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HMRC internal manual

Corporate Intangibles Research and Development Manual

From: [HM Revenue & Customs](#)
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CIRD112100 - R&D Tax Reliefs: reformed reliefs: new RDEC: calculation: payment steps

The steps are broadly similar to those for the old RDEC scheme, but:

- a lower rate of notional tax restriction at step 2 is available to small profit-makers and to loss-makers.
- the PAYE cap is different (see [CIRD140000](#) (<https://www.gov.uk/hmrc-internal-manuals/corporate->

[intangibles-research-and-development-manual/cird140000\)\)](#)

Please also note that the language used in the new legislation differs slightly in some places from that in the predecessor legislation (old Chapter 6A of Part 3 CTA 2009).

CTA09/S1042I - Redemption of value of expenditure credit

The steps are not the claim to RDEC. Rather, they determine how the RDEC is to be treated once it has been claimed. The steps also apply where there is an amount of RDEC carried forward from a previous period under step 3, even if there is no new claim.

Before the 7 steps are considered, any step 2 amount brought forward from a previous AP must be used to discharge (pay) the company's CT liability for the accounting period.

Step 1 - Discharge of CT in the present accounting period

Credit to which the company is entitled and which it claims (the “step 1 amount”) is used to discharge all or part of the company’s remaining liability to corporation tax for the present accounting period. The step 1 amount includes:

- the gross RDEC claimed for the present accounting period
- any amount of RDEC brought forward from a previous accounting period under Step 3 (CTA09/S1042J)

Note that amounts of old RDEC carried forward under old step 3 are also included, but see below under step 2 for the transitional treatment that applies to these.

Any amount remaining after step 1 is subject to step 2.

Step 2 - Notional tax deduction

If there is a notional tax deduction (CTA09/S1042K), this is deducted from the amount carried forward from step 1.

The notional tax deduction is the amount – if any – by which the amount remaining from step 1 exceeds the amount of the gross RDEC actually claimed for this accounting period (i.e. excluding any RDEC step 3 amount carried forward from a previous period under CTA09/S1042J, per CTA09/S1042K(9)) net of notional tax at the applicable rate.

For non-ring fence trades, the applicable rate is:

1. For companies with profits chargeable to the main rate of CT before the RDEC is accounted for, the main rate of CT. A company able to benefit from marginal relief still has profits chargeable at the main rate, even though its effective rate of tax is lower than the main rate.
2. For other companies, the small profits rate.

For ring fence trades, substitute in the foregoing “main ring fence profits rate” for “main rate” and “small ring fence profits rate” for the “small profits rate”.

Any amount deducted under this step may be surrendered to a group company (CTA09/S1042L(2) & S1042N). To the extent that it is not surrendered, it is carried forward and must be used to discharge CT liability for any subsequent accounting period (CTA09/S1042L(3)).

Any amount remaining after step 2 is subject to step 3.

Example 1

A company claims £300,000 RDEC for an AP, with £250,000 carried forward from a previous AP under step 3. The step 1 amount is £550,000. £200,000 of CT is discharged at step 1. The amount carried forward to step 2 is £350,000. The

applicable rate is 25%. The amount of the RDEC claimed for the period (£300,000) less tax at the notional rate (25%) is £225,000. This is lower than £350,000. A notional tax deduction of £350,000 - £225,000 = £125,000 is applied, and carried forward (step 2 notional tax carry forward) to be set off against CT in future periods. The amount carried forward to step 3 is £225,000.

Transitional treatment of step 3 carry forward from old RDEC claim

Please note that in the first accounting period where there is an amount of RDEC carried forward under step 3 from a period beginning before 1 April 2024 (and so the carry forward is effected by the now repealed Step 3 (b) of CTA09/S104N, rather than by CTA09/S1042J), this is not excluded from the amount subject to notional tax at the applicable rate in working out the notional tax deduction at new step 2 .

Example 2

A company with no PAYE or NIC liabilities draws up its accounts to 31 March. It claims old RDEC in the accounting period ended 31 March 2024, which results in an amount of RDEC carried forward under old step 3 (CTA09/S104N) of £100,000, in excess of its PAYE cap. In the accounting period ended 31 March 2025, it claims £10,000 of new RDEC. The amount carried forward is treated as an amount of RDEC to which the company is entitled for this period, increasing the RDEC for that period from £10,000 to £110,000. This means that the Step 1 amount is now £110,000, but in this example none of this is used because the company has no CT liability. The lower of £110,000 and $£110,000 \times (100\% - 19\%) = £89,100$ is carried forward to step 3, with notional tax arising at step 2 of $£110,000 - £89,100 = £20,900$. In this example, the company's new PAYE cap amount (see [CIRD140000](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird140000) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird140000>)) is £20,000. This results in a step 3 carry forward amount arising in 2025 of

(CTA09/S1042J) of £89,100 - £20,000 = £69,100.

When the calculation is carried out in the accounting period ended 31 March 2026 the treatment is different. For this 2026 accounting period the £69,100 step 3 carried forward figure is excluded from the step 2 calculation (per CTA09/S1042K(9)).

Step 3 - PAYE Cap

Unless the company is exempt (see [CIRD140000 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird140000\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird140000)) any amount remaining from step 2 exceeding the PAYE cap is deducted and treated as an amount of credit to which the company is entitled for the next accounting period (CTA09/S1042J). Note that no new claim to a gross RDEC in the subsequent accounting period need be made for the entitlement to arise.

The amount of the PAYE cap (CTA09/S1112B) is £20,000 plus 300% of the company's relevant PAYE and NIC liabilities. Further guidance is available at [CIRD140000 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird140000\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird140000).

Any amount remaining after step 3 is subject to step 4.

Step 4 - Discharge of CT liability for other period(s)

Any amount remaining after step 3 is to be applied in discharging any liability of the company to pay corporation tax for any other accounting period.

Any amount remaining after step 4 is subject to step 5.

Step 5 - Group surrender

If the company is a member of a group, it may surrender the whole or part of any amount

remaining after step 4 to any other member of the group (CTA09/S1042N).

Any amount remaining after step 5 is subject to step 6.

Step 6 - Other liabilities

Any amount remaining after step 5 is to be applied in discharging any other liability of the company to pay a sum to HMRC under any other head of duty (e.g. VAT, PAYE, &c.) or under a contract settlement.

Any amount remaining after step 6 is subject to step 7.

Step 7 - Credit payable

Any amount remaining after step 6 is payable to the company, subject to the following conditions:

1. The company met the going concern condition when it made the claim (CTA09/1112F – see [CIRD191000 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird191000\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird191000))
2. There is no enquiry, and the company's PAYE and VAT liabilities are up to date (CTA09/S1112H). In case of enquiry, see [CIRD80525 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird80525\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird80525) regarding interim payments of amounts not in dispute.

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