

Director Insights Top Mistakes Made R&D Tax 2024

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Contents

Problem 1: Understanding What Qualifies as an Advance	. 4
Criteria for Qualifying Advances	. 4
High-level Examples of Advances in Science or Technology	. 5
Supporting the Justification of Advances	. 5
Problem 2: Understanding What Qualifies as a Scientific or Technological Uncertainty	. 7
Criteria for Scientific or Technological Uncertainties	.7
Examples of Scientific or Technological Uncertainties	. 8
Problem 3: Application of an Appropriate Financial Methodology	10
The high-level steps taken to calculate the R&D benefit	10
Best Practices for Identifying and Calculating R&D Expenditure	10
Identification of R&D Expenditure1	11
Calculating R&D apportionments1	11





Top Mistakes Made in R&D Tax

Navigating the complexities of Research and Development tax relief can be challenging, particularly when it comes to understanding what qualifies as an advance in science or technology, identifying scientific or technological uncertainties, and applying appropriate financial methodologies. This document aims to address common mistakes and misconceptions in these areas, providing clear guidelines and examples to help ensure robust and justifiable R&D tax claims.

The first section delves into the criteria for qualifying advances, emphasising the importance of achieving an overall advance in a recognised field of science or technology, rather than merely within the claimant company's own knowledge base. The second section clarifies what constitutes a scientific or technological uncertainty, distinguishing it from routine business challenges. Finally, the third section outlines best practices for identifying and calculating qualifying R&D expenditure, highlighting the need for appropriate methodologies to support the integrity of the claim.

By following the guidance provided in this document, companies can better navigate the R&D tax relief process, ensuring their claims are both accurate and compliant with the Department of Science, Innovation and Technology (DSIT) guidelines.





PROBLEM 1: UNDERSTANDING WHAT QUALIFIES AS AN ADVANCE

There is a common misunderstanding in R&D tax that, if something is innovative or 'new-to-market', this constitutes an advance in science or technology, thus qualifying for R&D tax relief. However, in order for a project or activities within a project to qualify for R&D tax relief, the advance sought must represent an overall advance in a recognised field of science or technology (in other words, advancing the overall baseline level of knowledge or capability in the relevant field of science or technology). This must not just be the claimant company's own state of knowledge or capability alone, but the wider field of science or technology.

CRITERIA FOR QUALIFYING ADVANCES

To justify if a project is seeking to achieve an advance, the technical narrative must clearly satisfy section 9 of the DSIT (Dept of Science, Innovation and Technology) guidelines, which states that a project seeks to:

- a. extend overall knowledge or capability in a field of science or technology; or
- b. create a process, material, device, product or service which incorporates or represents an increase in overall knowledge or capability in a field of science or technology; or
- c. make an appreciable improvement to an existing process, material, device, product or service through scientific or technological changes. or.
- d. use science or technology to duplicate the effect of an existing process, material, device, product or service in a new or appreciably improved way (e.g. a product which has exactly the same performance characteristics as existing models, but is built in a fundamentally different manner).

If referring to 9c or 9d, the improvement sought should be more than a minor or routine upgrading and should represent something that would generally be acknowledged by a competent professional working in the field as a genuine and non-trivial improvement.



HIGH-LEVEL EXAMPLES OF ADVANCES IN SCIENCE OR TECHNOLOGY

- Development of a new polymer paint formulation with a surface roughness average of 0.4 microns, reducing bearing seizures without impacting the wear resistance properties
- 2. Development of a new/novel drug intervention x which aims to appreciably improve clinical outcomes for patience with disease y.
- 3. Development of a generative AI-integrated functionalities to refine construction management technologies by enabling novel 3D data capabilities and technology scalability.

SUPPORTING THE JUSTIFICATION OF ADVANCES

To support the justification of the advance being sought, it is essential that the technical narrative also include a strong explanation of how the project addresses the limitations in the baseline level of overall knowledge or capability in the given field of science or technology. The baseline is the current widely accepted level of knowledge and state-of-the-art capability in your industry/field of science or technology – not solely your company's own state of knowledge or capability alone.

High-level examples of the baseline supporting the aforementioned advances include:

- 1. A polymer overlay is applied to the surface of a bearing to reduce friction and prevent seizures. The surface roughness is typically 0.8 microns.
- 2. There is a lack of understanding in the field of biomedical science regarding the pathological mechanisms for disease x. Existing therapeutic strategies and drug interventions for patients is limited. Consequently, patients with disease x currently experience poor clinical outcomes.
- 3. Existing solutions do not have the capability to offer a one-size-fits-all LiDARscanned data ingestion, analysis, and processing mechanism, as the sought after solution required.

In summary, when preparing a technical narrative for an R&D tax claim, it is important to clearly explain the following:





- How the project seeks to achieve an advance as per paragraph 9 of the DSIT guidelines in overall baseline knowledge or capability in a recognised field of science or technology; and
- How the project addresses the limitation in the baseline level of overall knowledge or capability in the given field of science or technology.



PROBLEM 2: UNDERSTANDING WHAT QUALIFIES AS A SCIENTIFIC OR TECHNOLOGICAL UNCERTAINTY

Frequently we see claimants mistake time consuming activities or business challenges for scientific or technological uncertainties. A scientific or technological uncertainty is the state of not knowing whether your advance is possible in theory or in practice, and the knowledge to resolve this is not readily available or deducible by a competent professional working in the field (section 13 of the DSIT guidelines). In other words,

- Did you know if it was scientifically possible or technologically feasible at the beginning of the project?
- Did you know how to achieve it in practice?
- Why was the solution not straightforward to achieve by a competent professional working in the relevant field?

CRITERIA FOR SCIENTIFIC OR TECHNOLOGICAL UNCERTAINTIES

To justify the scientific or technological uncertainties faced, the technical narrative must clearly satisfy 13 of the DSIT guidelines by including the following:

- An explanation of what was not known to be scientifically possible or technologically feasible to achieve in the claimant's R&D project during the financial period.
- An explanation as why this would be non-readily deducible to competent professional (i.e., expert) in the stated field of science or technology. Uncertainties that can readily be resolved by a competent professional working in the field are not scientific or technological uncertainties.
- An explanation of why existing knowledge or technologies currently available could not be used to resolve the uncertainty.
- An explanation as to why the uncertainty could be resolved by conducting an R&D project, involving non-trivial activities including design, testing, prototyping, analysis, modelling etc.



EXAMPLES OF SCIENTIFIC OR TECHNOLOGICAL UNCERTAINTIES

High-level examples of scientific or technological uncertainties, relating to the examples provided in "problem 1" of this article, include

- The formulation of solid constituents and liquid agents required to improve the surface roughness was not known. Additionally, it was not known if the changes to the formulation would adversely impact the wear resistance properties, therefore decreasing the useful lifecycle of the product.
- 2. It was not known what the most safe and efficacious method to dose and administer drug x to patients with disease y was.
- 3. It was not known how to further the automated AI processing functionalities for LiDAR scanned BIM models. More specifically, how to enhance the AI-powered functionalities to automatically identify a range of structural, MEP, and architectural elements within 3D site data for the processing of data into a 3D model.

To support the justification of the uncertainties faced, it is essential that the technical narrative also include a description of the work undertaking by the competent professionals in the period in trying to overcome the scientific or technological uncertainty and develop the advance knowledge or capability sought. This section must describe in a linear fashion (i.e., from the start of the financial period to the end of the financial period) the following:

- The key activities and trials undertaken to design, build the and modify the solution.
- The key observations and modifications made to improve the solution.
- The rationale behind the approach taken.
- The key milestones in the project incl. significant successes or failures.
- The outcome of the R&D project by the end of the period. Specifically, whether the uncertainty was resolved or if further work is still required on the project.
- It is best practice to include dates for the key R&D trials and activities.





• Do not use the term "trial and error" when describing the R&D process taken.

The description of the R&D process should not be routine or standard, but complex and non-readily deducible, involving much iteration.





Once you've ascertained that qualifying R&D activities have taken place, it's time to carry out the R&D calculation. Unfortunately, we see far too often the lack of appropriate and robust methodologies (if any) applied when carrying out R&D calculations. Just as it is essential to ensure only qualifying R&D activities are claimed through a well-defined review process, the approach to how R&D expenditure is identified and calculated is essential to preparing a robust, justifiable claim.

THE HIGH-LEVEL STEPS TAKEN TO CALCULATE THE R&D BENEFIT

- 1. Identify the qualifying expenditure that was incurred to carry out this R&D (this applies to both direct and indirect R&D activities);
- 2. Apply appropriate R&D apportionments to this expenditure to ensure only the proportional amount of expenditure relevant to qualifying direct or indirect R&D activities is being claimed; and,
- 3. Carry out the benefit calculation as per the relevant R&D tax scheme.

BEST PRACTICES FOR IDENTIFYING AND CALCULATING R&D EXPENDITURE

In carrying out the first two steps, it is essential that an appropriate methodology is identified and applied to ensure robustness and integrity of the claim being made. The third step is carried out in line with the steps required in preparing the tax computation and CT600.

As mentioned, we frequently see very simple, frankly questionable approaches taken in carrying out the first two steps. For example, applying a blanket R&D apportionment (often very high) to technical staff without taking into account individual direct and indirect involvement in the relevant R&D projects. Additionally, claiming high levels of non-technical staff without justification of the indirect qualifying R&D activities they have carried out.

One method that we see used far too often is when relevant accounts are identified from the P&L statement (e.g., contractors or software licenses), and a portion of the overall costs from these accounts are claimed by applying a finger-in-error R&D apportionment. This is done without an investigation of what expenditure sits within these accounts (including validating if the expenditure has been fully paid for by the





time the claim has been made) and without applying an appropriate methodology for R&D apportionments. Talk about a big no-no!

Luckily, without getting into the nitty-gritty of the details, there are a few key approaches that can be taken when identifying qualifying R&D expenditure and calculating an appropriate R&D apportionment to ensure robustness of claim:

IDENTIFICATION OF R&D EXPENDITURE

- Firstly, only qualifying cost categories should be considered. These are limited, and include only staffing costs, externally provided workers (temporary workers), subcontractors, consumable items (raw materials transformed/consumed in the R&D process), software licenses and hosting, and payments made to participants of clinical trials. Expenditure such as equipment, machinery, and rent, for example, should not be included.
- For staffing costs, reference the raw payroll reports (e.g., gross to net report) to extract only qualifying staff costs on an individual level.
- For other cost categories (i.e., contractors, EPWs, software licenses, consumables, etc.), you can extract and assess transaction-level data from general ledger / account transaction reports. It may be useful to also review invoices where several items or services have been charged to the company to ensure you are including only qualifying and/or relevant expenditure.
- For any intercompany costs, reference intercompany invoices to get a breakdown of what has been recharged so that costs can be appropriately categorised. This is often available in the form of a detailed spreadsheet. Always ensure mark-ups are removed.
- Always ensure that any expenditure to be claimed should be paid before the claim is made with HMRC. This can be validated by cross-referencing the transactions identified as qualifying with what it is outstanding in a detailed aged payables report.

CALCULATING R&D APPORTIONMENTS

• For staffing and EPW costs, where timesheets are available, these should be leveraged to support the calculation of R&D apportionments. This can be done





by applying an R&D apportionment to each qualifying project and hours logged to the project(s) to allow for R&D hours to be calculated. Only time logged that is spent on direct and/or indirect qualifying R&D activities should be included.

• Where timesheets are not available (common with your typical SME claim), the approach to R&D apportionments should be fair and reasonable, and in-line with the R&D guidelines (i.e., only includes time spent on direct and/or indirect qualifying R&D activities). This should be done on an employee-by-employee basis, with time spent on non-qualifying and BAU activities removed from the costs claimed. We suspect, however, that eventually HMRC will require all claimants to keep timesheets, so this is a practice that is highly suggested.

For other costs claimed, these should be apportioned relative to the R&D project they form part of. Some costs are more difficult to determine this for, such as software licenses or utilities costs, and so appropriate methodologies depending on the circumstance should be adopted (such as if the item is used solely for R&D, by R&D staff across R&D and non-R&D projects, or used by staff across the wider business).



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