

Beta This part of GOV.UK is being rebuilt – [find out what beta means \(/help/beta\)](#)

HMRC internal manual

Corporate Intangibles Research and Development Manual

From: [HM Revenue & Customs](#)
([/government/organisations/hm-revenue-customs](#))

Published 11 March 2016

Updated: 10 September 2025 - [See all updates](#)

[Back to contents](#) > [CIRD80000](#) > [CIRD100000](#)

CIRD140000 - R&D Tax Reliefs: reformed reliefs: PAYE cap

Cap by reference to PAYE and NIC liabilities
CTA09/S1112B

The amount of the PAYE cap for claims under both the merged scheme RDEC (“new RDEC”) and enhanced R&D intensive support (ERIS) is £20,000 plus 300% of the company’s relevant PAYE and National Insurance Contributions (NIC) liabilities (CTA09/S1112B(2)) for payment periods within the accounting period. If the accounting period is of less than 12 months duration, the

amount of £20,000 is proportionately reduced (CTA09/S1112B(3)).

Under new RDEC₂, the PAYE cap (where applying) limits the amount of payable credit the company can receive in the accounting period for which it claims by applying a restriction at step 3 of the payment steps (see [CIRD112100](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird112100) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird112100>)). Any excess over the cap is carried forward and treated as an amount of RDEC to which the company is entitled for the next accounting period.

Under ERIS, any claim for tax credit in excess of the cap (where applying) is invalid.

The PAYE cap does not apply if the company is exempt (see below).

Relevant PAYE and NIC liabilities CTA09/S1112C & S1112D

These must be identified for each payment period falling within the accounting period for which the claim is made.

“Payment period” is defined at CTA09/S1141 as a period:

- which ends on the 5 day of the month and
- for which the company is required to account to for income tax and national insurance contributions to an officer of Revenue and Customs.

The starting point (step 1) is the company’s own liabilities, to which are added liabilities of any connected company supplying the company with EPWs or performing R&D contracted out by the company, where these liabilities are attributable to this (step 2). Finally, any element of the company’s own PAYE and NIC liabilities that is attributable to supply of EPWs or performance of R&D contracted out to the company by any connected

company is removed (step 3). The steps are set out in detail below.

Identify the company's total PAYE and NICs liabilities for the payment period, per CTA09/S1112D. This is the sum of amounts A and B, where:

- amount A is the total amount of income tax for which the company is required to account to an officer of Revenue and Customs under PAYE regulations for the payment period (CTA09/S1112D(2)), disregarding any deduction the company is authorised to make in respect of child tax credit or working tax credit (CTA09/S1112D(3))
- amount B is the total amount of Class 1 national insurance contributions for which the company is required to account to an officer of Revenue and Customs for the accounting period (CTA09/S1112D(4)), disregarding any deduction the company is authorised to make in respect of any of the following (CTA09/S1112D(5)):
 - statutory maternity pay
 - statutory adoption pay
 - statutory paternity pay
 - statutory shared parental pay
 - statutory parental bereavement pay
 - child tax credit
 - working tax credit

Add any amount produced by the application of CTA09/S1112C(4) or (6) to the company as company A (see below).

Deduct any amount product by the application of CTA09/S1112C(4) or (6) to the company as company B (see below).

PAYE & NIC liabilities in respect of EPWs supplied by connected companies (CTA09/S1112C(4))

Per CTA09/S1112C(3), an amount is produced by CTA09/S1112C(4) if:

- Company A and another company, Company B, are connected (whether by law or as a result of a joint election under CTA09/S1130 - see [CIRD137000 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird137000\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird137000))
- Company A incurs EPWs costs on EPWs provided by Company B
- Company B incurs staffing costs in respect of EPWs provided to A

Where these conditions are met, the following formula is applied for each of the affected EPWs and the results are added together to give the CTA09/S1112C(4) amount.

$$X (Y / Z)$$

Where:

- X is the amount of expenditure that (a) has been incurred on staffing costs by company B in providing the worker for company A, and (b) forms part of the total amount of company B's PAYE and NIC liabilities for the payment period (see section 1112D)
- Y is the amount of company A's expenditure on the externally provided worker that has been taken into account in calculating the amount of company A's qualifying expenditure for the payment period
- Z is the total amount of company A's qualifying expenditure on the externally provided worker (within CTA09/1127 - see [CIRD137000 \(https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird137000\)](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird137000)) for the payment period

PAYE & NIC liabilities in respect of connected contractor payments (CTA09/S1112C(6))

Per CTA09/S1112C(5), an amount is produced by CTA09/S1112C(6) where:

- Two companies (A and B) are connected.
- Company A incurs qualifying contractor expenditure (see [CIRD138000](https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird138000) (<https://www.gov.uk/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird138000>))
- Company B incurs staffing costs in the payment period in undertaking on behalf of company A any of the R&D to which that expenditure is attributable.

The amount produced by CTA09/S1112C(6) is so much of the staffing costs of B that form part of B's PAYE and NIC liabilities for the payment period.

Exemption for companies actively managing intellectual property CTA09/S1112E

The PAYE cap does not apply in accounting periods where a company meets both conditions A and B.

Condition A

A company meets this condition if it is creating or preparing to create relevant intellectual property (IP) or if it is performing significant management activities in relation to relevant IP that it holds.

These activities must be undertaken wholly or mainly by employees of the company. This does not include directors of the company (unless they are employees).

Meaning of creating, or preparing to create relevant IP (CTA09/S1112E(2)(a) and (b))

A company that is carrying on R&D will satisfy this part of the test (even if the R&D is, ultimately, abortive) as will a company that is carrying out preparatory work before undertaking R&D (for example, scoping a project or seeking to

understand potential markets). But the activity (whether creating, or preparing to create, IP) must be undertaken wholly or mainly by the company's own employees – it cannot for example be met by subcontracting R&D.

Performing management activities (CTA09/S1112E(2)(c))

Examples of “management activity” in relation to intellectual property are formulating plans and making decisions in relation to the development or exploitation of the intellectual property.

This could include activity such as registering a patent or undertaking litigation. Such activities can involve engaging external professionals such as lawyers or patent agents who will not be employees.

Again, the management activity must be undertaken wholly or mainly by employees of the company. This does not include directors of a company (unless they are employees). The condition does not require professionals such as those mentioned above to be employed by the company themselves, but the company must – via its employees – be managing that work and managing its relationship with the professionals.

The intellectual property being managed here must be owned by the company. Holding an exclusive licence for the IP will not meet this test. [The test does not require that all the IP arising from the company's past R&D be owned.]

Companies must be performing a significant amount of management activities in relation to relevant IP.

Meaning of relevant intellectual property

Intellectual Property means any patent, trademark, registered design, copyright, design right or plant breeder's right, or any rights under the law of a country or territory outside the United Kingdom

which correspond or are similar to these. This can include know-how and trade secrets.

To allow know-how or trade secrets to qualify as relevant IP they must derive from R&D or from carrying on R&D and the greater part by value of the intellectual property must be created by the company.

Condition B

Condition B is that the sum of qualifying expenditure incurred in the accounting period on

- subcontractors provided by connected companies
- EPWs provided by connected companies

does not exceed 15% of the company's qualifying R&D expenditure for the period. This includes qualifying expenditure, where parties have jointly elected to be treated as connected.

← **Previous page**

(/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird130000)

→ **Next page**

(/hmrc-internal-manuals/corporate-intangibles-research-and-development-manual/cird150000)



OGI

All content is available under the [Open Government Licence v3.0](#), except where otherwise stated



© Crown copyright