport's liabilities. Employers would be required to cover the cost the Trustees incur analysing the covenant implications and making appropriate changes to the employer's funding and investment plan. This would be achieved by making employers give an undertaking on joining Stoneport that they will notify us, acting on behalf of the Trustees, of any Type A events (as defined in the clearance guidance issued by tPR) that occur.

- When discussing a voluntary exit from Stoneport.

When we are notified of a Type A event or presented with a request for an exit, we will provide the employer with an estimate of the fees they are likely to incur, including all costs likely to be incurred by the Trustees. We would send a note of the extra fees to the employer at monthly intervals, or at the end of the process in the same way as if we were providing consultancy services to the employer and apply the fee adjustment to the employer's share of the assets with effect from 30 days after the date of our fee note.

4.5. True-up of notional asset accounts

We will adjust the individual notional asset accounts of each employer after undertaking the monthly tracking calculations so that the sum of the notional accounts is equal to the value of the assets held by Stoneport as a whole. Any surplus or deficit in terms of the assets of Stoneport as a whole when compared to the sum of all of the notional asset accounts of the individual employers, will be allocated to them in proportion to the amounts in the individual notional accounts prior to this adjustment.

5. Adjusting notional asset accounts and liability shares for insolvencies

Adjustments will be made to the share of the liabilities allocated to each employer (i.e. the Funding Target Cash Flow Shares) in the event of the insolvency of an employer.

In the event of the insolvency of an employer, there could be a lengthy delay between the insolvency event occurring and any recoveries being made against the Section 75 debt falling due on the insolvent employer. As such, it may not be possible to assess the full financial impact of an insolvency event at the time a monthly tracking calculation, or even an actuarial valuation, is carried out. We have therefore had to consider how and when to allow for these events as part of the tracking and valuation process.

Account can only be taken of known events at the effective date of each monthly tracking calculation. Any orphan liabilities arising from an insolvency event will immediately be allocated to the remaining employers as part of the monthly tracking process, following a confirmed insolvency event in respect of one of the employers. The notional asset account attributable to any insolvent employers will also immediately be allocated across the then remaining employers.

No allowance will be made for any expected recoveries against the Section 75 debt of any insolvent employers, until such time as those monies have been received by Stoneport. They will therefore come through in the form of a positive experience item as part of future monthly tracking updates.

We will keep employers informed of any insolvencies that arise, the impact they have on their Funding Target Cash Flow Shares, and the amounts that will be credited to their notional asset accounts.

5.1. Incidence of insolvencies

It is unlikely that any insolvencies will occur in the early years of Stoneport's operation or in the period following centralisation, due to the application of the Covenant Test both on joining and on the Centralisation Date.

However, over the lifetime of Stoneport, we do expect a number of employers to go bust. What that means for the remaining employers will depend on how well funded the employer's notional share of the liabilities are at that time. As we move further along the timeline to buy-out it may well be the case that at the point of failure the employer is already on track to meet the buy-out funding target with no additional cash contributions required. If it is not, any recovery against the exit debt falling upon the insolvent employer will help bridge the gap.

Insolvency events are expected to be rare. Initial projections suggest that we would expect less than one insolvency per annum once we reach our target of 100 employers. This is based on the insolvency rates for smaller schemes published by the PPF. In practice, due to the cyclical nature of the economy and the clustering of insolvency events, it is more likely in practice that there are no insolvency events in most years and a small number of insolvencies in other years (noting also the Covenant Test will eliminate the weaker covenants and those employers who cannot adequately support their pension liabilities allowing for adverse deviation and financial stress).

Further information and analysis on the potential future incidence of employer insolvencies and the impact they might have on Stoneport is provided in the employer covenant 'primer' guides.

6. Disclosure to employers

Once centralisation is reached, employers will be provided with online access to their financials in Stoneport which will be updated on a monthly basis. This will include their share of Stoneport's liabilities, notional asset allocation, and resulting share of any deficit. They will also be provided information on the funding position of Stoneport as a whole.

Along with the monthly funding information, we will provide an estimate of the employer's obligations calculated on an accounting basis to allow employers to prepare the necessary disclosures for inclusion in their statutory accounts. We will also show the share of the benefits paid and running costs incurred by the employer each month.

Access will be provided through a secure employer portal on the Stoneport website, with employers able to view only information about their own notional asset account and share of the liabilities and Stoneport as a whole.

There will be a time lag between the end of each calendar month and the monthly update being available to employers on the website. The lag will encapsulate the time required by the investment managers to prepare monthly asset valuations and performance information, and for us to undertake the necessary monthly tracking calculations.

We expect this information to be more than sufficient for most employers and that very few will ever need access to more up-to-date information.

7. Operational example

In this final section we work through a simplified example of the operation of the proposed tracking mechanism explained earlier in this guide.

For the purposes of these purely illustrative, simplified examples, we assume Stoneport has just been centralised with 100 employers, each with assets of £35.3 million.

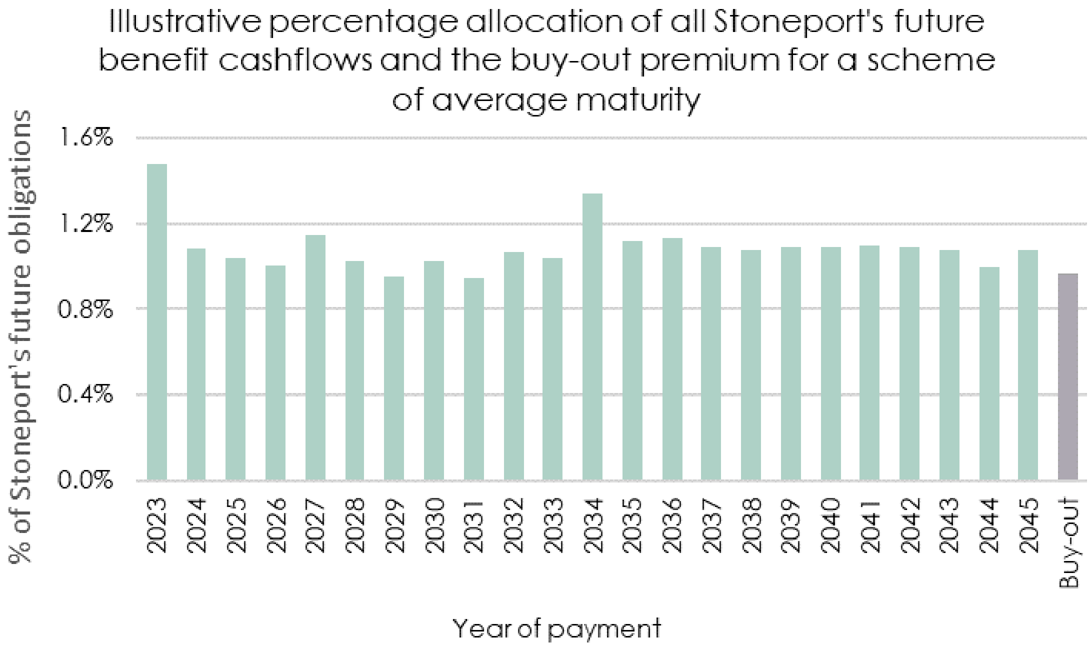
The technical provisions have been calculated by projecting the benefit cashflows in each future year up to and including 2045, estimating the buy-out premium on 31 December 2045 and discounting these future obligations. Stoneport is 91% funded on the technical provisions basis, which is broadly in line with the latest industry average funding position set out in the 2019 Scheme Funding Analysis by tPR.

The valuation balance sheet of Stoneport as a whole is as follows:

Stoneport's funding position	**£ millions**
Present value of all Funding Target Cash Flows	(3,879)
Sum of all notional asset accounts	3,530
Surplus / (Deficit)	(349)
Funding Level	91%

7.1. Our example employer

We will consider the position of one example employer with the following Funding Target Cash Flow Shares, as shown in the graph on the next page:



The example employer's assets of £35.3 million are allocated to its notional asset account. The example employer has chosen to invest these allocated assets exactly in line with the assumed overall strategy of Stoneport, which we assume is half in the Investment Fund and half in the Matching Fund.

The funding position of the example employer on the technical provisions basis has been estimated to be as follows:

Example employer's funding position	**£ millions**
Present value of employer's shares of the Funding Target Cash Flows	(39.222)
Employer's notional assets account	35.300
Surplus / (Deficit)	(3.922)
Funding Level	90%

Unless there are any insolvencies (or voluntary exits) amongst the employers, only the overall liabilities of Stoneport need be tracked (as Stoneport's liabilities are commingled, the liability experience is the same for all allocations, spread proportionately between them by size).

7.2. Monthly process

Each month we project forward the notional asset account of each of Stoneport's employers from the previous month's figures.

7.2.1. Movements during the month

During the month the following issues arise:

- Total contributions to Stoneport from all employers are made of £2,909,000 (broadly reflecting a straight-line spreading of the deficit measured against the technical provisions over 10 years with no interest);

- The Investment Fund returns +3.00% net of investment management fees whilst the Matching Fund returns -1.00%;

- Total benefit payments are made to members from Stoneport of £10,283,000; and

- Expenses and levies incurred across Stoneport as a whole total £588,000 (equivalent to 20 basis points per annum on the assets)

For the sake of simplicity, we make no allowance for the SMPL share of the running cost savings and assume that no special project expenses were incurred.

These factors would all taken account in projecting forward the assets and liabilities of Stoneport. The overall funding position of Stoneport therefore develops over the month as follows:

Stoneport's funding position	Beginning of the month (£ million)	End of the month (£ million)
Present value of Funding Target Cash Flows	(3,879)	(3,830)
Sum of all notional asset accounts	3,530	3,557
Surplus / (Deficit)	(349)	(273)
Funding Level	91%	93%

The funding position has improved over the month reflecting the outperformance of the Investment Fund relative to the liabilities and the contributions made.

7.2.2. Our example employer during the month

We will assume, for illustrative purposes, that example employer is contributing £30,000 for the month.

The return on the assets allocated to our example employer will, due to our assumptions, be the same as that on the overall assets. In actual operation the choices of employers will vary from the overall average and the actual return on the chosen split of Investment Fund and Matching Fund will be used to calculate the return on the assets allocated to each employer.

The employer will be allocated a share of the benefit payments and general expenses in line with their percentage allocation of the overall liabilities in the year in questions in line with the strategy of fully commingling of liabilities to eliminate idiosyncratic risk. In this case, our example employer was allocated 1.480% of the first years' benefit payments and hence its notional asset account will be reduced by 1.480% of the benefit and expense payments made during the month by Stoneport as a whole.

We assume that there were no special project expenses during the month. Such expenses when they arise are allocated directly against the notional asset accounts of the employer(s) that caused these special project expenses to be incurred.

The allocated assets for the example employer will develop over the month as follows:

Example employer's funding position	**£ millions**
Employer's opening notional assets account	35.300
Contributions	0.030
Investment return	0.353
Benefit payments	(0.152)
Expenses	(0.009)
Employer's closing notional assets account	35.522

The balance sheet of the example employer at the end of the month would be as follows:

Example employer's funding position	**£ millions**
Present value of employer's shares of the Funding Target Cash Flows	(39.070)
Employer's notional assets account	35.522
Surplus / (Deficit)	(3.548)
Funding Level	91%

In this instance, because the example employer is assumed to have chosen to have their assets effectively be invested in line with the overall Stoneport strategy, the funding position moves almost exactly in line with that of Stoneport (an improvement of around 2%). To the extent that employers choose to vary their investment exposure from the average their individual funding position will diverge from that of Stoneport.

7.3. Adjusting for insolvencies

In this sub-section we will consider the impact of any of the employers becoming insolvent during the month.

For the purpose of this illustrative example, we will assume that one of the employers becomes insolvent during the first month of operation of Stoneport as a centralised arrangement. We do this for ease of illustration - in practice, it is extremely unlikely that an employer will become insolvent so soon after centralisation because of the application of the Covenant Test. We then consider the impact on the remaining employers at the end of month rebalancing. The employer becoming insolvent is assumed to be exactly the same as our example employer.

The process of determining the outcome of an insolvency could take many months and therefore payments may not be received, and additions made to the notional asset accounts of the remaining employers, for some time after the insolvency occurs. However, for ease of illustration, our example assumes that the recoveries on insolvency are available immediately at the end of the month in which an insolvency occurs.

7.4.1. Recovery on insolvency

On insolvency, the debt for the insolvent employer will be calculated in accordance with the TD&R and submitted as a section 75 debt into the insolvency proceedings. The debt will be the greater of:

- the difference between the notional assets account allocated to the employer and the present value of the employer's share of the future benefit cashflows (on a buy-out basis) and the residual buy-out premium; and

- the employer's "normal" share of the section 75 deficit (allocated in proportion to liabilities) in Stoneport calculated on a buy-out basis.

In our example, we assume that the ratio of buy-out to technical provisions is 135% and hence our insolvent employer will have a section 75 debt of £17.650 million (i.e. 135% x £39.222 million - £35.300 million).

The recovery of any section 75 debt within Stoneport will fall into two parts:

- any security (such as a charge on property) that the employer has provided to Stoneport; and

- the recovery of the unsecured part of the section 75 debt.

We expect only a minority of employer to provide any form of contingent security, so there may be no recovery from this source in most cases.

There is limited evidence as to the rate of recovery of section 75 debts specifically. However, a section 75 debt ranks as an unsecured creditor in the insolvency process and the recovery against unsecured claims is generally very low. It is very rare that this claim is settled in full - the PPF assumed a recovery rate of only 5% on the section 75 debt falling on insolvent employers in its July 2018 Long Term Funding Strategy Update.

Noting that the recovery of the section 75 debts may vary significantly depending on the circumstances, we consider different levels of recovery and the consequent funding, on an ongoing basis, of the liabilities the insolvent employer is no longer able to fund as follows:

Recovery rate	Amount recovered (£ millions)	Available assets (£ million)	Ongoing funding level
0%	-	35.3	90%
10%	1.8	37.1	95%
20%	3.5	38.8	99%
50%	8.8	44.1	113%
100%	17.7	53.0	135%

We expect, for most insolvencies, a rate of recovery of no more than 10 – 20% of the section 75 debt from against the unsecured part of any claim. We would not expect the higher levels of recovery shown in the table to occur in practice unless substantial security had been granted.

However, as we move further along the timeline to buy-out it may well be the case that at the point of failure the Employer is already on track to meet the buy-out funding target with no additional cash contributions required. If it is not, any recovery against the exit debt falling upon the insolvent employer will help bridge the gap.

7.4.2. Updating the Funding Target Cash Flow Shares of the remaining employers

The insolvency of an employer will increase the liabilities of each and every remaining employer – each will see a proportionate increase i.e. the proportion of future benefit cashflows and the residual buy-out premium will be adjusted for all future months.

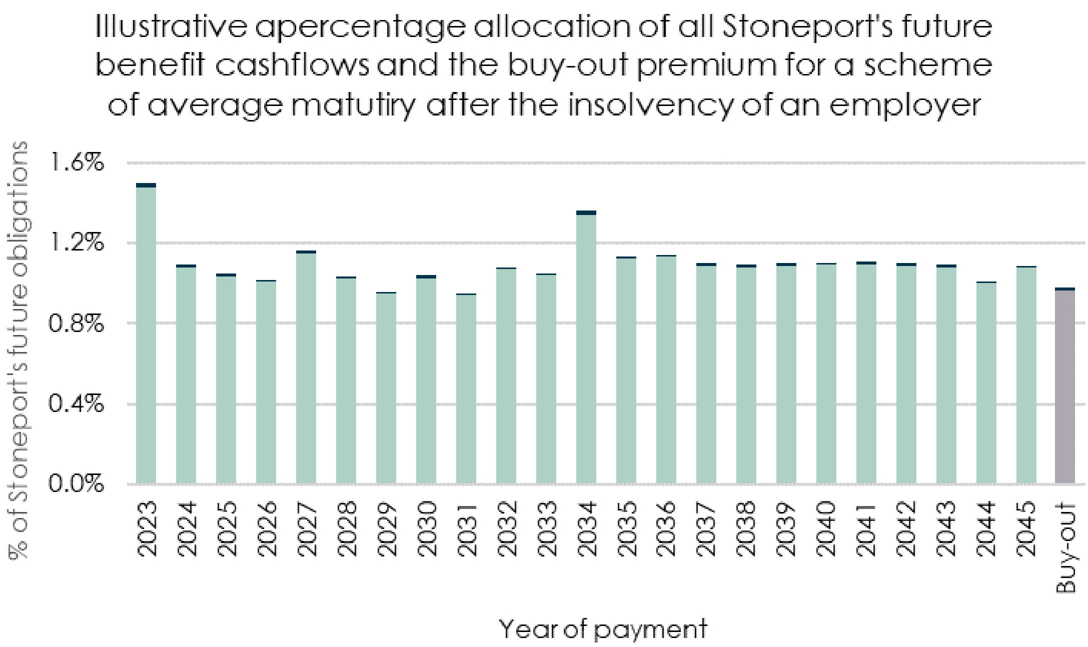
There are now £39.222 million of liabilities within Stoneport that are not allocated to any specific employer that need to be shared pro-rata between the remaining employers. These liabilities are not to be discharged but instead retained within Stoneport, supported by the remaining employers.

The insolvent employer had been responsible for 1.480% of the benefit cashflows falling due in the first year after Centralisation Date. The remaining employers were responsible for the other 98.520%. Post insolvency, the unallocated liabilities need to be re-spread across the remaining employers to restore the total percentage allocations to 100%.

The following calculation is undertaken for our example employer:

	Percentage in first year
Initial Funding Target Cash Flow Share	1.480%
Sum of Funding Target Cash Flow Shares for remaining employers	98.520%
Adjusted Funding Target Cash Flow Share	1.502%

The same calculation must be performed for each future benefit cashflow and the residual buy-out premium, so that all future obligations are fully allocated to the remaining employers. The graph on the next page illustrates the impact on the Funding Target Cash Flow Shares for our example employer:



The previously allocated cashflows are shown in light green, with the additional allocation following the insolvency event shown in dark green.

The allocated percentage of the overall liabilities of Stoneport increases for all remaining employers, reflecting the reduced number of employers due to the insolvency that has occurred.

7.4.3. Updating the notional asset accounts of the remaining employers

The allocated assets of the remaining employers will also change reflecting the fact that, in accepting a higher share of the liabilities, the employer will also receive a pro-rata share of the assets allocated to the insolvent party and any recovery made on those assets.

We have illustrated the position using a rate of recovery against the section 75 debt of 10% (i.e. 10% x £17.650 million = £1.765 million).

In our assumed case the assets available of £37.065 million (i.e. £35.300 million within Stoneport plus the £1.765 million recovery) would be allocated pro-rata to the remaining employers notional assets accounts based on their liability share. The calculation for our example employer is as follows:

Example employer's funding position	**£ millions**
Employer's opening notional assets account	35.300
Assets for distribution	38.830
Employer's shares of the Funding Target Cash Flows	1.060%
Additional assets allocated to the employer	0.411
Employer's closing notional assets account	35.711

7.4.4. Net impact of the insolvency

We can now compare the funding position of our example employer in Stoneport, before and after the insolvency event as follows:

Example employer's funding position	**Before insolvency (£ million)**	**After insolvency (£ million)**
Present value of employer's shares of the Funding Target Cash Flows	(39.222)	(39.638)
Employer's notional asset account	35.300	35.693
Surplus / (Deficit)	(3.922)	(3.945)
Funding Level	90%	90%

The impact of the insolvency is to increase the overall liabilities that each employer underwrites, as shown by the small increase in the allocated liabilities before and after the assumed insolvency for the example employer. The recovery on the section 75 debt partially offsets the increase in the ongoing liabilities but does still result in a small increase to the deficit notionally allocated to the example employer in this example.