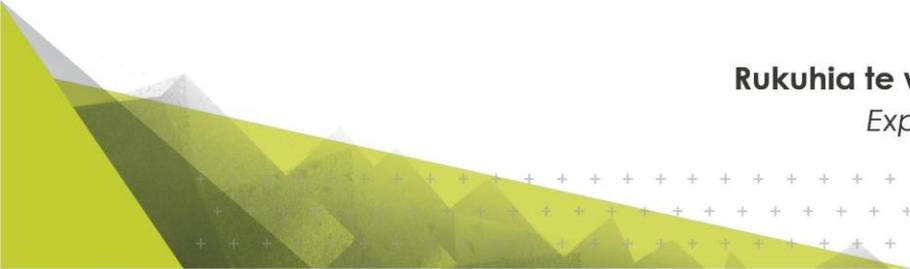


# Research and Development Grants

## A Guide to help define Research and Development in your grant application



**Rukuhia te wāhi ngaro, hei maunga tātai whetū**  
*Explore the unknown, pursue excellence*



Callaghan Innovation Research and Development grants are designed to help New Zealand businesses get started on their Research and Development journey.

The Ministerial Direction which sets out the requirements for the Project and Student Grants schemes states that:

*R&D Project Grants fund research and development using the following definitions:*

- *Research is original and planned investigation undertaken with the prospect of gaining new scientific or technical knowledge and understanding.*
- *Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use.*

*R&D is distinguished from non-R&D by the presence or absence of an appreciable element of innovation. If the activity departs from routine and breaks new ground it is normally R&D; if it follows an established pattern it is normally not R&D.*

We have developed the following guide to help you describe your R&D so that it is clear that it meets the requirements of the Ministerial Direction.

Please speak to your Callaghan Innovation manager or Regional Business Partner should you have any questions on any aspect of the guide.



## Identifying R&D in Project Grants using the OECD Frascati definition of R&D

The OECD Frascati definition of R&D has been adopted to provide a consistent interpretation of R&D activities and clarity for customers. The definition aligns with the Ministerial Direction and with the Project Grant focus on scientific and technical R&D.

In the business context, R&D is more clearly described as,

- Applied Research which is an original and planned investigation undertaken to acquire new scientific or technical knowledge, directed primarily towards a specific practical aim or objective, and,
- Experimental Development which is systematic work that draws on knowledge gained from research and practical experience to produce additional knowledge in the form of new or improved products, processes or services before the start of commercial production or use.

### Identifying R&D

For an activity to be classified as a Project Grant R&D activity, five criteria must be jointly satisfied.

It needs to be novel.

- The R&D project (objectives) must aim to generate knowledge that is both new to the business and not already in use in the sector.
- The result should not be deducible by a Competent Professional working in the sector, which rules out activities undertaken to copy, imitate or reverse engineer a product or process.

It needs to be creative.

- The R&D project needs to be creative, based on original, not obvious, concepts and hypotheses.
- Excluded are routine changes to products and processes because these are not substantial improvements and could be deduced by a Competent Professional working in the sector.



There needs to be uncertainty about the final outcome.

- There must be uncertainty about whether the R&D objectives can be achieved which is directly related to the degree of scientific or technical uncertainty.
- R&D prototyping to test technical concepts (experimental development) is R&D. However, pre-production units used to obtain technical or legal certification is not R&D, and Product Development, in total, is not R&D however the experimental development activities may be R&D.

The project needs to be performed systematically.

- R&D is a formal activity that is conducted in a planned way, with records kept of the R&D activities and the outcome. The Project Grant application should explain the purpose of the R&D project, outline the project plan and the project management activity.
- This criterion does not rule out accidental discoveries when undertaking systematic R&D activities.

The outcome (and knowledge generated) should be reproducible and have the potential for transfer.

- An R&D project should generate new knowledge that can be reproduced and transferred within the business. Results cannot remain solely in the minds of the researchers, as they, and the associated knowledge, could be lost to the business.
- Results will be protected by secrecy or other means of intellectual property protection however the process and the results should be recorded in the business.