

An aerial photograph of a winding road through a dense green forest, with a body of water visible in the upper left. Several decorative diagonal bars in shades of green and blue are overlaid on the image, particularly in the top right and bottom right corners.

HYMANS  ROBERTSON

Scottish Homes Pension Fund

Actuarial valuation as at 31 March 2020

Final valuation report

December 2020



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1 Introduction

Background to the actuarial valuation

We have been commissioned by City of Edinburgh Council (“the Administering Authority”) to carry out an actuarial valuation of the Scottish Homes Pension Fund (“the Fund”) as at 31 March 2020 as required under Regulation 60 of the Local Government Pension Scheme (Scotland) Regulations 2018 (“the Regulations”).

The actuarial valuation is a risk management exercise with the purpose of reviewing the current funding plan and setting the contribution rate for the period from 1 April 2021 to 31 March 2024. This report summarises the outcomes of the valuation and the underlying advice provided to the Administering Authority throughout the valuation process.

The deferred pensioner and pensioner members of the Fund were transferred to the Administering Authority prior to the wind-up of the Scottish Homes Residuary Body. The Administering Authority assumed the management of its assets and liabilities from 1 July 2005. The Scottish Government (formerly the Scottish Executive) acts as the Guarantor for the transferred liabilities. The Guarantor’s intention is that over time the transferred assets together with any additional contributions required should be sufficient to fund the former Scottish Homes Pension Fund liabilities.

This summary report is the culmination of other communications in relation to the valuation, in particular:

- Correspondence relating to data including the Data Report dated 30 November 2020.
- Our Initial Results Report dated 31 July 2020 which outlines the whole fund results and inter-valuation experience;
- The operation of the Scottish Executive Funding Agreement dated 29 June 2005, confirming the approach to determining contributions payable to the Fund by the Scottish Government (the “Funding Agreement”).

Reliances and limitations

This report has been prepared for the sole use of City of Edinburgh Council in its role as Administering Authority of the Fund to provide an actuarial valuation of the Fund as required under the Regulations. It has not been prepared for any other third party or for any other purpose. We make no representation or warranties to any third party as to the accuracy or completeness of this report, no reliance should be placed on this report by any third party and we accept no responsibility or liability to any third party in respect of it.

Hymans Robertson LLP is the owner of all intellectual property rights in this report. All such rights are reserved.

The totality of our advice complies with the Regulations as they relate to actuarial valuations. The following Technical Actuarial Standards¹ are applicable in relation to this report and have been complied with where material:

¹ Technical Actuarial Standards (TASs) are issued by the Financial Reporting Council (FRC) and set standards for certain items of actuarial work.

- TAS 100 – Principles for technical actuarial work;
- TAS 300 – Pensions.

Use of this report by other parties

This report is addressed to the Administering Authority of the Fund only. We appreciate that other parties may also seek information about the 2020 valuation process and methodology. We would encourage such parties to refer to the following publicly available documents for further information:

- The Fund's Funding Strategy Statement;
- The Fund's Statement of Investment Principles;
- Published meeting papers and minutes for the quarterly meetings of the Fund's Pensions Committee.

Considering these papers alongside this valuation report will provide a more complete view of the Fund's funding strategy and decision-making process surrounding this. These documents are available on the Fund's website or on request.

2 Valuation approach

Funding position as at 31 March 2020

The valuation offers an opportunity to measure the Fund's funding position as at 31 March 2020. As the Fund is mature and has a de-risked investment strategy, this provides some insight into understanding the long-term ability of the Fund to pay members' benefits.

The principal measurement is the comparison of the funding position at the valuation date against the funding target. For the purposes of this valuation we have adopted a "mark to market" approach. This means that the market value of the Fund's assets as at the valuation date are compared against the value placed on the Fund's liabilities in today's terms (calculated using a market-based approach). The assumptions used to calculate the liabilities are detailed in Appendix 2. As we have taken a market-related approach to the valuation of both the assets and the liabilities, we believe that they have been valued on a consistent basis.

The funding level is the ratio of assets to liabilities at the valuation date. A funding level of less/more than 100% implies that there is a deficit/surplus in the Fund at the valuation date against the funding target.

Significant events

The figures in this report are based on our understanding of the benefit structure of the LGPS in Scotland as at 31 March 2020. Details can be found at <http://www.scotlgpsregs.org/>.

3 Valuation results

Funding level and surplus / (deficit)

The funding position of the Fund as at 31 March 2020 is set out below. The results at the 2017 formal valuation are shown for comparison.

Valuation Date	31 March 2017	31 March 2020
Past Service Liabilities	(£m)	(£m)
Deferred Pensioners	42.8	32.0
Pensioners	120.1	109.2
Total Liabilities	162.9	141.1
Assets	170.6	166.1
Surplus / (Deficit)	7.7	24.9
Funding Level	104.7%	117.7%

The overall result has been an improvement in the Actual Funding Level (AFL), as set out in the Funding Agreement, from 104.7% to 117.7% with a larger funding surplus than was reported in 2017.

These results are sensitive to the underlying financial and demographic assumptions as well as the quality of the underlying data.

Please note the results as at 31 March 2020 include the assets and liabilities of Homeless Action Scotland which transferred into the Fund following its cessation from the Lothian Pension Fund on 12 July 2018.

Analysis of the change in surplus / (deficit)

Since the previous valuation, various events have taken place which affect the funding position of the Fund. These are summarised in the following chart.

Change in the surplus/deficit position	£m
Surplus / (Deficit) at 31 March 2017	7.7
Interest on surplus / (deficit)	0.0
Investment returns greater than expected	15.1
Contributions paid in	0.6
Actual membership experience compared to expectations	(0.6)
Change in demographic assumptions	(0.3)
Change in base mortality assumption	7.0
Change in longevity improvement assumption	5.4
Change in financial assumptions	(12.7)
Other experience items	2.7
Surplus / (Deficit) at 31 March 2020	24.9

Further comments on this chart are set out below:

- After allowing for rounding, the interest item is zero. This is based on three years of compound interest at 0.2% p.a. (the average assumed return over the period using the yield curve approach) applied to the previous valuation surplus of £7.7m.
- Investment returns being higher than expected since 2017 lead to a gain of £15.1m. This is roughly the difference between the actual three-year return (9.0%) and the expected three-year return (0.5%) applied to the assets from the previous valuation of £170.6m, with a further allowance made for cashflows during the period.
- The change in longevity assumptions (baseline and improvements) has given rise to a gain of £12.4m.
- The change in financial conditions since the previous valuation has led to a loss of £12.7m. This is due to a decrease in the real discount rate between 2017 and 2020. This can be approximately broken down as follows:

- o Changing the discount rate leads to a loss of £11.4m
- o Changing the benefit increase assumption leads to a loss of £1.4m
- Membership experience over the 3 years has led to a small loss of £0.6m. A loss due to higher than expected pension increases was largely offset by a gain from more pensions ceasing than anticipated.

Projection of the funding position

The progression of the funding position will depend on various factors including future asset performance, economic conditions and membership movements. If the financial and demographic assumptions we have made at this valuation are borne out in practice, and there are no changes to the valuation assumptions, we project that the funding level at the 2023 valuation date will be broadly unchanged.

Guarantor Contribution Rates

Deficit Recovery Contributions

The Funding Agreement sets out how payments from the Guarantor should be determined. The Target Funding Level (TFL), as set out in the Funding Agreement, is 94.5% at 31 March 2020. The AFL is greater than the TFL at the 2020 valuation date and therefore no deficit contributions are required from the Guarantor for the period from 1 April 2021 to 31 March 2024.

Expense Requirement

The Guarantor has a responsibility to pay towards the cost of the following expenses:

- Administration (including oversight and governance) – estimated to be £90,000 per annum
- Investment management

As required by the Funding Agreement, the liabilities are valued using yield curves that make no allowance for investment returns above gilts. To maintain prudence in future valuations, the Guarantor should also pay for investment expenses otherwise these would act to reduce the returns expected from the gilts-based strategy to below those implied by the yield curves. However, given the Fund is currently in surplus, we and the Administering Authority are comfortable with these expenses being met by the Fund over the next three years.

The total Expense Requirement is therefore £90,000 p.a. from 1 April 2021 to 31 March 2024.

Certified contributions

The Guarantor is being asked to pay total contributions of £90,000 p.a. to the Fund from 1 April 2021 to 31 March 2024. This contribution requirement is set out in the Rates and Adjustment Certificate in Appendix 3.

The Actual Funding Level and Expense Requirement will be reassessed at the 2023 valuation of the Fund and contributions (either towards any Past Service Deficit or towards expenses) will be reviewed at that time.

Regulatory experience

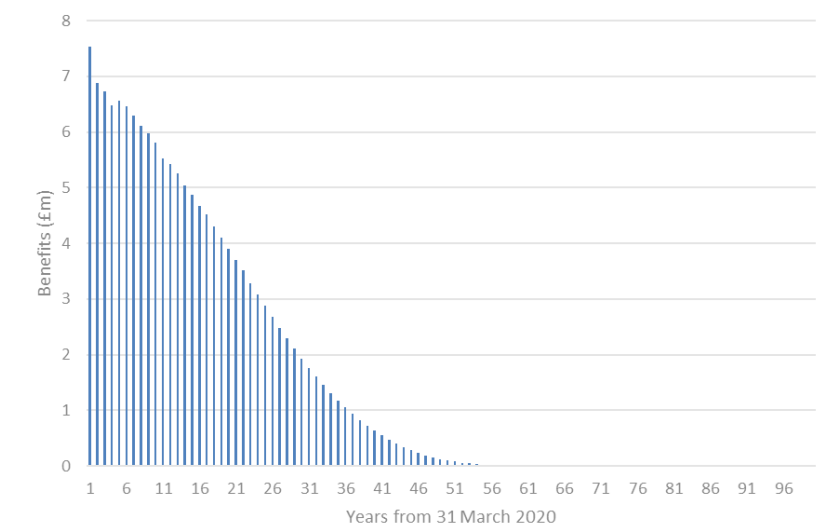
Indexation and equalisation of Guaranteed Minimum Pensions (GMP)

In their [January 2018 consultation response](#), HMT stated that their preferred long term indexation solution of converting GMP to scheme pension will also meet the requirements of equalisation.

For the 2020 valuation we have assumed that all increases on GMPs for members reaching State Pension Age after 6 April 2016 will be paid for by the Guarantor. This has served to increase the value placed on the liabilities.

Projected benefit payments

The liability figure is the value in today’s money of all the future projected benefit payments from the Fund based on all benefits accrued up to 31 March 2020 and the assumptions outlined in Appendix 2. The chart below details these future projected benefit payments to help understand the size and timing of the payments.



4 Sensitivity analysis

The valuation funding position results depend critically on the actuarial assumptions that are made about the future of the Fund. If all of the assumptions made as at 31 March 2020 were exactly borne out in practice then the liability results presented in this document would represent the true cost of providing benefits from the Fund as it currently stands at 31 March 2020.

However, no one can predict the future with certainty and future experience will not exactly match all of our assumptions. The future therefore presents a variety of risks to the Fund which should be identified and, where possible, the financial significance should be quantified. Thereafter the Fund can assess how (or if) these risks can then be controlled or mitigated and put in place monitoring to assess whether any mitigation is actually working.

In this section we comment on how sensitive the funding position as at 31 March 2020 is to the assumptions made about the future.

Changes in financial assumptions

The values placed on the Fund's liabilities are sensitive to the assumptions made. In particular, the discount rate assumption and the assumption for future benefit increases. To help understand the impact of these two assumptions being different from assumed, we have shown the effects on the liabilities of varying the discount rate and benefit increase assumptions below.

Discount rate assumption	Liabilities
% pa	(£m)
Gilts plus 0.5%	132
Gilts	141
Gilts less 0.5%	151

CPI Assumption	Liabilities
% pa	(£m)
CPI plus 0.2%	144
CPI	141
CPI less 0.2%	138

It is worth noting that, because the Fund is invested 100% in government bonds, the surplus / (deficit) position is to a large extent immunised against any changes in government bond yields. That is, any increase (decrease) in liabilities as a result of changing bond yields will be offset (partially or fully) by an increase (decrease) in the value of the government bonds held. The 'change in surplus / (deficit)' position table on page 8 demonstrates how this has occurred in practice over the intervaluation period. The impact of changing financial assumptions (a loss of £13m) has been offset by strong investment performance (a gain of £15m) over the period. The extent of this immunisation will be dependent on how closely the duration and inflation-linkage of the bonds held match the characteristics of the Fund's liabilities

Demographic assumptions

Sensitivity of the funding position to life expectancy

The main area of demographic risk is people living longer than expected. A 1 year improvement in life expectancy will result in an increase in the liabilities of around 5%.

Other demographic risks to consider

There are other risk factors which would have an impact on the funding position. An example being the amount of pension members commute for cash at retirement. These other risks are probably unlikely to change in such a way that would rank them as amongst the highest risks facing the Fund and therefore we have not sought to provide further quantification of their risk.

Other risks to consider**Regulatory, Administration and Governance risks**

As well as financial and demographic risks, the Fund also faces:

- Regulatory risks – central government legislation could significantly change the cost of the scheme in the future; and
- Administration and governance risk – failures in administration processes could lead to incorrect data and inaccuracies in the actuarial calculations.

These risks are considered and monitored by the Fund as part of its ongoing risk management framework.

Resource and environment risks

The Fund is exposed to risks relating to future resource constraints and environmental changes. These risks may prove to be material.

We have not sought to quantify the potential impact of these risks for the purpose of the results shown in this report, given the complexity and uncertainty involved. Further analysis is available to the Fund to illustrate the future impact of adverse climate outcomes.

Post valuation events

There has recently been significant volatility in the financial markets as a result of the economic uncertainty associated with the COVID-19 pandemic.

At the time of writing, it is very uncertain how this will affect the long-term economy and investment returns. However, as mentioned above, the Fund's gilts-based investment strategy provides significant protection against volatile stock markets. No allowance has been therefore made for this ongoing volatility in the 2020 valuation results or contribution rates detailed in the Rates & Adjustments Certificate.

5 Final comments

The Fund's valuation operates within a broader framework, and this document should therefore be considered alongside the following:

- the Funding Strategy Statement;
- the Statement of Investment Principles, which sets out the investment strategy for the Fund;
- the general governance of the Fund, such as meetings of the Pensions Committee and Local Pension Board, decisions delegated to officers, the Fund's business plan, etc;
- the Fund's risk register;

Valuation frequency

Under the provisions of the LGPS regulations, the next formal valuation of the Fund is due to be carried out as at 31 March 2023 where contribution rates payable from 1 April 2024 will be set.



Richard Warden

Fellow of the Institute and Faculty of Actuaries

For and on behalf of Hymans Robertson LLP

1 December 2020

Appendices

Appendix 1 – Data

Membership data as at 31 March 2020

A summary of the membership data provided by the Administering Authority for the purposes of the valuation at 31 March 2020 is shown below. The corresponding membership data from the previous valuation is also shown for reference.

Whole Fund Membership Data	Last Valuation 31 March 2017	This Valuation 31 March 2020
Employee members		
Number	-	-
Total Actual Pay (£000)	-	-
Total Accrued Pension (£000) (80ths)	-	-
Total Accrued Pension (£000) (60ths)	-	-
Total Accrued Pension (£000) (CARE)	-	-
Average Age (liability weighted)	-	-
Future Working Lifetime (years)	-	-
Deferred pensioners		
Number	471	369
Total Accrued Pension (£000)	1,110	801
Average Age (liability weighted)	54.7	55.7
Pensioners		
Number	1,209	1,165
Total pensions in payment (£000)	6,755	6,601
Average Age (liability weighted)	71.9	72.2
Average duration of liabilities	14.4	13.4

Other data used in this valuation

We have also relied upon asset and accounting data from the Fund's published 2017/18, 2018/19 and 2019/20 Annual Report and Accounts.

A summary of the Fund's assets provided by the Administering Authority as at 31 March 2020 and 31 March 2017 is as follows:

Asset class	31 March 2017 (£000)	Allocation %	31 March 2020 (£000)	Allocation %
UK index-linked gilts	128	75%	161	97%
Overseas equities	29	17%	0	0%
Overseas bonds	0	0%	0	0%
Property	8	5%	0	0%
Cash and net current assets	5	3%	6	3%
Total	171	100%	166	100%

Comment on data quality

The results of the valuation are dependent on the quality of the data provided to us by the Administering Authority for the specific purpose of this valuation. We have carried out validations on the membership data provided to ensure it is fit for the purpose of the valuation. Further details can be found in our report issued to the Administering Authority entitled "Data report for 2020 valuation", dated December 2020. We believe the membership data is fit for the purposes of this valuation

Appendix 2 – Assumptions

Financial assumptions

The Scottish Government acts as the 'Guarantor' for the Fund's liabilities. The valuation of these mature liabilities uses more prudent assumptions than those applied to other employers in the Lothian Pension Fund, as set out in the agreed Scottish Executive Guarantee dated June 2005 ('the Funding Agreement').

The terms of the Funding Agreement impose restrictions on the discount rate that is used to calculate the value of the past service liabilities. The Funding Agreement states that there will be no allowance for anticipated out-performance resulting from investment in assets that are riskier than government bonds, and there will be no deduction for investment expenses.

The financial assumptions are set out below, along with the assumptions adopted for the 2017 formal valuation:

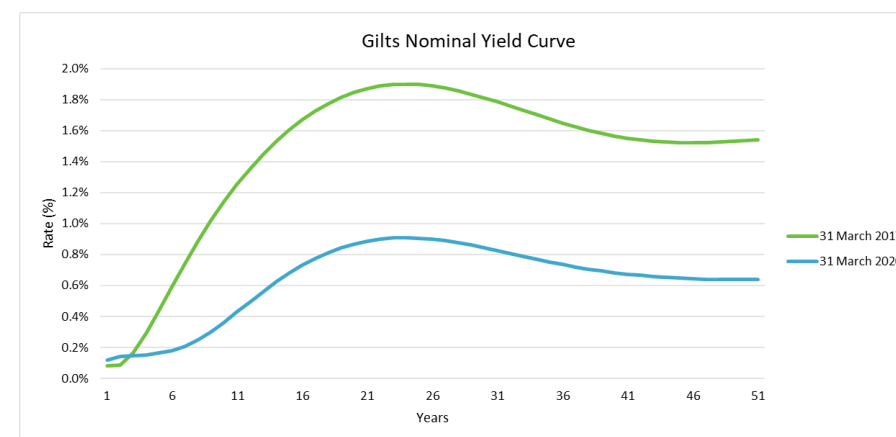
Financial Assumptions (p.a.)	31 March 2017	31 March 2020
Discount rate	Bank of England nominal yield curve	Bank of England nominal yield curve
Benefit increases	Bank of England implied inflation (RPI) curve less 1.0% p.a.	Bank of England implied inflation (RPI) curve less 0.9% p.a.

The yield curve used for the discount rate is the Bank of England nominal yield curve. This is the same discount rate that was adopted for the 2017 valuation of the Fund (albeit updated for market conditions as at 31 March 2020). At the 2017 valuation of the Fund this discount rate assumption included a margin for prudence by virtue of the fact that it made no allowance for any out-performance (relative to the yield available on government bonds) that could be

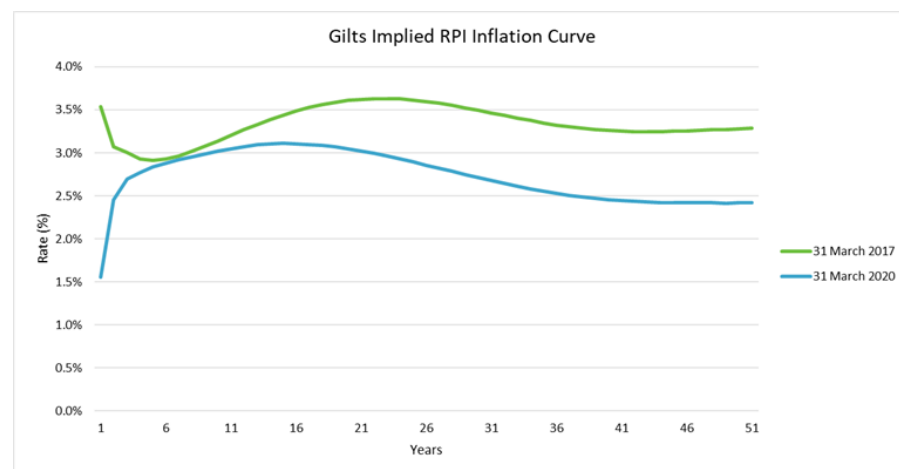
expected from the equity and property investments held by the Fund as at 31 March 2017. As at 31 March 2020 the Fund is invested 100% in government bonds, which means the discount rate assumption may now be considered as a 'best estimate' of the future investment performance. Whilst the Regulations require the funding basis to be prudent, given the low risk nature of the Fund's investment portfolio, and the associated low risk nature of the funding strategy, we believe this discount rate is appropriate for the purposes of the valuation.

Yield curves

The following chart shows the nominal spot yields for a Government-backed loan (i.e. the yield to maturity of a zero coupon bond) as at 31 March 2017 and 31 March 2020 (Source: Bank of England).



The next chart shows the Bank of England implied inflation curve over a range of maturities at 31 March 2017 and 31 March 2020. This is derived from the yields on both fixed and index linked gilts (Source: Bank of England).



All other assumptions adopted are intended to represent our best estimate of future experience. Taken in aggregate, the funding basis results in a 'best estimate' of the Fund's pension liabilities, which are being funded in a prudent manner.

Demographic assumptions

The same demographic assumptions are used in setting contribution rates and assessing the current funding position.

Longevity

The 2020 valuation longevity assumptions are set out below, along with the assumptions adopted for the 2017 valuation:

Longevity Assumptions	31 March 2017	31 March 2020
Baseline Longevity	Club Vita	Club Vita
Future Improvements	CMI 2016, Smoothed, 1.75% p.a. long term	CMI 2019, Smoothed, 2.0% p.a. long term

Our longevity assumptions for LGPS funds in Scotland, and the approach to setting these, is set out in guide 7 (*Longevity and other demographic assumptions*) of our [2020 valuation toolkit](#). As per the approach taken for the 2017 valuation of the Fund, we have assumed a higher long-term improvement rate than our default assumption to reflect the mature nature of the Fund's membership.

The longevity assumptions result in the following typical future life expectancies from age 65 (figures for 2017 shown for comparison):

Assumed Life Expectancy	31 March 2017	31 March 2020
Male		
Pensioners	22.4 years	20.8 years
Non-pensioners	24.8 years	21.1 years
Female		
Pensioners	24.8 years	23.3 years
Non-pensioners	27.8 years	26.0 years

Non-pensioners are assumed to be aged 45 at the valuation date

Retirement age pattern

We have adopted the retirement age pattern assumption as specified by the Scheme Advisory Board in England & Wales for carrying out their 2016 cost cap valuation. Further details are available on request.

Other demographic assumptions

We are in the unique position of having a very large local authority data set from which to derive our other demographic assumptions. We have analysed the trends and patterns that are present in the membership of Scottish local

authority funds and tailored our demographic assumptions to reflect LGPS experience. The resulting demographic assumptions are as follows:

Demographic Assumptions	
Family details	A varying proportion of members are assumed to be married (or have an adult dependant) at retirement or on earlier death. For example, at age 60 this is assumed to be 90% for males and 85% for females. Husbands are assumed to be 3 years older than wives.
Commutation	50% of future retirements elect to exchange pension for additional tax free cash up to HMRC limits for service to 1 April 2009 (equivalent 75% for service from 1 April 2009).

Sample rates of the incidence of death from deferred status are shown in the table below:

Age	Death in Deferment Rates	
	Incidence per 1000 active members per annum	
	All Males	All Females
20	0.21	0.11
25	0.21	0.11
30	0.26	0.16
35	0.30	0.27
40	0.51	0.44
45	0.86	0.71
50	1.37	1.04
55	2.15	1.37
60	3.86	1.75
65	6.44	2.25

Appendix 3 – Rates and Adjustments certificate

In accordance with regulation 62(4) of the Regulations we have made an assessment of the contributions that should be paid into the Fund by the Guarantor for the period 1 April 2021 to 31 March 2024 in order to maintain the solvency of the Fund.

The method and assumptions used to calculate the contributions set out in the Rates and Adjustments certificate are detailed in Appendix 2 of our report on the actuarial valuation dated 30 November 2020. These assumptions underpin our estimate of the number of members who will become entitled to a payment of pensions under the provisions of the LGPS and the amount of liabilities arising in respect of such members.

The required minimum contribution rates are set out below

Period	Guarantor's Minimum Contribution Rate
1 April 2021 to 31 March 2022	£90,000
1 April 2022 to 31 March 2023	£90,000
1 April 2023 to 31 March 2024	£90,000

Signature:



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