TEST REPORT

Release of 24 November 2026

Calculate My Pension · Prepared by Ed Jackson, Calculate My Pension Ltd · Published 24 November 2026

Summary

This release corrects the year income tax thresholds start rising after the current freeze. It adds two Premium settings: Model a Level Income, for a retirement income that stays at the same cash amount each year, and State Pension Abroad, for a State Pension that's frozen while you live abroad. It also improves ERIC's answers on LGPS pensions and on DB pensions already being paid, and adds this How We Test page.

Testing	What was done	Result
Unit testing	Each change checked while it was built, against figures worked out separately	2,044 tax checks, 1,218 level income checks and 983 State Pension Abroad checks, all passed
Regression testing	257 test plans run on the release copy of the site	All 257 matched
ERIC testing	ERIC's new page information checked in the browser, and 3 questions asked	All 3 answered correctly; level income not yet asked about

How we test

Unit testing. Every new feature and fix is checked while it's built. We work out the figures separately, by hand or in a spreadsheet, using official sources such as HMRC's manuals, and compare them with the calculator's. We also run the existing test plans with the new feature switched off, to show nothing else has moved, and check the screens, PDF report and downloads in the browser. These checks are made on our development copy while the change is built. The release copy is then tested in full by the regression testing below.

Regression testing. We keep a library of test plans: made-up households covering single people and couples, many kinds of pension and savings, tax in Scotland and the rest of the UK, market crashes and more. For each plan we store results that have already been checked: every figure for every year of the plan. Before a release, every plan is run on the release copy and every figure is compared with the stored one. Any difference stops the release until we know why.

ERIC testing. ERIC words its answers differently each time, so they can't be compared word for word. We ask sets of real questions on test plans, as free and Premium users, and check that each answer quotes the figures on screen, explains rather than recommends, has links that open the right part of the page, and follows the free and Premium rules.

1. Unit testing

1.1 Income tax thresholds after the freeze (a fix)

What changed. Income tax thresholds are frozen until 5 April 2031, so 2031/32 is the first tax year they rise with inflation. CMP had the first rise a year late, in 2032/33, so every later year was a year behind. This affected the personal allowance and the tax bands (rest of the UK and Scotland), the National Insurance thresholds, the £100,000 taper start if you choose to index it, the capital gains tax exempt amount on a property sale, and the Lump Sum Allowance if you choose to index it. Nothing before 2031/32 changes. It was fixed straight away, as a correction to figures shown to users.

How it was found. By our independent check of how tax thresholds change in future years: 640 cases comparing CMP's allowance, band limits and tax, to the penny, with figures worked out separately from the rules. Before the fix, 400 of the 640 differed, and every one of them matched a rise exactly one year late.

How we tested the fix

- **Tax thresholds in future years:** all 640 cases now match, on the release copy's calculator.
- **Income tax:** the 844 independent checks of the rules, rates and bands were run again. All passed.
- **Tax on property income, dividends and savings:** the 560 independent checks were run again. All passed.

> **Worked example.** Someone in the rest of the UK with £45,000 of income and 2% inflation. In 2031/32 the personal allowance should rise by one year of inflation: £12,570 × 1.02 = £12,821.40. CMP had kept it at £12,570, and charged £50.28 too much tax that year. It now uses £12,821.40.

1.2 State Pension Abroad (Premium)

What changed. You can now model moving to a country where the UK State Pension is frozen, and coming back if you choose. From the later of the year you move and the year your State Pension starts, it stops rising. In the year you come back it returns to the full UK rate, with no back pay. A couple can choose whether the partner's State Pension is frozen too. The Timeline, the PDF report, the Excel download and ERIC all show it.

How we tested it

- **Nothing else moved:** 960 runs of the test plans with the setting off, free and Premium, with and without a market crash, gave identical results.
- **With the setting on, 23 checks by hand against the normal plan's own figures:**
  - frozen after State Pension age, with and without a return to the UK
  - moving before State Pension age
  - already retired, where the confirmed April 2027 rise is lost
  - a deferred State Pension
  - retiring after State Pension age
  - couples, with the partner frozen too and not, including a partner whose State Pension starts part way through a year
  - a historic market scenario with 6% inflation, where the scenario's rises are lost while frozen and the full amount comes back on return
  - the frozen years marked in the results, for the Timeline and PDF steps
- **On screen:** the setting on the Withdrawal Strategy tab, its helper line, the Timeline steps and the PDF guide. Saved to an account and loaded back.
- **The checks were repeated** after the last change to the calculator for this feature.

> **Worked example.** A State Pension of £17,010 a year at 67. Moving abroad in 2030 with no return: £17,010 a year from 67 onwards. Moving in 2030 and returning in 2040: £17,010 a year from 67 to 70, then the full UK rate of £19,144 at 71, the same as in the plan without the setting.

What isn't modelled

- Tax in the country you move to, and tax treaties
- The rule on returning within 5 years
- Exchange rates
- National Insurance after you leave the UK, and ISA contributions while you live abroad

The frozen figure is the gross State Pension. Its net figure can still rise slightly after 2031, because the personal allowance it's taxed against rises with inflation.

1.3 Model a Level Income (Premium)

What changed. A new Level Income switch, on the Withdrawal Strategy tab. With it on, your target retirement income stays at the same cash amount every year from retirement, instead of rising with inflation. Because the income doesn't rise, more can usually be afforded at the start. Your State Pension, DB pensions and annuities keep their own increases. For a couple it's one setting for the household. The headline figures stay in today's money.

How we tested it

- **Nothing else moved:** 1,182 runs of the test plans with the switch off, free and Premium, with and without a market crash, gave identical results.
- **With the switch on, 36 checks:**
  - the income and target stay level in cash from retirement, and nothing changes before retirement
  - 0% inflation gives the same result as before
  - an income step-down on top of a level income
  - someone already retired, level from now
  - a free plan ignores the switch
  - the target stays level through a high-inflation historic scenario
  - the Stress Test judges a level plan against its own level target, and a crash and the 1973 scenario give identical results to before at the defaults
  - couples: both targets level in cash, the household income level, and the household shortfall consistent
- **On screen:** the switch saves and loads back, including a newer save from another device. We checked the Income Breakdown chart: level in cash until the State Pension and other pensions, which still rise, exceed the level target.

> **Worked example.** One test plan can afford £36,372 a year at 60 with an income that rises with inflation, and £50,928 a year with a level income. A couple's test plan goes from £66,508 to £91,359 a year.

What isn't modelled yet. An income that's level for a set period and then rises with inflation ("Level For A Period") is planned for a later release.

1.4 How We Test page

A new public page showing how each release is tested, with a PDF test report for each. It doesn't change any calculation. It was checked in the browser at desktop and phone widths, and its PDF downloads were checked.

2. Regression testing

Run. The full suite was run on the release copy of the site on 24 November 2026: all 257 test plans matched. The report confirmed that the site being tested was running the release copy's own calculator. This was also the first full run to include Model a Level Income.

Group of test plans	Plans
Core features	133
Feature combinations	18
Premium features	37
Stress Test and historic scenarios	25
NHS pensions	27
LGPS pensions	17
Total	**257**

What's compared. For each plan: the headline figures; every figure in every year of the plan (about 98 a year, and household totals for couples); the inputs the calculator actually used; and, where they apply, the Stress Test, NHS and LGPS summaries. About 1.45 million figures in all.

Kind of figure	Must match to within
Allowance trackers (tax-free cash, annual allowance)	£1
Affordable income	0.5% (at least £5)
Ages	0.1 of a year
Fund and account balances	0.1% (at least £50)
All other amounts	0.1% (at least £1)

Plans changed on purpose (255), all because of the tax threshold fix. The fix was first run against the stored results of the previous release, which reproduced them exactly (257 of 257). With the fix, 255 plans moved. Every difference was analysed before the stored results were replaced:

- **211 plans** first differ in 2031/32 or later (2036/37 or later with 5 extra freeze years). That's the fix itself.
- **44 plans** also differ before 2031. They're all people already drawing an income with a shortfall, where CMP spreads what's affordable over the whole plan. Lower tax from 2031/32 means slightly more income now. The tax rules for those earlier years are unchanged.
- **2 plans** didn't change, as expected: one with 0% inflation, where indexing makes no difference, and one ending before its retirement age.

Four plans were checked by hand, year by year, to the penny:

Plan	Years checked	Result
Rest of UK, already retired, 2.5% inflation	2029/30 to 2032/33, 2040/41, 2050/51	Matches the corrected rule. Example, 2031/32: £35,301.08 taxable, £4,483.37 tax (£4,543.17 a year late)
Rest of UK, retiring at 60	2050/51	Matches: £2,200.63 (£3,085.04 a year late)
Scottish taxpayer	2045/46	Matches: £412.45 (£419.08 a year late)
5 extra freeze years, 4% inflation	2043/44, 2060/61	Matches: £449.13 and £10,928.92 (£459.42 and £11,195.87 a year late)

In each case the old stored results matched "a year late" exactly, and the new results match the rule. The old stored results were archived before they were replaced, and the suite then matched 257 of 257 on the new ones.

Model a Level Income and State Pension Abroad are both off by default, so no existing plan changed because of them.

New test plans: none in this release.

Limits. The test plans can't cover every combination of inputs. The suite reads the figures after a plan loads; it doesn't check how charts and tables are drawn. The tests run as if today were 1 June 2026.

3. ERIC testing

Changes to ERIC in this release

- **LGPS pensions:** ERIC is now given worked figures for each member: when the pension starts, the pension and lump sum at every age it can be taken, each part from the statement figure to the projected one, and the death benefits. Checked in the browser for an England & Wales member still paying in and a Scottish member who'd left. Two questions were answered correctly. Asked "How much would my LGPS pension be if I took it at 63?", ERIC gave £11,172 retiring at 60 and £13,385 working on to 63, matching the plan.
- **DB pensions already being paid:** ERIC no longer applies scheme start ages, reductions or lump sums to a pension that's already being paid. Checked with the setting off and on for generic DB, NHS and LGPS pensions. One question was answered correctly.
- **Model a Level Income:** ERIC is given notes on the setting and a line saying whether it's on. ERIC hasn't yet been asked about a level income plan.
- **State Pension Abroad:** ERIC is given the setting and, for each person, the years frozen and the amounts. It now explains that the Income Breakdown chart shows net income, so a frozen State Pension's bar can still rise slightly. The figures ERIC reads were checked in the browser.

Still open from the last release. The 3 wrong or incomplete answers found on 23 November (an NHS lump sum, a partner's NHS pension, and LGPS mode switched off) haven't been fixed yet. Fixing them is planned for a coming release.

What testing doesn't cover

- The test plans are made-up households, so they can't cover every combination of inputs.
- The calculator checks look at the figures, not at how the charts and tables are drawn.
- ERIC can still get things wrong. If you spot a wrong answer, please use Report a Bug.
- CMP's projections rest on assumptions, and they aren't financial advice.

Questions about this report: ed@calculatemypension.co.uk