Government Actuary's Department

LGPS McCloud interest calculator user guide

Calculator version: v3.0

Purpose

This note has been prepared to assist scheme managers and administrators in using the GAD LGPS McCloud interest calculator. The purpose of the GAD LGPS McCloud interest calculator is to calculate the interest that should apply to payments arising from applying the McCloud remedy. The calculator allows for remedy payments owed from the scheme to the member only.

It sets out a simple guide on how to use the calculator and specification of the inputs required by the calculator.

This calculator can be used by funds in LGPS England and Wales, LGPS Scotland and LGPS Northern Ireland (the LGPS schemes).

Scope

The calculator should only be used for the following situations:

a. **Retirement recalculations**: final underpin date before 1 October 2023

b. **Trivial commutation top-up payments** (including small pot payments and trivial commutation lump sum death benefits): original calculation date before 1 October 2023

c. **Transfer top-up payments:** original calculation date before 1 October 2023 (excluding bulk transfer payments and Club transfer payments to McCloud remedy schemes)

d. **Top-up death grants:** member died before 1 October 2023

e. **Survivor pension recalculations:** survivor pension in payment before 2 October 2023

f. **Pension credits:** PSO effective date between 1 April 2014 (for England and Wales) or 1 April 2015 (for Scotland and Northern Ireland) and 30 September 2023 (inclusive) and the LGPS pension credit was in payment on 1 October 2023.

g. **Part 4 tax losses:** Tax loss arising as a result of McCloud remedy

Tax is not considered in the calculator. This should be considered by the user.

References

The calculator is built in line with GAD's interpretation of the interest calculation requirements for the LGPS schemes, as set out in:

Directions

LGPS England and Wales and LGPS Scotland: The Public Service Pensions (Exercise of Powers, Compensation and Information) Directions 2022:

The_Public_Service_Pensions__Exercise_of_Powers_Compensation_and_Information__Directions_2022.pdf (publishing.service.gov.uk)

LGPS Northern Ireland: The Public Service Pensions (Exercise of Powers, Compensation and Information) Directions (Northern Ireland) 2023

The Public Service Pensions (Exercise of Powers, Compensation and Information) Directions (Northern Ireland) 2023 (finance-ni.gov.uk)

These are collectively referred to in this note as "the Directions".

Regulations

LGPS England and Wales: The Local Government Pension Scheme (Amendment) (No. 3) Regulations 2023:

The Local Government Pension Scheme (Amendment) (No. 3) Regulations 2023 (legislation.gov.uk)

LGPS Scotland: The Local Government Pension Scheme (Remediable Service) (Scotland) Regulations 2023:

The Local Government Pension Scheme (Remediable Service) (Scotland) Regulations 2023 (legislation.gov.uk)

LGPS Northern Ireland: The Local Government Pension Scheme (Amendment No. 2) Regulations (Northern Ireland) 2023:

The Local Government Pension Scheme (Amendment No. 2) Regulations (Northern Ireland) 2023 (legislation.gov.uk)

As at the date of this user guide, the LGPS Scotland 2023 and LGPS Northern Ireland 2023 Regulations are subject to amendments to bring the interest in respect of Part 4 tax loss in line with that set out in the LGPS England and Wales. Once these updates are made, it is expected that the 2023 Regulation references in this note will be the same for LGPS Scotland and Northern Ireland as for LGPS England and Wales.

The 2023 Regulation references in respect of Part 4 tax loss in this user guide and in the interest calculator are therefore currently with reference to LGPS England and Wales and will be updated once any relevant amendments to the LGPS Scotland and Northern Ireland 2023 Regulations are finalised.

Users should ensure that they are aware of the requirements made under prevailing legislation, including any amendments made in the future.

Interest rates (assumptions)

The interest rates set out in the calculator are based on GAD's understanding of the relevant legislations and reflect the interest rates applicable as at 1 July 2026.

The user should ensure the assumptions are up to date before using the calculator. The rates are subject to change and the user is responsible for ensuring the rates in the calculator are relevant for the purpose of the calculation. The user can change the rates directly in the calculator.

Judgments rate

For schemes which refer to The Public Service Pensions (Exercise of Powers, Compensation and Information) Directions 2022, this rate is set out in:

- For **LGPS England and Wales**: Judgments Act 1838

Judgments Act 1838 (legislation.gov.uk)

- For **LGPS Scotland**: Sheriff Courts (Scotland) Extracts Act 1892

Sheriff Courts (Scotland) Extracts Act 1892

For schemes which refer to The Public Service Pensions (Exercise of Powers, Compensation and Information) Directions (Northern Ireland) 2023, this rate is set out in:
- Rules of the Court of Judicature (Northern Ireland) 1980

Court Rules Publications | Department of Justice (justice-ni.gov.uk)

This rate is currently 8%. Note that if the 8% rate changes in the future, the Directions allow, in the interest of simplicity, for the calculation to use the median or average rate which applies over the relevant period (38(5) of the Directions).

HMRC repayment rates

The HMRC repayment rates are shown here:

HMRC interest rates for late and early payments - GOV.UK

The user can add new HMRC repayment rates in the tables on the *Assumptions* sheet of the calculator if required.

Note: there are blank rows in the HMRC repayment rates assumptions table. If these rows become full, further rows should NOT be added as this is the maximum number of assumption changes the calculator is built to accommodate. Instead, please contact GAD to update the calculator.

Mid-point calculations

Where the start date of interest is the mid-point of a period between two dates, the calculator works out the period as [end date – start date]. This means that the period is not inclusive of the end date. When the mid-point of this period is calculated, the result is rounded up. This approach is based on GAD's interpretation of the 2023 Regulations on mid-point dates (14(6) and 14(9)).

For example, this approach means that the period between 1 March and 31 March is treated as 30 days (31 March - 1 March). Half of the period is 15 days, so the calculator adds this to the start date (1 March + 15 days), resulting in a mid-point of 16 March. This date doesn’t need to be rounded up, so the final mid-point of this period according to the calculator falls on 16 March.

The period between 1 March and 30 March is treated as 29 days (30 March - 1 March). Half of the period is 14.5 days, so the calculator adds this to the start date (1 March + 14.5 days), resulting in a mid-point between 15 March and 16 March. As this date is halfway between two days, this is rounded up so that the final mid-point of this period according to the calculator falls on 16 March.

Any questions should be referred to MHCLG (for LGPS England and Wales), SPPA (for LGPS Scotland) or DfC (for LGPS Northern Ireland) in the first instance.

Annual vs daily interest rates

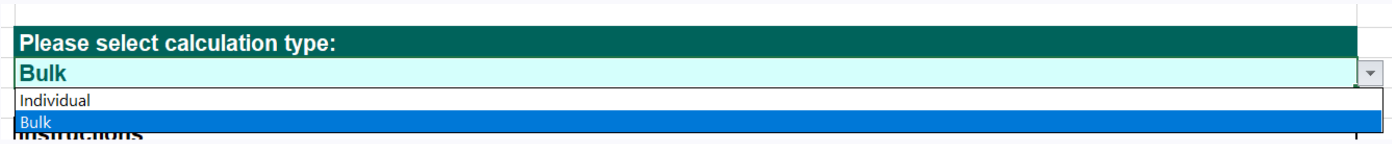
As standard, the calculator uses a divisor of 365.25 days to convert annual interest rates into daily rates. This can be changed to 365 on the assumptions tab.

Instructions

The calculator allows for both bulk and individual member entry. Instructions on how to use the calculator in both ways are set out below. Guidance can also be found on the corresponding *Inputs* sheets of the calculator.

Set calculation type

1. Go to the *Scope* sheet and find the box labelled “Please select calculation type”. Select either “Bulk” or “Individual” from the drop down menu as shown below.



Individual data input

1. If entering individual data, go to the *Inputs (Individual)* sheet.

2. Fill in the inputs at the top of the sheet (cells B6 to B12), where applicable for the selected payment type. Each input is explained in the Glossary of inputs section of this user guide.

3. The calculator processes one payment type at a time; if multiple payment types are required for a member then separate copies of the spreadsheet should be used, or use of the bulk input method as set out in the Bulk section can be used.

4. Look at the error count (cell B22) and ensure there are no errors with the inputs. Details of any errors are set out in rows 14 to 21. Where there is an error outstanding, no Output will be shown.

5. Proceed to the Obtaining the outputs section of the user guide.

Bulk data input

1. If entering bulk data, go to the *Inputs (Bulk)* sheet. On this sheet, data for multiple members and multiple payment types can be processed.

2. Fill in columns A to I of the inputs table, where applicable for the selected payment type, starting in row 25. Each input is explained in the Glossary of inputs section of this user guide.

3. The bulk calculation can only process one payment type per member ID per row. If multiple payment types are required, alternative Member IDs can be used per payment type (e.g. where interest calculations relating to a member’s pension payments and lump sum payment are required, alternative member IDs “Member1_Pension” and “Member1_LumpSum” may be used). The global ID can be used to identify a member or group of members in the outputs. An illustration of this is provided in the Example inputs.

4. Look at the error count (cell R23) and ensure there are no errors with the inputs. You can filter the error count column (column R) to identify rows which have failed checks. If there

are errors, error messages will display in the corresponding check column and data row, and outputs will not be displayed in the Outputs sheet for that member.

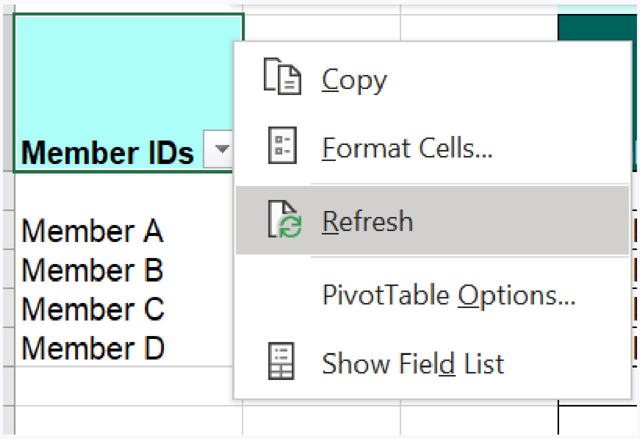
5. Proceed to the Obtaining the outputs section of the user guide.

Please note that this version of the spreadsheet allows for 500 rows of data to be entered as bulk data. This number was chosen for balance of bulk functionality, calculation speed and file size.

Obtaining the outputs

1. Proceed to the Outputs sheet. The Outputs sheet summarises key inputs and shows the total interest due. If any input checks have not been passed, the total interest due will not be displayed and an error message will be shown.

2. **If you are using the version of the calculator *without* macros**, you will need to refresh the pivot table labelled “Member IDs”. You can do this by right clicking on cell A22 and selecting “Refresh”. You can then view the outputs in the outputs table.



3. **If you are using the version of the calculator *with* macros**, the results will automatically update as you enter data.

4. **To check if you are using the version of the calculator with or without macros**, please see the “Workbook” heading in row two of any sheet of the calculator. The version with macros is labelled “McCloud Interest calculator - with macro”, while the version without macros is labelled “McCloud Interest calculator”.

Glossary of inputs

Input	Description
Member ID (bulk calculations only)	A unique identifier for each member (and payment type) you are entering.
Global ID (bulk calculations only)	An optional input for identifying a member or group of members in the output. This does not impact the calculations.
Effective date	The date the interest will be calculated up to.
Payment type	Select the payment type from the drop-down list. The interest method varies depending on the type of payment. Note: only a single payment type can be processed per member ID. If you wish to calculate interest on different payment types for a given person, this can be achieved using the Bulk data functionality by setting different member IDs for each payment type.
Lump sum payment date	If the payment is a lump sum payment (e.g. Member commuted lump sum), enter the date from which interest should apply (see Note A). Note: only a single lump sum can be processed at once. If you wish to calculate interest on different lump sum amounts for a given person, this can be achieved using the Bulk data functionality by setting different member IDs for each lump sum.
Earliest payment date	If the payment is not a lump sum (e.g. member pension) enter the start date that is required for the mid-point date calculations (see Note B)).
Payment amount	The amount of the remedy payment. This calculator determines the amount of interest applying to remedy payments owed to the member. These amounts should be input as a positive number.
Part 4 tax loss interest start date override	If interest should start from a specific date instead of the default 31 January following the relevant tax year, then this should be filled to specify that date.
Tax year for part 4 tax losses	For Part 4 tax losses, this should be the tax year to which the losses relate. The tax year should be in the format “yyyy”, e.g. the tax year 6th April 2015-5th April 2016 should be entered 2015.

Note A: 2023 Regulations 14(6)(b) and (c) set out the dates from which interest on one off payment types should apply.

Note B: 2023 Regulations 14(6)(a), (d) and (e) set out the mid-point dates from which interest on pension amounts should apply. The “Earliest payment date” input should be the start date for the mid-point date calculation.

Note C: 2023 Regulations* 15(5)(b) sets out the dates from which interest on Part 4 tax losses should apply.

* As set out earlier in this user guide, until amendments to the LGPS Scotland 2023 Regulations and LGPS Northern Ireland 2023 Regulations are finalised, this refers to LGPS England and Wales only.

The required date inputs are summarised below:

Payment type	2023 Regulations reference	Earliest payment date input requirement (to calculate mid-point)	Lump sum date input requirement	Tax losses input requirement
Member pension	14(6)(a)	day after member’s final underpin date	N/A	N/A
Member commuted lump sum	14(6)(b)	N/A	the earliest day from which the administering authority would have been able to make the payment for a lump sum paid under regulation 5(7)	N/A
Death grant, Club/Non-Club transfer out, Trivially commuted lump sum	14(6)(c)	N/A	the day on which the original payment was made	N/A
Survivors pension	14(6)(d)	day after member’s date of death	N/A	N/A
Pension credit member pension	14(6)(e)	day on which pension credit pension was put into payment	N/A	N/A
Part 4 tax losses	15(5)(b)**	N/A	N/A	The default date is the 31 January of the scheme year after that in which the part

				4 tax loss relates, however this can be overridden by the date on which the member made the payment if required.

** As set out earlier in this user guide, until amendments to the LGPS Scotland 2023 Regulations and LGPS Northern Ireland 2023 Regulations are finalised, this refers to LGPS England and Wales only.

Input checks

The checks in the input sheets are set out below.

Please note that these checks are intended to catch some common issues, but there is still a risk of errors that are not allowed for in these checks. As the outputs are very sensitive to differences in input data, we would recommend having a thorough process in place to check that all the user inputs and the interest methodology are correct to reduce the risk of the interest payment being incorrect.

Check	Description
Payment date consistency check	Checks that only one of the Lump sum payment and Earliest payment date is completed
Lump sum check	Checks that: • the Lump sum payment date is populated if the payment type is a lump sum • the Lump sum payment date is blank if the payment type is not a lump sum
Effective date check	Checks that Effective date is not blank
Payment amount check	Checks that Payment amount is greater than zero.
Payment type check (individual inputs only)	Checks that the payment type is from the allowable list
Payment type and member ID check (bulk inputs only)	Checks that the payment type is from the allowable list and no duplicated member ID is used.
Part 4 tax loss tax year check	This check is only triggered if the payment type selected is part 4 tax losses. This checks that: • The tax year is a valid number • The tax year is either 2008 or later and less than or equal to the current tax year. 2008 is the earliest tax year supported by the calculator because earlier tax years would produce an interest start date before the earliest interest rate period included in the calculator.
Part 4 tax loss override date check	This check is only triggered if the payment type selected is part 4 tax losses. This checks that: • The date inputted is in a valid format

	• The date is either on or after the 29th September 2009 and either on or before today's date. 29 September 2009 is the earliest date supported by the calculator because it is the start of the earliest interest rate period included in the calculator.
Part 4 tax loss input check	This check is only triggered if the payment type selected is part 4 tax losses. This checks that: • If the payment type is part 4 tax losses, either "Tax year for part 4 tax losses" or "Part 4 tax loss interest start date override" has been filled in.

Example inputs

Individual inputs

1. Example of a member who received pension payments totalling £60,000 starting 19th September 2017 but should have received a total of £80,000. The inputs required to calculate the interest applying to the remedy amount of £20,000 (£80,000 - £60,000) up to 16 March 2024 would be input as follows:

Government Actuary's Department		
Workbook:	**McCloud Interest calculator - with macro**	
Worksheet:	**Inputs (Individual)**	
Location:		
Effective date	16/03/2024	This the date the interest will be calculated up to
Payment type	Member Pension	
Lump sum payment date		**All payment types except part 4 tax losses:** If the Payment
Earliest payment date	19/09/2017	**All payment types except part 4 tax losses:** If the Payment
Payment amount	£20,000.00	Enter the total payment amount. This calculator determines the
Tax year for part 4 tax losses		**Part 4 tax losses only:** this should be the tax year to which th
Part 4 tax loss interest start date override		**Part 4 tax losses only:** If this is not populated, the interest sta
Payment date consistency check	PASS	
Lump sum check	PASS	
Effective date check	PASS	
Payment amount check	PASS	
Payment type check	PASS	
Part 4 tax loss tax year check	PASS	
Part 4 tax loss override date check	PASS	
Part 4 tax loss input check	PASS	
Error count	-	

2. Example of a member who previously retired, is due an addition to their pension account in respect of the underpin, and has elected to commute some of their final guarantee amount to receive £25,000 of lump sum. The earliest the administering authority would have been able to make the payment of the top up lump sum is 1 May 2024. The inputs required to calculate the interest applying to the remedy amount of £25,000 up to 31 May 2024 would be input as follows:

Government Actuary's Department		
Workbook:	McCloud Interest calculator - with macro	
Worksheet:	Inputs (Individual)	
Location:		
Effective date	31/05/2024	This the date the interest will be calculated up to
Payment type	Member commuted lump sum	
Lump sum payment date	01/05/2024	**All payment types except part 4 tax losses:** If the Payment
Earliest payment date		**All payment types except part 4 tax losses:** If the Payment
Payment amount	£25,000.00	Enter the total payment amount. This calculator determines the
Tax year for part 4 tax losses		**Part 4 tax losses only:** this should be the tax year to which th
Part 4 tax loss interest start date override		**Part 4 tax losses only:** If this is not populated, the interest sta
Payment date consistency check	PASS	
Lump sum check	PASS	
Effective date check	PASS	
Payment amount check	PASS	
Payment type check	PASS	
Part 4 tax loss tax year check	PASS	
Part 4 tax loss override date check	PASS	
Part 4 tax loss input check	PASS	
Error count	-	

3. A member has a Part 4 tax loss relating to the 2018/19 tax year, so the user enters 2018 in the Year column. By default, the calculator would calculate interest from 31 January 2020, being the 31 January following the relevant tax year. However, if the member made the relevant tax payment on 1 May 2019, the user can enter 01/05/2019 in the Part 4 tax loss interest start date override column so that interest is calculated from that date instead.

Government Actuary's Department		
Workbook:	McCloud Interest calculator - with macro	
Worksheet:	Inputs (Individual)	
Location:		
Effective date	16/10/2024	This the date the interest will be calculated up to
Payment type	Part 4 tax losses	
Lump sum payment date		**All payment types except part 4 tax losses:** If the Payment
Earliest payment date		**All payment types except part 4 tax losses:** If the Payment
Payment amount	£1,000.00	Enter the total payment amount. This calculator determines the
Tax year for part 4 tax losses	2018	**Part 4 tax losses only:** this should be the tax year to which th
Part 4 tax loss interest start date override	01/05/2019	**Part 4 tax losses only:** If this is not populated, the interest sta
Payment date consistency check	PASS	
Lump sum check	PASS	
Effective date check	PASS	
Payment amount check	PASS	
Payment type check	PASS	
Part 4 tax loss tax year check	PASS	
Part 4 tax loss override date check	PASS	
Part 4 tax loss input check	PASS	
Error count	-	

Bulk inputs

If the three inputs outlined above were all relating to Member 1, they could be entered into the Inputs (bulk) sheet as follows (alongside a calculation in respect of Member 2):

Member ID	Global ID	Effective da	Payment type	Lump Sum payment da	Earliest payment da	Payment amount	Part 4 tax loss interest start date overrid	Tax year for part 4 tax losses
Member 1_pensio	Member 1	16/03/2024	Member Pension		19/09/2017	£20,000.00		
Member 1_lump s	Member 1	31/05/2024	Member commuted lump sum	01/05/2024		£25,000.00		
Member 1_Part 4 t	Member 1	16/10/2024	Part 4 tax losses			£1,000.00	01/05/2019	2018
Member 2	Member 2	01/03/2024	Survivors pension		10/04/2019	£5,000.00		

Change log

v2.0 Incorporates LGPS Scotland and LGPS Northern Ireland as well as LGPS England and Wales

Also incorporates the option to switch from an annual divisor of 365.25 to 365.

V3.0 Incorporates changes that add Part 4 tax losses functionality