



Submission on the Taxation (Research and Development Tax Credits) Bill

This submission is made by NZRise, representing NZ digital businesses.

Our key points are:

1. The Bill should detail the desired Outcomes along with the industries expected to benefit, and how success will be measured.
2. The Bill should provide certainty for the IT sector by providing an unequivocal definition for software R&D
3. The Bill should not reduce the flexibility that Callaghan Growth Grants provide to the software sector, because of the new In-Year Approval process.
4. The Bill should encompass more eligible expenditure.

1. The Bill should detail the desired Outcomes

The Bill makes the objective of increasing NZ's R&D% very clear, and there is a general assumption this will boost our economy in various ways. But how will it achieve that for NZ, when it's generally acknowledged our economy is different to those being benchmarked? Assuming the Bill aims to improve NZ's wellbeing, what are the key NZ industries that are expected to be invigorated by the scheme?

Beyond increasing our R&D%, how will we measure the Bill's contribution towards our growing economy? We would respectfully suggest that there may be too much emphasis on **expenditure** without sufficient clarity of "what success looks like".

Why does the Core R&D definition have such an emphasis on "pure research"? While NZ would benefit from more scientists, how does that translate into increased employment, better jobs, higher wages and the better social outcomes for the wider community?

And why encourage R&D when the resultant IP doesn't reside in a NZ business? Why not require firms to transfer knowledge to New Zealand when R&D conducted overseas is being subsidised?

2. The Bill should provide clarity and certainty for the IT sector

NZRise is enthusiastic about Govt's aspiration to make IT the #2 industry sector, and anticipated the Bill would provide a strong platform to help achieve that goal.

However, the Core R&D definitions don't make it obvious that software qualifies; definitely not to the extent it did under Callaghan grants – MBIE's Discussion Document noted software comprised 40%-50% of grants by value.

The timing of this change is unfortunate, as software businesses with a Callaghan Growth Grant that expires in Mar19 are being put into an invidious position in terms of current and planned R&D, given

the level of uncertainty that currently pertains. Many businesses may be facing the choice between deferring optional R&D or assuming “she’ll be right” for such new projects. And it’s not clear what will happen to incomplete Callaghan-qualifying R&D projects at the time of the change-over, if they don’t qualify under the new regime.

Other Commonwealth jurisdictions have included words such as “Experimental Development” to make it abundantly clear that software development qualifies as Core R&D (refer to information in the Technical details attached).

It has been recognised that NZ can develop world-class software and that the sector pays high salaries, helping the drive towards a high wage economy. With respect, we would submit the Bill should have been deliberately designed to ensure software qualified easily, rather than the converse situation that we currently face.

The Bill should provide a separate definition for software R&D, or the current definition should be modified to give certainty to the software sector.

3. Why are we losing an acknowledged benefit of Callaghan Growth Grants?

It seems the requirement for in-advance In-Year Approvals will remove flexibility and eliminate numerous agile software projects, even if during-the-year Approvals can be sought (because of the anticipated time to process applications). A significant benefit of Growth Grants was the removal of the inflexibility associated with Project Grants; this was particularly relevant to the software industry, where research life cycles are short and business priorities can change R&D investment. The need for upfront In-Year Approvals and the anticipated approval-processing times will eliminate much of that flexibility, to the detriment of the software sector. Even if Approvals could be applied for during the year, the target 6-week turnaround time for a Yes/No answer is a long time for agile software businesses. This issue would be largely ameliorated if there was absolute clarity around qualifying R&D.

4. The Bill should encompass more eligible expenditures

- a. Overheads - Software organisations generally work in office environments, so “Occupancy Costs” or something similar would be recognised rather than “lease payments” that the Bill uses.
- b. Bonuses – excluding from Eligible expenditure seems unreasonable. In the software industry they’re not uncommon when recognising exceptional work efforts. Provided there is a clear connection with the R&D work, they should be classed as eligible.

Technical Details:

R&D definition in Bill, taken from IR's Commentary:

[note – the software industry develops Products to sell (licence); so the 2nd and 3rd limbs create difficulties/present uncertainty for the sector]

P15 of IR's Commentary - Background

Core activity

The core activity definition is expected to apply to a wide range of R&D activities in a variety of industries, and is not limited to basic research. It draws on elements of the R&D core and supporting activity definitions from comparable jurisdictions, the OECD's Frascati manual, the definition from the 2008 regime, and Callaghan Innovation's experience with its R&D grants regime.

The requirement for (c) also contemplates an intended advance, because it requires an activity to have a material purpose of resolving scientific or technological uncertainty. If an activity resolves uncertainty, it must also by implication advance science or technology.

P16 of IR's Commentary - Detailed analysis

Core activity

Systematic approach (limb (a))

A person will need to demonstrate that their R&D process followed a planned, logical progression of work. A systematic approach includes scientific methods, so may involve hypothesis, experiment, observation and evaluation. An agile approach to R&D (such as the approach used in some software R&D) may also be considered a systematic approach, provided the R&D activity is planned, occurs logically, and tests whether a proposed solution (or solutions) resolves what is scientifically or technologically unknown.

Prototyping, and the type of planned and logical testing that occurs in a test kitchen or similar environment, may also be sufficiently systematic to meet the requirements for a systematic approach. The requirement for a systematic approach will, however, exclude anything discovered or produced as a result of random trial and error.

Creating new things (limb (b))

To qualify as core activities, R&D activities must be undertaken for a material purpose of creating new knowledge or creating new or improved processes, goods or services. The material purpose test means that the R&D need not be successful to qualify for the credit.

To establish whether something is new, it should be compared with what is already available in the public arena on a reasonably accessible worldwide basis at the time in the relevant field.

A person may satisfy this requirement where another firm is undertaking the same R&D simultaneously but independently. An R&D activity may also satisfy this requirement where another firm has already created the new knowledge but has kept it secret, and the person is undertaking the R&D to create equivalent knowledge.

Improvements to existing products or processes may qualify as R&D. In addition to improving a product or process, the core activity definition requires a claimant to have a purpose of resolving scientific or technological uncertainty, so any improvements must go beyond routine maintenance to be eligible as core activities.

Scientific or technological uncertainty (limb (c))

Scientific or technological uncertainty exists when a competent professional who has access to the publically available information on a topic does not know whether something is possible. The uncertainty can relate to whether something is possible or achievable at all, or whether something is achievable within constraints such as cost.

If a competent professional can deduce an answer or can identify an approach to take in advance, without a systematic process of testing, analysis or prototyping, there is no technological or scientific uncertainty.

A competent professional:

is knowledgeable about the relevant field;

possesses the relevant qualifications and/or experience to participate in the relevant field with a reasonable level of skill;

is aware of the current state of knowledge in the field; and

has access to publicly available knowledge from around the world such as the internet, relevant industry journals, and to other professionals.

The requirement to resolve uncertainty also assists in defining the extent of the R&D activity. As a general rule, the R&D activity will finish once the uncertainty has been resolved.

The test is an objective test on a worldwide basis. It is not enough that the business does not have the knowledge or that no one in New Zealand has yet done what the business is trying to do.

NZRise Comments:

Callaghan R&D Growth Grants have worked OK for "Research Application" and "Experimental Development" software R&D activity, but that has been lost in the new definition.

The 2nd limb only references "products" in the final paragraph. Products are generally produced by software R&D, and should be included in the first paragraph.

The 3rd limb has the potential to create an oxymoron in relation to the development of products and services; from NZ Inc's perspective – We don't want to pay for people "inventing" things that have already been invented. However, the opposite is true for Research Application and Experimental Development - you want the application of inventions to be as widely beneficial as possible. If the application of a technology isn't obvious, even to "a competent professional", then it isn't useful

technology. If it's obviously useful, then its valuable... This is where software can contribute so much - it's the only "variable/programmable" technology out there. As a result, it's mostly used to make other technologies useful - hence the focus on "Research Application" and "Experimental Development".

Examples from other Commonwealth Countries

What Australia does - from the Australian R&D Tax Incentive:

Their Core R&D Activities definition works for software application development. Because the outcome cannot be known until the new code is used/tested, it's built with a systemic scientific approach, and it leads to the generation of new knowledge in the form of improved products/services. The definition does decent job of combining OECD's scientific definition with SNA's business R&D definition. Importantly, note that they have no reference to "resolving Scientific Uncertainty" in the definition. (SNA is the UN System of National Accounts, and is the basis of comparing UN member nations economic performance).

The ATO has also published a guideline with the legislation; it is the **company** resolving technical uncertainty, rather than the ATO applying an independent test. It is also resolving technical, not technological, uncertainty. That's an important distinction....

What Canada does

Openly recognises Experimental Development, making it abundantly clear that software is eligible for their R&D tax incentives. They have transformed the "R&D" expression into "SR&ED" = Scientific **Research** and Experimental **Development**.

Acknowledgement of Mr Roger Ford's contribution

NZRise wish to acknowledge the substantial contribution of Mr Roger Ford, President of the NZ Software Assn, whom we consider to be particularly well-informed on the subject of software R&D, international definitions and the incentive approaches taken by other jurisdictions.

About NZRise

We are a group of business leaders from NZ-owned IT firms who have formed NZRise as a non-profit New Zealand incorporated society.

NZRise exists to represent the interests of NZ-owned digital technology businesses (we use the terms IT and "digital technology" interchangeably).

NZRise and its member companies are passionate about New Zealand technology and believe our IT industry can be a hotbed of innovation and growth. We believe New Zealand's unique economic and cultural context provides the ideal conditions for building an industry that can meet world demand for agility, rapid development, collaboration, and innovation.

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