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Guide to common errors

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Guide to Common Errors

While software development is often innovative, it does not always meet the definition of eligible R&D activities for the purpose of the R&D Tax Incentive. Software developers tend to use the term 'R&D' to refer to a broad range of activities, many of which may not meet the definition of core R&D activities as they are routine in nature. This different use of terminology can cause confusion and potentially expensive errors in claiming.

This page highlights some common errors that companies and their tax advisors make when claiming the R&D Tax Incentive for software development activities.

What you'll learn:

- Claiming for whole projects, not individual activities
- Assuming that activities are automatically eligible because they follow a software development lifecycle
- Failing to identify a specific technical knowledge gap
- Claiming for activities related to the development of internal administration software
- Not keeping contemporaneous documentation

Claiming for whole projects, not individual activities

When conducting R&D, companies tend to think in terms of projects and project outcomes rather than in terms of the specific activities that the company conducts within a project. However, the eligibility criteria under the R&D Tax Incentive require eligibility to be assessed at the level of specific activities.

During the self-assessment process, companies must be careful to recognise that eligibility under the R&D Tax Incentive is based on identifying specific activities that meet the statutory definition and not based on registering whole projects or large parts of projects without considering if all of the activities that make up that project are eligible.

Self-assessment must identify and separate any experimental activities and activities that directly support them (which may be eligible core or supporting R&D activities) from routine software design, coding and verification activities (which may not be eligible R&D activities).

Activities being claimed as supporting R&D activities must be directly related to an eligible core R&D activity (and in some circumstances, must also be undertaken for the dominant purpose of supporting core R&D activities) – just being an activity within the same project is not enough on its own.

Conducting an eligible core R&D activity within a software development project does not automatically make the rest of the project eligible as supporting R&D activities.

Assuming that activities are automatically eligible because they follow a software development lifecycle

The process of developing, modifying or customising software may be superficially similar to the eligibility requirements for core R&D activities under the R&D Tax Incentive. They can be systematic, and they may involve testing. However, they usually do not test a hypothesis, and they often use existing knowledge, information or expertise and so have an outcome that could be known or determined in advance by a software engineer, and do not have the purpose of generating new knowledge as the legislative test requires.

Sometimes there is confusion about whether routine testing steps in software development projects are core R&D activities for the purpose of the R&D Tax Incentive. Many of these tests are conducted for purposes other than generating new knowledge, and are not hypothesis-driven experiments, and as such, do not meet the statutory definition of core R&D activities. These tests tend to occur after the experimental activities are carried out and do not address technical risks with unknown outcomes. Examples of activities that are unlikely to be eligible core R&D activities are:

- bug testing (identifying and fixing errors in code)
- beta testing
- user acceptance testing
- system testing
- requirements testing
- data mapping and data migration testing
- testing the efficiency of different algorithms that are already known to work
- testing websites in operation by measuring the number of hits.

However, these activities may be eligible as supporting R&D activities if they are directly related to a core R&D activity. In some circumstances, to be eligible as supporting R&D activities, these activities will also be required to be undertaken for the dominant purpose of supporting core R&D activities.

Failing to identify a specific technical knowledge gap

The development of operating systems, data systems, network systems, firmware, microcode, middleware, applications, and mobile applications software can be highly technical in nature and complex. While this complexity can pose technical challenges, most can be solved based on the current knowledge, information and experience available to a competent professional.

Just because a specific product or functionality has not been developed before, does not mean it requires hypothesis-guided experiments with unknown or indeterminable outcomes to create it.

Activities that involve solving challenges by applying existing knowledge and expertise, without needing to undertake experiments are not eligible as core R&D activities for the R&D Tax Incentive. The test is not simply whether the staff in a company could know or determine the outcome without conducting an experiment. It refers to the state of knowledge worldwide, across all industries.

It is essential that companies are able to identify the specific technical knowledge gap that a hypothesis-driven experiment is conducted to overcome. It is also necessary to demonstrate that a competent professional in the field would have been unable to know or determine in advance what the outcome of that experiment was going to be.

Developing customised solutions from an existing commercial software package

Many companies purchase commercial software platforms and then customise them to meet their specific requirements and work processes. While there may be some challenges in the customisation process, the adaptation of existing platforms may just be a business risk rather than an outcome that cannot be known or determined in advance by a competent professional. If the solution can be developed with a competent professional having to undertake experimental activities, it may not represent a technical knowledge gap and it may not be a core R&D activity.

If the knowledge, information or experience needed to develop or implement the solution is available (on a worldwide basis) to a competent professional without the need to undertake hypothesis-driven experiments, then the activity will not meet the core R&D activity requirements.

Claiming for activities related to the development of internal administration software

Software undertaken for the dominant purpose of internal administration is a specific exclusion from core R&D activities under the R&D Tax Incentive legislation. Even if the activities would otherwise meet the eligibility criteria for core R&D activities, experimental activities undertaken for the dominant purpose of developing, modifying or customising the company's own internal administration software (or an entity that the company is connected to or affiliated with) are not eligible as core R&D activities. Developing, modifying or customising administration software intended for wider use outside of your company, like commercial payroll or accounting software, could still be eligible if all required eligibility criteria are met.

More information on the activities that are excluded from being core R&D activities is available in the [Guide to Interpretation](#).

Not documenting R&D activities at the time they are conducted

If a company did not keep records throughout the R&D process, they will not be eligible for the R&D Tax Incentive.

You must document how you meet each of the eligibility criteria, including:

- how each experimental activity was carried out
- how you knew that the outcomes could not be known or determined in advance on the basis of current knowledge, information or experience available to a competent professional
- how each activity applied a systematic progression of work
- that each activity was conducted for a significant purpose of generating new knowledge.

For each supporting R&D activity, you must specify:

- which core R&D activity it is directly related to, and
- how it meets the definition of a supporting R&D activity.

You must also have records of the expenditure on eligible R&D activities, and how it relates to the activities.

You must keep a record demonstrating what you actually did for each core R&D activity, including a record of each experiment undertaken. You must record each step of an experiment you undertake, not just a record of the final source code. Using an 'agile' methodology is not an excuse for failing to keep adequate records.