Douglas Pharmaceuticals Limited (Douglas)

Draft Submission on planned R&D Tax Credit

1. Introduction to Douglas Activities

1.1 Douglas Pharmaceuticals Ltd ("Douglas") is a New Zealand ("NZ) owned and operated Pharmaceuticals Company based in West Auckland. We are the largest manufacturer of pharmaceuticals in NZ and employ around 550 people in the NZ group of companies.

1.2 The majority of Douglas Research & Development ("R&D") spend is on bioequivalent generic formulations, with a lesser, but increasing, amount on novel therapeutic indications.

1.3 Douglas has been a recipient of the 2008 tax credit, a MSI grant and more recently a Callaghan Growth Grant. Douglas appreciates the opportunity to make submissions on the proposed R&D Tax Incentive for NZ.

1.4 s 9(2)(b)(ii) [redacted]

2. Eligibility

2.1 Douglas is concerned that the proposed tax credit policy eligibility is significantly more directed towards 'research' (i.e., new to the world), with current activities of the company being 'development' (i.e., new products and processes to the organisation based on adaptation of existing knowledge) not falling within the tax credit eligibility criteria.

2.2 We are concerned with comments made that IAS38 is considered inadequate for purposes of assessing eligibility, with language suggesting activity must be innovative " acquiring new knowledge or creating new or improved materials, products, devices, processes or services" and intended to "advance science or technology through the resolution of scientific or technological uncertainty", which ensures that the credit is only available for solving problems that have not already been solved, and which will expand the existing knowledge base.

2.3 Concerns were confirmed, with comment made during a Douglas attended MBIE workshop (8 May 2018), that activities such as reverse engineering of a competitor product with the intent of creating new products for Douglas are not envisaged to be eligible. Effectively this is what Douglas does with regards to development of generic pharmaceuticals apart from some instances where a patent work-around formulation is required. In all generic developments our target product is one that is bioequivalent to an existing product. This is likely to be new or improved to Douglas based on information which was available to us when the project begun however it may not be eligible for a tax credit as it is not a globally "improved product". These developments have previously been deemed to be eligible for tax credits/grants on the basis that the knowledge being obtained is new to the company, is not without technical uncertainty, and follows a scientific process.

2.4 We suggest that the target of 2% GDP being spend on R&D includes both research and development activities, whereas the proposed R&D Tax Incentive appears to be mainly focused on research.

2.5 We suggest consideration to return to NZ IAS38 for the definition of R&D activities for these tax credits.

3. Tax credit rate at 12.5%.

3.1 The tax credit is proposed at 12.5%. This is less than the 15% rate previously introduced under the 2008 tax credit regime. It is also less than the 20% Callaghan Growth Grant over the last 4 years, and the MSI grant for the three years prior. It is acknowledged that the post-tax rate falls from 20% to 14.4%.

3.2 If the intent is to drive an increase in R&D expenditure, reducing the rate from what has effectively been in place for the last 8 years is unlikely to be successful, and a more competitive rate would be necessary, particularly with the stated aim of encouraging multi-nationals to shift R&D activities to NZ.

4. Cash flow timing

4.1 Growth Grants (less 10% retention) are paid relatively immediately following the quarter incurred.

4.2 In order to not suffer a major cash flow timing impairment, Douglas expects to offset expected Tax Credits against provisional tax payments during the year, albeit the timing is not as favourable, and not without legacy risk as detailed in Para 5 below.

5. Certainty of eligibility

5.1 Callaghan Growth Grants are effectively pre-approved for agreed activity. Subject to auditor review, there is little room for eligibility disagreement, and 10% retention is kept in case of any disputed matters.

5.2 Tax credits require self certification. In all likelihood, as expected credits will be offset against provisional tax as you go (as per 4.2 above), which if in the event of dispute could lead to punitive use of money interest and shortfall penalties being imposed. This would be further compounded by a four year statute of limitation timeframe under the tax legislation, which creates considerable trialing uncertainty compared with the Growth Grant which is signed off annually.

5.3 This risk of penalty could be mitigated by the IRD providing an upfront service certifying in advance the eligibility of R&D activities and spend, although this could create a significant administrative burden for the company, and for the IRD.

5.4 Alternatively the IRD could certify advisers, who if engaged by persons claiming under the tax credit regime, would avoid risk of use of money interest and penalties, if claim made in good faith, if the IRD disagreed with the amount claimed.

6. No recognition of IP benefit to NZ

6.1 The level of tax credits is set at the same rate whether the NZ entity undertaking the research activities is NZ owned or foreign controlled.

6.2 We suggest that a higher rate be available for NZ controlled companies.

6.3 By way of comparative example Canada offers R&D tax credits at 15%, with an enhanced rate at 35% on the first $3m of expenditure p.a. if the company (amongst other eligibility criteria) is not a foreign controlled entity.

6.4 The current proposed R&D Tax Incentive rewards activity regardless as to where the IP lies. We suggest that there should be greater recognition of R&D spend where the IP remains in NZ, which in our view will ultimately will drive enhanced long-term economic activity

6.5 There is no distinction in the proposal between work being undertaken in NZ for the benefit of NZ companies, and work where the IP is shipped overseas. With a limited supply of suitable R&D talent under this proposed regime we could face inflationary pressures which outweigh due to international demand which outweigh the benefit of the R&D tax incentive.

7. Impact of overseas costs on project eligibility

7.1 It is proposed that overseas expenditure up to 10% of total project costs can be claimed. This 10% falls away if more than 50% of the project spend is offshore.

7.2 Douglas by necessity (population size issues) needs to undertake certain clinical trials offshore as part of the development programme. These are expensive and can be more that 50% of the total project cost. These are NZ funded projects, with 100% of the IP residing back with the NZ company to enjoy future economic benefits from the development.

7.3 We suggest that that the overseas portion is increased to a higher cap, say 25%, with no exclusion at under 80% of project spend being offshore, on the proviso that the project IP settles back to a NZ controlled entity.

8. Overseas costs guidelines

8.1 It is often difficult in Douglas to determine whether a specific R&D expense is offshore or not. For example we often need to purchase expensive active ingredients from international companies, which are shipped to New Zealand for use in development batches manufactured in NZ. Whether these count as international expenditure or not is unclear. What if they are purchase instead from a NZ based importing agent?

8.2 We recommend that the overseas exclusion, if retained, is connected to activities (i.e. expenditure on overseas activities), not only the expenses as some projects cost need to be incurred overseas even though all project activities will occur in NZ.

9. Quality of tax credit regime

9.1 We note that the R&D tax credits are potentially available to a much wider pool

9.2 While this may open up governmental assistance to companies that otherwise did not qualify for funding under the Callaghan Growth Grant regime, the downsides of this that government funds may be allocated toward poor economic return R&D activities. Under the current Callaghan model there is a degree of pre-approval screening which provides a comparatively improved degree of confidence around the quality of the spend.

s 9(2)(a)

Douglas Pharmaceuticals Ltd

Fuelling Innovation to Transform Our Economy

The NZ Government is currently seeking feedback on the proposed design of a new R&D Tax Incentive and has entitled the initiative as "Fuelling innovation to transform our economy". This proposal removes all Government support for R&D start-up companies (the Growth Grant is phased out and the cash-out tax credit eliminated). Although some support for such start-ups (tax loss companies) may be considered in future, we do not know what support, if any at all, there will be.

Start-up R&D companies are key to innovation. How can such a proposal be presented as "Fuelling innovation to transform our economy" when it removes all existing support for R&D start-up companies? The proposal is a clear disincentive for anyone wanting to start a new R&D businesses.

The goal of the new R&D tax incentive as we understand it is to drive faster growth of business R&D and reach a goal of R&D expenditure equalling 2% of GDP by 2027. To offer greater certainty to business. We understand that the Government's broader system of investment in R&D in research, science and innovation will continue to function alongside the new R&D tax incentive, but to date we have not seen detailed confirmation of what this continuation will look like.

As a start-up organisation in the biotechnology sector we have relied on investment from shareholders, venture capital, grants and tax rebates to fund our activities. We have no other source of funding.

R&D Tax credits are certainly a way to attract further investment from large multi-national organisations into R&D, but only a small part of what will fuel innovation and transform economies. Under the new proposed scheme, a company like ours will lose a substantial component of our annual income for on-going investment into R&D. A non-refundable tax credit is of no real benefit.

To have a goal of 2% of GDP by 2027 is hardly inspirational when countries like Australia already sit at 2.8% or Israel at 4.3%. Why don't we benchmark ourselves against the best, and to that end a country like Israel? A recent article by Tzahi Weisfeld entitled "How Did Israel Become a Hub for Innovation" which we believe is one of many very pertinent examples of how NZ might fuel innovation.

Tzahi writes "Israel is a country, 8 million people. And yet, Tel Aviv is the second largest start-up ecosystem in the world, following Silicon Valley. Every multinational tech company in the world has an R&D centre in Israel, including Intel, IBM, Microsoft, Google, Facebook, and Apple. Most of these centres were a result of making local acquisitions of Israeli start-ups.

Being small means Israel has no local market or even a regional one, so entrepreneurs are forced to think globally and prove to the world that size doesn't matter. It also means Israelis had to find creative ways to get funding.

In 1993, the Israeli government initiated a plan called Yozma (Hebrew for "initiative") offering attractive tax incentives to foreign venture-capital investments in Israel and promising to double any investment with funds from the government. As a result, Israel's

annual venture-capital outlays rose from $58 million to $3.3 billion between 1991 and 2000. The number of start-ups backed by Israeli venture funds rose from 100 to 800.

It's also extremely easy to start a company in Israel. It costs a few dollars and takes about a day to have it up and running. It's not just start-ups that are constantly looking to innovate. Israel spends about 4.4% of its GDP on research and development: almost double the OECD average of 2.4%. This country is literally a start-up"

We would argue that no one size fits all in terms of driving innovation, and that different types incentives should be matched to an organisations' Lifecyle. What do we mean by that? Why should an organisation with substantial revenue, and numerous avenues to reduce its tax burden be able to claim for grants from Callaghan for example? How is a R&D tax credit advantageous to a start-up organisation with no revenue or income?

To truly fuel innovation, we ask that a broader view of the potential instruments are considered together, such as, but not limited to cash-out tax credits, venture capital, grants and tax rebates. Match the incentive to the company's standing in the market place.

Caldera's response to specific questions in the proposed new R&D tax credit document are included below.

Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?

It would negatively impact business R&D if significant costs are incurred to conduct comprehensive studies to establish the materiality of the problem and the materiality of the scientific advancement.

Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?

Laboratory consumables, depreciation on costly lab equipment, and contracting outside specialists are essential for conducting R&D and excluding them from R&D incentives would introduce a bias. Businesses that are more labour intensive would derive an unfair advantage over businesses that also incurred high costs in equipment, consumables, etc. It would also act as a disincentive for capital investment in technology, such as robotics, that could significantly improve and speed up research.

Question 14: Are there reasons why continuity rules should not apply to tax credits? Please describe.

Start-up companies need to raise capital from new investors to complete the R&D. Introducing continuity rules on tax credits would be a disincentive for new investment and limit capital raising.

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1 June 2018

Dear Sir / Madam

Submission in response to the discussion paper on the R&D tax incentive

We write in response to the recently released discussion paper and provide our comments herein.

Policy overview

Before addressing the technical questions raised in the discussion paper, we recap below the key policy objectives of R&D incentives for New Zealand:

- Creating high value added jobs with good pay
- Attracting foreign direct investment
- Attracting and retaining skilled, globally mobile talent
- Fostering an innovation ecosystem with a free flow of information between businesses, government and institutions
- Keeping successful local companies in New Zealand

Any reform which does not reinforce these objectives will see the scheme promoting R&D for R&D's sake, raise BERD without translating into meaningful change for average New Zealanders, and ultimately, will be a liability rather than an asset going into future elections which creates uncertainty and instability leading to poor participation in the scheme.

Continuity and stability

For any reform in this area to have traction, it's critical that there is broad political support to prevent the continual 'ping ponging' between grants and tax credits depending on which Party is in power.

Under the 2009 R&D tax credit, there was initially significant engagement amongst the business community, with a high level of enthusiasm to record and grow their R&D spend. However, when the new National government axed the regime immediately following the 2008 election, businesses lost interest.

Since 2009, there have been multiple reforms leading up to the creation of Callaghan, and then again further reforms in the Callaghan era.

We are now again going through the latest round of reforms.

For these reasons, it's understandable that there's apprehension in the business community about the degree to which it can rely on the sustainability of any new reforms.

This concern is further underscored by the negative public statement made by the National spokesperson for Innovation, Dr Parmjeet Parmar on 19 April 2019 in response to the R&D tax credit discussion paper. Similar scepticism was indicated through questions raised in the House regarding:

- The cost of R&D tax credits v growth grants, and government pushing the risk of doing R&D onto businesses (1 May 2018);
- Concerns regarding rorting the system and reclassification of existing spend as R&D (24 May 2018);
- The projected percentage growth in R&D spend by 2020 (24 May 2018).

KPMG represents a large cross-section of the New Zealand business community and our primary concern is that whatever scheme is in place, whether grants or credits, that there is stability so that businesses can plan and engage with government in a meaningful way for the long term.

For the new reforms to gain traction, it's important that there's broad political support so that the business community can rely on these in the event of a change of government.

To-date, the comments from the Opposition indicate that these reforms do not as yet have a breadth of political support. We therefore urge Officials to take the necessary steps to remedy this, as much as can be done practically, and to share with the business community what steps have been taken.

Replacing the growth grant

As the credit is replacing the growth grant, it's beneficial to highlight business' experience with the growth grant and its pros and cons:

Pros

- Quarterly payment which helps with cashflow.
- Grant income is recognised 'above the line' as additional revenue, increasing business unit performance and providing an incentive for business unit managers and their teams to drive R&D growth and record it appropriately.
- 3 year grant contracts confirmed before undertaking the R&D, providing a degree of certainty to assist with planning, resourcing and budgeting.
- An on-going relationship with experts at Callaghan Innovation which also provides a network to connect with others in the industry.

Cons

- **Limited access**: In five years, approximately 300 growth grants were awarded, an average of 60 annually. In the one year of the 2009 R&D tax credit, approximately 1,000 taxpayers filed claims. It's possible that a percentage of these claims were marginal, however, this is offset by the number of quality R&D businesses that did not file in 2009 because it was only in place for one year after being cancelled by the new National government.
- **Initial and annual R&D audit requirement**. For businesses who already have their financial statements audited, this is not a major issue. However, for those businesses who have never been through an audit, having to justify revenue and other non-R&D items for an R&D grant is time consuming, costly and unrelated to the purpose of the incentive.

  By way of example, the types of matters businesses must attest to in their R&D audit include accounts receivable, credit notes, bank reconciliations, HR processes, the various

legislation and regulations governing the business, consolidation entries for group companies - amongst many others. There is no one R&D audit process amongst firms for assessing these matters, therefore the evaluation of businesses can vary significantly.

It's hard to see what any of this has to do with R&D, and in that respect the growth grant has failed a large proportion of NZ businesses doing quality R&D and who need to demonstrate the above for the sole purpose of an R&D audit.

This in part explains the poor uptake of growth grants at 6% compared to R&D tax credits described above.

— **Financial due diligence**: Companies have to justify their financial position to officials in order to access the funding. However the risk to government is limited because if the company did not have the cash to fund their part of the R&D then government would not need to pay anything. This is fine for large companies who have financial due diligence information readily available, however it creates significant challenges for small privately owned businesses, which comprises 95% of the New Zealand business community.

  In this regard, the growth grant has been criticised for being biased against entrepreneurs who risk their own funds to create genuine innovation. These small, privately owned companies may have raised funds through loans from friends and family, second mortgages on the family home, or funding secured against a previously successful venture.

  In such cases, there is often not a stand-alone set of financial statements which clearly demonstrates the entrepreneur's actual position. Furthermore, such entrepreneurs spend their time working on their innovation and not preparing detailed investor ready reports. This can lead to them falling short of the high standards for financial due diligence which they are subjected to, even when this is the genesis of so many of our successful innovative companies. Ultimately, many of these entrepreneur's don't even bother engaging in the process due to these roadblocks.

  This again is another explanation for the poor uptake of growth grants at 6% relative to R&D tax credits.

— **Exclusion of costs which would otherwise be capitalised under IAS 38**: It's apparent that the original Ministerial Directive's reference to R&D as defined under IAS 38 was to provide readily identifiable R&D costs in an applicant's financial statements. It is also probable that the reason for excluding capitalised intangible assets per IAS 38 was that some R&D in this area might be considered market development rather than R&D.

  Overtime, this inadvertently morphed into heuristics such as 'Research is eligible' but 'Development is ineligible' - a strange outcome for an R&**D** grant. This became even further warped when the intangibles exclusion for IAS 38 was applied even to cases where there was no intangible asset to capitalise costs to.

  In practice, the distinction between expensed R&D costs and R&D costs which would otherwise be capitalised was arbitrary and disconnected from the reality of how organisations do R&D.

  Modern business R&D is customer-centric and driven by the needs of the market. Accordingly, the space between "research" and "development" has become reduced so much that the dividing line is practically indistinguishable and archaic. For this reason, significant amounts of quality R&D was unnecessarily excluded from the growth grant regime.

Where relevant, the strengths and weaknesses of the growth grant are reflected in our recommendations in the remainder of this document.

Further comments on the Growth Grant

We note that there are a significant number of weaknesses in the growth grant highlighted above. Nevertheless, terminating growth grant contracts before their maturation creates further instability in the R&D funding ecosystem.

Government has talked about creating partnerships with business, and the growth grant contract itself emphasises the importance of both parties acting in good faith.

Notwithstanding that commitment to act in good faith, government has undertaken by itself to cancel growth grant contracts before their maturation with no 'good faith' reason provided other than the fact that it has the right to do so as long as it provides two months' notice.

This is not acting in good faith and does not contribute toward building meaningful partnerships between government and businesses.

For all the faults highlighted with the growth grant, if government intends to achieve anything meaningful with its R&D reforms, it must close the credibility gap created by this action. If not, it's possible that government will simply not see the results it's forecasting from the R&D tax credit due to the apathy engendered amongst business from failing to keep its word.

One simple action to help close this credibility gap is to honour current R&D growth grant contracts to maturation. This will cost the government nothing since these companies will claim an equivalent amount under the R&D tax credit regime as they would under their growth grants. Furthermore, we understand that the overhead costs at Callaghan for managing growth grant payments and compliance is immaterial.

Response to specific questions

Question 1: If SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?

Generally speaking CRIs, DHBs and Tertiaries receive substantial recurring targeted research funding from central government thus there is no need to provide additional broad-based funding via the tax credit.

However, in some cases, they may setup special purpose companies for commercial purposes which is ring-fenced from their existing operations. In this case, it's arguable that access to the R&D tax credit for the special purpose company will provide a positive incentive as is the case for any other privately-owned company.

Furthermore, most, if not all, funding provided by central government to these agencies is fully allocated to existing programs thus it would be incorrect to assume that core funding can be used to fund such spin off commercial ventures. It's also unrealistic to expect that the agency can simply just ask central government to increase its core funding merely to pay for its commercial R&D venture.

Accordingly, there may be merit in allowing commercial subsidiaries of these agencies to access the R&D tax credit, with a proviso that any R&D funded by other government sources is ineligible.

As regards SOEs, these are businesses setup with a profit motive, and unlike the other government-affiliated organisations listed above, they receive little to no recurring research funding from government. Accordingly, as SOEs are subject to the same limitations and market forces as any other NZ business, there is no reason to exclude them from the R&D tax credit regime.

Question 2: How well does this definition apply to business R&D carried out in New Zealand?

The language used in the Frascati Manual and overseas is antiquated and harks back to an earlier, industrial era which bears very little resemblance to many of the innovative, high growth organisations which the R&D tax incentive is targeted at.

If you were to walk into many leading innovative tech companies and ask an employee at random if they were doing R&D, they wouldn't understand the question, yet these are exactly the kinds of companies which government is keen to support.

It's clear that the era of test tubes and white lab coats setting the standard for what is and isn't R&D should be consigned to our past.

A further concern regarding the Frascati model is that many other countries derive their definition of R&D from this. However, in practice it is highly likely that administrators of the fund/credit just ignore the overly technical language and simply ask 'is this genuine innovation, yes or no'.

Accordingly, a revised definition would be as follows:

> ~~Core~~ R&D activities: ~~those conducted using scientific methods that~~ are activities performed for the purposes of acquiring new knowledge or creating new or improved materials, products, devices, processes, or services; and that are intended to ~~advance~~ ***further*** ~~science~~ **technology, technical know-how,** or ~~technology~~ **science** through the resolution of technological, technical or scientific uncertainty ***by following a methodical process, which a competent professional could not reasonably resolve.***

Note the following changes:

- Removal of 'scientific method' as this is antiquated and irrelevant to most businesses today. By including it, government would simply be asking businesses to define an artificial hypothesis which bears no connection with their actual internal project management processes. It's sufficient that the business has simply followed a 'methodical process', hence this term being inserted toward the end of the paragraph. This addresses the scientific method query raised in question 4.
- Replacing 'advance' with 'further' to make the definition more accessible to the typical business person.
- Reversing the order of 'technology' and 'science' to reinforce the importance of R&D in the field of technology in modern business.
- Insertion of the term 'technical know-how' in the same class as 'technology' and 'science' because there are a vast range of innovative R&D activities which are neither technological nor scientific but which support government's policy objectives e.g. innovation in engineering, agriculture, applied statistics. The boundaries of 'technical know-how' will be constrained by the fact that its meaning is coloured by the words around it (i.e. technology and science).
- Insertion of a threshold of 'competent professional' to provide a standard against which the R&D can measured to exclude trivial activity. This will negate the need to add a 'materiality test' as proposed by question 5.

Creating two different types of R&D as 'Core' and 'Supporting' activities is redundant and very confusing for businesses. It's sufficient, and common sense, to simply state immediately following the definition above that:

"Activities undertaken directly or indirectly to support the R&D activities can be included within the taxpayer's eligible activities."

For the reasons outlined in the discussion above on replacing the growth grant, we recommend inserting an express provision stating that "activity is included as R&D, and the costs treated as eligible, even if they would have been treated as capitalised intangible costs elsewhere in the Act".

Question 3: Does this definition exclude R&D that you think should be eligible, please illustrate with examples.

Our response to question 2 addresses the required changes in this regard.

Question 4: Does the scientific method requirement exclude valid R&D in some sectors, please illustrate with examples?

Our response to question 2 addresses our concerns regarding the use of the term 'scientific method' and the suggested alternative. Refer also to our response to question 13 regarding the R&D method in the context of software companies.

Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?

Our response to question 2 addresses our views on the materiality test and our suggested alternative.

Question 6: How well does this definition apply to business R&D carried out in New Zealand?

Our response to question 2 addresses our view on this definition.

Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.

As noted in our response to Question 2, the distinction between core and support activities is antiquated and confusing to businesses. The activities listed amongst the exclusions would not meet the definition of R&D therefore there is no benefit to adding this list to the regime. Rather, it may be more effective to include examples in the guidelines of what is and is not R&D.

Question 8: Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?

We would point to the important R&D being done around artificial intelligence, machine learning, human behaviour, impact of environment on genetics and personality, gamification systems or UI/UX environments, etc. These are examples of genuine R&D originating in the social sciences, which are becoming more important in driving economic growth for modern economies.

For example, WSP Opus prioritises the development of human centric infrastructure, and they have undertaken significant R&D which has helped shape the rebuild of Christchurch post-earthquake, informed various rebuild activities for Kaikoura earthquake recovery, leading the way in disaster resilience. In this regard, smart mobility and smart cities concepts are changing the urban landscape and the contribution of social science in these fields is vital in shaping human focused environments.

Question 9: What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?

The proposed exclusion for 'dual purpose R&D' is unworkable as no business does R&D solely for the sake of doing R&D. Every business has a profit motive and conducts R&D for a commercial end.

It would be an abuse of language to state that something is not R&D simply because it is being done for a commercial purpose.

A more practical and intellectually honest approach would be to accept that this is R&D, and then insert a test to identify whose R&D it is. If it is in fact R&D commissioned by a customer, then we should acknowledge that valuable R&D is being done, and the only question which remains is 'who performed the R&D'.

For that reason, we recommend removing this exclusion and re-inserting the 'on behalf of' test from the 2009 regime.

For example, if an engineering company was engaged by a customer to assist in the construction of a large complex project and the engineering company undertook R&D to arrive at a cutting edge solution which had wide application across other industries and projects, then valuable R&D has been performed. The only question which remains to be answered is 'who's R&D is it?'. If the engineering company controlled the IP, bore the financial risk and controlled the R&D phase of the project, it is the engineering company's R&D.

Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?

Focusing on direct labour alone would significantly distort the type of R&D incentivised. It would be inconsistent with the intent of the incentive to apply broadly to businesses.

Advantages:

- Simple for companies to identify and calculate. Likewise, it would be simple for the government to administer and monitor compliance.
- Incentivise labour-intensive R&D activities in the fields of engineering and high tech software.

Disadvantages:

- Creates bias to businesses that are labour-intensive (e.g. software, services based companies) and against those that incur more direct, contractor and capital expenditure (e.g. engineering, agriculture, manufacturing businesses).
- New Zealand still has a relatively large manufacturing base. Limiting eligible expenditure to labour cost would exclude these business from participating in the credit as they move towards modernising production and implementing cutting edge production techniques to maintain and grow manufacturing jobs.
- Excludes many costs that would generally be considered part of undertaking R&D such as: research services, production of prototypes, purchase and use of R&D-specific equipment and facilities, depreciation, etc. As a consequence, only a small part of the total business R&D costs would be included, reducing the effectiveness of the program.
- The program also seeks to attract large international R&D-intensive firms to NZ. Sometimes these firms prefer to utilise local contractors to undertake their R&D activities, which would be excluded.

Furthermore, many businesses rely on indirect R&D labour costs to achieve their R&D goals. NZ is a small growing economy and there are only a handful of companies who have full time R&D teams. In this regard, we are very different from larger economies, where many companies employ large teams of R&D experts. Most of our companies have only a few full time R&D employees, and they rely on indirect support from the rest of the team to achieve their goals. Examples include:

- Project Managers, including Innovation Managers, who shepherd the R&D activity through the company and help pull in resources as needed;
- Senior management, who provide input on how the R&D fits within the broader strategic goals of the company and guide the direction that the R&D program should take;
- Customer facing staff, who are able to source real time feedback and identify user requirements, so that the output of the R&D meets a real world need, avoiding it being 'wasted R&D';
- Production experts, who provide input on prototyping and also whether something can actually be produced at scale. There is no point in the 'Innovation Lab' of a company creating something which cannot actually be produced.

To control the types of non-labour costs which are claimed, we recommend the guidelines include examples of eligible overhead, prototyping and third party costs.

Question 11: What are the advantages and/or disadvantages of setting overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?

For the tax credit to be effective in supporting the cost of doing R&D, it is important that it supports the fully costed value of R&D.

The fully costed value will differ from company to company, therefore it would be overly burdensome for government to intervene in mandating how businesses calculate this.

For management reporting and the preparation of financial statements, organisations already follow sound commercial practice in allocating overheads to their activities. In most cases, this will be "activity labour" divided by "total company labour". For those organisations where this results in a warped allocation, they already turn to alternative methods.

Accordingly, there is no need for government to add any further mandates. It should suffice to state that the method be fair and reasonable, and consistent with generally accepted accounting practices. A standard methodology can also be included in the guidelines with an example.

Question 12: Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.

Question 12 is in some sense another way of asking question 9 (dual purpose R&D). In reality, all businesses undertake R&D for this purpose. By excluding R&D for which a commercial return was received, that would only incentivise failed R&D, and businesses who had successful R&D would be penalised.

Furthermore, current best practice is to work collaboratively with customers to get feedback from users in real time. The best kind of customers to work with are paying customers because that provides a signal that they care about the results of the R&D.

The feedback from non-paying customers is heavily discounted because they have no 'skin in the game'. Accordingly, excluding R&D for which commercial consideration was received bears no relation to modern R&D practices and can also encourage poor R&D methodologies by incentivising businesses not to engage with customers to get early feedback.

In light of this, any reforms in this area should be directed at identifying 'who's R&D' it is, and that can be managed by using the same 'on behalf of' test from the 2009 regime as described in our response to question 9.

Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?

Broadly speaking our recommendations in question 2 address the necessary changes.

However, we are aware of two broad concerns in some quarters within government that we wish to address.

Firstly, we understand that some officials, especially those that have come up through the ranks in academia and government research agencies, do not consider software development as a class to be genuine R&D. This is a very out-dated view of the world and disconnected from the primary engine driving business growth. Furthermore, software development is a form of computer science, which is a science in and of itself. In this regard, software development incorporates some of today's most important cutting edge science, such as artificial intelligence, machine learning and data analytics. Therefore, there is no need to create special subclasses of R&D in the legislation just for software activity.

We appreciate that R&D in software happens at such a rapid pace that traditional R&D experts may struggle to fully comprehend the rigour in the methodology. This is especially so with cloud based technologies, where new features can be pushed out rapidly and testing done in real time.

By way of example, MYOB has a cloud-based platform in which it rapidly pushes out new features that its R&D team have been working on. Often, the R&D team can deploy 5-10 times in a given day. This allows for rapid feedback on performance, customer usability, stability and platform integration. Even though the company follows an agile development process with rapid deployment, agile does not mean ad hoc. MYOB's R&D team, numbering over 100 software engineers have a highly methodical and focussed approach in the technologies they are researching and their development cycle, coupled with rapid evaluation via input from real customers.

In the modern era, best practice for R&D means real time, fail fast, lean and customer centric. It just happens to be that software currently leads in this approach, but many traditional and industrial businesses are quickly adopting this as well because it generates superior results.

For this reason, government should applaud software companies for leading in this space through their early adoption of 'agile' and 'lean' development, rather than holding it against them because it does not conform to the norms established when the Frascati model was originally written 50 years ago.

Secondly, we understand that officials are also concerned about their experience in 2009 and examples from Australia of large financial institutions and other big corporates upgrading legacy systems and simply claiming the whole cost as R&D. On this point, we are in agreement with officials that care must be exercised in this area. The modified definition of R&D we've provided above will exclude these cases as they do not exhibit eligible activities.

In saying that, to the extent that they do exhibit genuine R&D this should be embraced.

For example, if a financial institution replaces a current manual paper-based process with an interactive artificial intelligence agent that uses data analytics to adapt to customers' specific needs and uses the latest encryption tools to protect their privacy, then this should be assessed on its merits and not excluded simply because it's a case of a financial institution replacing a legacy system. Not only should it be evaluated on its merits, but there would no logical reason to have a cap on the amount of R&D that can be claimed.

Question 14: Are there reasons why continuity rules should not apply to tax credits? Please describe.

A significant number of loss-making companies will rely on the R&D loss cash-up regime in the first year of the R&D tax credit, therefore, we recommend continuity issues be revisited in year two once it's clarified what will replace that regime and the support for loss making companies more broadly.

For profitable taxpayers, most of these will receive their refund shortly after the R&D activity is undertaken, therefore the risk that a different economic owner receives the benefit from the

incentive is limited. In addition, some businesses may choose to reduce their provisional tax payments by the amount of their expected R&D tax credit. As the credit will count as 'tax paid' the existing imputation continuity rules should suffice.

Furthermore, we understand that in subsequent years with regular R&D reporting government may in turn pay the incentive on a regular basis (e.g. quarterly or monthly). This will significantly reduce the time lag between R&D activities and receipt of the credit which will further eliminate the risk of a different economic owner receiving the benefit.

Question 15: Is the minimum threshold set at the right level? If 'no', please provide further details.

We agree that this minimum threshold is reasonable. Organisations need to have a critical mass of R&D for their activity to have a long term impact in building their internal R&D capability. The figure of $100,000 is approximately 1 full time equivalent skilled employee fully costed for overheads. By setting the minimum threshold at one FTE, it signals the need for businesses to take R&D seriously and dedicate sufficient resources to this to achieve sustainable innovation.

Question 16: How important is a cap or a mechanism to go beyond the cap? Please provide further details.

A cap is beneficial as it will provide an avenue for businesses to engage with government early before undertaking large R&D projects.

This will provide an opportunity to engage in more wide reaching conversations about the spill over benefits to NZ from such a project and the other tools government has to support projects at these large scales. This is an especially important signal for large foreign companies looking to move their R&D facilities to NZ as that can then be undertaken in a planned, methodical manner in partnership with government.

Question 17: What features of a Ministerial discretion or pre-registration would make them most effective?

It may be more sustainable to move the decision to the executive branch rather than cabinet as decisions are less likely to be impacted by election cycles. As regards criteria, two critical features would be:

— That the R&D is for the benefit of NZ

— That the activity is sustainable in the long term

Question 18: What are your views on the proposed mechanisms to promote transparency and enhance evaluation?

We broadly agree with these proposed mechanisms.

Question 19: Are there any other risks that need to be managed? Please describe.

We have no further comments in this regard.

Question 20: What are the risks with making external advisors liable in this way?

We agree that there are merits to curbing contingent fees and have no further concerns regarding this proposal.

Question 21: What is the right level of information required to support a claim?

It's critical that the company records its R&D activity in real time (or as close to real time as possible). This avoids the risk of leaving it until the end of the tax year, plus the additional one year proposed, to attempt to recall all the R&D undertaken.

We understand that some jurisdictions have a 'contemporaneous' requirement i.e. that unless the activity was recorded at the time of being performed, it will be ineligible for the R&D tax credit. We agree that there are merits to this approach.

Government can achieve a greater buy-in for real time record keeping by committing to pay the credit in regular instalments, rather than after the end of the tax year.

In this manner, businesses will be incentivised to record and submit their R&D information on a regular basis throughout the course of the year.

As regards the specific form of the documentation, it would be would be most efficient if taxpayers can utilise commercial documentation which they already possess internally, to the best extent possible. Requiring R&D specific documentation is incredibly onerous and our experience with the 2009 R&D tax credit was that IRD would simply request the taxpayer's internal project files, largely bypassing the word-limited descriptions provided in IRD's online portal.

Nevertheless, if R&D specific documents are required, this should be clearly stipulated in either the legislation or guidelines, and the format explicitly provided so that companies can prepare the necessary documentation on that basis as the activities are performed.

We note that some of the negative experience which officials had with the 2009 R&D tax credit is unfairly laid at the feet of that regime writ large. IRD's experience at the time was that businesses waited until the end of the year to document their R&D claims.

However, we point out that after the then-Labour government announced the scheme in 2007, there was significant interest in the business community around proper recording of R&D and implementing systems and processes to capture data in real time.

Half way through the tax year the government changed and the regime was cancelled for subsequent years. This created a disincentive for businesses to implement real time record keeping, leaving them to only reflect on their R&D activity when they filed their 2009 tax return several months after the end of the tax year.

For this reason, it's critical to gain trust from the business community in the stability of the R&D funding ecosystem so that they are willing to make the investment in real time record keeping processes and systems for the long term. We have already provided our thoughts on the stability of the ecosystem at the outset of this document.

Question 22: What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?

Businesses are open to submitting claims via third party software especially if the collection of data in real time will mean that they can receive the credit in regular instalments e.g. quarterly/monthly.

Question 23: What integrity measures do you think Inland Revenue should use?

The most robust form of integrity measures will be that which is driven by the taxpayer. For that reason, ensuring that they have robust systems and processes to collect their R&D data in real time is critical, as outlined in our responses to questions 21 and 22.

Real time data collection and sharing by taxpayers should allow officials to review R&D claims throughout the course of the year rather than post year-end. This should mean that safeguards that currently exist for GST can also be adopted for R&D e.g. holding back the refund and contacting the company where there is abnormal activity for a particular month.

We understand that it's currently planned for IRD to be the first port of call for all R&D tax credit claims, and that Callaghan Innovation will be used on an ad hoc basis for 'complex' projects. Furthermore, it's our understanding that IRD may recruit technical experts to review the merits of R&D claims.

We have the following concerns regarding this plan:

- There is currently widespread negative speculation about the future of Callaghan Innovation. Having lost $100 to $150 million (39% to 58% of Callaghan's total revenue) by shifting funding to R&D tax credits, this only adds to confusion and uncertainty in the business community about what role Callaghan will play in administering these reforms. Accordingly, it is critical that government provide a definite role for Callaghan as soon as possible to reduce uncertainty and get buy-in from the business community.
- Hiring R&D specialists for IRD goes against the Business Transformation which that organisation has embarked on for the past several years. This reduces the scope for broad political support, increasing the likelihood of a future National-led government reforming the scheme. This again creates risk and uncertainty which needs to be negated to get buy-in from the business community.
- There is an inherent conflict of purposes by having R&D specialists inside of IRD. The culture of IRD is to preserve the tax base by limiting the amount of funds being disbursed. The R&D experts should work collaboratively with businesses to foster, surface, and promote innovation in business. These two purposes are incompatible. Accordingly, we recommend that Callaghan experts are the sole source of technical expertise used in evaluating R&D claims. IRD's role should be clearly defined by government as the facilitator of payments, and policy administration in equal contribution with Callaghan and MBIE.

Other matters

Effective start date

We understand that there is some uncertainty amongst officials as to how a start date of 1 April 2019 will actually be implemented, given that many applicants have non-standard balance dates.

Practically speaking, there are two options in this regards:

- Option A: The legislation can refer to application from 'the 2020 income year onwards'. This removes any confusion and ensures that there is equitable treatment across early (e.g. December year-end), standard and late (e.g. June year year-end) balance dates. Furthermore, this is internally consistent with the rest of the income tax rules which, with few exceptions, operate on an income year basis.
- Option B: The legislation instead has a 'hard' start date of 1 April 2019, and refers to 'expenditure incurred after 1 April 2019'. In this case, companies with financial years beginning 1 January 2019 will include costs for the last nine months of the financial year. For companies with June balance dates, they would claim R&D costs from the last 3 months in the period 1 April 2019 to 30 June 2019, and then the full twelve months from 1 July 2019 onwards. There is precedent in the Act for new regimes having a hard start date (e.g. removal of depreciation loading and taxation of gains on investment properties) so this would have a degree of internal consistency.

We recommend adopting Option A for its ease of administration and natural fit within the existing income tax framework. Furthermore, the major non-standard balance dates are December (3 months early) and June (3 months late) and there are a large number of taxpayers in both pools. Accordingly, by treating these as equal to standard balance date taxpayers, the impact of non-standard periods is netted off (i.e. plus 3 month and minus 3 months). Not only is there equity amongst taxpayers, but there is also no adverse impact on the tax base.

We understand that in some quarters of government there is an inclination to refer to 'income years beginning on or after 1 April 2019'. This is unacceptable as early balance dates (which form a large part of the business community) would be denied access to the regime for

approximately a year before the announced start date. This inequitable treatment of taxpayers based solely on their financial years is inconsistent with the purpose of the income tax regime and the government's policy objective in reforming R&D funding. Furthermore, it would deepen the level of apathy in the business community regarding these reforms, resulting in poor engagement with officials, a lack of uptake and ultimately an ineffective regime.

Dual system filers

We understand that it's yet to be determined how to manage companies who have a growth grant and who wish to file an R&D tax credit claim for costs not claimed in their growth grant (or vice versa). Furthermore, we understand that one of the options being looked at by officials is to simply make companies choose one method and deny access to the other.

The growth grant is a government grant like any other, and presumably the provision from the 2009 regime will be reintroduced which requires businesses to exclude R&D funded by some other government grant. We suggest that this method is relied on to mitigate the risk of 'double dipping' as:

- It is relatively easy to monitor since IRD has access to both growth grant and tax credit data;
- It empowers companies to take ownership and control their own transition off the growth grant and into the tax credit on terms which are most suitable for their business;
- It covers off companies that have project grants as well.

Revenue above the line

For many companies, one of the biggest benefits of the growth grant was that the payment from government was recognised 'above the line' as revenue. This helped with budgeting, management reporting, stakeholder engagement, and driving positive behaviours throughout the organisation.

It should be remembered that R&D incentives may be a payment from government to the company, but the company then also has to incentivise the desired behaviour in its organisation and the form that that incentive takes can either help or hinder in this regard.

In various quarters within organisations, there is often a sense of apathy with tax credits as team members feel, whether rightly or wrongly, that 'head office' will simply just bank the credit and decide how to spend it and that the department and team members who actually did the underlying R&D will have no say. This is one of the issues which an 'above the line' payment helps remedy as the receipt can be recognised in business unit P&Ls within the organisation and business unit managers can drive the right behaviours within their teams with a degree of independence from 'head office'.

We appreciate that it's not government's responsibility to help companies manage their people. However, as mentioned above, the form that the incentive takes can either help or hinder companies within the broader purpose of achieving the goals of the regime.

In that regard, we recommend government officials consider publishing guidelines for financial reporting purposes and potentially endorsing the treatment of the payment as an investment tax credit under IAS 20 so that companies who wish to can include the credit 'above line' in their management reports and financial statements. Upon filing their tax returns, these companies can reverse the item as a tax adjustment so that they are not taxed on the receipt.

Control, ownership of intellectual property (IP) and financial risk

There is some confusion in the business community about government's view on R&D performed by New Zealand companies who are part of multinational groups, where the R&D is

undertaken in NZ but the ultimate control, IP ownership and/or financial risk rests within the global group.

Below, we've recapped again the policy objectives of the R&D incentive for reference:

- Creating high value added jobs with good pay
- Attracting foreign direct investment
- Attracting and retaining skilled, globally mobile talent
- Fostering an innovation ecosystem with a free flow of information between businesses, government and institutions
- Keeping successful local companies in New Zealand

Based on the above goals, it's irrelevant whether R&D performed in NZ is ultimately under the control, ownership and/or risk of the NZ legal entity or an overseas legal entity within the same global group.

Consistent with recent trends in income tax policy (e.g. debt remission reforms) and the pragmatic approach adopted throughout the Callaghan era, it should be sufficient that the R&D is being performed under the auspices of the same ultimate economic owner.

Loss-making companies

We understand that this issue is being parked while government works through the key items for the R&D tax credit. In preparing to engage with government at that later point, we make the following observations about the shape of future support for loss making companies:

- A transitional package for loss making companies which has the hallmarks of an R&D growth grant is an inadequate solution due to the limited access that most businesses have to the growth grant i.e. the 6% relative uptake due to the issues highlighted above.
- We understand that one of the primary drivers for government in excluding loss making companies in the first year is to hedge against the cost of opening access too broadly. This is a false economy since loss making companies already (and justifiably so) have access to growth grants, project grants and the R&D tax loss cash-up.
- Many high growth, R&D intensive companies will have an initial period of loss making, and as government looks to rationalise the R&D funding regime, it would be sensible to open up access to the R&D tax credit to them as well. From a risk management perspective, the companies actually have to spend $100,000 at least to get back a minimum of $12,500 so the reservation of throwing good money after bad is unfounded as these companies must still have the financial wherewithal to overcome that constraint.

Based on the above, we see no reason why the regime can't be opened up to loss making companies from 1 April 2019.

In the event that government decides not to take this up for the first year, the regime should be opened up to loss-making companies in the second year in full (i.e. a refundable credit).

Regular feedback and reporting to the House

As mentioned at the outset, our number one priority is stability of the R&D funding system, regardless of what form it takes. To achieve this, it's critical that there is broad political support.

To assist government in achieving this, we recommend that there is a steering group established with officials (IRD, MBIE, Callaghan) and professional advisors to regularly report on what's working with the regime and where it's falling short. This would be a two way

conversation and also provide a regular and 'on the record' opportunity for officials to raise their observations and concerns directly.

We recommend that the group meets quarterly and, in furtherance of shared goals of transparency and achieving broad political support, the key issues discussed should be published on MBIE's website and tabled in the House.

Overseas expenditure

Many businesses are unable to obtain local expertise to support the R&D activities being undertaken in NZ and need to rely heavily on overseas resources. In that regard, the 10% upper limit may be too restrictive to support genuine R&D which benefits NZ through the transfer of knowledge, and creation of innovative goods and services for New Zealanders.

For example, Fletcher Building's s 9(2)(b)(ii) However, there was no local expertise for the cutting edge technologies they were investigating. They also checked with local universities with little success. After engaging with NZTE, they were able to find the necessary expertise overseas. As the company is focussed on solving global problems, it's critical that they can work with global R&D experts where appropriate.

Accordingly, we recommend a waiver of the 10% upper limit for projects with a substantial overseas footprint. We suggest that the threshold for applying for the waiver is where the 10% figure exceeds $1million and the applicant can demonstrate the benefits to NZ from undertaking the project.

Next steps

We would be happy to meet with officials to discuss the above in further detail.

Should you have any questions in the interim, please feel free to contact us.

Yours sincerely

s 9(2)(a)

s 9(2)(a) [redacted]

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29 May 2018

R&D Tax Incentive Team
Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140

Dear Sir/Madam

R&D Tax Incentive Submission

Thank you for the opportunity to provide a response to the discussion paper "Fuelling Innovation to Transform Our Economy" (dated April 2018).

This submission is specifically in relation to the proposal to remove Growth Grants - and therefore funding for early to mid stage innovative R&D companies.

Background
I am a director of Flying Kiwi Angels - a highly active investment group founded 2014.

- s 9(2)(b)(ii) [redacted]
- All of our investee companies are pre-profit and highly active in R&D.
- Our companies are almost exclusively software only.

Removal of uncertainty around the R&D tax incentive system

Having a solid and stable R&D tax incentive scheme is critical to start-up and growth entities. It provides confidence to entrepreneurs that financial support will be available throughout the lifecycle of the research and development process. Without a strong degree of legislative certainty we envisage there will be less entrepreneurs willing to embark on research and development activities.

A stable research and development incentive scheme is also important platform for entities to raise capital; giving investors' confidence that the business have sufficient capital to be supported through its growth phase.

The current uncertainty is also decreasing business value, and in some situations this is potentially worth millions of dollars.

R&D Tax Credits needs to be refundable for start-up / early stage companies

The R&D Tax Incentive which is to be introduced from 1 April 2019 is proposed to be "non-refundable" and therefore the support it will provide to start-up and early stage businesses which are usually in a tax loss position is negligible. These businesses will only be able to carry forward their tax credit to a future tax year. This proposal is inconsistent which many global R&D tax credits (e.g. Australia, UK and Canada) which are refundable to early stage companies in a tax loss position.

As the Government undertakes further assessment of this issue we strongly urge it to consider a "refundability" mechanism and that these refunds are paid on a quarterly basis. Start-up companies need cash in order to fund their ongoing R&D Activities and to accelerate the growth of the business. While there is uncertainty around the refundability of the R&D Tax Incentive it will be more difficult for early stage businesses to raise capital from investors.

Callaghan Growth Grants

We note that the Government is proposing that the Growth Grant Scheme will end 12 months after the start of the R&D Tax Incentive. While we support the introduction of the R&D Tax Incentive, our view is that the Growth Grants should continue as well, or that all grants that have been written and executed should be allowed to run until completion. Growth Grant funding has already been built into the business' cash flow and valuation models therefore the premature cancellation of the Growth Grant directly impacts both of these items. While there is uncertainty around the Callaghan Grant programme it will be more difficult for early stage businesses to raise capital.

We also strongly urge the NZ Government to consider offering a combination of both Growth Grants and the R&D Tax Incentive, so that start-up and early stage companies can access both programmes (but not for the same activities/expenses). By offering both programmes the Government provides start-up businesses with options, encouraging them to be innovative.

It is essential to the ecosystem not to have a gap in funding where only the profitable companies receive support and the early stage are left at a distinct disadvantage. Large companies tend to be good at development, while early stage companies tend to dominate the true inventive thought.

Minimum threshold (Question 15)

The minimum eligible expenditure threshold is proposed to be set at $100,000 in order for a company to qualify for the R&D Tax Incentive. While this minimum threshold does not apply to R&D activities outsourced to an Approved Research Provider, we firmly believe this threshold is too high for early companies. Many start-up businesses run very light for the first year or so, and often they don't pay the founders and other key staff. As such, the true "cost" to the business and shareholders to reach $100,000 of overheads and other direct costs would be much higher.

We recommend the minimum expenditure threshold is reduced to $20,000 in order to allow early stage companies to access the R&D Tax Incentive at a time when it is material to their ongoing activities.

Compliance costs (Question 21)

The purpose of a broad based R&D Tax Incentive is to encourage business to undertake R&D in a manner which is streamlined and supportive to their stage of growth. However, we are concerned that the compliance burden will be very high for SMEs. The reporting, capturing and compliance costs for SMEs is likely to be high and in some instances may be prohibitive to access the R&D Tax incentive.

To enable a streamlined compliance process, we ask that good clear guidance materials are published, and that application processes are designed to be streamlined. If not, time poor early stage companies will need to engage a consultant, which is just another cost to cash poor businesses.

Software activities eligible for R&D support (Question 13)
The proposed definition appears to focus on more traditional laboratory-based R&D whereas software development activities are significant to NZ's early stage companies. A scientific definition of R&D which includes "material advance in science or technology" will restrict the type of software development activities which qualify. This definition appears to focus on research, not development.

R&D in software is a significant part of the business we invest in - and New Zealand has been a leader in software (Xero, TradeMe, Eagle, Orion, Ghost, Wingate etc). We development software to solve complex technology problems and deliver new products and ultimately generate very significant export earnings. This type of R&D should qualify.

R&D Definitions (Questions 2,3 &4)

The Paper provides a definition of what R&D is (Page 15) and well as some exclusions (page 17). In particularly it refers to the intention to advance science or technology through the resolution of scientific or technological uncertainty. This can provide some issues in certain industries for certain industries (such as software) as it is difficult and often subjective to demonstrate that you are advancing science or technology due to the unknowns of fast-pased market driven research.

Dual Purpose R&D Activities (Question 9)
Start-up and early stage companies are usually focused on developing new products based on customer-focused innovation. This enables us to create products which have real-world appeal. To achieve this, the R&D needs to occur in a commercial market driven environment, and is often undertaken in collaboration with potential customers. As a result, most of these R&D activities have multiple purposes, even if R&D is the main purpose.

We think the sole purpose test should be replaced with another requirement which indicates the main purpose of the activity needs to be R&D, but it's not always the sole purpose.

R&D expenses (Questions 11 & 12)
The Discussion Document proposes to limit the expenses a company can claim to only labour costs or to apply a standard overhead rate. While this might streamline the compliance process, it would have some direct disadvantages for start-up companies. Small companies that are very early stage, in order to keep costs low, often don't pay the founders. Therefore, limiting the R&D expense to labour expenses would be unfairly detrimental to early stage companies. Furthermore, in this circumstance, applying a standard overhead rate based on labour costs would also reduce the

company's ability to include the actual costs it spends on the R&D project. The best solution would be to just let companies claim the costs they actually spend on the R&D.

Please make contact if you have any questions.

Yours sincerely

s 9(2)(a)

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1 June 2018

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Dear Sirs

Submission on Fuelling Innovation to Transform our Economy: A Discussion Paper

We write to provide feedback to the Government on the discussion document published in April 2018.

1. *Introductory comments*

Westpac welcomes the proposed introduction of the R&D Tax Incentive regime. We support the Government's objective of raising investment in R&D, which will benefit the New Zealand economy and our country's future prosperity. We believe that the proposed regime would contribute to that objective.

As the discussion document notes, the private sector plays an important role in R&D investment in New Zealand. It is therefore essential in meeting the Government's target of raising R&D expenditure to 2% of GDP over 10 years that private companies are easily able to access the R&D Tax Incentive. It is important to note that private sector R&D is not typically motivated by the academic search for scientific or technological knowledge; in general, commercial R&D is applied to solve practical issues, improve products and services, or create new commercial opportunities. If the R&D Tax Incentive is to succeed in raising the level of existing investment, companies must not be prevented from claiming the R&D Tax Incentive merely because R&D activities have an underlying commercial purpose.

While Westpac invests substantial sums each year in R&D to improve its products and services for New Zealand customers, we would not expect a large proportion of this expenditure to qualify for the R&D Tax Incentive. However, some of our R&D activities will involve the development of innovative software and information technology; we suggest that such expenditure should qualify for the R&D Tax Incentive, based on the policy objectives outlined in the discussion document. Furthermore, this R&D investment has broader benefits to the NZ economy beyond Westpac and its customers. If some of Westpac's R&D activities were to qualify for the R&D Tax Incentive, Westpac would undoubtedly be incentivised to invest further resources in innovative R&D; again, this is consistent with the objectives of the R&D Tax Incentive outlined in the discussion document.

We note the Ministers' comment at page 4, which says

"A wider and more diverse range of firms will be able to access the tax incentive which will assist and encourage businesses of all sizes and scales to undertake R&D."

We support all companies being encouraged to access the R&D Tax Incentive regardless of size, scale or industry. We agree with the discussion document (at page 15) that the rules must be clear and robust regarding what sort of activities qualify. However it is unclear from the discussion document whether the type of commercial R&D undertaken by Westpac is currently intended to qualify for the R&D Tax Incentive. We set out our comments below.

2. *General comments*

2.1 Westpac supports the R&D Tax Incentive being available to all New Zealand businesses undertaking eligible R&D activities, regardless of legal structure. This is consistent with the government's aim of increasing overall R&D activities, and recognises the important role that the private sector plays in initiating and undertaking R&D activities.

2.2 Westpac supports the provision of the R&D Tax Incentive in the form of a 12.5% tax credit, and supports the receipt of imputation credits equal to the amount of the R&D tax credit claimed.

2.3 Westpac supports the proposed application date of 1 April 2019 for eligible expenditure incurred on or after that date.

2.4 Westpac is generally supportive of the R&D Tax Incentive being based on the 2008 R&D Tax Credit regime, subject to the specific comments made below.

3. *Specific comments*

3.1 Dual purpose activities (Question 9)

At page 18 of the discussion document, it is stated that:

"The R&D incentive may be better targeted if it applies to an activity conducted solely for an R&D purpose. If an activity was carried out for a R&D purpose and a non-R&D purpose, the entire activity would not qualify as an R&D activity."

Westpac does not support a bright line test that requires expenditure to be solely incurred for an R&D purpose. In our opinion, a commercial enterprise will rarely conduct R&D for the sole purpose of R&D; companies typically conduct R&D to satisfy a commercial objective, for instance to solve a specific problem or to create a commercial advantage or opportunity. We do not therefore consider that such a bright line test would work in practice.

In Westpac's case, R&D projects may address a number of complex technological issues to achieve an overall commercial outcome. These projects (or parts of these projects) may involve the development of new or improved products/processes/services in a systematic way through the resolution of technological uncertainty. However a 'dual purpose activities' test would seem to preclude any part of such activities from qualifying for the R&D Tax Incentive, since there will be an underlying commercial purpose to the R&D. This seems to be inconsistent with the policy intent outlined in the discussion document.

We consider that a 'dual purposes activities' test would not therefore be practical to implement. Accordingly we submit that a 'dual purpose activities' test should not be included in the design of the R&D Tax Incentive.

3.2 Eligibility - Software R&D (Question 13)

Westpac supports the inclusion of software R&D in the definition of eligible R&D activities, in line with the comments at page 22 of the discussion document. We agree that software R&D is an important part of the New Zealand economy, and that the standard definition outlined at page 15 of the discussion document is not sufficient to ensure that software R&D activities are captured for R&D Tax Incentive purposes.

We recognise that a definition of qualifying software R&D activity will be difficult to devise. We understand that a significant challenge in this respect is whether there is technological uncertainty, given that software or applications are often developed using standard languages and tools. This is an area where the 2008 definition assisted, because it included the concept of 'novelty' which could apply to the outcome of the R&D (for instance, a unique algorithm or application). It is therefore important that the definition of software R&D takes into account both the means and the outcome of software R&D, so that innovative software R&D is not excluded from the R&D Tax Incentive simply because it is developed using existing software tools.

In this context, Westpac supports a separate definition of software R&D rather than a variation of the standard definition of R&D core activities. We submit that this definition should be subject to further consultation with affected taxpayers (including NZ banks who conduct a significant amount of software R&D).

3.3 Eligibility – effective ownership

In order to be eligible to claim the R&D Tax Incentive, it will be necessary for a company to

- bear the financial risk;
- control the R&D activities; and
- effectively own the results of the R&D.

We are concerned that the requirement to have 'effective ownership' may disadvantage groups of companies where eligible R&D expenditure is incurred in one group company (effectively on a contract R&D basis) but ownership of the results of that R&D resides in another group company (for instance, the group parent). The result of this would be that the R&D expenditure would not be eligible for the R&D tax credit on any side (since the group company owning the results would bear no financial risk in relation to the R&D expenditure incurred by the other group company). This does not seem consistent with the policy intent outlined in the discussion document and may disincentivise investment in R&D in New Zealand, particularly where groups are foreign owned.

We therefore submit that the 'effective ownership' requirement should not apply for R&D Tax Incentive purposes where ownership of the results resides in the wider group.

3.4 Certainty

Westpac agrees with the discussion document that the new rules must be clear and the outcomes must be certain and predictable. In this regard, Westpac submits that

- Inland Revenue should issue comprehensive practical guidance with examples to assist taxpayers in concluding whether R&D activities and expenditures are eligible for the R&D Tax Incentive; and

- Inland Revenue should provide the facility to approve R&D projects' eligibility for R&D Tax Incentive purposes in advance of income tax return filing deadlines, to facilitate the timely agreement of R&D Tax Incentive claims.

We support introducing a similar system to the Australian R&D Tax Credit Concession, where an 'Advance Finding' in respect of R&D projects (similar to a binding ruling) can be requested from the government in advance of income tax return filing. Alternatively we support a specific binding ruling regime for the advance review and approval of R&D projects. Where applicable, it should also be possible to obtain advance review and approval of R&D projects by Inland Revenue under Co-operative Compliance Agreements (if in place).

As noted in the discussion document, certainty of tax treatment is essential to the success and efficiency of the R&D Tax Incentive. It is therefore crucial that certainty of tax treatment is offered to taxpayers in advance of R&D projects, so that the Incentive can be confidently priced into R&D budgets. Without the certainty provided by advance approval of claims, there is a risk that a significant number of R&D tax credit claims may be challenged in the future, as has been the case in Australia, which may result in a loss of confidence in the R&D Tax Incentive regime.

Westpac would be happy to be contacted by officials to discuss the points raised.

Yours faithfully

Westpac New Zealand Limited

s 9(2)(a)

Westpac New Zealand

R&D TAX INCENTIVE – SUMBISSION ON APRIL 19, 2018 DISCUSSION PAPER.

Graeme Lance Turner Wiggs (Lance Wiggs)
4C/11 Pakenham St East
Auckland 1010
s 9(2)(a) [redacted]

A: About the submitter Lance Wiggs

1: This is a personal submission, and not on behalf of any of the entities with which I am associated.

2: I have a number of roles that are related to the topic area, including founder and manager of Punakaiki Fund, which has made over 65 investments in 20 New Zealand based companies (growth stage – post revenue), all of which have performed or are performing design, research, development and market development activities. These include several Software as a Service (SaaS) companies, a high tech hardware company and a digital medical company. As part of this role I am a director of 11 companies and an advisor to most of them.

3: I am a director and investor in a number of other companies, including Define Instruments (IoT for industry), Authentic (digital platform for tours) and Pocketsmith (personal financial software). Collectively the companies that I or Punakaiki Fund has invested have over $90 million in revenue and provide meaningful and generally very well compensated work to between 500 and 1000 people.

4: I am a member of two Return on Science Committees, ICT and Physical Science, and am the former chair of the ICT Committee. These committees assist researchers and teams from research institutions across NZ commercialise their inventions.

5: I have performed well over 100 intensive workshops through NZTE's Better by Capital and Investments programs with mostly growth stage companies that are seeking to raise capital, and many more shorter sessions with further companies. I was also an NZTE Better by Design practitioner, assessing through reports and helping companies through workshops using design thinking to create products and services that would be more easily sold and command higher margins.

6: I have a history of advising, as well as founding, high growth companies in NZ since my return from offshore in 2003. Before returning I spent time at McKinsey in the USA, obtained an Masters of Public and Private Management (MBA) from Yale University and I have worked in a wide variety of sectors and countries. My original degree is in product development – as one of the first three graduates of Massey's BTech (Product Development) degree.

B: Principles used in this response

7: While the tax credit is welcome, I see that there are four principles to consider as it evolves further – the tension between **simplicity and motivation** for business, the **alignment of incentives** with the drivers of value for the businesses, society and the environment, and the **inclusion** of all businesses that are driving economic or societal value, regardless of profitability.

8**: Simplicity, and Motivation**: Any new tax should be simple to implement. It should be, for example, consistent with existing accounting standards, so that companies do not need to report two sets of accounts, and that any required IRD changes are minimised.

The level of the tax meanwhile should be at a high enough level to **motivate genuine changes in business behaviour**. The test is whether directors of companies will see the new tax incentive as motivation for change, or just another way to reduce their tax burden.

As a director I do not see the proposed level of tax, at 12.5%, motivating any change in spend on R&D - it will merely help the profitability of companies that have been unable to receive grants from Callaghan Innovation. It will, meanwhile, reduce the profitability of companies that currently are receiving those Callaghan Innovation grants.

The incentive should also be competitive with our peers, in particular with Australia which offers an extraordinarily generous plan of 43.5% for companies with revenue under AU$20 million, and 38.5% with those over $20 million. At the moment it can make a lot of sense for New Zealand companies to consider restructuring and obtaining staff, departments and investors based in Australia to take advantage of their regime. This places New Zealand companies at a tremendous disadvantage versus their Australian peers.

One example of an unintended negative consequence is where a company that Punakaiki Fund invested into was sold to an Australian company, which in turn was able to claim back 48% of the cash component of that deal as an R&D rebate. We need to be competitive with that.

New Zealand enjoys a lot of structural advantages over Australia and other credible tax competitors, but the incentive proposed is materially underwhelming versus alternatives.

9: **Alignment of incentives**: Please consider carefully the purpose of the proposal.

Is it to simply increase spending on research? Or is it to increase the number of meaningful and well paid jobs, and the size and sustainability of our economy?

It seems obvious that the overall purpose should be the latter, and thus a tax incentive should be directed accordingly. The risk of an overly narrow definition of R&D is that our businesses spend too much time and money on pure research that is not actually commercially viable. There is a very real risk that businesses will allocate too much energy and funding to the research stage of projects, and not enough to the large amount of other work required for successful commercialisation.

I encourage digging deeper into the assumption that greater R&D spend leads to faster growing economies. I strongly suspect that increasing this one metric will have limited impact, versus a properly aligned incentive program that rewards investment in research development and (especially international) commercialisation.

10: **Inclusion:** As proposed the tax excludes the engine room of the fast growing ICT sector – software companies. These have the demonstrated ability to sustainably add high paying meaningful jobs very quickly, as we have see with Xero, Trade Me and many others. These companies employee rooms full of highly qualified software engineers who are developing new products – and generally inventing as they go. We call these people "developers", and they, along with designers, testers and many others are engaged in R&D activity. As written the grant is only focussed on rewarding pure research. If that is the intent then it should be named accordingly. If the intent is to drive R&D activity then the definition needs to expand.

The definition also excludes companies, such as HR-tech, education-tech and perhaps even social outcomes based digital medical companies, that compete using social science research to underpin their businesses. In Punakaiki Fund's own portfolio there are several companies that perform research (and/or would like to perform more) in the social sciences, using this research to further develop their products and grow their businesses.

A fair and effective tax incentive would include all kinds of research and a much broader definition of development.

Tax Loss making companies

The incentive as described removes the R&D tax loss cash out scheme. From what I have see so far this scheme is already highly effective at promoting R&D investment, and is genuinally helping companies avoid expensive investment (and the painful processes associated with that). This program needs to be retained, or even enhanced, if the R&D incentive is to have any credibility in the pre-commercialisation, start-up or high growth sectors. These earlier stage companies are where the bulk of the help is required.

Question Responses

Question 1: *If SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?*

It is clear that for entities that are not currently taxable then there will be no impact.

However for entities that are taxable then carving them out from the tax incentive will not just reduce the amount of simplicity in the tax system, but may lower the amount of R&D activity that is contracted by them out to businesses in New Zealand.

Question 2: *How well does this definition apply to business R&D carried out in New Zealand?*

Very poorly.

The proposed definition introduces complexity and narrows the scope of activity that is incentivised. The definition is not one used anywhere else, and companies will need to have separate accounting standards to track this spend.

The proposed definition encompasses certain scientific research activities, but not development activities, and it does not align with what businesses in NZ currently see and invest in as R&D.

By using such a narrow definition we risk sending a signal to businesses that they should replicate a research institution environment of producing pure science without adding the end user research, development, testing and commercialisation elements necessary to produce positive outcomes. Those outcomes, generated from global sales of high margin products and services, include high paying jobs, increased income and tax paid through export earnings and a sustainable economy and environment.

The proposed definition also misses development of software and would act as a disincentive for founders and investors to start and grow these businesses.

There are many examples of misalignment of R&D incentives inside companies, where the focus on hard core R&D has led to products with poor market fit and marketability, lower sales through under investment in other parts of the business, and eventually resulted in redundancies, voluntary reductions in income and many years of growth and millions in government and private sector funding lost. Please use a wider definition for R&D.

Question 3: *Does this definition exclude R&D that you think should be eligible, please illustrate with examples.*
The definition is too narrow and excludes the most valuable parts of the product development process.

Successful R&D is delivered as part of a larger design, development and market development process, that starts not just with research science, but also with a deep understanding of end user requirements formed by observing end users in their environment. Successful products and services require a large amount of testing and iteration with end users and paying customers, development of the product, software and manufacturing capability and building of the sales and marketing function. Isolating and rewarding only research efforts creates perverse incentives to research rather than develop and deliver.

As above I have worked with companies that had previously spend far too much time and money (including grants) on research and far too little on the rest of the product development requirements. As this will be a public document I am not providing specific examples.

Arguably the definition of R&D should include all of the product development process, from ethnographic research to market development. The incentive should help companies invest their, and the government's, money wisely to create lasting value. Therefore, in my opinion

the definition should include activity as party of any formal product development process, and at least include design and development as well as research.

The proposed definition should also explicitly include software development and associated activities. This activity has generated billions of dollars of value and thousands of jobs for New Zealand – so the incentive should be at least equivalent to our research.

Question 4: *Does the scientific method requirement exclude valid R&D in some sectors, please illustrate with examples?*
Yes as above R&D is more than just pure research, and enforcing the rules like this wold create lower incentives for investment.

Development of world class products may not need much or any fundamental research or new science, but may instead or also require the ability to understand end user needs, quickly and to cleverly develop solutions with the minimum amounts of re-invention.

The research required to understand end user needs does not strictly use the scientific method, especially as defined where it excludes social sciences. This research instead relies on a series of end user observations, prototyping, testing and iteration. It is research that is focused on determining the most high value products and services as quickly as possible. As evidenced by the government's investment in the Better by Design Programme, these activities are highly valuable to businesses, but there is substantial underinvestment from businesses.

Meanwhile development of services is often far more effective without pure research using the scientific method. For example, the software development process is rapidly changing to use a host of external services - software and systems provided by outside parties that are assembled by the developers into a final product. Assembling these in a new form along with creating new code to perform core functions caries a very real development and engineering risk, but does not strictly use the scientific method.

Question 5: *What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?*
This would increase the complexity of the tax incentive, make it far less likely to be considered an incentive by boards and CEOs and as a result render the programme far less effective.

Question 6: *How well does this definition apply to business R&D carried out in New Zealand?*
I agree that R&D results are generally uncertain, but the measures described above in 4: lower than uncertainty. We need care to avoid sending the wrong messages and incentivising spend on R&D for the sake of increasing a statistic, and instead focus on spend that will collectively create commercial outcomes.
The supporting activities are correct when applied to the narrow definition offered, but woefully inadequate when assessing the overall need.

Question 7: *Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.*
Exclusions should apply to both.

Question 8: *Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?*

Weirdly* is an HR-tech company that uses science and ongoing research to help large employers more rapidly understand and filter prospective employees for cultural fit. The company is evolving its model using external and internal social science research. This improves the quality of the model, which already saves clients millions of dollars each year.

There are a number of other high growth companies addressing the HR market (Fuel 50 is an example), as well as in education (e.g. Code Academy) and other areas (business, investment) where social sciences dominate. I have observed that scientists from the 'hard sciences' can be accused of discounting the value of research from the social sciences, and urge that potential for this bias is addressed through consultation with appropriate (social science) reviewers.

*I am a director and Punakaiki Fund is an investor in Weirdly.

Question 9: *What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?*

Without clear brightline guidance this will make the incentive less likely to be materially positive to the companies. We should arguably be encouraging companies to invest in activities that have multiple outcomes, so I question whether this is creating perverse incentive.

Question 10: *What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?*
The advantages are simplicity for the government and businesses.

The disadvantages is that is not how R&D costs work in practice for many businesses. For some businesses it is true that the cost of people's time is the major input, but others require materials, outsourced development and testing, travel and other material costs. Where these costs are easy to separate they should be included in R&D expenditure.

Meanwhile we should be careful to consider the implications of a tax policy that motivates company decisions to hire staff directly rather than using an outsourced R&D provider. Is that the intent?

I recommend that New Zealand's policy on claiming R&D from offshore is aligned with Australia's, so that the two policies fit together, rather than overlap, and that the Australian policy doe not offer more than the New Zealand one. For example let's make sure that we

are similarly rewarded for purchasing a company with a large amount of IP/R&D company from the other country.

Question 11: *What are the advantages and/or disadvantages of setting overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?*
The overhead percentage will vary by company, so any fixed number will be unfair. A system where companies periodically (annually for example) estimate this percentage may work.

Question 12: *Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.*
I agree that where R&D is paid for by another party that the government should not provide an incentive. If the R&D is partially paid for then the unpaid portion should be eligible.

Question 13: *What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?*
All software development for new products or extensions to existing products should be specifically included, especially given the value and jobs this activity is creating for New Zealand.

Question 14: *Are there reasons why continuity rules should not apply to tax credits? Please describe.*
Continuity rules themselves need review – for early stage and high growth companies the investors contribute over several rounds, and the continuity rules are not appropriate. They should be taken back to first principles. If they are fixed then the R&D credits can be aligned.

Question 15: *Is the minimum threshold set at the right level? If 'no', please provide further details.*
No – there should be no threshold as R&D expense does not come in $100,000 lumps.

This is a claim on a tax form, and there is no materiality threshold from the side of the tax-payer, so similarly there should be none from the side of the incentive.

Meanwhile $100,000 is a lot of money for some very early stage companies, and we do not want to create a perverse incentive to spend more than a company can afford in order to get a rebate.

Question 16: *How important is a cap or a mechanism to go beyond the cap? Please provide further details.*
I support a cap as it will increase the benefits to the smaller companies that actually need the incentive.
However it is important, for the larger companies, to ensure that the overall New Zealand tax regime + incentive scheme is competitive with offshore tax regimes and incentive schemes, especially Australia's.

Question 17: *What features of a Ministerial discretion or pre-registration would make them most effective?*
I would prefer no discretion – simply to avoid any whiff of picking favourites, which generally doesn't work.

Question 18: *What are your views on the proposed mechanisms to promote transparency and enhance evaluation?*
I agree with the proposed approach – and suggest that the government should have a requirement to publish specifics whenever the government is providing funding or finance. I do not agree with an unusual lag – publishing the data will help capture fraud much more quickly.

Question 19: *Are there any other risks that need to be managed? Please describe.*
The level of tax incentive is perhaps too low to promote very strange behaviour. I expect that the amount of work that will be classified as R&D will go up as the incentive provides that motivation.

Please consider carefully the balance between expensing versus capitalising R&D spend – that's perhaps more interesting for many companies.

Question 20: *What are the risks with making external advisors liable in this way?*

The risk is that they will charge more up front, and the results will be underwhelming. Please make this program simple enough so that we do not need to hire expensive advisors. And yes – make them liable.

Question 21: *What is the right level of information required to support a claim?*
The burden is on the company to prove their claim if audited. They should not need to provide information to the IRD beyond the claim (headline numbers) itself, just as with GST.

Question 22: *What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?*
These should be submitted just as we do GST and income tax returns. Please don't invent anything new. Every company I am involved with uses Xero – so build on that.

Question 23: *What integrity measures do you think Inland Revenue should use?*
Use analysis and randomisation to determine when to audit. Please don't invent anything new.

Submission: R&D Tax Incentives & Transition

Background

Vend is a cloud-based point-of-sale and retail management software that lets retailers run their business in-store and online. Vend's software integrates with leading business applications around the world. Vend has grown to be used in more than 20,000 stores in 140 countries, and has five global offices. Vend has raised more than NZ$63 million from top-tier investors.

Vend continues to invest ⅓ of company resources into R&D, and are investing heavily in product and engineering teams, recently growing the team by 20% (with more hiring to come).

In large part thanks to this R&D focus, Vend has managed to develop deep product features that help differentiate us from our competitors.

- We were able to explore alternative approaches to data processing to enable us to build an inventory processing platform that will allow us to further experiment with inventory prediction.
- We've added best-in-class functionality for retail promotions through an iterative approach of incremental development with user & production testing at each step to validate the functionality and research future approaches.

R&D has been, and will continue to be core to Vend's business plan and future development. We are investing heavily in our product and engineering teams to accelerate development of features at the leading edge of retail innovation. It is therefore critical for Vend that Government continues to support R&D in New Zealand. We therefore welcome the opportunity to comment on the Tax Incentive discussion document.

General comments

We welcome Government's view on the wider benefits of R&D for the New Zealand economy, and agree that R&D has an important role to play in cementing New Zealand's position as an innovative and forward looking country. We also note and agree on Government's view that R&D allows New Zealand business to move up the value-chain and to increase NZ wages.

We also note Government's comments on the growing importance of software R&D to our economy. There are a large number of NZ born and bred software companies to be proud of. Vend has grown from a small start-up to an international business now employing over 200 people, more than half being based in New Zealand. Government should not need reminding of other NZ software success stories such as Xero and Pushpay and the large number of emerging technology companies doing brilliant things in the NZ software space. It is therefore welcomed that Government has identified that historic

R&D definitions do not apply well to R&D software activity. We agree that additional work and special treatment of some activities is required.

However, the stated intent of the regime is to have an R&D tax incentive that will have a broad reach across the economy, to be accessed by a wide and more diverse range of firms. We believe that the R&D tax incentive as currently framed will benefit medium and large, established business, but not be of practical assistance to the modern technology sector. We feel that startups and emerging business are left out in the cold. In particular, those businesses with carried forward tax losses will be unable to get a cash flow benefit from the proposed regime. Even New Zealand's largest technology firms are unlikely to receive a cash flow benefit. This forgotten group represents a very large subset of NZ technology firms. Based on latest publicly available financial statements, Xero, PushPay and Orion Health appear to fall into this group for example.

It appears that Government is aware of this fact, but is choosing to largely ignore the problem, instead dealing with it via temporary sticky-plasters and vague intentions of growing the proposed R&D package. In the meantime, innovative software companies that are not in a tax paying position will face negative cash flow changes as a result of the move away from Callaghan Grants. Whilst the temporary extension of the Callaghan programme to 31 March 2020 is welcome, this "she'll be right'' approach has dangerous consequences for R&D in New Zealand. The lack of support for New Zealand's growth engine appears ill-advised. We recommend that the Callaghan programme should be left in place until the extended R&D packages are effective. Current proposals to prevent double-dipping both Callaghan and R&D tax credits should remain to manage cost to Government.

It is also noted that the tax credit at 12.5% is modest at best when compared with international standards. With ever increasing international mobility, virtual offices and remote working, international competition for R&D should not be ignored by Government. Whilst many home grown technology businesses will be loyal to New Zealand, increased competition and investor demands will mean more businesses will start looking at ways to maintain their competitive advantage. Increased R&D funding is likely to be one of these avenues. Whilst we appreciate the budget constraints faced by Government, the tax incentive at 12.5% is likely to have only a marginal impact on R&D activity.

Key concerns on overall policy design

- For businesses in a tax loss position, the R&D tax incentive offers no cash flow benefit to carry out R&D - we expect R&D in the technology sector to reduce as a result.
- The removal of the Callaghan programme results in a significant funding reduction for businesses carrying out R&D.

- Increased carried forward tax losses are of little relevance to a startup/early stage company that could be several years away from turning a profit , and so will do little to incentivise R&D.
- If continuity provisions are applied to the losses, the incentive to carry out R&D is further reduced via the removal of the tax asset.
- The proposal seems to favour profitable companies that arguably are in a better position to self fund R&D.
- The definition of R&D as proposed, combined with the low rate of funding is likely to mean that even tax paying businesses will experience a negative impact on cash flow when compared with the existing Callaghan programme.

Comments on the definition of R&D and operational issues

Starting point

Whilst we support attempts to make the definition of R&D clear and robust and as practical as possible, we feel that Government has too quickly dismissed the obvious starting place. IAS 38 contains definitions for both 'research' and 'development'. As well as use in financial accounting, these definitions are also leveraged for Callaghan purposes. The definitions will be better known by a much larger audience when compared with the 'old' R&D credit definition and Frascati principals. We see little value in reinventing the wheel.

We appreciate the need to be able to limit R&D claims in order to ensure a sustainable programme. However, we would encourage Government to stick to better known definitions, and if necessary add additional limiting factors to reduce down claims quantum. An emphasis on resolving technological uncertainty could be added as a sub-limb to the IAS 38 definition for example. We believe that a simpler and more established definition will not only encourage more businesses to claim for R&D expenditure, but the more familiar wording should lead to better quality claims, to the benefit of both the taxpayer and IRD.

Application to NZ business

The definition as currently stated is not well suited to modern era, technology companies.

We understand that certain refinements are likely to be made following the release of the discussion document which we welcome. In particular, the removal of the 'scientific method' wording is welcome. This is on the basis that, whilst technical uncertainty exists, more modern practices and approaches to work and have been developed that make the 'scientific method' less relevant. Software product R&D does often not follow such traditional scientific methodology.

We understand that the 'scientific method' wording is likely to be replaced with 'systematic approach'.

We believe this is more suited to the technology sector and the is broad enough to allow for the more iterative approach taken to R&D in the software context.

We also believe that there is scope for improvements in technology to be under represented by the current definition. Software product development R&D is often targeted at a specific creation or result, for example faster load times or a new API. Further, current and known technologies can be adapted and improved upon for use in different settings and scenarios. In these cases, a narrow view may consider that technological uncertainty is lacking - i.e. it is reasonably expected that the end result can be achieved, but the 'how' Is unknown. It is important that the definition should allow for this type of technological uncertainty if and when the relevant thresholds are met.

Industry examples of this experimental, iterative approach may include:

- Movement away from a sub-optimal standard database for recording inventory movements, towards an event-sourced architecture. Both beginning and end point are "known", but the path between the two is uncertain. A typical engineering approach would start by researching various approaches, and undertaking development work towards one approach (e.g. converting a database synchronization log to a Kafka topic). After some weeks, that work is discarded when further research reveals a similar approach available with different tooling. The new tooling is implemented to achieve a novel approach, the approach is validated and the next stage of the project can commence.
- A mechanism to segment functionality delivered to end users depending on multiple properties of the user is required (e.g. demographics, date-based access, etc.). It is unclear if a service could handle the task of responding to many thousands of requests per second in adequate time, so development is undertaken to build a system. Testing then takes place by sending increasing amounts of production traffic to the system, while monitoring performance metrics. At several points it may be necessary to stop traffic, iterate on the development to improve performance, before finally accepting that the system could form part of a live infrastructure.

Social sciences

We understand the user interface and user experience work ('UX') is likely to be seen as social science research and therefore be excluded from eligible R&D spend. We believe that such a treatment would eliminate significant volumes of expenditure from eligible R&D spend. In many cases, UX accounts for both large spend and represents most of the IP of a product.

For example, a large part of early research on potentially novel or uncertain work involves user research, which is an essential part of reducing uncertainty. Often engineers experiment with multiple potential approaches to UX (e.g. different ways of presenting data, or transitioning through a set of steps), and this process involves understanding the various drivers behind how users expect to interact with systems - it definitely overlaps with social science. Prototypes are built for users to experiment with, discarding some and iterating further on others. This work is designed to eliminate uncertainty, and in some cases work may be discarded entirely if UX research concludes that there is no viable way to approach the problem economically. Suh work can be analogous to building prototypes of hardware devices.

Where UX research is validated, it forms an essential input in to the technological steps of software R&D. UX work is referred back to frequently as engineers iterate and experiment on the technology implementation of the solution to a UX problem.

We feel that Government might not fully appreciate the importance of UX and the valuable advancements it brings. We urge Government to consult more widely on the application of R&D incentives to UX, and to gain a better understanding of this space before fully removing it from eligible R&D spend.

Dual Purpose test

We believe Business R&D will not increase to the extent desired if dual purpose activities are ineligible for the R&D Tax Incentive.

This is on the basis that, at a high level, the majority of business R&D is carried out for non-R&D purposes. That is to say that businesses carry out R&D for business purposes, rather than pure R&D purposes. These business purposes, whilst compatible with R&D purposes are unlikely to satisfy a closely drawn dual purpose test.

For example, Vend carries out R&D in order to improve our product and service offering for the benefit of retailers. This purpose may ultimately be seen as a commercial driver - i.e. with the flow on effect of increasing sales, staying ahead of the competition and better meeting customer needs, rather than a driver of pure R&D for R&D's sake.

It is therefore important to consider any dual purpose test in this light. A dual purpose test should be capable of preventing claims for business as usual expenses, without limiting claims for beneficial R&D. Given the broader criteria to meet the definition of eligible R&D spend, we find an additional limiting factor in the form of a dual purpose test unnecessary.

Overhead allocation

Clearly setting overhead costs as a percentage of R&D labour costs is a simple approach and so decreases the compliance cost of making claims and allows business to focus on R&D, rather than accounting for R&D. We support all attempts at reducing the compliance cost, in terms of both cash and time.

However, such a simplistic approach is not likely to maximise R&D activity, especially for larger scale R&D projects. For example, a company that identifies a significant R&D opportunity may incur high costs scaling and growing the R&D project. Such costs, in particular employee training and recruitment would be under accounted for using a simple percentage basis, especially when such costs can be clearly apportioned to an R&D project. Extending the items included in the R&D labour cost should be considered.

Integrity measures and compliance

Whilst we appreciate the need to manage claims, there is a risk that any exposure to penalties will be ultimately pushed down directly or indirectly to business via increased adviser fees. We do not support this approach. We would encourage Government to consider softer alternatives to advancing the promoter penalty rules. For example, a mandatory declaration that a claim has been filed with a contingent fee basis may allow for more refined risk profiling.

We welcome the proposal for IRD to work with Callaghan in the claims process. A desirable feature of the Growth Grant is the certainty that an upfront contract brings. Such certainty helps business planning and will assist in maximising R&D. We recommend that IRD make Callaghan staff available to review R&D projects early in the process to give comfort to business on the application of the proposed definitions once enacted.

In order to further aid certainty in the claims process, we submit that Government should provide meaningful, industry specific guidance. We also recommend that this guidance should attempt to deal with the more marginal cases in order to be truly helpful. This guidance should be written with the support of software professionals from industry, in collaboration with IRD and Callaghan. We also believe that lessons can be learned from the HMRC Guidance materials made available for taxpayer reference in the UK. Ultimately, the more guidance and material available to advisers and business, the better quality the claims will be.

We thank you again for the opportunity to comment on the proposed R&D tax incentive and transition.

Yours sincerely

s 9(2)(a)

[redacted]

ChristchurchNZ™

R&D tax incentive team
Ministry of Buisness, Innovation & Employment
PO Box 1473
Wellington 6140

1 June 2018

Submission:
Fueling Innovation to Transform our Economy
Discussion Paper on a Research and Development Tax Incentive for New Zealand

Thank you for the opportunity to comment on the discussion paper; Fueling Innovation to Transform our Economy.

This submission supplements a more detailed view provided through the submission of the Canterbury Regional Business Partners Ltd of which ChristchurchNZ is a 49.15% shareholder.

ChristchurchNZ would like to submit the following comments for consideration:

We note that the proposed tax credit scheme moves away from the current growth grant model which "picks winners" and looks to spreads the incentive for R & D activity more widely, albeit in most cases more thinly.

If the proposed tax credit system seeks to incentivise greater R & D activity in New Zealand, it is our view the 12.5% credit rate may not be sufficient to drive a material change in R & D activity and be as transformational for the New Zealand economy as anticipated. Many of our R & D businesses are export businesses and are therefore trading overseas. It is our understanding that this tax credit when compared with other global jurisdictions does not offer a significantly high enough incentive to drive an increase in localised R & D activities given that overseas jurisdictions, such as Australia offer significantly greater R & D incentives for SME businesses.

Another consideration is the potential for businesses to expense current R & D activities as normal operating expenses rather than utilize the proposed tax credit at 12.5%. Given it is almost impossible to isolate R & D expenses and to enforce they be treated as such, the proposed level of tax credit may in fact work as a disincentive to record and report businesses R & D activities, thus not achieving the objectives of driving greater R & D activity and reporting. On balance however, we think this new approach (R & D tax credits, plus the retention of Project Grants) should be pursued, but with a higher rate than 12.5%.

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The key will be to measure and monitor investment in R&D to ensure that the policy is meeting the objective of encouraging a step change in investment by New Zealand firms. If there is a step change, leading to higher paying jobs and better productivity, the investment by the government will be shown to be working. If not, government should be open to adjusting the policy to get the desired results.

New Zealand is in a global "race to the top" when it comes to innovation and competition and many other countries around the world are grappling with the best way to achieve greater R & D intensity in their economies. This is leading to government interventions in other jurisdictions that we believe this proposal will not out-compete. Considering this, we believe this level of tax credit will provide little to no additional incentive for large international firms to domicile their R&D activity here, contrary to the commentary presented in the discussion paper in relation to the governments innovative partnerships programme.

ChristchurchNZ has concerns around administration and compliance costs with the proposed approach, particularly for SME businesses. Many businesses benefiting from growth grants have also significantly benefited from the cash flow they generate as R & D activity occurs rather than waiting to the end of the financial year. We are therefore concerned about the challenge associated with lack of cash flow from a tax credit scheme.

It has been noted that a tax incentive is no help for businesses in tax loss position, which is a situation typical of R & D intensive firms specifically in their early years of development. We believe therefore that this justifies the need to maintain a separate targeted project grant system through the Callaghan project grant model to address these issues.

Whilst ChristchurchNZ is supportive of the 10% allowance for eligible expenditure for overseas costs, we believe this ought to be reviewed and increased as we do not believe this supports the overall objective of driving greater R & D activity for New Zealand businesses and to be realistic in today's global economy. We appreciate the government does not want to incentivise businesses to conduct R&D activity offshore, however we also believe we do not want to see missed opportunities because of the restrictive nature of the 10% limit or the creation of silo mentality when it comes to R & D activity in New Zealand. We believe decisions by companies on where to locate activity will not be heavily influenced by this policy, as R & D activity will be located where the skills and resources are best placed for business needs.

We support the development of a system that has a higher level of transparency. For economic development agencies such as ourselves, it would also be useful if an ability to report R & D activity spatially (i.e. by region or territorial authority) could be built into the system to improve understanding on whether and where R & D activity is concentrated.

Summing up - in principle, we agree with the intent of the overall move to tax incentives, in that it is more equitable than the current growth grant scheme and will likely support a greater number of companies investing in more R & D.

Yours sincerely,

s 9(2)(a) [redacted]

s 9(2)(a) [redacted]

From: s 9(2)(a)
To: RD Incentive
Subject: Submission on R&D tax incentive
Date: Friday, 1 June 2018 4:46:31 p.m.

Sorry I didn't have time to work through the online submission form - but just wanted to send through a few notes regarding the upcoming changes.

We started receiving a Callaghan Growth grant late in 2014, and it has been very beneficial in promoting NZ as a good place to grow our R&D capability. At that point we had under 100 staff - today we have around 220 and continue to grow our R&D capability here in NZ.

We are now part of a larger organization that has R&D centres in a number of other countries, many of them also vying to be seen as the best place to expand R&D capability.

The move from a grant to a tax credit system is probably of less concern to an organization of our size, but would have been more of a concern in our initial startup days where actual money for funding R&D resource was a critical factor. Our interest in encouraging smaller startups to be honest is because they often tend to be attractive acquisition prospects developing in areas we haven't thought of and hence we are keen to encourage their development. My view is that a growth grant is more likely to be of benefit to them than a tax credit system which I see as more applicable to well established R&D houses.

My main concern about the current proposal is the move from defining R&D via IAS 38 to the Frascati Manual - which on the surface seems to be promoting a more academic view of R&D and leading to uncertainty as to whether much of the software development work we do will quality as R&D in the future. I would estimate less the 10% of our current work is pure R&D, with the remainder being development work designed to turn that research into an actual usable product.

The current growth grant system has enabled our R&D capability to grow considerably faster than it would have otherwise, as well as raising our profile as an attractive place for further R&D investments from our overseas corporate owners - and I believe has resulted in a very large (by NZ standards) R&D establishment doing high quality work in our area, and taking on a large number of graduates from our local universities.

The proposed system seems less attractive than the current one and on the surface doesn't seem to be offering additional incentive to do R&D here in NZ.

Kind Regards
s 9(2)(a)

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s 9(2)(a)
[redacted]

Corporate Taxpayers Group

1 June 2018

R&D Tax Incentive Team
Ministry of Business, Innovation & Employment
PO Box 1473
WELLINGTON 6140

Dear Sir / Madam

FUELLING INNOVATION TO TRANSFORM OUR ECONOMY: A DISCUSSION PAPER ON A RESEARCH & DEVELOPMENT TAX INCENTIVE FOR NEW ZEALAND

The Corporate Taxpayers Group ("the Group") is writing to provide comment on discussion paper *Fuelling Innovation to Transform our Economy: A discussion paper on a Research & Development Tax Incentive for New Zealand* ("the discussion paper").

The Group appreciates the opportunity to comment on specific issues that are of particular interest to our members. We would be happy to discuss our submission with Officials.

ABOUT THE GROUP – INFORMED, PRINCIPLED, PRACTICAL

About the Group

The Corporate Taxpayers Group is an organisation of major New Zealand companies that works with key Inland Revenue and Treasury officials to achieve positive changes to tax policy in New Zealand.

The focus of the Group is achieving the right corporate tax policy settings for New Zealand's tax system, not to push individual or industry specific agendas. The Group has traditionally not only devoted resources to responding to issues being progressed by Inland Revenue, but is also forward-looking and proactively raises policy and operational issues to ensure that the tax system is working efficiently and effectively.

The most significant stakeholders of Group members are New Zealanders, and therefore a New Zealand economy and society that is functioning well is in the interests of the Group.

The Group's Principles for a Good Tax System

Underpinning the Group's submissions and engagement on tax policy matters are three main principles that the Group believes a good tax system should be built around:

- High certainty, predictability and low business risk;
- Low compliance costs; and
- International competitiveness.

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These principles are central to the way the Group judges tax policy issues and we discuss these further below in our submission.

INTRODUCTORY COMMENTS

Overall the Group is pleased to see the reintroduction of an R&D tax incentive for New Zealand. The Group has long championed initiatives that promote the growth and development of New Zealand, and the goal of raising R&D expenditure to 2% of GDP will benefit both New Zealand and New Zealanders. We are a country that has long prided itself on its number 8 wire mentality and an R&D Tax Incentive will support and encourage innovation, building on our current strengths and developing new ones.

Problem definition

This submission has been prepared on the basis that the core goal is to increase New Zealand's R&D expenditure to 2% of GDP (over 10 years). As the discussion paper states, growing R&D expenditure has benefits for all, including enhancing the ability of businesses to be successful in changing markets. It also provides diversification of the economy by encouraging new industries and companies, new jobs and new ways of doing business.

If the Government is committed to achieving this ambitious target, and increasing the contribution from businesses undertaking R&D, it is vital that this tax incentive applies to all businesses undertaking R&D activity in New Zealand.

In the Group's view, the discussion paper proposals are too focused on limiting R&D expenditure which is eligible for the incentive, when the focus should be on how to incentivise and increase R&D expenditure. We acknowledge that some of the eligibility criterion are aimed at concerns about two entities claiming a credit for the same expenditure. However, the rules as currently proposed are not appropriately targeted at this specific issue and would instead exclude a significant amount of valid R&D expenditure from the regime, working against the Government's goal of increasing R&D expenditure.

For example, R&D activity has many benefits, including moving New Zealand further up the value chain and attracting / maintaining highly skilled and experienced workers (and delivering higher wages). These benefits exist and are realised whether or not the R&D is owned by the business actually undertaking the R&D, or where the R&D activity is just a small part of the organisation's wider business activity.

The Group's concerns regarding the eligibility tests for the regime are set out in detail in Appendix One, along with our other comments about the design of the tax incentive. If these are addressed, the Group believes that the R&D tax incentive can provide the stated benefits and build the better New Zealand that we are all aiming for.

2008/09 tax credit regime

Significant investments were made by Inland Revenue and taxpayers in developing the last R&D tax credit regime. The Group invested significant resources in working with Officials to scope the original proposals, define terms and review guidance etc to make that regime workable. The Group considers that as much as possible the 2008/09 regime should be reintroduced (with enhancements) in order for the previous explanatory materials / guidance to be reused; particularly in light of the 1 April 2019 application date. For example, the Group recommends that legislation should be located in subpart LH of the Act and as much as possible terminology should be the same as in 2008/09.

In the 2008/09 income year claims were made for R&D Tax Credits which totalled $154 million (source: IRD Annual Report 2010), this was roughly in line with the forecast cost of the regime of $630 million over four years when the regime was first introduced. The new R&D tax credit is forecast to cost $1 billion over four years, and therefore should have scope to be more generous than the 2008/09 regime, bearing in mind the lower tax credit rate and the non-refundability of credits this time around.

The discussion paper highlights that the proposed regime design has evolved from the 2008/09 tax credit to incorporate lessons learned from that time. Bearing in mind that there will always be some taxpayers who will push boundaries, the Group submits that Inland Revenue should be transparent in highlighting the lessons learned in 2008/09, and in particular the stories of inappropriate R&D tax credit claims made. It is the sharing of these examples which will help taxpayers to understand why particular proposals are the way they are and to allow submitters like the Group to assist in coming up with solutions that target bad behaviour while still letting compliant taxpayers claim credits for legitimate R&D. The inclusion of such examples in published guidance notes would be recommended to provide taxpayers with greater certainty.

Administration of the regime

Also fundamental to the success of the regime is the way in which it is administered. The Group would like to see the regime be a success. A critical factor to this will be ensuring that taxpayers are not subject to significant questioning and scrutiny of every claim and that there are processes in place to give taxpayers upfront certainty about the eligibility of particular R&D projects. The Group is conscious to ensure that the administrative burden of the regime does not exceed the level of benefit from the regime for taxpayers. Members of the Group involved with the 2008/09 regime experienced so much additional questioning from Inland Revenue that the combined internal time and advisors fees exceeded the eventual R&D tax credit received in some instances. To incentivise taxpayers applying for the credit, the administration of the regime should not be so burdensome as to discourage taxpayers applying for the credit in the first place.

KEY SUBMISSION POINTS

We set out below some key submission points which are elaborated on in the attached appendix:

- The regime should be developed with the intention of letting as much R&D qualify as possible; the rules should not be filled with requirements that block legitimate R&D claims. Officials should maintain an ability to adjust the rules using a determination or regulation making power.

- Early and late balance date taxpayers should be eligible to claim R&D tax incentives for any R&D expenditure incurred from 1 April 2019. The rules should not apply only to income years starting on or after 1 April 2019.

- The Group strongly opposes Stated Owned Enterprises being excluded from the regime. There is no policy basis for this exclusion and it is counter to the requirement that State Owned Enterprises compete with the private sector on an equal footing.

- The core R&D definition needs to be amended to remove references to "scientific" methods and "scientific and technological uncertainty". The core definition of R&D also needs to be wide enough to capture projects which are for the benefit of the organisation (i.e. internal projects). The definition should incorporate a novelty test in order to allow innovative software to qualify for an R&D tax incentive. If there is a

requirement to resolve scientific or technical uncertainty then software development will not qualify

- The requirement for control, financial risk, and ownership can be a high threshold and may result in no party being eligible for an R&D tax incentive. The multiple eligibility tests overlap and could result in a situation where neither the business undertaking the R&D work nor the business getting it carried out could benefit from the R & D incentive. A pragmatic approach should be taken such as allowing the R&D tax incentive to be claimed by one of the parties where there is an agreement between the two parties showing who is agreed to bear the risk of and control the R&D activities. This is a compliance friendly suggestion as existing pre-contractual arrangements may not make this clear.

- The Group notes that some exclusions from core and support R&D definitions should be relaxed or clarified. For example, some product developments which may appear "cosmetic" require extensive R&D; s 9(2)(b)(ii) ; compliance with statutory requirements can necessitate extensive R&D in certain industries; and demonstration of commercial viability can also be an integral part of product development which should not be restricted to only being a support activity.

- The Group supports social science research being eligible for an R&D tax incentive.

- The Group disagrees with the dual purpose activities test. We understand this test is aimed at ensuring "business as usual" expenditure cannot be characterised as R&D expenditure; however the manner in which the test is expressed is too uncertain and restrictive for businesses to comply with. The R&D tax incentive should not be limited to expenditure that would not have been incurred "but for" the R&D activity. This type of test is too subjective and would require a business to hypothesize what expenditure would have been incurred under alternative facts. It also does not recognise that staff can be redeployed to work on R&D projects; i.e. the staff expenditure was always going to be incurred.

- Blackhole expenditure, in particular in relation to feasibility expenditure, needs to be resolved in conjunction with the R&D tax incentive regime; to do otherwise will penalise taxpayers with unsuccessful feasibility twice – once through not receiving a tax deduction and then by virtue of any innovative feasibility expenditure not being eligible for the R&D tax incentive because of the requirement for the expenditure to be tax deductible.

- The Group does not support the R&D tax incentive only applying to tax deductible expenditure. Many businesses will hold R&D costs in a balance sheet suspense (WIP) account until a project is sufficient progressed. This is a business accounting decision, not something which is tax driven (as there is an automatic deduction for expensed research and development costs); an accounting decision to capitalise project costs should not result in expenditure being ineligible for a tax incentive. The Group notes that the 2008/09 R&D tax credit regime allowed certain capitalised expenditure to be eligible.

- The Group does not support an R&D tax incentive being calculated solely with reference to R&D labour costs.

- The Group believes that R&D undertaken for commercial consideration should be eligible for the R&D tax incentive, in particular contract R&D that is undertaken for multinationals.

- The Group submits there should be a project life view when determining what overseas expenditure is eligible for the incentive in a given year.

- Noting the comments above about the R&D definition being inadequate to allow software to qualify for the R&D tax incentive, assuming this is rectified, the Group does not believe there should be any form of cap on eligible software expenditure (outside of the overall $120million cap).

- The rules should apply equally to businesses in a tax loss and tax paying position. Loss making companies should be able to obtain a refund of R&D tax incentives.

- The Group supports there being a discretion to have R&D expenditure in excess of the $120million cap approved and supports taxpayers having the option to have R&D projects pre-approved.

As with the 2008/09 regime, the Group would welcome the opportunity to regularly discuss the regime with Officials, including acting as a sounding board for testing legislative drafting and guidance.

For your information, the members of the Corporate Taxpayers Group are:

1. Air New Zealand Limited
2. Airways Corporation of New Zealand
3. AMP Life Limited
4. ANZ Bank New Zealand Limited
5. ASB Bank Limited
6. Auckland International Airport Limited
7. Bank of New Zealand
8. Chorus Limited
9. Contact Energy Limited
10. Downer New Zealand Limited
11. First Gas Limited
12. Fisher & Paykel Healthcare Limited
13. Fletcher Building Limited
14. Fonterra Cooperative Group Limited
15. Genesis Energy Limited
16. IAG New Zealand Limited
17. Infratil Limited
18. Kiwibank Limited
19. Lion Pty Limited
20. Meridian Energy Limited
21. Methanex New Zealand Limited
22. New Zealand Racing Board
23. New Zealand Steel Limited
24. New Zealand Superannuation Fund
25. NZME Limited
26. Pacific Aluminium (New Zealand) Limited
27. Powerco Limited
28. Shell New Zealand (2011) Limited
29. SKYCITY Entertainment Group Limited
30. Sky Network Television Limited
31. Spark New Zealand Limited
32. Summerset Group Holdings Limited
33. Suncorp New Zealand
34. T & G Global Limited
35. The Todd Corporation Limited
36. Vodafone New Zealand Limited
37. Watercare Services Limited
38. Westpac New Zealand Limited
39. WSP Opus
40. Z Energy Limited
41. ZESPRI International Limited

We note the views in this document are a reflection of the views of the Corporate Taxpayers Group and do not necessarily reflect the views of individual members.

Yours sincerely

s 9(2)(a) [redacted]

s 9(2)(a) [redacted]
For the Corporate Taxpayers Group

cc s 9(2)(a) [redacted]

APPENDIX ONE – THE GROUP'S SUBMISSION

The Group has set out (in green boxes) the discussion questions in the discussion paper, in the order that these questions are asked by the discussion paper, and below each question the Group sets out its response. The Group also addresses aspects of the paper not addressed in the discussion questions. We raise these other issues in the order as they arise in the discussion paper.

As an opening comment, the Group would like to note that the policy intent of the R&D tax incentive should be to incentivise R&D in a predictable, low compliance cost way. The Group comments on the proposals in light of this policy intent.

1. Design

1.1. The Group notes the following comments on page 12 of the discussion paper: "It is anticipated that the detailed rules of the Tax Incentive will change over time. This is important to reflect the changing nature of R&D in New Zealand and to respond to potential abuse or misuse of the incentive. Potential changes will be balanced against the need to maintain stability so that businesses can plan their R&D activities with confidence".

1.2. The Group supports Officials making incremental changes to the regime as necessary, and recommends that Officials have a determination or regulation making power in order to ensure that adjustments can be made in a timely fashion compared with the usual legislative process. Any changes that are made must be prospective (i.e. cannot be retrospective).

1.3. The Group recommends that the approach to the drafting of the legislation is consistent with the policy intent of incentivising R&D and therefore that the starting position is legislation which has sufficient safeguards while not deliberately blocking a wide range of R&D activities being eligible for the tax incentive. As and when abuse is identified that is when amendments could be made to tighten the regime if there is no other alternative. The Group also recommends that Officials publish real-life examples of claims from 2008/09 with an explanation of why the claim would not qualify / would qualify under the new regime. This will help contextualised the regime for taxpayers and their advisors and ensure the spirit in which the regime is intended to be applied is clear to all.

1.4. The Group would welcome the opportunity to further work with Officials on refining elements of the regime and with the development of guidelines.

2. Rate and application date

2.1 The R&D tax incentive is intended to apply to eligible expenditure incurred from 1 April 2019. As this does not align with the commencement of an income year for many taxpayers, the Group submits there should be an optional transitional rule available for late balance date taxpayers. In particular, taxpayers with a late balance date can choose to incorporate eligible expenditure undertaken in the 2019 tax year into the R&D tax incentive claim for the 2020 tax year. For example, ABC Limited has a 30 June balance date; expenditure on R&D from 1 April 2019 to 30 June 2019 is eligible for an R&D tax incentive; to minimise compliance costs ABC limited can include 15 months of eligible R&D expenditure in its 2020 tax return.

2.2 The Group supports imputation credits being received. As with the 2008/09 tax credit, the imputation credit should arise at the time the tax return claiming the R&D tax incentive is filed.

3. Eligibility

Tax paying status

3.1 The Group notes that the discussion paper states that "All businesses, regardless of legal structure, will be eligible to claim the tax incentive." It is unclear how the regime can apply to all businesses when it is in the form of an income tax credit. It should be clarified how the regime applies to non-taxpaying entities. The Group notes that on page 19 of the discussion paper it makes reference to those earning tax-exempt income.

Eligibility tests – control / financial risk / ownership of R&D results

3.2 The Group does not support the proposal for requiring the organisation carrying out the R&D activity to own the results of the R&D, nor the requirement to have control over the R&D activities and bear the financial risk. The Group notes it is unclear from the discussion paper whether all three elements will be required in order to be eligible (noting that all three elements were required in the 2008/09 regime).

3.3 The reality is that parents of multinational organisations, with operations in different countries, may be the ones who hold the ultimate control and ownership of R&D expenditure and any resulting intellectual property. In such cases, often New Zealand will charge for the R&D work done on a 'cost plus' basis, with the parent bearing the ultimate financial risk. We refer to this in our submission as "contract R&D", where organisations in New Zealand are contracted to carry out R&D activities, but do not necessarily own the results of the R&D.

3.4 The Group's main concern is that by removing eligibility to the extent that organisations carry out this contract R&D, a large proportion of R&D undertaken in New Zealand will be excluded from the regime. The R&D tax incentive will not be an incentive which encourages R&D activity in New Zealand, but will be an active disincentive to organisations (including large multinationals) from coming to New Zealand to undertake R&D. Currently there are a number of organisations undertaking contract R&D who are receiving Callaghan Growth Grants, in recognition of the benefits this R&D brings to New Zealand.

3.5 Some multinationals undertake contract R&D in New Zealand, and do not 'own' the R&D in New Zealand as this is not their centre of business (others are more New Zealand focused, with wider business activities based here). When their customers are also overseas it is not intuitive that the R&D is owned here in New Zealand. This is a standard multinational structure and if New Zealand wants to attract the R&D activities of these organisations, then we must ensure that our system is flexible enough for this standard structure to fit. As a small country reliant on foreign direct investment, we cannot require multinationals to fundamentally change their normal processes (and it would be inadvisable to assume that they would do so).

3.6 For example, it is a common scenario for a parent company to have an idea that it wishes to look into and develop, and will ask one of its business or research units to deliver this (if possible). Ultimately this R&D may be controlled and owned by the parent, however all the R&D activity and the day to day decision making in relation to that R&D activity is undertaken in New Zealand, by New Zealanders. It is an inappropriate outcome for this R&D expenditure to not be included in the tax incentive regime.

3.7 The key issue is that intellectual property from R&D is mobile – physical borders are not a barrier to the results of R&D work being shared and there is no real significant

benefit to New Zealand having ownership of the R&D. New Zealand is physically distant from other markets. The greatest benefits come from R&D being physically undertaken in New Zealand, not from ownership of the R&D, and the spill over benefits from R&D being based in New Zealand are too important to be excluded.

3.8 We understand the intention is for these tests to be applied in a similar manner to the 2008/09 tax credit. In particular we note that under that regime a business was considered to "own" the results when the claimant had the ability to exploit the results without further fee or payment; i.e. the overseas parent can be the legal owner so long as the New Zealand business has a right to use the intellectual property without a royalty or other charge.[1]

3.9 We appreciate that the eligibility requirements are aimed at ensuring the tax incentive goes to the organisation making the decision to invest in R&D; however the rules need to be flexible enough to allow common commercial practices to qualify, particularly if part of the goal of the regime is to attract businesses (including multinationals) to undertake R&D in New Zealand. If the concern behind these requirements is with the potential eligibility of the expenditure for R&D incentives in more than one location there should be a specific rule developed to target multi-jurisdictional R&D claims for the same project.

3.10 The requirement for control, financial risk, and ownership can be a high threshold and may result in no party being eligible for an R&D tax incentive. The multiple eligibility tests overlap and could result in a situation where neither the business undertaking the R&D work nor the business getting it carried out could benefit from the R & D incentive. A pragmatic approach should be taken such as allowing the R&D tax incentive to be claimed by one of the parties where there is an agreement between the two parties showing who is agreed to bear the risk of and control the R&D activities. This is a compliance friendly suggestion as existing pre-contractual arrangements may not make this clear.

3.11 We also submit that the rules should operate in a manner to ensure that if ownership, financial risk and control sit within different entities within a group of New Zealand companies, this should satisfy the eligibility criteria (even if the entities are not in a consolidated tax group).

R&D activity has spill over benefits

3.12 R&D activity that is based in New Zealand has benefits far greater than the ownership of the intellectual property. The greatest spill over benefit of R&D activity based in New Zealand is the utilisation of New Zealanders in R&D activities, and improving and developing their skills and expertise. At the end of the day it is New Zealanders who are gaining skills and knowledge and it is New Zealanders managing the projects.

3.13 Organisations undertaking R&D are helping to create a bigger pool of talent in New Zealand, the likes of which will attract more and more sizeable R&D projects to New Zealand. This will allow more innovative R&D, as the size and scale of investment increases, and this will come with new business opportunities and greater chances for collaboration. It is important that these projects are based in New Zealand, as it

[1] Tax Information Bulletin vol20,n3 (April 2008); page 41; "Effective ownership of the results of the R&D activity means that the claimant must have the ability to exploit the results for gain without further fee or payment. That is, the claimant must have gained the right to use the results of the activity in its business without incurring further costs. It does not require the claimant to formally own the intellectual property or results arising from the project."

allows New Zealanders to manage these sorts of projects, and enhances both human and physical capital in New Zealand. This will not occur if the rules are too rigid about who is eligible for the regime.

3.14 As noted in the discussion paper, growing or attracting R&D performing firms is essential to the New Zealand economy. These larger firms have high quality managers and knowledge of capital markets (and large capital budgets), all of which provide benefits that are very valuable to New Zealand. They also bring their customer base into New Zealand, basing economic behaviour here. There are also connections with global networks and learning / support systems, which can and will be drawn on by activities undertaken in New Zealand. In the best case scenario, this will grow and develop the New Zealand R&D activities of a multinational to become the principal R&D hub of an organisation.

3.15 Having R&D physically based in New Zealand has many benefits and staff, when they leave organisations, will take with them knowledge and experience that will be invaluable to their future R&D endeavours. However, to ensure that this can occur, the R&D tax incentive settings must appropriately include the activity that will provide these benefits to New Zealand.

Government entities

> Question 1: If SOEs, Crown Research Institutes, District health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?

3.16 The Group submits that the eligibility criteria should be consistent with the R&D tax credit regime in 2008/09; that is, State-Owned Enterprises ("SOEs") and other government entities which are subject to income tax should be eligible. This includes, mixed ownership model companies, Crown entity subsidiaries and other Crown companies. These entities conduct genuine commercial R&D activity and have competitors who will be eligible to receive a tax incentive – they should be on an equal footing. The Group understands there are divergent views as to what is intended to be excluded as a SOE for the purpose of these proposals, with it possible that some Officials believe all entities listed in schedule 36 of the Income Tax Act should be excluded. This list is wider than SOEs, and includes mixed ownership model companies.

3.17 The Group strongly submits against SOEs and mixed ownership model companies being excluded from the R&D tax incentive regime. Mixed ownership model companies, in particular, are owned by the public and any exclusion raises the cost of investment of these businesses compared to their direct competitors. This provides an uneven playing field between competing energy companies and airlines; and provides an incentive on shareholders to change investments to a qualifying entity.

3.18 The Group notes that the 2008/09 regime was deliberately designed to include SOEs. As was stated at paragraph 3.32 of *"R&D tax credits - Definition, eligibility criteria, eligible expenditure - An officials' issues paper on matters arising from the Business Tax Review" (November 2006):*

> "3.32 Crown-owned businesses that are not funded to do R&D, such as state-owned enterprises, should be eligible for the credit. In principle, crown-owned businesses that are funded to undertake R&D should not be eligible for the

credit if receiving it would constitute double funding of R&D. There are options for avoiding double funding, and officials will do further work on this in consultation with crown agencies."

3.19 In addition to being contrary to the policy intent of the 2008/09 regime, excluding SOEs would be inconsistent with section 4 of the State-Owned Enterprises Act 1986, which requires SOEs to be "as profitable and efficient as comparable businesses that are not owned by the Crown". This objective cannot be achieved if SOEs are not entitled to incentives that are available to comparable private sector businesses. SOEs are designed to be ordinary commercial entities with ordinary commercial operations. SOEs have the ability and potential to contribute to the economy and development of New Zealand just as much as any other entity, and to exclude SOEs from the regime would be to the detriment of New Zealand.

3.20 As significant undertakers of R&D and as commercial businesses, State-Owned Enterprises play a large part in the R&D environment in New Zealand. For many SOEs R&D is a core activity and this must be funded from operating cashflows; there is no separate government funding for this activity. The R&D activity undertaken by SOEs is just as legitimate as the R&D undertaken by other organisations and there is no reason for it to be excluded; to the contrary providing R&D tax incentives would allow SOEs to scale up R&D initiatives quicker, hire more staff and reap the benefits of the R&D through increased productivity and revenue. SOEs meet all the other proposed criteria in the discussion paper and their R&D will bring all the benefits outlined in the discussion paper, yet it is proposed their R&D activity won't be encouraged, while the R&D activity of comparable businesses will be.

3.21 If SOEs are to operate as successful businesses, as profitable and efficient as comparable businesses, then they should be treated as successful businesses and included in the R&D tax incentive regime. If SOEs are to be excluded, this should only be done if it can be reasonably justified.

3.22 SOEs (and wider income tax paying Crown companies) compete as commercial businesses against private sector businesses in a wide range of industries including banking, delivery services, energy generation and sale, aviation, media, farming, and housing. These entities all have direct competitors who may be eligible for an R&D tax incentive for undertaking comparable activities. It would seem incongruous, for example, for one bank to be ineligible for an R&D tax incentive while the remainder of New Zealand banks are eligible; or for three electricity generators to be ineligible while the remainder are eligible.

3.23 Any exclusion of SOEs will also limit the ability of SOEs to collaborate with commercial businesses on a particular project, particularly where each brings skills that the other does not have. This is to the detriment of the development of New Zealand and for a core group of New Zealanders undertaking R&D, takes away an opportunity to learn from others with a different set of skills and knowledge.

3.24 The negative effect on collaboration in part goes to pricing but also the (perceived) ability to deliver on a project when the SOE starts with a disadvantage. Even if initial budget of time and money proposed by an SOE vs an ordinary business is similar (with differences in price going to the margins of the SOE), the nature of R&D projects is that often these projects take more time and resources than budgeted for, as they are inherently uncertain. It would be less risky in the longer term to collaborate with a business that can more easily bear any unexpected costs with the available tax incentive and there will be less incentive for a business to collaborate with an SOE that does not receive a tax incentive.

3.25 Where SOEs (and wider income tax paying Crown companies) are a significant part of an economic sector, removing them from the ambit of the rules risks a static R&D environment in those sectors. The result of such would be to then limit the areas of the economy where R&D increases. This would be contrary to the aims of the regime.

Definitions

Question 2: How well does this definition apply to business R&D carried out in New Zealand?
R&D would be defined as:
(a) Core activities: those conducted using scientific methods that are performed for the purposes of acquiring new knowledge or creating new or improved materials, products, devices, processes, or services; and that are intended to advance science or technology through the resolution of scientific or technological uncertainty.
OR
(b) Support activities: those that are wholly or mainly for the purpose of, required for, and integral to, the performing of the activities referred to in paragraph (a).

Question 3: Does this definition exclude R&D that you think should be eligible, please illustrate with examples.

Appropriateness of core R&D definition

3.26 As an opening statement, the definition of R&D expenditure should be reviewed at appropriate intervals to ensure that it is capturing the activity it is intended to, particularly as there are greater advances of science, technology and knowledge that lead to areas that may fall outside the definition. We comment on the appropriateness of the definition in relation to software expenditure later in our submission.

3.27 The Group has some concerns with this definition which we address further below. The Group acknowledges that definitions such as this are challenging, not least because R&D activity by its nature covers a broad range of activities. What will be just as important as the definition itself, is its application. It is vital that sufficient flexibility is exercised when applying the definition in practice, to ensure that genuine R&D activity that meets the purpose of the regime is captured.

3.28 The focus of the R&D regime should be on capturing as much of the relevant R&D expenditure as possible, to reach the Government's goal of R&D expenditure being 2% of GDP. A significant budget has been allocated to R&D tax incentives and it is important that this is utilised, for the benefit of New Zealand.

3.29 In the Group's view, the key concept in relation to determining what is R&D is that of risk. If there is an element of risk in relation to whether the R&D will succeed (relative to its aims), then this is usually R&D activity. This is similar to the scientific or technological uncertainty concept described in the discussion paper.

3.30 The discussion paper potentially limits the definition of R&D by requiring core activities to be conducted using "scientific methods". In the Group's view, the use of "scientific" is limiting and excludes some legitimate R&D activity, such as software R&D and some R&D in the food and beverage industry. The Group considers that the definition should at the very least include "scientific or systematic methods", as this would capture more relevant activity.

3.31 The Group submits that if a business contracts an "approved research provider" to undertake R&D, that business should automatically satisfy the criteria that the research has used scientific methods. The definition of R&D expenditure should incorporate and include R&D activity undertaken by pre-approved R&D providers. There can be compliance costs in determining whether scientific methods have been used or not, and some R&D that is undertaken by a pre-approved R&D provider should be automatically included in the regime. The list of pre-approved R&D providers could be created and updated by way of determination or regulation, with R&D providers applying to be included on the list.

3.32 The discussion paper references the Frascati Manual definition of R&D[2], which we set out below:

> *"Research and experimental development (R&D) comprise creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge."*

3.33 The discussion paper notes that the proposed definition is in part guided by the Frascati definition. However the Frascati definition is considerably broader and in the Group's view, more accurately captures true R&D activity.

3.34 The Group submits that the definition of R&D expenditure should better utilise the concepts in the Frascati definition, of creative and systematic work that increases the stock of knowledge and that devises new applications of available knowledge. Such a definition would more sufficiently encompass true R&D activity.

3.35 The Frascati Manual also considers that for an activity to be an R&D activity, it must satisfy five core criteria. I.e. the activity must be: novel, creative, uncertain, systematic and transferable and/or reproducible. The Group considers that if these criteria are drawn upon for New Zealand's definition of R&D activity, this will also better capture the concept of R&D better than the currently proposed definition.

3.36 The Group queries why the concept of "novelty" which applied in the last regime has been removed as a separate limb for eligibility. Inclusion of novelty as a test in some respects can act as a 'catch all', to capture the R&D activity that is intended to be captured, but does not meet the definition otherwise. This may also enable a single R&D definition that would incorporate software R&D.

Alternative definition

3.37 The Group suggests an alternative definition of R&D core activity:

Research and development activities of a person that are:
(a) Conducted using a systematic approach; and
(b) Has the purpose of creating new knowledge, or new or improved materials, products, devices, processes, or services; and either
(c) Has the purpose of resolving scientific or technological uncertainty; or
(d) Involves an appreciable element of novelty.

Internally focused R&D

3.38 The Group is concerned with the focus being on external R&D that can be commercialised, as opposed to internal R&D where the benefits are kept inhouse;

[2] OECD Frascati Manual 2015.

while not entirely clear from the discussion paper, this focus on external R&D is inherent in the requirement that R&D "advance science or technology…". The discussion document seems to place more importance on external R&D, but in the Group's view, internal R&D is just as important. At the end of the day, with internal R&D, there is a person or team undertaking this activity, gaining knowledge and experience. They are still advancing science, technology or knowledge through the resolution of uncertainty, but they wouldn't want to be commercialising this for other companies. This knowledge will remain with the person no matter where they move to next, even if the immediate benefits are with the company. Examples include:

- s 9(2)(b)(ii) [redacted]
- s 9(2)(b)(ii) [redacted]
- s 9(2)(b)(ii) [redacted]

Site specific R&D

3.39 The Group notes that Officials appear to be developing rules to combat examples of R&D tax credit claims seen for the 2008/09 tax year. We understand this includes "site specific" R&D; which encompasses undertaking an R&D activity at a specific site where it has not previously been undertaken. This concept is not overtly raised in the discussion paper, but is part of the concept of whether a project addresses scientific or technological uncertainty. The Group's view is that site specific R&D should still be eligible if it results in new knowledge that was not publically available or deducible by a competent professional working in the field.

3.40 An example of R&D that at first glance appears to be site specific is the construction of assets; whether that is a building or an infrastructure asset such as a bridge. These type of projects can encounter challenges which need to be overcome due to specific features of the terrain. While the R&D is specific to the site, they can also result in a body of knowledge that can be applied to other projects.

Example 1
A business was engaged to build a retirement village apartment complex; however during the construction phase it is discovered that the original plan is no longer feasible due to the location of drainage services. R&D was needed to understand the slope of the site and to develop solutions where the slope of a site does not allow for natural downward flows of water. In this instance an R&D tax incentive should be able to be claimed on the specific activities related to the redesign of the pipework which has contributed to new knowledge about drainage.

Example 2
s 9(2)(b)(ii) [redacted]

s 9(2)(b)(ii) [redacted]

3.41 To the extent there are specific examples Officials have seen which concerns them; for example, a claim that the application of fertiliser to a specific hill which had not previously been treated with fertiliser; the Group would like to understand these examples (and recommends they are anonymised and published in the guidelines so the public can understand what is / is not within the spirit of the rules). This would allow us to better understand the rationale for certain aspects of the rules and allow us to make informed comments of alternative ways to ensure legitimate R&D can still qualify for the R&D tax incentive.

> Question 4: Does the scientific method requirement exclude valid R&D in some sectors? Please illustrate with examples.

3.42 As noted above, the scientific method requirement excludes valid R&D in some sectors, such as software R&D and some R&D in the food and beverage industry. The Group would favour rules which require taxpayers to follow "systematic method".

> Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to <u>both</u> the problem R&D seeks to resolve and the intended advancement of science or technology?

3.43 The Group has no issue with a materiality test <u>to the extent it is applied appropriately</u>. However, the Group has concerns that the inclusion of a materiality test both in relation to the problem *and* the advancement of science or technology (as in the currently proposed definition) will be used inappropriately by those administering the regime to push back on what is valid R&D expenditure.

3.44 Materiality is obviously a subjective concept, the use of which has been well documented in both accounting and tax practice. In an R&D context it would be a matter of problem definition – what is the problem you intend to solve? If this problem and its solution will result in a significant enough advancement, then this should be sufficient to meet the test of materiality. A commercial outcome justification should be adequate.

3.45 In the Group's view, a material advancement can be incremental, as long as it sufficiently advances knowledge and/or devises new applications of available knowledge. Many R&D firms make small advances, building slowly but surely, until they eventually come to be world leaders. This is the activity we should be capturing and if the inclusion of a materiality test would jeopardise this, then the Group would not support the use of a materiality test in the definition.

3.46 If materiality is intended to be the test, the word "materially" should be included in the definition to ensure clarity. The discussion paper does not include the word "material" in the definition, but notes that this is "reflected" in the requirement that activities are intended to "advance science or technology through the resolution of scientific or technological uncertainty".

Unsuccessful R&D and feasibility expenditure

3.47 The discussion paper notes that "the outcome of R&D is inherently uncertain; it is not necessary that the R&D activity be successful to be eligible for the tax incentive."

3.48 The Group supports that unsuccessful R&D should qualify for the R&D tax credit.

3.49 While the Group supports an R&D tax incentive, the Group is concerned that the tax regime still does not allow businesses to claim deductions for certain types of expenditure, such as feasibility expenditure. Feasibility and R&D go hand in hand, and it is a concern to the Group that much feasibility expenditure is not deductible, and in particular feasibility work undertaken on something which ultimately fails is often non-deductible (referred to as blackhole expenditure). This is of even greater concern given the requirement that any expenditure must be tax deductible before it can qualify for the tax incentive.

3.50 It is important that the tax deductibility of blackhole feasibility expenditure is rectified prior to these rules taking effect. If not, there is a significant risk that the regime will fail to lift R&D to the desired levels as certain expenditure will fail to qualify due to either 1) lack of nexus or 2) it being capital expenditure under the current application of the law.

Definition of support activities

Question 6: How well does this definition apply to business R&D carried out in New Zealand?
R&D would be defined as:
(a) Core activities: those conducted using scientific methods that are performed for the purposes of acquiring new knowledge or creating new or improved materials, products, devices, processes, or services, and that are intended to advance science or technology through the resolution of scientific or technological uncertainty.
OR
(b) Support activities: those that are wholly or mainly for the purpose of, required for, and integral to, the performing of the activities referred to in paragraph (a).

3.51 The Group has no issue with the definition of support activities, providing that the application of the definition meets the purposes of the regime.

Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.

3.52 The Group does not support blanket exclusions of certain activities / regimes as this will take out genuine R&D expenditure from the regime.

3.53 The Group appreciates that some types of business are inherently uncertain, and the Group is comfortable that those activities should not be core R&D activities, but this should not preclude these businesses from having any eligible R&D activities. For example, if prospecting, exploring or drilling for geothermal reserves were ineligible to be support activities this may have an impact on the energy sector innovating in this area.

3.54 Some industries are more regulated than others (for example the health sector, and any industries connected with food and beverages) and as such there may be significant amounts of R&D which are potentially excluded from being core R&D depending on how these concepts are interpreted. In particular the following aspects of the excluded activities list should be relaxed or clarified:

- Making cosmetic changes to materials, products or device
- Compliance with statutory requirements or standards
- Demonstration of commercial viability

3.55 In most instances the guidance in Tax Information Bulletin volume 20, number 3 (TIBv20n3) indicated that these activities could qualify as core R&D. The Group submits that this same interpretation should be adopted for this regime.

3.56 The Group does not support the exclusion from the core R&D definition for "the making of cosmetic or stylistic changes to materials, products, devices, processes or services". In some instances it can be very R&D intensive to make what might be considered a "cosmetic" change to a product (s 9(2)(b)(ii) [redacted]). If this exclusion is to remain, it needs to be interpreted in the same fashion as the 2008/09 regime where it was acknowledged that cosmetic changes could be eligible either as a core or support activity.[3]

3.57 The "routine collection of information" can be essential to core R&D; for example if a healthcare company is testing a new medicine it will need to collect routine medical information about patients in order to determine the success of the new medicine. At a minimum, it needs to be very clear that this is a qualifying support activity. TIBv20n3 stated "…routine data collection will not be eligible as a SIE (?) activity but can qualify as a support activity."

3.58 For some products it is an integral part of product development to be able to prove it can be produced in a commercially viable way. Again, TIBv20n3 indicated in relation to the 2008/09 regime that "If activities that satisfy the definition of R&D in paragraph (a) arise during a pre-production process, they will be eligible regardless of the exclusion"; the Group would support this interpretation being applied again.

Social science research

> Question 8: Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?

3.59 The Group considers there are areas where social science research is part of valid R&D expenditure and it would be inappropriate to exclude it completely from being core R&D (noting it can be a supporting activity). For example:

Example 1
An organisation is looking to provide medium density housing in a number of different locations across New Zealand. As part of this, the organisation undertakes research and encounters social and demographical issues that may impact the design solution and discovers better systems of flooring and walls etc.

[3] Tax Information Bulletin v20n3 (April 2008); page 48 "…However, work to create a desired cosmetic or aesthetic effect through the application of science or technology can advance the science or technology and be R&D. Cosmetic or stylistic changes that meet the requirements in paragraph (b) of the R&D definition can also be a supporting activity…"

This project must still meet the nexus test in order to be tax deductible, therefore it has a commercial purpose. The organisation also conducts research into how people will live in the future. For example will there be communal eating and greater use of communal gardens? The organisation also looks into sustainable energy such as wind turbines, and how adjacency and proximity to neighbours impact noise levels.

The aim of this research is to lead to new housing technology and materials for that organisation. This type of activity should qualify for the R&D tax incentive.

Example 2
As part of planning large roading infrastructure projects it is necessary to undertake research of the needs, preferences and behaviours of drivers and other users in order to ensure that the road design satisfies the needs of the users. An example of this type of research could be on driver behaviours and attitudes towards cyclists, particularly when overtaking. This type of research results in the acquisition of new knowledge which can then be incorporated into roading design by all parties involved. This example is based on this real life example supplied by a Group member: http://www.opus.co.nz/projects/sharing-the-road/

3.60 In the Group's view, the social science research undertaken in the examples above is a core part of the business R&D of the organisation. This is legitimate expenditure towards developing the innovative capabilities and advancing the knowledge of society, and so should be captured by the regime as R&D expenditure.

Dual purpose activities

> Question 9: What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?

3.61 The Group strongly disagrees with the dual purpose activities test. In the Group's view, this test, when combined with the other restrictions, represents a significant overreach. This 'dual purpose' expenditure is captured by other parts of the rules and is an unnecessary and inappropriate barrier to the regime. If the other proposed rules (e.g. financial risk) are enforced properly, this test is not required.

3.62 The discussion paper states "If an activity was carried out for a R&D purpose and a non-R&D purpose, the entire activity would not qualify as a R&D activity." This description is difficult to understand as arguably in a commercial context all R&D is undertaken with a non-R&D purpose – R&D activity does not exist in a vacuum. The purpose of R&D undertaken by businesses is ultimately to earn more income. The intention of commercially exploiting R&D should not result in a business being ineligible to claim the incentive.

3.63 Deciding what is included in the R&D regime should be a matter of determining what activity is actually R&D and what is not. The Group does not consider that 'dual purpose' activities should be excluded from the regime. To the extent that the taxpayer can prove that expenditure had a R&D purpose it should be included.

3.64 If Officials' concerns are in respect of "business as usual" expenses being reclassified as R&D then the rules should be clearly articulated as such. However, within these expenses there can still be R&D. It is important that this can come in under the supporting activities and not be excluded because it has a 'dual purpose'. It is also

noted that "business as usual" costs such as overheads are intended to be specifically eligible to an appropriate degree.

3.65 We understand consideration is being given to the formation of a "but for" test; i.e. that costs will only be eligible if they would not be incurred "but for" the R&D project being undertaken. The Group would strongly resist this type of test being in place as while it may prevent recharacterisation of expenses, it would also make true eligible expenses ineligible. For example, if an employee works in the software team at a business doing routine software maintenance but is then redeployed on a part time basis to work on a world-first blockchain product development project, the salary costs of that employee would still have been incurred by the business regardless of the R&D project. A "but for" test also would require businesses to hypothesize alternative fact situations, this is highly subjective and will lead to great uncertainty in the regime. In many instances R&D occurs within existing budgets but businesses must make a decision whether to spend that budget (or deploy its people) on R&D activities or other business as usual activities. In the case of employee expenditure, there must be some reasonable manner in which staff costs can be apportioned.

3.66 To the extent dual purpose activities are excluded, these should be clearly defined in the legislation and examples of dual purpose activities should be given in guidance accompanying the regime.

4. Eligible expenditure on R&D

4.1 The discussion paper states that "The credit will apply only to expenditure that is deductible, or amortisable, under the Income Tax Act…" As noted above, the Group would like to see feasibility expenditure become tax deductible rather than being blackhole expenditure. We consider that development costs capitalised for accounting purposes should be eligible for the tax incentive, in a manner broadly similar (but enhanced) to the previous R&D tax credit regime, i.e. the accounting treatment alone should not be determinative. We expand on this further under the heading "timing of expenditure".

> Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?

4.2 The Group strongly prefers the second approach for determining eligible expenditure, being on a broader range of direct and indirect costs (including options for determining appropriate overhead expenditure). This approach will more accurately capture the relevant expenditure.

4.3 It is important that this method, if chosen, is supported by administrative guidelines on what direct and indirect costs can be included, particularly where any apportionment is required. Organisations need to have comfort and certainty that the calculations they undertake are supported by the regime.

4.4 Clear guidance needs to be provided about the level of administrative burden in supporting claims; for example whether employees need to keep timesheets.

4.5 The Group would prefer not to use the R&D labour cost method. Despite this method's simplicity, it will not maximise the potential of the regime to increase R&D expenditure and achieve the government's goal of increasing R&D expenditure to 2% of GDP. Even if a higher rate of credit is allowed, this will exclude a significant amount

of true R&D expenditure and less accurately capture relevant activity. The Group considers that the majority of R&D will have a significant material element to it that will not be captured by the labour cost method and so the labour cost method will not sufficiently incentivise R&D activity. If this method is to be adopted, the rate of the incentive must be set appropriately high so that there is sufficient balance; the rules must also adequately address situations where R&D is undertaken by contractors rather than employees.

4.6 The Group submits that, the above aside, it could be possible to have a combination of both methods. For example a safe harbour could be imposed, for the portion of R&D expenditure that will be accepted as a proportionate bright-line position (the proportion could be based on labour costs; e.g. 10% of labour costs). Anything above this would need to follow the second approach for determining eligible expenditure (based on a broader range of direct and indirect costs).

Overhead costs

> Question 11: What are the advantages and/or disadvantages of setting overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?

4.7 In regards to overhead costs, the Group does not consider that these should be limited and as long as reasonable apportionment is undertaken, then this should be acceptable to Inland Revenue. Alternatively, there may also be scope for a pre-approved percentage of overhead costs that can be included as R&D expenditure – such an approach would reduce compliance costs.

4.8 It needs to be clear what costs can be included as overhead costs; for example can this include accounting or general administration of projects? It should also be clarified that direct administration of R&D projects can be included in the regime as support activities. Such administrators are integral to R&D projects as they ensure that project resources are in the right place at the right time.

Ineligible expenditure

4.9 The list of proposed ineligible expenditure mirrors the approach taken in 2008/09. The Group is broadly comfortable with the proposed list.

Commercial consideration

> Question 12: Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.

4.10 The Group strongly disagrees with the eligibility requirement that claimants must bear the financial risk of the R&D activity in all instances and that there cannot be "commercial consideration" provided in relation to R&D (particularly where the contracting party is not operating in New Zealand). The purpose of the R&D regime should be to encourage all R&D activity. As noted earlier, R&D has significant spill over benefits just from being physically undertaken in New Zealand. These wider

benefits to our economy justify encouraging R&D activity, even when entities do not bear the financial risk.

4.11 In many situations a taxpayer may receive compensation for R&D. This can be R&D undertaken as problems are encountered on a project. In many instances businesses may be awarded projects to work on, but the solution to complete the project is not known; or it is necessary to innovate to provide the solution in the most effective manner (particularly if projects are on a fixed fee basis). R&D needs to be undertaken to get the job done. In these instances, the customer may not know how complex the job is or that R&D is required at all (particularly if they are contracting on a fixed fee basis).

4.12 The Group understands that the commercial consideration rule is intended to prevent any 'double dipping', where two different entities are able to receive a credit for the same expenditure. However, if this is the issue being sought to be addressed by this proposal, then this issue is better targeted in other ways.

4.13 Where taxpayers are involved in contract R&D, it should not be necessary to satisfy the commercial consideration criteria (to the extent it is retained). By its nature, contract R&D is undertaken for commercial consideration. In many instances, it cannot be said that the R&D business has financial risk if they are in effect reimbursed for all costs with a margin. However this 'cost-plus' method that many multinationals employ should not be viewed as commercial consideration as to do so, would remove the incentive to undertake this sort of R&D in New Zealand, reducing the level of R&D undertaken here.

4.14 To the extent a commercial consideration test is retained, it should not apply to related party transactions, where R&D is undertaken by one entity for a related party, with the related party providing commercial consideration for this R&D. This sort of R&D activity would make up a significant amount of the R&D activity being undertaken by multinationals in New Zealand, and to exclude it would risk removing all the benefits that this R&D is currently providing New Zealand.

Overseas R&D

4.15 Some R&D will involve a greater component of overseas costs simply because the scientific expertise is not located in New Zealand, even though the R&D project is based in New Zealand. The Group submits that the 10% cap should be applied across the life of the project, and accordingly taxpayers should be able to go above the threshold in a particular year for a multi-year project on the proviso that the expenditure does not exceed 10% of the overall project budget.

4.16 For example, in one year there may be a proportionally large overseas cost to get a project started, then in a second year it may be all New Zealand cost, then in year three there may be more overseas costs again. The R&D outputs, however, are in New Zealand and the vast majority of costs are in New Zealand, with significant knowledge transfer back to New Zealand. The overseas percentage test needs to be adjusted so that multiple year projects are not unduly disadvantaged simply because in the normal life cycle of the project there are greater overseas costs in one year than in others.

4.17 Previous section LH 6(5) defined "overseas eligible expenditure" to include expenditure incurred in the income year for "the" research and development project. The Group agrees the 10% threshold needs to be calculated on a project by project basis. Section LH 6 also allowed the 10% rule to be applied over the life of the project with expenditure in excess of 10% being able to be carried forward to a future year

until sufficient local eligible expenditure had been incurred. The Group submits that if our above submission is not accepted, that Officials adopt the same position as in the 2008/09 regime.

4.18 The Group also submits that where R&D is undertaken overseas, there could be an option to include it in the regime and exclude it from the calculation of the 10% of overseas expenditure, in situations where there is no available New Zealand expertise on that topic. This could be achieved in conjunction with ministerial approval / pre-approval and entities would have to explain in detail why the relevant expertise is not available in New Zealand.

4.19 There should also be ministerial discretion to allow pre-approval for specific projects with overseas R&D expenditure that would be considered good for New Zealand Inc, where the eligible overseas expenditure allowed is greater than 10%. The Group foresees that there may be some projects that are so significant that it would be beneficial to encourage them to be based in New Zealand, where the benefits of the project (such as the spill over benefits described earlier) far outweigh the fact that more than 10% of the expenditure is based overseas.

Software R&D

4.20 As noted in the paper "software R&D has become increasingly important in our economy". Software is incorporated into many facets of R&D, and it is therefore essential that there is a workable regime around software. There should not be a separate cap on the level of expenditure on software which is eligible for an R&D tax incentive, as there was in 2008/09.

> Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?

4.21 The Group is of the firm belief that software R&D must be included in the R&D tax incentive regime. There has never been a more critical time for New Zealand to adopt a proactive stance towards software development. Artificial intelligence, blockchain and other automation enabling software are at a critical point in their development and New Zealand needs to ensure it is at the forefront of this.

Example
s 9(2)(b)(ii) [redacted] This work may not meet the current definition of R&D due to there being a limited amount of scientific or technology uncertainty – at the time the project is commenced, s 9(2)(b)(ii) [redacted] Despite this, the work did involve using a systematic process to increase knowledge and understanding in this area, with a level of uncertainty regarding the final deliverables. The end result would be unique as this is an area of software development that is not well understood.

4.22 We acknowledge that there has been some difficulty in establishing an appropriate definition for "Research & Development" / "core activities" as they apply to software and that Officials have been having ongoing dialogue with some software industry participants. Without the benefit of knowing how Officials thinking has developed in

this area, the Group wishes to submit that it is critical that the regime allows for the innovative use and development of software to be an eligible activity. Based on experiences in 2008/09 the Group is concerned that a similar approach will be adopted; in particular in the previous R&D tax credit regime, a high threshold was applied for software R&D expenditure and accordingly taxpayers were actively disincentivised to make claims (including by virtue of a $3million cap on internal software development).

4.23 R&D in part comes down to a question of what is technically uncertain versus what is not. The Frascati Manual defines R&D as being about systematic work undertaken to increase the stock of knowledge and to devise new applications of available knowledge[4], this would seemingly incorporate software R&D. The Group notes that instances where existing software is applied, adapted or customised to do something new or unique or solve something that has not been solved before should qualify for an R&D tax credit. The Group submits:

- The specific wording from the Frascati Manual definition of R&D should be used to draw in software R&D.
- Alternatively, expenditure on software R&D can be brought into the regime using the concept of "novelty" as part of the definition and relaxing the requirement for scientific or technological uncertainty.
- To the extent an appropriate definition cannot be determined within the standard definition of R&D, a separate limb should be included in the definition specifically for software R&D.
- Certain activities in relation to software R&D, such as testing and internal software development, are specifically included as eligible R&D activity.
- It will be important that upfront guidance is produced and published in relation to the R&D tax incentive regime. In particular this guidance should include illustrative examples of eligible software R&D activity given the uncertainty surrounding this area. These examples should be varied and cover a number of different scenarios in order to provide clarity and predictability. Details of what documentation/evidence must be kept is also essential.

4.24 The Group submits that as much software R&D as appropriate should be included in the tax incentive regime, from day one of the regime – it would be inappropriate for this uncertainty to result in any delay. As noted in the discussion paper, 40-50% of the value of grants given in the last three years was made up of software R&D. This highlights the significance of software R&D and the importance of including it in the R&D tax incentive regime from implementation on 1 April 2019. For the tax incentive to incentivise behaviour, organisations need to know upfront that they will receive something. Upfront certainty will allow the tax incentive to be built into financial models and ultimately result in more projects passing the hurdle required to be progressed.

Timing of expenditure

4.25 The discussion paper notes that tax incentives will be available in the year in which the R&D expenditure is recognised as a deduction for income tax purposes. Again, this emphasises the need to for the tax rules to allow the deductibility of feasibility expenditure.

[4] OECD Frascati Manual 2015.

4.26 The Group considers that capitalised R&D expenditure should also be eligible for the tax incentive. For example, a business is developing a world's first biofuel plant. The business capitalises all costs, including R&D, to the cost of the asset for financial reporting purposes (initially to a balance sheet WIP account during the feasibility phase). For tax purposes the expenditure has passed the point of being deductible feasibility expenditure. The tax and accounting treatment should not be determinative of the R&D tax incentive outcome. Accounting treatment alone should not be determinative.

4.27 The Group understand there are a range of accounting treatments adopted for development expenditure by New Zealand corporates for a range of reasons. One such reason may be the accounting rules themselves - as the OECD suggests[5] accounting rules (IAS38) appear to "implicitly confer significant discretion to firms as to whether to capitalise".

Example
s 9(2)(b)(ii) [redacted] The business capitalises all costs associated with this testing work due to the discretion granted by the accounting rules to capitalise such expenditure. This business should not be limited from making an R&D tax incentive claim on this expenditure where the results of the expenditure on testing this technology will benefit New Zealand and make other New Zealand businesses more productive, generating new insights and knowledge.

4.28 Given the above, and the fact that the previous New Zealand R&D tax credit[6] and the current Australian R&D Tax Incentive regime both provide incentives for appropriate capitalised development expenditure we strongly suggest that the new R&D tax incentive should do the same.

4.29 The Group notes that from an integrity standpoint, there should be clear rules on entry into the regime about how the R&D tax incentive will apply to expenditure which has been deferred under section EJ 23 of the Income Tax Act 2007. We note section EJ 23 was addressed under the 2008/09 regime, where it was clarified that the tax credit arose at the time the expenditure was incurred, not when the deferred deduction was taken.

Loss continuity

4.30 The Group struggles to see why there should be a difference in treatment between a business in profit versus a business in a loss position. The Government should be indifferent between having a taxpayer's provisional tax reduced and paying out a tax credit. Both have the same effect and R&D tax credits should be refundable from 1 April 2019. If there are real fiscal concerns about allowing R&D tax credit to be refundable then some constraints could be put around the rule; for example the total claim is <$XX or the businesses turnover is <$YY.

4.31 A refundable credit would provide the cash flow certainty necessary for certain "borderline" R&D projects to proceed. As some R&D projects will proceed regardless, incentivising appropriate cash-flow borderline projects to proceed would seem to us to be critical to lifting R&D.

[5] OECD time-series estimates of government tax relief for business R&D - TAX4INNO Project 674888
[6] Refer to the now repealed sLH 5(4)(c)(ii)

4.32 It is not only "borderline" R&D projects that the R&D tax incentive would benefit but also borderline corporate viability. For example, a Group member has provided this example from the previous regime:

> Example
> A company was undertaking cancer research and seeking to get it to the next research stage. The Chief Research Lead and CEO were checking in at first monthly, then weekly, as to when their R&D tax credit claim would be completed, filed and processed. This was because their balance sheet was not strong and the money was needed to pay salaries so they could reach the next milestone. This was highly important research that would be terminated if all the taxpayer received was a tax credit to carry forward to the future.

4.33 Making the new R&D tax credit refundable to all from the start would help enable investment in R&D to continue (i.e. not be cut) during periods in which businesses face profitability and funding challenges.

4.34 In addition, the non-refundability of the credit will be an active disincentive to multinationals undertaking contract R&D in New Zealand. This is because the actual cash benefit of the R&D tax credit will be limited to the tax payable in that year. For an R&D intensive business with limited other activities (e.g. it is solely undertaking contract R&D on a cost-plus basis) will never be able to realise the full benefits of the tax credit. This is best illustrated by an example.

> Example
> Assume a contract R&D business (Company A) incurs $10million of R&D expenditure and it able to on-charge this to its parent company (Parent Co) on a cost plus 8% basis. It has no other income or expenditure. All costs are eligible for the R&D tax incentive:

Description	NZ$
Total service fee revenue charged to Parent Co (at fully absorbed cost plus 8%)	10,800,000
Gross R&D costs incurred by Company A	(10,000,000)
Taxable income for Company A	800,000
Tax on taxable income at 28%	(224,000)
R&D tax credit (12.5% of fully absorbed costs assuming all $10m costs are eligible)	1,250,000
Remaining R&D tax credit (this may be able to be utilised to offset taxable income derived from other activities in any given year or carried forward)	1,026,000

> Based on this example, the effective case benefit of the tax credit would only be 2.2% of the eligible expenditure. The remaining credits could be carried forward, but could never be used unless Company A developed new revenue streams.

4.35 The inability to have excess incentives refunded will materially reduce the benefit of the regime to these types of contract R&D businesses and consequently reduce the attractiveness of undertaking R&D in New Zealand.

4.36 This highlights the importance of the need for the credit to be refundable. While this may not occur during the first year of the credit, it should be implemented for the second year of the credit commencing 1 April 2020, as many of the organisations this will affect will be at the end of the Growth Grant transition period.

4.37 The Group acknowledges that tax losses and continuity are on the Tax Policy Work Programme, to be addressed as resources allow. In this regard, the Group's priorities in regards to companies with tax loss is as follows:

- First, the Group considers the tax incentive should be refundable from 1 April 2019 (with no reference to continuity). This will address any issues of applying these rules to companies in tax losses.
- Second, if full refundability is not possible, the Group considers that the refund could be limited by some measure e.g. businesses with a turnover of less than $XX or a tax incentive of less than $YY.
- Third, a same business test should be introduced so that while continuity still applies, this does not adversely disadvantage start-ups who may be actively seeking new capital to grow their businesses.

> Question 14: Are there reasons why continuity rules should not apply to tax credits? Please describe.

4.38 The difficulties in applying the R&D regime to businesses in tax loss highlights the issues with the loss continuity regime. The lack of an alternative carry-forward test means there is the potential for carried forward credits to be forfeited where new equity is sought by these innovative and fast growing companies (so that they can continue to innovate and grow), defeating the purpose of the regime.

4.39 The Group has, in conjunction with other organisations, been engaged in discussions with Ministers and Officials about the introduction of a "same or similar" business test to the tax loss carry-forward rules. This proposal is to supplement the current 49% continuity of ownership test with a rule that losses can be carried forward so long as the company's underlying business remains the same or similar.

4.40 If the same business test is introduced, this will complement and enhance the outcomes the Government seeks by introducing R&D tax credits and would help the Government achieve its goal of boosting spending on R&D to 2% of GDP. The potential unfairness of a continuity of ownership requirement must be addressed in the context of the proposed R&D tax incentive, as these two issues go hand in hand. The loss continuity rules can stifle innovation and business certainty. The same business test will, on the other hand, bring New Zealand's rules into line with those of comparable jurisdictions, reduce compliance costs and further the potential for business growth.

4.41 We refer you to the recent comprehensive Tax Working Group submission made by the Group and others in relation to the need for New Zealand to adopt a same business test for tax loss continuity. We would be happy to provide this for your reference as required.

Minimum threshold

Question 15: **Is the minimum threshold set at the right level? If 'no', plea**se provide further details.

4.42 The Group is supportive of the minimum threshold and considers that it is set appropriately. The R&D tax incentive regime will consume a significant amount of resources and a minimum threshold is appropriate to avoid costs being incurred for processing applications when the tax credit to be claimed is minimal.

4.43 The Group submits that the $100,000 threshold should be applied on both a per taxpayer basis as well as where there is a group of wholly owned companies (i.e. if there is a wholly owned group its R&D expenditure should be aggregated to determine whether the threshold is met).

Cap on expenditure

Question 16: How important is a cap or a mechanism to go beyond the cap? Please provide further details.

4.44 The Group is also supportive of a cap on the expenditure, provided there is discretion to go beyond this, and to get upfront approval of this. There is an obvious fiscal cost to this regime and while being one that will bring many benefits to New Zealand, it is appropriate for limits to be put in place.

4.45 That said, it is important that there is discretion to go beyond the cap. There will be cases where particularly large projects are being undertaken or considered (or where organisations simply have a large R&D spend). The ability to apply for ministerial discretion or preapproval beyond the cap will ensure that these projects are not disadvantaged and that these organisations are not discouraged from undertaking these sorts of projects in New Zealand (or from spending over a certain amount on R&D). To limit this would only act to disincentivise R&D activity after a certain point.

4.46 It will usually be the case that organisations with significantly large R&D spends are undertaking particularly complex / special projects, hence the large spend. Diversity in R&D is just as important as volume of R&D. It is important that we are developing the skills and knowledge of New Zealanders and attracting large and complex projects to New Zealand will help achieve this.

4.47 Having the ability to go beyond the limit will also ensure that New Zealand grows or attracts the large R&D performing firms that the discussion paper notes are essential to the New Zealand economy. These firms, and the resources that they bring, are the most efficient way to grow and develop New Zealand.

4.48 It is important that the cap should apply to all R&D expenditure equally, i.e. the cap for software expenditure (including internal software development) should be the same as for other expenditure.

Ministerial discretion

Question 17: What features of a Ministerial discretion or pre-registration would make them most effective?

4.49 The Group's preference is for there to be a system of pre-registration rather than a Ministerial discretion. This is to ensure that taxpayers do not feel they are subject to political bias, and also to ensure that taxpayers can have certainty in a timely fashion. The Group appreciates that Ministers are very busy and may not have time to adequately consider cap waivers. In order to incentivise behaviour, businesses need to know upfront whether their R&D expenditure will be included or not. This is also important for information gathering and record collection purposes – whether activity will or will not be included may affect an entity's decision on how they organise their documentation processes.

4.50 The key features of any Ministerial discretion or pre-registration should be the ease of the process and certainty as to the criteria that will be applied in the exercise of any discretion. It is important that any mechanism to go beyond the cap does not introduce significant compliance costs to businesses (or to the Officials administering the regime). Further, the information that is required to be provided should not be considerably different to that which will be required in normal circumstances under the regime.

4.51 It will also be important that the discretion (or pre-registration) is applied appropriately and in a timely manner. It is important that certainty is provided to businesses and it is important that approval or non-approval is provided efficiently so that taxpayers can make decisions about their projects.

4.52 The Group supports that there is pre-registration / pre-approval not only to go beyond the cap generally, but for specific projects on a case-by-case basis. One of the downsides from moving from the Growth Grant is the upfront certainty that is lost, but the provision of a pre-approval process (in particular for large claims), will go some way to reinstating some certainty in the regime.

4.53 Guidance should be given as what kind of expenditure will be allowed in excess of the cap / what kind of projects will qualify for spending beyond the cap.

4.54 The discretion should be exercised by persons with the requisite knowledge for determining whether something is R&D expenditure or not. If the form of the discretion is a ministerial discretion, the signing off of this should be more of a 'rubber stamp' activity. While the discretion may ultimately lie with the Minister, it is important that these sorts of decisions are made by those who are informed and have the skill set to be making these decisions; for example by New Zealand's Chief Science Advisor.

New Zealand economy

4.55 The Group wishes to specifically acknowledge its agreement with the following comments on pages 26-27 of the discussion paper:

- *Growing or attracting large R&D performing firms is essential to the New Zealand economy*
- *Large firms bring resources to the economy that small firms struggle to provide:*

- o *high quality managers and entrepreneurs*
- o *knowledge of international markets*
- o *large capital budgets*
- o *corporate finance,*
- o *a customer base for smaller high-growth firms.*

- *There are numerous factors that might affect the location choice of R&D investment by large international firms including support for business R&D. An R&D tax incentive and support these decisions.*

5. Administration

Transparency and evaluation

> Question 18: What are your views on the proposed mechanisms to promote transparency and enhance evaluation?

5.1 It will be important that the regime is regularly evaluated to ensure that it is working as intended and is capturing the appropriate R&D activity. The Group would support the use of regulatory changes to efficiently remedy issues in order to maintain the integrity of the regime.

5.2 The Group would prefer a three year lag in reporting, as this will allows sufficient time to pass following the expenditure being incurred. The reality is that R&D projects are often long and the reporting lag should reflect this. The Group would also tend towards favouring sector reporting, as opposed to reporting of the names of recipients and the amounts (in bands). While in some sectors information could still be obtained from such reporting, this should cover most businesses.

5.3 The reason for not reporting company names is that the company name could indicate what the R&D is related to as it is common to form special purpose vehicles; for example if it were reported that "Square Apple Limited" received a tax incentive this may indicate to apple growers that there may be new apples about the enter the market. In addition to the concern about company names, there could be flow on impacts to customer relations if it is determined that, for example, "Complicated Road No 1 Ltd" received an R&D tax incentive when the sole customers of CRNo1 Ltd was unaware that the project was complicated.

5.4 In light of the above measures to promote transparency in the regime, it is even more necessary to amend the rules in relation to eligibility into the regime, as details being made public acts as a safeguard.

Risks

> Question 19: Are there any other risks that need to be managed? Please describe.

5.5 The Group sees the largest risk with the regime being that the boundaries are drawn or administered too tightly and the regime ends up being ineffective at encouraging R&D as it is too difficult for taxpayers to qualify.

5.6 As noted elsewhere in this submission, the Group supports the comments on page 12 of the discussion paper about incremental refinements to the rules overtime. The Group supports Officials having a determination or regulation making power to modify the rules or to specify eligible / ineligible expenditure types in the event of misuse or abuse of the regime.

External advisors

> Question 20: What are the risks with making external advisors liable in this way?

5.7 The Group appreciates the desire to ensure that tax advisors are not aggressive in relation to claiming R&D tax incentives. It will be common for taxpayers to agree professional fee arrangements which make reference to the level of R&D tax incentive received by the taxpayer. For example, it may be common for taxpayers to agree to pay advisors on a time and cost basis, but also cap the level of the professional fee at a fixed percentage of the total claim. This type of arrangement is beneficial for taxpayers so they can budget / ensure they retain the majority of the R&D tax incentive received. The Group has no concerns with making external advisors liable in this way, provided that it is only in situations where the R&D tax incentive application *also* demonstrates a serious offence.

Administration

5.8 The discussion paper proposed that Inland Revenue will administer the R&D tax incentive, supported by Callaghan Innovation. The Group's preference would be for decisions as to what constitutes R&D to be made by Callaghan Innovation rather than Inland Revenue. Member's experience with the 2008/09 tax credit was that taxpayer were subject to a significant level of questioning from Inland Revenue. These processes made the R&D tax credit regime inefficient and compliance costs intensive for taxpayers.

Return process for R&D tax incentive

5.9 The Group acknowledges the preference for online filing and ensuring that claims are made through MyIR.

5.10 The Group would like to ensure that online processes are easy to use and that they can be used and accessed by tax agents assisting with R&D tax incentive claims. In some instances a taxpayer may choose to have an R&D Tax Incentive Advisor who is not the usual "tax agent" of the taxpayer. They IR system should be flexible enough to grant access to the relevant MyIR information for both R&D Tax Incentive Advisors and regular tax agents.

5.11 Claim forms should also be flexible to allow taxpayers to populate the forms with pre-existing project information rather than having to rewrite material for a tax-only perspective. In addition, there needs to be sufficient flexibility for taxpayers to provide as much information with a claim as they consider necessary; claims should not be limited to an arbitrary 500 words.

Claim period

5.12 The Group notes that the claim period is intended to be one year after the end of the income year to which the claim relates. The Group would like clarity as to how this rule will apply to early balance date taxpayers who have more than 12 months to prepare income tax returns. In the Group's view the date should be when the return is due to be filed, not "one year".

5.13 The Group would also like to highlight the inequity in this position. In other situations taxpayers are able to amend past returns, as long as the requirements of the four-year time bar are met. From the wording of the discussion paper, this will not be the case and taxpayers will only have one year to identify and include this expenditure. However Inland Revenue will still have the four years statute bar open to them to query and reassess a return − this inequity should be addressed.

Information required

> Question 21: What is the right level of information required to support a claim?

5.14 The key issue here is that Inland Revenue should look at and be comfortable with the existing documentation from the commercial projects that businesses are undertaking. There are potentially a significant number of documents that will be linked to R&D expenditure undertaken by an organisation and there should not be significant additional compliance costs required in relation to collation and provision of this information in a particular form, at least upfront.

5.15 The amount of information required should strike a balance between providing the necessary information and detail for the claim to be assessed, and the compliance costs and record keeping that will be required in submitting a claim. In the Group's view, this is an area where the experiences of the previous R&D tax credit regime can be drawn upon. In particular, a focus group of taxpayers who went through the 2008/09 claims process can provide feedback on what did / did not go well.

5.16 It is vital that the details of the information that is required to support an R&D incentive claim are clearly outlined well before introduction of the regime on 1 April 2019. As well as being included in legislation, the guidance supporting the regime should include examples and details of what is required. Organisations code and track expenses using their own systems and internal processes. From our experience, changing these systems and processes requires significant lead time, particularly when an organisation has various different business streams and undertakes a significant amount of varied activity.

Third party software claims

> Question 22: What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?

5.17 The Group has no issues with customers being able to submit R&D tax incentive claims via third party software, provided that this works at least as efficiently and effectively as the Inland Revenue systems.

Integrity measures

> Question 23: What integrity measures do you think Inland Revenue should use?

5.18 The R&D tax incentive should be treated just like any other income tax measure – the starting point should not be that organisations will be using this to 'game' the system. The normal integrity measures that are already imposed should be used, with extra integrity measures added only to the extent that they are absolutely necessary. Any additional integrity measures implemented by Inland Revenue should provide certainty to taxpayers, in a reasonable timeframe. They should also not introduce any significant compliance costs.

5.19 The Group strongly supports the use of third party expertise in the assessment of R&D eligibility. Whether these be ex-Callaghan Innovation staff or other experts with the experience and requisite knowledge, this is an area that Inland Revenue (and MBIE) should contract out to the specialists in this area. The focus of Inland Revenue should be on the tax treatment and tax implications, not the technical R&D that is being undertaken. If this approach were taken it would be consistent with Australia where "AusIndustry" consider eligibility and the ATO review the allocation of expenditure.

6. Transition from Growth Grants

6.1 The Group is aware that there may be automatic rollover of existing Growth Grants to the transition R&D tax incentive scheme. The Group considers that this would be an appropriate measure to provide some certainty to these recipients, particularly so that they are able to continue undertaking the valuable and varied R&D work that they do. The R&D world moves very fast and it is important that organisations are not hindered from undertaking the very activity these proposals are intended to promote, which will be to the detriment of the innovative work they are undertaking.

7. Other

7.1 We appreciate that there is a lot of work to be undertaken on this regime prior to the September deadline for legislation and the 1 April 2019 implementation date. One matter which Officials may wish to consider is the manner in which taxpayers can avail themselves of R&D tax incentives on a close to real time basis. If a taxpayer is in a taxpaying position that taxpayer can obviously choose to pay less provisional tax, factoring in the anticipated R&D tax incentive. However, this decision is made more complex by the use of money interest rules which will incentive taxpayers to continue to pay provisional tax using the standard method (i.e. 105% or 110% of prior year provisional tax). Thought should be given to whether the 5% / 10% thresholds could be lowered or if there can be some other mechanism to allow businesses to access the tax incentive (for example, provisional tax is paid, with a separate application made for a refund of 1/3 of the anticipated tax incentive amount).

NEW ZEALAND WINE

PURE DISCOVERY

SUBMISSION TO THE MINISTRY OF BUSINESS, INNOVATION and EMPLOYMENT

on the

FUELLING INNOVATION TO TRANSFORM OUR ECONOMY

DISCUSSION PAPER

1 June 2018

Introduction to New Zealand Winegrowers, and the wine industry's research activities

New Zealand Winegrowers (**NZW**) provides strategic leadership for the wine industry and is the body that represents the interests of all of New Zealand's grape growers and wine makers. Established in 2002, NZW is funded by compulsory levies under the Commodity Levies Act and the Wine Act, and has approximately 1,500 members. New Zealand is the only major wine producing country to have a single, unified industry body that represents both grape growers and winemakers.

A key part of our activity is a longstanding and successful research and knowledge transfer programme that has delivered measurable advantages to grape growers and winemakers in New Zealand.

NZW, with significant support from the government through the Regional Research Institute initiative, have recently established the New Zealand Winegrowers Research Centre, a Marlborough-based centre with a national focus, which will provide cutting-edge science, research and innovation to benefit New Zealand's entire wine industry, and its key stakeholders.

Increasing industry involvement and investment in research and development is a key driver for the new facility. As such, the policy settings surrounding their investment in research and development are of significant interest to our members.

NZW welcomes the opportunity to make a submission to the MBIE in respect of its paper "*Fuelling Innovation to Transform our Economy – A Discussion Paper on a Research and Development Tax Incentive for New Zealand*" (**Paper**).

Executive Summary

1. NZW supports the government's commitment to increase New Zealand's R&D expenditure to 2% of GDP over 10 years, and welcomes the government's intention commit to sustained increases in government investment in R&D.
2. NZW also welcomes the introduction of *additional* support to industry through the proposed R&D tax incentive.
3. We consider the R&D tax incentive should be broadly available, and submit that the threshold should be lower than the $100,000 proposed (we propose $20,000).
4. To ensure smaller businesses are not prejudiced, any minimum threshold for eligibility ought to accommodate multiple smaller businesses collectively reaching that threshold by joining together to fund a collaborative R&D project.

   Alternatively, if the threshold remains high or small businesses are not allowed to pool their funds to reach the threshold, consideration should be given to allowing multiple businesses to make R&D-credit-eligible research investments by pooling their money in another eligible entity (eg a levy-funded body) for that purpose, with those contributing investors then eligible for the credit when that pooled money is spent on eligible R&D.
5. The definition of R&D core activities could better emphasise "development", as the *development* of existing research for application to our specific New Zealand conditions can be every bit as valuable as the generation of completely new knowledge. We also suggest consideration should be given to retaining the additional limb from the 2007 Act covering

activities involving an "appreciable element of novelty". This would capture a valuable range of knowledge creation not caught by the proposed wording.

6. NZW supports the ability to carry forward the tax credit. In a sector that is ultimately dependent on the weather, a year or more of losses is always a risk.

New Zealand's winegrowers are committed to R&D and adoption of the resulting knowledge

New Zealand conducts what is known as "cool-climate viticulture"; because of our location, geography and proximity to the sea, grape growing in New Zealand is unlike grape growing in any other country. Although the cool climate presents challenges when compared to growing in warmer, continental climates – reduced yields, greater input costs, different pest and disease pressures, and longer ripening times – it is the key driver of our distinctiveness: no other grapes share these conditions, and no other wines develop the same flavour profiles.

These conditions allow us to make wines that are truly unique, highly sought after, and able to be sold at a premium price: our bottled still wine sells for the highest average price per litre of any wine in the world.

But to cope with these unique cool-climate challenges, New Zealand's growers and wineries have had to be creative. NZW and its individual members, often with investment from government research funding bodies, have a history of investing in programmes that have researched, developed and educated our membership on techniques in the vineyard and winery that keep us at the global edge. For example:

- successful virus elimination techniques;
- perfecting and embracing the screw-cap closure;
- understanding the flavours and aromas of Sauvignon blanc, and how manipulations in the vineyard, winery and distribution affect these;
- identifying that mechanical thinning techniques effectively reduce botrytis disease;
- understanding the entire vineyard as an ecosystem; and
- producing *naturally* lower-alcohol wines.

These research programmes are expensive, and the outcomes always speculative.

Despite the fact that wine is New Zealand's 5th largest export good ($1.72 billion per year), at least 95% of winegrowers in New Zealand are small or medium enterprises (**SME**s) – many of them family-owned businesses. But our members of all sizes have invested in research – both through their levy funding of NZW, and directly through individual member contributions to specific programmes – because research is the lifeblood of our competitive advantage.

In many of these projects, collaboration between multiple small growers or wineries has underpinned the success of the project, with the breadth of participation both spreading the cost and providing robustness to the findings.

With the establishment of the New Zealand Winegrowers Research Centre, we intend that the opportunity will grow for more of our smaller members to participate and invest in valuable collaborative R&D projects.

The extent to which government policy settings for the R&D tax incentive recognise the need to allow SMEs to join together to participate in research projects of scale, focussed on our own specific New Zealand winegrowing needs, will influence our industry's ability to take advance of the R&D tax credit, and expand the scope of industry's R&D investment.

Responses to specific questions in the Paper

We have not responded to all of the questions posed in the Paper, but note our responses to the numbered questions as follows:

Q 1 NZW agrees that levy funded bodies that receive levy payments or other contributions for the purpose of undertaking or commissioning R&D should be eligible for the tax incentive. We note, however, it is important that levy funded bodies whose purposes include research can claim the credit. Eligibility should not be restricted to levy funded bodies whose main or sole purpose is research.

In the case of NZW, research is a key purpose of the levy funding we receive, however the authorised purposes for which we may spend levy funds are broader than research. To the extent NZW does spend its levy funds for the permitted research purposes, it ought to be eligible for the tax credit.

Q 2-3 We submit that the "development" component of R&D needs more emphasis and should be included in the definition. Investment in work of this nature is critical to ensuring fundamental science is taken to a point where it can be applied by industry, adapted to our own unique circumstances, to deliver the outcomes the tax credit aims to encourage.

Q 5 We are not clear on why the definition in NZ IAS 38 is not considered suitable – no reason or rationale for that position was provided in the Paper.

With respect to the proposed R&D definition, we submit that the fact that an entity is willing to invest funds to work on any of the kinds of activities covered by the two limbs of the proposed definition is sufficient evidence that it is a R&D activity worth working on. NZW does not support the application of a materiality test to both the problem the R&D seeks to resolve and the intended advancement of science or technology. Further, we see some benefit in retaining the limb from the 2008 tax credit definition providing for "an appreciable element of novelty" as a separate criterion, given that this is easier to measure than an assessment of materiality, or indeed the intended advancement of science or technology.

Q 6-7 We support the acknowledgement regarding R&D's inherent uncertainty and the necessary conclusion that R&D activity does not need to be 'successful' to be eligible for the tax credit.

Furthermore, we support activities including market research and market testing as valid, and valuable R&D support activities. In the case of research into grape growing and winemaking, we often need to conduct sensory and market testing to understand the implications of the techniques being researched.

NZW would not support the de-facto exclusion of social sciences. As well as the example of digital R&D given in the discussion document, NZW expects that social sciences will play an

increasingly important role as industries tailor products towards specific cultural, and other socio-demographic groups and niches.

Q 9 Rather than an exclusion of Dual Purpose activities, NZW favours the adoption of a bright line test, and sees significant merit in the USA example referenced in the Paper.

Q 10 NZW does not support the limitation of eligible expenditure to direct R&D labour costs only and supports the second option of the Paper, including a broader range of direct and indirect costs as eligible R&D spend.

In relation to the cost of items processed or transformed in the R&D process we did not find the Paper clear enough to understand what is proposed to be eligible and what is proposed to be ineligible. In the case of grapes used for research purposes, in addition to other defined eligible costs we would expect,

- the full cost of growing those grapes (if grown) or buying those grapes (if purchased) to be eligible
- the full cost of processing those grapes for research purposes to be eligible
- that any revenues from selling the grapes (or wine produced) to reduce the amount of eligible spend.

If this is what is proposed as the "net cost of items processed or transformed in the R&D process", then we agree it should be classified as eligible spend. Otherwise, we request clarification on the definitions in the paper, and permission to resubmit on this point.

Q 14 NZW supports the ability to carry forward the tax credit. In a sector that is ultimately dependant on the weather, a year or more of losses is always a risk. The ability to benefit from the tax credit should not be reduced by this.

Q 15 For NZW's members, the $100k threshold is too high. The NZ wine industry is highly collaborative, mostly made up of SMEs, but we value research highly. As well as funding R&D through the application of levy funds, there are many examples in our industry of several members collaborating to jointly fund an R&D project.

Either the threshold should be lowered so such contributions (in the vicinity of $20,000 per year) are eligible for the credit, or provision should be made for multiple entities to collectively fund to reach the threshold, and claim their share of the credit.

If these proposals are not accepted, we suggest that individual businesses should be allowed to pay R&D money to another eligible entity (such as a levy-funded body) expressly to be invested in R&D-credit-eligible research, and then be eligible to claim the credit for such indirect investment. This would achieve the goal of incentivising the desired R&D activities, while not excluding New Zealand's smallest businesses from the benefits of supporting and investing in such research.

Conclusion

In this submission NZW have expressed our support for the proposed R&D tax credit and have briefly noted some comments on the proposal. In particular we have noted some questions regarding the definition of R&D activity and whether it sufficiently prioritises "development", and have highlighted the importance of a minimum threshold being set or structured so that SMEs who want to invest in R&D in conjunction with other industry participants can do so.

We would be happy to discuss any of the points raised in more detail.

Yours sincerely

s 9(2)(a) [redacted]

s 9(2)(a) [redacted]

To Whom it May Concern
Submission on proposed new R&D Tax Incentive

SUPPORT
Most importantly, we strongly support the implementation of Incentives for R&D. While we are architects, urban designers, landscape architects and interior designers, our 80 person business currently has a full time Head of Research as well as several research assistants embedded in the practice and has been undertaking architectural and building science research for a decade. We make several points below in areas of interest to our business and of wider concern.

PUBLIC GOOD RESEARCH
We suggest that research that is made fully publicly available has a larger Tax Incentive applied [say a 50% weighting] as this research has potentially a benefit for New Zealand Inc as a whole and/or a broad spectrum of New Zealand businesses/citizenry rather than just a benefit for one particular company or set of company shareholders [who may not be domiciled in New Zealand in any case].

We have in mind research projects such as investigations we have underway into the correlation between underlying assumptions in the NZ Building Code requirements and calculations for insulation and the realities of built practice in actual construction. The outcomes of this research can be directly used by us in a limited number of buildings compared to the the numbers actually built in New Zealand and has, in our view, a limited potential for commercialisation by us or any other single business. However, widespread public benefit should, based on the research results, result from the dissemination of the knowledge obtained. This is a shared view by our research partners on this project, Victoria University of Wellington and BRANZ. There are far-reaching implications to the building environment and construction industry: including design methods, construction methods, compliance and possibly for building legislation.

In our view, businesses that propose public good research as part of their business ethics or as part of their community involvement or to support the social side of their triple bottom line reporting should be both incentivised and rewarded for their immediate societal contribution. Research freely put into the Commons as on nzresearch.org.nz or the University of Waikato Research Commons could be a qualifying mechanism for instance.

SOCIAL SCIENCES AND ARTS RESEARCH [Q8]
We strongly believe that research in these areas SHOULD QUALIFY for the same Tax Incentives as other technology based research. This is because research in these areas can directly contribute to well being, uptake of technology and to productivity.

It would be wrong to place a limitation that means the Tax Incentive is not "accessible to a diverse range of businesses" [which is one of the driving forces in the stated Vision]. The arts and social sciences are often at the forefront of creativity; in fact, creativity is a necessity for artistic endeavour and

creativity is inherently required for innovation, the creation of new knowledge, processes, and new things. It would be a remarkable travesty to deny that this creative energy has no research capabilities and no possibility of leading to "innovative business activity".

We are architects. We have a foothold in the world of building **science** and yet by some definitions, we belong in the realm of the visual **arts**. Our work encompasses some of the social sciences; for instance, psychology, affects the way we design. We are part of the design industry. This industry, according to Designers Institute of NZ research, produces over 4% of New Zealand's GDP, a greater share than that of agriculture. To put in place a Tax Incentive that supports only a very narrow interpretation of science, technology and innovation is wrong: both for its potential impact on the creative industries involved and for its potential impact on R&D activity in the wider economy.

While we would argue that an industry such as ours with a foot in two camps should still qualify for Tax Incentives, we also take the wider view that the Arts and Social Sciences in general make contributions to new knowledge with potentially wide spread benefits. As an example, research in areas such as aesthetics and the effects of aesthetics and spatial configuration on personal preference, consumer behaviour, and workplace productivity if conducted by architects, psychologists and social scientists would presumably not qualify under the intended current framework when it should.

There are also a number of actual research projects we are involved with where we enter the combined realms of social sciences, art, architectural design and environmental impact. Some studies investigate the fundamental relationships between design, efficiency and usability in commercial buildings in New Zealand. Compiling architectural plans and metrics of multiple commercial buildings into a common format, assessing their efficiency and evaluating their effectiveness enables an understanding of building systems that have empirical and economic outcomes as well as social outcomes that impact on occupant well being and productivity. This, like many lines of inquiry in design research, would not appear to meet the current Tax Incentive criteria.

COMMERCIAL CONSIDERATION [Q12]

Some research activities are funded in whole or in part by other entities including other companies, by international entities and by NZ government agencies. The fact that government agencies contract businesses [and not wholly or partly owned subsidiaries] to conduct some or all of their research for particular projects is done because:

Business may have special expertise in a particular area,

Businesses may have access to data that would not otherwise be available,

Business partnerships may result from the research that later benefits both parties, and

It supports the extension of R&D capability into the business sphere where this capability is otherwise weak or un-supported.

There is still a risk that the commercial consideration does not cover the costs of the research, but the existence of the consideration broadens the possibilities for both the number and type of entities involved in research and the range of likely outputs. The result, otherwise, is to narrow research possibilities to a very narrow set of entities and a narrow set of developments. We suggest that the proposed rules are re-assessed.

Contact details are provided below. You are welcome to get in touch should you wish to have any of the

above points clarified.
Please acknowledge receipt of this submission.

Best regards s 9(2)(a)

s 9(2)(a)
on behalf of Studio of Pacific Architecture Limited

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1 June 2018

R&D tax incentive team

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Sent by email: RDincentive@MBIE.govt.nz

Dear Sir or Madam

Tait Communications submission on Research and Development ("R&D") tax incentive for New Zealand

We welcome the opportunity to make a submission on the "Fuelling Innovation to Transform our Economy – a discussion paper on a Research and Development Tax Incentive for New Zealand" and "Managing the transition from growth grants to the R&D tax incentive" documents.

Introduction

Tait Limited ("Tait") is a New Zealand owned and operated designer and manufacturer of critical communications products and solutions. We employ around 450 people in Christchurch and over 90% of our sales are exported.

Tait has been a recipient of the 2008 R&D tax credit, MSI project grants and a Callaghan Growth Grant. R&D plays an important part in the success of our business and Tait has undertaken substantial R&D for many years. s 9(2)(b)(ii) [redacted]

In our view there are better mechanisms available to assist the New Zealand business community with increasing its R&D investment than the re-introduction of an R&D tax credit. For example, the current grants administrated by the Callaghan Innovation are simple to use and administer, provide certainty for recipients and provide real cash benefits for businesses who are actively investing in R&D.

Despite our review that the current grants system should be retained, we outline our detailed comments on the proposed R&D tax credit below.

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Definition of R&D

Tait is concerned that the proposed definition of R&D expenditure is directed towards 'research', whereas a significant portion of our current R&D spend is 'development' and therefore not falling within the proposed tax credit eligibility criteria.

Tait's development activities that significantly improve features or functionality of our products have previously been deemed to be eligible for grants (using the NZ IAS 38 definition) on the basis that the knowledge being obtained is new to the company, is still technically uncertain and follows a scientific development process.

The R&D spend target of 2% of GDP is likely to include both research and development activities, whereas the proposed tax incentive appears to be mainly focused on research. We consider that this may reduce the overall spend on R&D.

We submit that:

- either the description of eligible expenditure is altered to make it clear development activity is included or guidance is supplied clarifying the existing description of eligible expenditure includes development;

- the interpretation of eligible expenditure makes it clear that product or service improvements established through market feedback are included as eligible; and

- the interpretation of eligible expenditure makes it clear that when conducted as part of an R&D project then activities such as "complying with statutory requirements or standards" or "pre-production activities, such as demonstrations of commercial viability, tooling-up and trial runs" are included as eligible.

Tax credit rate of 12.5%

The proposed R&D tax credit is 12.5% which is less than the 15% rate in the previous tax credit regime. It is also less than the current 20% Callaghan Growth Grant (14.4% after tax).

As the intent of the proposed tax credit is to increase R&D expenditure, we consider that reducing the rate from the current scheme may not be successful.

We submit that the rate should be increased to ensure that current recipients of the Callaghan Growth Grant are not put in worse position by the introduction of the R&D tax credit.

Certainty of eligibility and claim process

In our view, the Callaghan Growth Grant scheme is easy to use and low-cost to administer. Activity is effectively pre-approved and there is little room for eligibility disagreement (subject to review by a chartered accountant and submission of a year-end report to claim the 10%

retention). However, an R&D tax credit requires self-certification and there are risks of penalties or interest.

Under the proposed R&D tax credit scheme, businesses are likely to incur significant additional costs, both external (for professional advice) and internal (staff time in both R&D and Corporate teams to prepare claims and ensure adequate processes and documentation).

Disagreement over eligible expenditure or the claim process is likely to increase business uncertainty and may reduce business expenditure on R&D. The process used for the existing R&D Grants may represent a useful model for establishing this.

We submit that the R&D tax credit claim process must provide certainty (through an up-front certification process, for instance) to taxpayers.

Eligible expenditure

Two approaches are suggested for determining eligible expenditure, one based solely on direct R&D labour costs and the other including a broader range of direct and indirect costs.

Businesses incur significant direct and indirect overheads to undertake R&D (specific expenditure on a project, or more general overheads such as property costs for the R&D team). Both categories of cost should be eligible expenditure to avoid a reduction in spend. In our case, direct and indirect overheads may be up to 50% of total cost of the R&D project.

Calculating indirect overhead costs as a set percentage of direct labour is simple, but as businesses have different level of overheads, this would need to be set at a reasonably high level.

It is proposed that overseas expenditure up to 10% of total project costs can be claimed. This 10% falls away if more than 50% of the project spend is offshore.

To create exports, Tait incurs overseas expenditure as part of the development programme. This may be for temporary resources unavailable in NZ, or due to Tait developing products and services that are for export (as over 90% of our revenue is from outside New Zealand).

We submit that the overseas portion cap be increased to 25%, on the condition that the project IP created is owned by a NZ-controlled entity.

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Tax loss position

We consider that it is important to support R&D businesses that are also in a tax loss position, particularly when the current growth grant scheme ends. Typically, these are start-up firms that are R&D intensive in their early years but may also include established firms that temporarily become loss-making which can occur during a planned investment phase.

As outlined in the discussion document, the Government is committed to providing a solution to support these businesses and we consider this critical.

Transition Period

Tait's current growth grant expires in September 2018. The "Managing the Transition" discussion document states that all businesses with an active growth grant on 31 March 2019 can continue to receive funding through to 31 March 2020. On this basis, we expect that our current grant funding will be extended to this new deadline.

In our view, providing the end-March 2020 extension is critical to minimise uncertainty and therefore maximise R&D investment in the transition period. The extension will ensure adequate time for businesses to plan and improve internal processes in order to successfully transition to the new scheme.

Tait's balance date is 30 June, as are many businesses in New Zealand. We submit that the transition period be extended to match the FY20 balance date of the businesses claiming growth grants. There would be significant compliance costs for Tait (both external advisor costs and internal staff time) in claiming under two schemes in one financial year.

General

If you have any questions, please do not hesitate to contact us.

Yours faithfully

s 9(2)(a)

[redacted]

[redacted]

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Building a better working world

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1 June 2018

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Dear Sir/Madam

Submissions on *Research and Development Tax Incentive for New Zealand* discussion document

We refer to the discussion paper ("DP") on a research and development ("R&D") tax incentive for New Zealand entitled, *Fuelling innovation to transform our economy*, which was released for consultation on 19 April 2018 ("DP"). We appreciate the opportunity to make this submission.

We provide general comments regarding the R&D tax incentive, together with our detailed responses to the specific discussion questions posed in the DP.

1. Executive Summary

1.1. R&D tax incentives have become a major tool for promoting R&D in OECD and partner economies. A well-designed incentive can lead to increased innovation activity.

1.2. To be successful, the R&D incentive must be sustainable and predictable over time. There must be a seamless transition for existing Callaghan Growth Grants recipients.

1.3. The main changes required to the proposals in the DP before the R&D tax incentive is introduced include:

- The incentive should be refundable to cash-constrained businesses in loss,
- Allowing greater neutrality between entity form by way of inclusion of State-Owned Enterprises ("SOEs") and Crown Research Institutes ("CRIs"),
- Refinements to the definition of R&D activities, notably replacing the "scientific method" requirement with "systematic approach" or similar,
- Changes to the excluded activities list, notably relaxing the "dual purpose activity" exclusion, and
- Changes to the ineligible expenditure list, particularly regarding "commercial consideration" and expenditure "at risk".

1.4. We accept not all programme features will be enacted prior to its introduction on 1 April 2019. We recommend resources are made available for the continuous development of programme features. We anticipate future programme features will include:

- Refundability for businesses in a tax loss position (discussed further below),
- Refinement of the application process and record-keeping requirements,
- An alternative compliance process for businesses which operate substantial R&D centres,
- Consideration of the adequacy of the 12.5% rate, and
- A set of key performance indicators beyond R&D expenditure as a percentage of GDP to measure the success of the incentive.

2. Sustainability

2.1. R&D tax incentives are a long-term policy. The incentive must be sustainable, with an enduring commitment from Government to make the regime successful. Sustainability requires economic efficiency, ease of compliance and administration and fiscal integrity.

2.2. The Government has committed to making the 2019 Budget a Wellbeing Budget, using the Treasury's Living Standards Framework.[1] Our view is that the Living Standards Framework is a useful tool for long-term policy direction, although not yet sufficiently developed to act as a guide for detailed design questions. We see the R&D tax incentive as contributing most strongly to our human capital, through enhancing the skills and intellectual property of our people. Less directly, it should contribute to our financial/physical capital through greater productivity and investment, and to our natural capital through successful research outcomes. The Living Standards Framework therefore supports the Government's approach to the R&D tax incentive.

2.3. Overseas experience shows the ongoing administration of an R&D tax incentive can be time consuming and expensive for both Government and the claimant. Therefore, its design should adequately streamline the compliance burden for both large R&D businesses as well as SMEs. Compliance processes must be managed to ensure they do not become a barrier to engagement.

2.4. Businesses need certainty before they will engage. While programme features and processes may need refinement over the initial years, Government should minimise programme changes which will introduce uncertainty, especially around eligibility definitions. Certainty will enable business to plan appropriately and to purposefully increase their expenditure on R&D with confidence. Confidence should also be provided by enacting an advance approval process.

2.5. The incentive should have appropriate mechanisms to identify and monitor significant claims, ensuring the justified investment of public funding. In the interest of integrity, the regime must have a strong but balanced audit component.

2.6. Similarly, a substantial administration burden is anticipated for Inland Revenue and Callaghan Innovation. The two organisations should commit significant resources to making the claims process both easy and capable of being audited. The system and its processes will need to be designed with a focus on automation and clear IT interfaces to ensure the process is as efficient and streamlined as possible. We suggest Inland Revenue and Callaghan Innovation actively engage with businesses about their data management and IT systems, as understanding business realities will lead to a much higher-quality interface.

3. Refundability

3.1. As currently proposed, the R&D incentive to be introduced from 1 April 2019 will be "non-refundable". This design choice will materially reduce the impact the programme could have on businesses. This will also complicate and delay the transition from Callaghan Growth Grants to the R&D tax incentive. Failure to allow refundability undermines the credibility of the incentive.

3.2. Uncertainty about the termination of Growth Grants and the temporary nature of the R&D grant for a very limited group of businesses is already making it more difficult for early stage businesses to raise capital from investors.

3.3. The non-refundable proposal is inconsistent with many global R&D tax incentives (e.g. Australia, UK, Singapore and Canada) which are all refundable to certain early stage companies in a tax loss position. An R&D incentive will only stimulate R&D activity in these businesses if it is refundable.

[1] Hon Grant Robertson, Budget Speech 2018.

3.4. In fact, Australia, Canada and other jurisdictions allow certain early stage businesses in tax losses to cash out their R&D tax loss (equivalent to 28% of eligible R&D expenditure in NZ) plus the additional R&D incentive (proposed 12.5%). In effect, this could be achieved in New Zealand if the existing R&D loss cash out credit was retained and the new R&D tax incentive was refundable. However, for efficiency reasons, a single process should be used to deliver this outcome if enacted.

3.5. We acknowledge the need for fiscal sustainability. However, in our view, refundability is essential if the programme is to achieve its objective. We are aware the Government is working on a number of options which may deliver mechanisms and integrity measures which may enable a level of controlled refundability. Some example mechanisms and measures could include:

- A controlled maximum annual refund per entity
- A pre-approval requirement
- An audit requirement

3.6. Ultimately, if the incentive remains non-refundable, an alternative permanent cash mechanism should be considered.

4. Transition for Callaghan Growth Grants recipients

4.1. The Growth Grant scheme, administered by Callaghan Innovation, will be phased out with the introduction of the R&D incentive. In the interests of offering greater certainty to businesses and maintaining public confidence in the R&D system, there should be a clear pathway for current Callaghan Growth Grant recipients to transition to the new incentive.

4.2. Should the Government accept our recommendation for the R&D tax incentive to be refundable, the transition would be simplified. In the absence of a R&D regime which is fully refundable, we note the Government's proposal to allow existing Growth Grant customers to transition onto a temporary grant that mirrors the R&D tax incentive for the 2019/20 year will enable current growth grant recipients who are in tax losses to receive support for R&D on a quarterly basis in the same way as the Growth Grant.

4.3. We expand on these points in our separate submission on *Managing the transition from Growth Grants to the R&D tax incentive*.

5. Substantial R&D centres

5.1. We recognise the design and operation of the R&D incentive compliance process is critical. Programme integrity must be balanced with the administration burden on taxpayers. This burden is likely to be felt most by SMEs/small R&D claimants and by the very large R&D spenders. We recommend that thorough consideration is given to the compliance expectations for each type of claimant. Consequently, we provide a concept proposal for an alternative compliance process for businesses which operate Substantial R&D Centres where the activities are demonstrably within the scope of the R&D programme's requirements (see Appendix 1). This alternate process would also enhance programme integrity via early engagement, pre-approval, external audit and a Government-business relationship based on trust and cooperation.

6. Other major submission points

6.1. Our submissions, detailed in Appendix 2 as responses to the questions posed in the DP, relate primarily to the following matters:

Inclusion of SOEs and CRIs

- SOEs and CRIs should be included in the tax incentive. Under the State-Owned Enterprises Act 1986, the principal objective of every SOE is to operate as a successful business and, to this end, to be as profitable and efficient as comparable businesses that are not owned by the Crown. Although the instruction is not as explicit for CRIs, they still have financial objectives and an obligation to pay tax on their profits. The mandate of these entities is aligned with private entities and to preclude them from the incentive will create a competitive disadvantage. The spill-over from incentivising R&D for these entities will provide other benefits (e.g., higher skilled employees and more jobs) to the New Zealand economy. There is also a public benefit in including CRIs as CRIs have the principal objective to carry out scientific research for the benefit of New Zealand.

Defining R&D

- An R&D activity definition that achieves a broad-based R&D tax credit is necessary to meet the Government's policy objective. The proposed "scientific method" definition may preclude some software or big data type research activities from qualifying. We therefore suggest a "systematic approach" definition is considered as this would permit a broader base of R&D activities that demonstrates a planned methodology or behaviour. Further, we believe this definition will be more readily understood and applied by industry.

Dual purpose activities

- We recommend the "dual purpose activities" exclusion should be removed. This exclusion does not align with business reality. Taxpayers who are in business may incur R&D in order to innovate as a primary purpose but will usually have a secondary purpose of commercialisation or marketing. Excluding activities that are not conducted for the sole purpose of R&D would likely preclude a significant amount of genuine R&D. As an alternative, a significant, substantial or primary purpose test should be considered as these would acknowledge that multiple purposes usually exist however the R&D purpose needs to be the most significant of all purposes.

"At risk" rule

- The "at risk" rule is unduly restrictive. R&D collaboration is common in industry and in some circumstances, payments will be made during the course of R&D e.g., jointly or partially funded by an "early adopting" customer. From our discussions with industry, some of the most effective R&D occurs when a business collaborates with potential customers. If a company undertakes a R&D activity and they receive partial consideration for that activity, they should be able to claim the difference between cost and receipt (as opposed to deeming the whole project as ineligible). A claw-back mechanism could be considered to eliminate the "not at risk" portion.
- A further issue with the "at risk" rule as proposed relates to R&D which is funded on a cost plus basis by an overseas related party. We are of the view that any R&D undertaken in New Zealand contributes towards the policy objective and therefore should be eligible for the tax incentive.

Excluded activities

- Generally, we are of the view that the exclusions should only apply where the specific excluded activity is the primary focus of the activity/project itself. That is, if an activity has the 'excluded' nature but it is undertaken for the main/dominant/most significant purpose of supporting another eligible core activity, then the activity on the excluded list should itself be eligible.

Expenditure calculation methods

- Eligible expenditure should not be limited to labour costs. A labour cost approach would unduly favour labour-intensive industries (e.g., IT) and discriminate against capital-intensive businesses and against SMEs that often underpay founders in an effort to manage costs during the early years.

- For simplicity, we support a default overhead allocation methodology as long as businesses have the option to choose to undertake their own calculation where they believe the default rate is not reflective of their R&D cost structure. The burden of proof would reside with the taxpayer.

Loss continuity for surplus credits

- In the event that refundability is not enacted, we propose that the loss continuity rules should not apply to tax credits carried forward. Early stage and growth type companies are likely to have a number of changes in shareholding during the formative years as they seek to raise capital.

Measuring success

- We recommend the Government creates a framework to measure (or at least indicate) the success of the incentive beyond R&D expenditure as a percentage of GDP. This could include for example, growth in science/technology employment, revenue or profit growth for R&D incentive recipients or export revenue growth for R&D incentive recipients. This could be achieved by capturing appropriate data during the application process and undertaking some advanced analytical assessment. Analysis of these key performance indicators over time would provide Government with a quantitative measure of programme success.

We would be happy to discuss these points further with officials.

Yours faithfully

s 9(2)(a)

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Building a better working world

Appendix 1

NZ R&D Tax Incentive: Substantial R&D Centres

Concept proposal: Alternate compliance process for certain businesses

A number of businesses operate substantial R&D programmes in New Zealand. By their nature, these programmes are demonstrably within the spirit and scope of the proposed R&D tax incentive. There is an opportunity for Government to reduce the administrative compliance burden and encourage this R&D to occur in NZ, whilst maintaining the integrity of the R&D incentive. This concept aims to:

1. Reduce the year-end R&D tax incentive compliance requirements for substantial R&D Centres by enacting a preapproval and external audit compliance process.
2. Provide R&D claimants with a higher level of compliance certainty.
3. Reduce the compliance risk to the programme administrator.
4. Encourage local and international businesses to establish, grow and retain significant R&D facilities in New Zealand.

This alternate compliance process adds further integrity to the traditional R&D tax incentive compliance process; early engagement, pre-approval, external audit and a Government-business relationship based on trust and cooperation.

R&D activities undertaken beyond an approved R&D Centre would be the subject of the standard R&D tax incentive compliance process.

Which R&D Centres should qualify?

For an R&D facility to qualify for the Substantial R&D Centre compliance process it must:

1. Specialise in the conduct of R&D activities in at least one specifically identified field relevant to the business's field of operation.
2. Conduct R&D activities in a suitably equipped (for the field of research) facility that is distinguishable from the business's operational activities (although both may exist under the one roof). R&D centres/facilities within a 20km radius can be considered a single R&D Centre.
3. Have suitable administrative structures in place for the management of the R&D activities and the provision of services to the R&D Centre.
4. Engage a minimum of 25 full time equivalent staff with relevant scientific or technology qualifications or at least five years' relevant experience. Scientific or technological qualifications include NZ University degree level or higher, or equivalent recognised overseas tertiary qualifications. At least half of the equivalent full time staff must hold a relevant qualification.
5. Expect to incur expenses of at least $5 million per annum on in-house R&D activities within the R&D Centre.
6. Expect to incur at least 75% of the R&D Centre's total expenses on the business's in-house R&D activities.
7. Maintain a set of financial accounts/cost centres that are distinguishable to other R&D Centres or business activities.

Application and the alternate compliance processes

To qualify for this alternate compliance processes, businesses must obtain approval via the following process:

1. Complete the "Substantial R&D Centre" application form and lodge it with the required government department. This application should include the following information:
    a. The business's operational details and structure.
    b. The R&D Centre's facilities, and administration and financial structures.
    c. A description of the R&D Centre's financial arrangements: expenditure statements for the last 2 income years and high-level budget/forecasts for the current and next two income years.
    d. A description of the R&D Centre staffing, including qualifications and experience.
    e. A description of the business's field of research, current projects and outcomes from the last 2 years of research (if the R&D facility operated).
    f. A detailed description of the methodology the business will use to determine which activities and expenses qualify for the R&D tax incentive [guidance to be provided].
    g. Details of any non-R&D activities which occur within the R&D Centre (e.g. market research, quality control, and production support activities).

2. The Department will appoint a Customer Relationship Manager ("CRM"), to facilitate the application and streamlined compliance process. Initial eligibility assessment and clarification may be required at this point in time. [Note: The CRM will be responsible for early and on-going engagement and the resolution of significant questions of technical eligibility, expenditure eligibility, claim methodology, and on-going scheme participation.]

3. A meeting will be conducted, most likely at the R&D Centre, to discuss the application. This will be between the business, its advisors and technical experts, the CRM and other relevant Government parties.

4. Based on information provided, the CRM will process the application to the point of decision. This will be communicated to the business.

5. If the application is approved, the CRM will confirm the alternate compliance process with the business, including:
    a. A mutual understanding of the R&D centre's operations.
    b. Mutual agreement of the R&D identification and costing methodologies to be employed by the R&D centre.
    c. Mutual agreement about the annual compliance process, incorporating an auditor's confirmation that the agreed methodologies have been applied plus the annual R&D Summary Statement to be delivered to the CRM. This statement is due before lodgement of the company's tax return.
    d. An annual meeting between the business, its advisors and the CRM to review activities conducted, outcomes achieved, current year claims made, and the activities the business intends to make in the subsequent year.
    e. The period for which the approval applies (recommend: current year plus two subsequent income years) and any events which would terminate the agreement.
    f. Mutual agreement of communication, reporting and forecasting requirements.

Building a better working world

Appendix 2

Discussion questions

Question	Submission	Analysis
1. *If SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?*	· SOEs and CRIs should be eligible to access the R&D tax incentive. · Alternative funding mechanisms are more viable for District Health Boards and Tertiary Institutions. · Subsidiaries of Government entities should be included in the tax incentive. · If excluded, alternative R&D incentive mechanisms should be available to these entities.	Crown entities play a significant part in the New Zealand economy. The spill-over (e.g., higher skilled workers, more jobs and innovative commercial products/services) from Crown entities undertaking R&D will benefit the New Zealand economy. Excluding these businesses is likely to result in the Crown's investments deteriorating over time leading to negative fiscal consequences for the Government. Crown entities will face competitive disadvantage as their competitors will be able to innovate at a reduced cost. This will create increased barriers for Crown entities to invest in R&D and may result in these entities adopting different drivers. SOEs SOEs are expected to operate as corporate entities. The principal objective of every SOE is to operate as a successful business and to be as profitable and efficient as comparable businesses that are not owned by the Crown.[2] It is unjust to require these entities to act as corporate entities yet to exclude them from receiving the same mechanisms to prosper.

[2] https://treasury.govt.nz/information-and-services/commercial-portfolio-and-advice/commercial-portfolio/types-commercial-crown-entities

Question	Submission	Analysis
		Crown Research Institutes A CRI's principal objective is to carry out scientific research for the benefit of New Zealand. Unlike SOEs, the Crown does not expect CRIs to maximise profit, but does expect them to cover their cost of capital.[3] CRIs are likely to satisfy the approved research provider concept and definition however, this will not enable them to claim R&D credits for their own "at risk" R&D investment. There is a substantial amount of CRI investment that is "at risk". CRIs provide employment for high-skilled science and technology professionals. A key spill-over from CRI eligibility will be more jobs for highly skilled professionals, a key focus of the Living Standards Framework. From a financial perspective, CRIs play an important part in the Government's financial position and performance. Through exclusion, CRIs will be undermined competitively in commercial markets domestically and internationally. District Health Boards/Tertiary Institutions District Health Boards ("DHBs") and Tertiary Institutions have different mandates from SOEs and CRIs. SOEs and CRIs are expected to maximise profit/cover their cost of capital whereby DHBs and Tertiary Institutions focus on social wellbeing. They have less of a commercial emphasis and have greater Government funding. They are less likely to incur "at risk" R&D activities that from a policy level, should be supported by the R&D incentive. In our view, due to the structural make-up of these entities, there are better alternative funding mechanisms than an R&D tax incentive.

[3] https://treasury.govt.nz/information-and-services/commercial-portfolio-and-advice/commercial-portfolio/types-commercial-crown-entities

Question	Submission	Analysis
		Alternative mechanism If it is determined that Crown entities will be excluded, some other mechanism should be used in order to assist these businesses with R&D. We consider this to be important as R&D should be incentivised for Crown entities in order to meet the Government's policy objectives of higher wages, new jobs and new ways of doing business. Further, the spill-over from encouraging Crown entities to engage in increased R&D (i.e., creation of more jobs and retention of skilled professionals) is critical long-term for the New Zealand economy. Without some sort of mechanism, Crown entities are likely to be out "R&D'd" and will struggle to be competitive in the market. This will ultimately have flow-on fiscal consequences for the Government.
2. *How well does this definition apply to business R&D carried out in New Zealand?*[4]	· The proposed definition may preclude some software, big data and information and communication technology type activities from being eligible. · A "systematic approach" definition would permit a broader base of R&D activities. · A "systematic approach" definition will be more readily understood and applied by industry. · Appropriate guidelines with clear examples will be essential.	A definition that achieves a broad-based R&D tax credit is necessary to meet the Government's policy objective. Based on the 2008 incentive, we understand "scientific method" to broadly mean "hypothesis, experiment, observation and evaluation".[5] Overall, the definition is wide enough to be accessible to a diverse range of businesses. However, based on discussions with industry, the definition may preclude some software, big data and information and communication technology type activities from being eligible. This is largely due to the fact that the method applied to software type activities does not necessarily follow the formation of a hypothesis but rather the formation of an idea which develops organically.

[4] Understanding the R&D definition is entirely dependent on the definition of "scientific methods" which unfortunately hasn't been defined.

[5] https://taxpolicy.ird.govt.nz/sites/default/files/2007-sr-rand.pdf

Question	Submission	Analysis
		The Government is committed to ensuring that the definition adequately captures R&D software activity. EY supports incentivising software R&D. With this in mind, we suggest the reference to "scientific method" should be amended to "systematic approach" which is more easily understood by industry. A "systematic approach" will permit a broader base of R&D activities that follow a planned methodology or behaviour. We support the "new or improved" limb of the test as this will enable a diverse range of activities, as long as they are adding to the scientific and technological knowledge pool. The draft definition requires R&D activities to resolve "scientific or technological uncertainty". This term is somewhat ambiguous and recommend that this limb is further defined. The clarity of the R&D definition is paramount to creating a programme that is efficient and sustainable.
3. *Does this definition exclude R&D that you think should be eligible, please illustrate with examples.*	· The proposed definition may preclude some software, big data and information and communication technology type activities from being eligible.	See question 2 above – the definition as described appears to support a broad-based incentive programme. However, we suggest that a "systematic approach" definition may be more readily understood by industry. For example, augmented reality and virtual reality type R&D activities arguably do not necessarily follow a method of "hypothesis, experiment, observation and evaluation". Developers are systematically fostering and experimenting ideas and technologies but are not necessarily following a "scientific method". The R&D activities are not focussed on a targeted product but generally tend to evolve organically through trials and experimentation. It may be possible to reclassify this type of activity into a scientific framework, however the terminology may be artificial.

Question	Submission	Analysis
4. *Does the scientific method requirement exclude valid R&D in some sectors, please illustrate with examples?*	· Yes, certain development within the software industry.	See question 2 and 3 above regarding software industry.
5. *What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?*	· We do not support the introduction of a materiality test to either the "problem" the R&D seeks to resolve or the intended "advancement" of science or technology. · Materiality tests misinterpret the R&D process (i.e., very small steps are evidence of exceptionally technical issues) and may exclude eligible R&D activities.	Based on our experience, intention and materiality tests can be difficult to evidence, especially in an R&D context when the activities/test fail. In reality, very small scientific or technological steps, or even failures, are often strong indicators of exceptionally technical issues. However, it is difficult to evidence level of intent advancement or the materiality of the problem being addressed. Science is the incremental generation of knowledge about the physical. The more fundamental the R&D, the more difficult it is to illustrate a significant step. Consequently, activity eligibility should be tied to the complexity of the activity/process, not the quantum of the knowledge step. We also query the granularity which will be applied to the assessment of activity eligibility. This is important because R&D which takes months or years will be highly incremental, and at the micro level it may not appear to satisfy a material level, but when the discrete micro steps are combined, the overall series of activities, or the project, would clearly demonstrate a material step in knowledge. This will be important when R&D activity audit/assessment processes are being designed.
6. *How well does this [support activities] definition apply to business R&D carried out in New Zealand?*	· A "wholly" test is difficult for business R&D as businesses operate with a commercial outcome in mind and a significant amount of R&D needs to occur at scale in order to deliver a "scientifically significant result".	We support the inclusion of support activities. A considerable amount of plausible R&D expenditure in practice relates to "support activities" and including this type of expenditure will be beneficial for businesses that undertake R&D.

Question	Submission	Analysis
		A "wholly" test is difficult for business R&D as businesses operate with a commercial outcome in mind and a significant amount of R&D needs to occur at scale in order to deliver a "scientifically significant result". Albeit, it is important for the sustainability of the system that a windfall of activities that do not have an R&D purpose are precluded from being claimed. We consider that a "mainly" or "predominantly" for type threshold may be more appropriate. Based on our experience in Australia, this is an area of contention if left open. We recommend the provision of comprehensive guidance materials with detailed examples.
7. *Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.* [our response has focussed on the exclusions generally]	· Generally, the exclusions should only apply for activities where the excluded activity is the focus of the activity itself. · Trial runs can be genuine scientific and technological experiments which resolve scientific or technological uncertainty. They should not be on the excluded list.	Sometimes a business needs to undertake activities on the "excluded from being core R&D activities" list before it can undertake a core R&D activity. In this circumstance, the activity should be an eligible supporting activity. For example, a dedicated R&D laboratory would need to undertake routine WHS and chemical store compliance checks before staff are allowed to operate in the laboratory space. While activities to complying with standards are 'excluded as core R&D activities' in this situation this activity is necessary to enable the core activity to qualify. A blanket exclusion of these activities will exclude certain activities and expenses although they are fundamental to the R&D. "Pre-production activities, such as demonstration of commercial viability, tooling up and *trial runs*" We acknowledge that as currently proposed, the "trial runs" exclusion is currently prefaced by the activity being a "pre-production activity". However, we would like to clarify that trial runs can be core R&D activities that solve scientific or technological uncertainty. For examples, some manufacturing process R&D activities must occur in the full scale

Question	Submission	Analysis
		manufacturing environment to deliver scientifically significant data. Trial runs are a core part of this process and provide viable data as a foundation for the R&D activities. The exclusion of "trial runs" may exclude genuine R&D activities and expenditure.
8. *Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?*	· Social science research that investigates and develops frameworks and methodologies is a core part of business R&D in New Zealand that should be considered eligible.	For example, an entity can offer a research based framework to critique and improve an integrated response to family violence, and to select evidence-based interventions. By excluding social science research there is a risk that these effective techniques, which have a significant public benefit, will not be developed.
9. *What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?*	· If applied, this would cause the majority of business R&D to be deemed ineligible. · The "dual purpose activities" exclusion does not align with the reality of business R&D and should be removed. · Business R&D will usually have the multiple purposes, albeit R&D will be the primary purpose.	We recommend that the "dual purpose activities" exclusion is removed. This exclusion does not align with the reality of businesses who undertake R&D. Excluding activities that are carried out for an R&D purpose and non-R&D purpose will preclude a significant amount of R&D expenditure. Unless you are a R&D centric business which is undertaking fundamental research, every R&D activity will have a dual/multi-purpose. Very rarely do activities have a sole R&D purpose. A dual purpose test would result in a substantial amount of "development" activities being deemed ineligible. Conversely, "research" activities would be more likely to qualify. This exclusion does not align with the policy intent. Taxpayers who are in business may choose to incur R&D in order to innovate as a primary purpose but will consequently have a secondary purpose of commercialisation, marketing, promotion, production. For example, many technology/software R&D activities need to be undertaken in a live commercial/consumer environment with early adopting customers/users usually being involved. Without the live environment, researchers cannot obtain accurate data.

Question	Submission	Analysis
		However, while these experiments are occurring, the users are being exposed to the new product/service. Although minor, this activity could be deemed to have partial 'marketing' purpose as the testers are likely to be the first customers/promoters. A similar example arises in the clinical trial R&D where new drugs need to be trialled on real patients. While the primary purpose of the trial is R&D, the medical professionals are also having the potential products marketed to them (if the product is a success). This marketing purpose is minor but it is still present and could deem the whole activity ineligible if a sole purpose is required.
10. *What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?*	· Eligible R&D expenditure should not be limited to labour costs. · A labour cost approach would favour labour-intensive industries (e.g., IT) and discriminate against capital-intensive businesses and entrepreneurs and SMEs that often don't pay the founders in an effort to manage costs.	Advantages *Simplicity* – limiting eligible R&D expenditure to labour cost will streamline the compliance process and it may make the incentive more accessible for some entities. *Fiscal* – an R&D incentive is likely to have fewer fiscal consequences if limited to R&D labour cost. We understand that if such an approach were adopted, the rate of the credit would be higher reflecting the smaller base of eligible expenditure. We would expect a rate increase if this approach was adopted. Disadvantages *Industry bias* – capital intensive industries such as manufacturing, and deep science have significant R&D overhead cost structures. A labour-only cost approach would disadvantage these industries.

Question	Submission	Analysis
		Small-medium enterprises (SMEs) – It is common for early stage SMEs to operate for an extended period of time without paying the founders. This is done to manage costs. The consequence is that these business would have very little cost which could be claimed, and further increases the minimum expenditure hurdle. *Alignment with policy* – An R&D tax incentive which only supports labour cost could discourage investment in tangible R&D capital in New Zealand. This is a risky approach as human capital is more mobile than tangible plant and can be easily relocated overseas.
11. *What are the advantages and/or disadvantages of setting overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?*	· We support a default overhead allocation methodology as long as business has the option to choose to undertake their own calculation where they believe the default rate is not reflective of their R&D cost structure. The burden of proof would reside with the taxpayer. · Where a default overhead uplift is utilised, business should also be able to claim directly attributable project costs such as travel, materials and contractors. Appropriate guidance should be provided.	Advantages *Simplicity* – a set overhead allocation methodology would be less burdensome and would reduce administration costs in preparing R&D claims. A set percentage rate will facilitate a more streamlined compliance process for businesses as dispute should not occur on this issue. This proposal has been supported by a number of our clients. Disadvantages *Industry specific* – R&D overhead costs are industry specific. Overhead rates are much higher for capital intensive and/or deep scientific R&D teams. A set rate percentage therefore will disadvantage these businesses. Appropriate overhead uplift Should direct costs also be claimable, we propose that 35% would be an appropriate overhead uplift to gross R&D salary expense.

Question	Submission	Analysis
12. *Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.*	· The "at risk" rule is unduly restrictive. · R&D collaboration is common in industry and in some circumstances, payments will be made during the course of R&D. A business may have their R&D partially funded by an "early adopting" customer. · Entities should be able to claim the delta of expenses between cost and receipts (as opposed to the whole project being deemed ineligible).	Employing a "reasonable person" test (i.e., "could reasonably be expected to receive") in this circumstance is unnecessary and adds unwarranted complication. An alternative could be to "clawback" any receipt or eliminate R&D expense equal to any consideration received. During the R&D process, collaboration frequently occurs between the R&D entity and suppliers or customers. Businesses specialise in order to be more competitive and collaboration enables them to make use of a broader pool of resources and knowledge while sharing risks. From a policy perspective, collaboration should be encouraged. Based on our discussions with industry, some of the best product development has occurred when the business engages with suppliers and customers. In some cases, customers contribute to the R&D via a small payment and suppliers either want to have "skin in the game" or want to be "early adopters" before the product/service has been completed. In this situation, the R&D entity has received consideration for its R&D activities and under the proposed rules, the entire activity would be deemed ineligible. Logically, businesses will undertake R&D activities where commercialisation will/may result. If a company chooses to undertake a project where they receive early payment, then they should be able to claim the delta of expenses between cost and receipt. A further issue with the "at risk" rule relates to R&D which is funded on a cost plus basis by an overseas related party. We are of the view that any R&D undertaken in New Zealand contributes towards the policy objective and therefore should be eligible for the tax incentive.

Question	Submission	Analysis
13. *What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?*	· A "systematic approach" type definition would create greater clarity and certainty for R&D software activities.	Refer to question 2.
14. *Are there reasons why continuity rules should not apply to tax credits? Please describe.*	· The continuity rules should not apply to tax credits as this would discourage programme engagement by early-stage and high-growth business which are expecting to raise capital in the sort to medium term.	In our view, the continuity rules should not apply to R&D tax credits. Early-stage and high-growth companies are likely to have a number of equity changes early on in their life cycle as they seek to raise capital. This will mean that the continuity of these companies may be breached a number of times throughout the start-up and growth phases of R&D development. The anticipation of losing carry forward tax credits will discourage early-stage and high-growth businesses from engaging with the programme. In reality, it is unlikely these business will engage if the programme is non-refundable, making this a moot point.
15. *Is the minimum threshold set at the right level? If 'no', please provide further details.*	· No, we submit that the minimum threshold should be $50,000. · This lower level would balance compliance effort/cost with the proactive programme engagement with early-stage businesses.	Should refundability be introduced, which we understand in the medium-term intent, then a $6,250 rebate could be very beneficial to an early-stage tech start-up.
16. *How important is a cap or a mechanism to go beyond the cap? Please provide further details.*	· For reasons of programme sustainability we support a cap. · A mechanism to go beyond the cap for genuine large R&D spenders would be beneficial for the New Zealand economy.	A maximum expenditure cap is an important integrity feature. This will support the long term stability of the programme. We support the proposed cap of $120m of R&D expenditure per annum.

Question	Submission	Analysis
		A mechanism to go beyond the cap for genuine large claims would be beneficial for the New Zealand economy. In order to promote innovation, new jobs and greater diversification, the New Zealand Government should create an opportunity for entities which have R&D expenditure exceeding $120m to invest this money in New Zealand. The mechanism for pre-approval could be similar to the Substantial R&D Centre proposal at Appendix 1.
17. *What features of a Ministerial discretion or pre-registration would make them most effective?*	· We recommend a combined process that is based on pre-registration and final ministerial discretion.	As mentioned above, the pre-registration process could be similar to the Substantial R&D Centre proposal at Appendix 1. Ministerial discretion would provide the greatest flexibility to Government. However, if this process was enacted, it would need to be balanced with clear guidance principles. We recommend a combined process that is based on pre-registration and final ministerial discretion as this would balance the incentive with programme sustainability and system integrity.
18. *What are your views on the proposed mechanisms to promote transparency and enhance evaluation?*	· We support the proposed transparency mechanisms and are confident that this will enhance the integrity and durability of the incentive. · We recommend the Government measure the success of the incentive beyond R&D as a percentage of GDP.	We support the proposed transparency mechanisms and are confident that this will enhance the integrity and durability of the incentive. Based on our discussions with industry, the proposed measures are generally supported as long as appropriate confidentiality mechanisms are enacted. For example, we recommend a two-year lag between income year and publication of claim data and that the benefit received is expressed in broad bands. We recommend the Government creates a framework to measure (or at least indicate) the success of the incentive beyond R&D expenditure as a percentage of GDP. This could

Question	Submission	Analysis
		include for example growth in science/technology employment, revenue or profit growth for R&D incentive recipients or export revenue growth for R&D incentive recipients. This could be achieved by capturing appropriate data during the application process and undertaking some advanced analytical assessment. Analysis of these key performance indicators over time would provide Government with a quantitative measure of programme success.
19. *Are there any other risks that need to be managed? Please describe.*	· Refundability (programme update risk) · Detailed and clear guidance material (interpretation risk) · We suggest a clawback mechanism for situations where an entity in New Zealand undertakes R&D, claims R&D credits and on completion of the project, sells the business or IP to an unrelated offshore entity (integrity risk) · The DP does not clearly state whether the programme start date is from the specific date of 1 April 2019 or for income years starting from this date (timing risk) · We recommend that LPs should be able to claim as a separate claimant and the tax credits will be passed up to each of the owners in relation to their shareholding proportions (business exclusion risk)	Refundability Failure to make the credit refundable undermines the credibility of the entire R&D tax incentive: businesses that would have benefitted significantly from the incentive will be denied access. For loss-making businesses, especially capital-constrained SMEs, the incentive needs to be refundable. An R&D incentive that does not return cash to early stage loss companies will not incentivise and promote these entities when they need it most. Without this, the policy objective will not be achieved. Guidance material The DP states that "a range of guidance and education material (including online tools) to assist claimants" will be provided. We support this initiative and believe it is paramount in order for the incentive to enjoy a smooth introduction and its long term sustainability. Sale of business / IP The DP has not discussed the scenario whereby an entity in New Zealand undertakes R&D, claims R&D credits and on completion of the project, sells the business or IP to an unrelated offshore entity. The risk in this circumstance is that

Question	Submission	Analysis
		an entity has come into New Zealand, utilised the benefits of the R&D scheme and then repatriated the IP/business offshore. Although jobs would have been created during the R&D phase, New Zealand has effectively been denied the taxable benefit from income resulting from the IP/business. We suggest that a clawback type mechanism should be imposed where this situation eventuates. Programme start date The DP states that "the credit will be available for eligible expenditure incurred from 1 April 2019". The DP does not clearly state whether the regime applies for all entities from this specific date or for income years starting from this date. We suggest that the date should be clarified to be for income years from 1 April 2019. In our experience, it will be administratively burdensome for all entities to apply from 1 April 2019 as a number of apportionments will need to be made for entities that have irregular balance dates (i.e., that do not begin from 1 April). Limited Partnerships (LP) We suggest that the compliance for limited partnerships needs to be separately considered. LPs are fiscally transparent entities for income tax purposes. Under the current proposals, if you have an R&D intensive LP that has lots of passive limited partners, each LP would need to lodge an R&D claim. Consequently, each LP would have the compliance costs of lodging an R&D claim. We suggest that LPs should be able to claim as a separate claimant and the tax credits will be passed up to each of the owners in relation to their shareholding proportions.

Question	Submission	Analysis
20. *What are the risks with making external advisors liable in this way?*	· Generally supportive of the policy behind making advisors liable to the extent they advised on an issue. · The penalties need to be clearly aligned to the specific advice provided and advisors should not be liable for items they were not contracted to advise upon and/or the integrity of the underlying data in which the advice has relied.	We are generally supportive of the policy behind making advisors liable. In our view, advisors should be willing to stand behind the advice they provide and positions which are taken as a result. However, this is prefaced by the fact that advisors are usually required to rely on the data the clients provide and are usually engaged to only complete specific tasks. Therefore, any liability and penalties need to be clearly aligned to the specific advice provided and advisors should not be liable for items they did not advise upon. Furthermore, we note that success based fee arrangements are typically market driven and are often used minimise advisor fees rather than inflate them. We would prefer to be paid for our time, but the market doesn't always allow it. This type of fee arrangement should not automatically result in a perceived risk.
21. *What is the right level of information required to support a claim?*	· The required level of evidentiary documentation should be commiserate with the value of the R&D expenditure and the likelihood of compliance (higher risk = higher level of documentation). · In general, R&D evidentiary documentation should be similar to Growth Grant documentation. · We recommend that an alternative pre-approval application process should be implemented for businesses which operate extensive R&D incentives (Appendix 1). · Clear guidance materials should be published regarding the level of information required.	We recognise that due to the broad-based nature of the incentive, the information business compile will vary considerably. This is likely to be influenced by the size of R&D programme, the size of the business, the R&D experience of the R&D team and the field of research. The key requirement should be that a business holds documentation to evidence that each key/registered core and supporting activity meets the eligibility requirements. Secondly the business should hold documentation to evidence that the R&D expenses were incurred on the R&D activities. The specific format should not be essential but the evidentiary link should be. In balance, R&D activities can always be analysed at a more granular level where certain cases require closer scrutiny. The information required to support a claim should not therefore be overly burdensome. An environment should not be created

Question	Submission	Analysis
		whereby entities are spending up to 10% of their effort documenting R&D for the purpose of its R&D claim, nullifying any additional benefit. To enable a sustainable compliance process, we request that clear guidance materials are published regarding the level of information which is expected.
22. *What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?*	· We recommend the use of industry recognised third party software.	We recommend the use of industry recognised third party software which demonstrates a reduction in compliance costs and an increase in efficiency for claimants. Automation of claims should be a system priority which will enable the regime to be durable and sustainable. Further, a software system should enable a more efficient review process for the claimant and for Callaghan/Inland Revenue, increasing the integrity of the system.
23. *What integrity measures do you think Inland Revenue should use?*	· A pre-approval mechanism · Strong guidance materials · Active reviews of claims · Data analytics and tools	Most businesses who are looking to make an R&D claim are concerned that they may not know whether their projects/activities will qualify. They are looking to access the programme but they are uncertain that their claims meet the programme requirements. This can be delivered by: · Strong guidance materials which include detailed industry-specific examples. With technology moving so quickly, it likely that these materials will need to be updated every 2-3 years. · A pre-approval mechanism. If this was available we anticipate that may companies would see pre-approval. The benefits of this include early engagement, certainty and 'no surprises'. · Active reviews of claims. Inland Revenue and Ministry of Business and Innovation should actively review R&D claims

Question	Submission	Analysis
		as they are made. If an early activity registration process is initiated, then this review could be completed before the company lodges its tax return and claims the financial benefit. Consequently, businesses can have confidence that the projects will qualify before the expenditure is claimed. Further, a transparent review process that is not overly burdensome will promote greater public confidence in the sustainability of the system. · Data analytics and tools. With the prevalence of digital tools and the anticipation that the application will be fully digital, IR should be able to develop and utilise a number of data analytic methods and tools to identify 'outliers' or claims which appear to be high-risk. This could trigger immediate review action. As discussed at questions 15 and 16, threshold caps are important for the system to be sustainable.

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1 June 2018

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Dear Sir/Madam

Submission on consultation document: *Managing the Transition from Growth Grants to the R&D Tax Incentive*

We refer to the consultation document *Managing the Transition from Growth Grants to the R&D Tax Incentive* ("the Consultation Document"). We appreciate the opportunity to submit on the Consultation Document and set out our comments below.

This submission should be read in conjunction with our separate submission on the R&D Tax Incentive discussion paper *Fuelling Innovation to Transform Our Economy*.

Executive Summary

Based on our discussions with a significant number of Growth Grant recipients, a number of businesses are confused about how the transitional provisions will apply to them. This current ambiguity is already causing businesses to reconsider and/or delay R&D programmes of work.

The need for certainty and a smooth transition is essential to ensure businesses are not "worse off" due to poor transitional provisions. To enable the smoothest transition possible, we recommend the following:

Cash flow

- The timing of payments (cash flow) for tax paying businesses needs to be addressed, with delays and uncertainties in cash flows minimised during the transition period.

Transitional period

- Growth Grant agreements which have been executed should be honoured.
- The transitional period does not adequately account for entities with non-standard balance dates. A business should be entitled to retain its Growth Grant or access the temporary grant for the full relevant income year, irrespective of its balance date.

Receiving funding from R&D Tax Incentive and Growth Grant in the same tax year

- Businesses should be able to claim both the Growth Grant and the R&D Tax Incentive during the transitional year in certain circumstances.

Reluctance to transition

- There is likely to be a reluctance to transition from Growth Grants to the R&D Tax Incentive. This reluctance could be reduced by the provision of clear practical R&D Tax Incentive guidance materials along with a mechanism for businesses to confirm eligibility for the R&D Tax Incentive in advance (such as an advanced ruling/approval process).

Concerns with temporary grant scheme

- In relation to the proposed temporary grant scheme:
  - Take up is likely to be low.
  - Businesses in a tax paying position may be pushed in to a tax loss position upon transition to the R&D Tax Incentive. These businesses should be entitled to access the temporary grant in either year one or year two of the R&D Tax Incentive. In addition, to provide certainty a business should be entitled to the temporary grant in full if it meets either of the following conditions:

    (a) In the prior income year it received a Growth Grant and reported a tax loss, or
    (b) In the prior income year it received a Growth Grant and reported a tax profit which was less than or equal to the Growth Grant amount.

  - It may be difficult for many businesses to determine whether they will qualify for the temporary grant until late in the income year. Clear guidance needs to be provided around what will happen if:

    (a) A business in a profit position for most of the income year ends up in an unexpected tax loss position at the end of the income year, or
    (b) A business in a tax loss position for most of the income year that has claimed the temporary grant becomes profitable and tax paying in the last few weeks of the year.

Each of these matters is discussed further in the appendix below.

We would be happy to discuss our submission with you. Please contact me in the first instance in that regard.

Yours sincerely

s 9(2)(a) [redacted]

s 9(2)(a) [redacted]

Building a better working world

Appendix

1. Need for certainty

1.1. Based on our discussions with a significant number of Growth Grant recipients, one of the primary concerns around the transition from Growth Grants to the R&D Tax Incentive is the uncertainty arising under the R&D Tax Incentive compared to the Growth Grant scheme. A smooth transition is essential to ensure businesses are not "worse off" due to uncertainty alone.

1.2. While the proposed transitional provisions will not negate the impact of the reduction in benefit provided to businesses - from 20% to 12.5% - the provisions need to be clear to enable businesses to plan with a level of confidence. A number of the businesses we have talked to are confused about how the transitional provisions will apply to them. This current ambiguity is already causing businesses to reconsider and/or delay R&D work programmes until clarity is obtained.

1.3. We provide further details on some specific areas of concern below.

2. Cash flow

2.1. For businesses in a tax profit position, the change in payment cycles will negatively affect the business's cash flow as the receipt of payments will no longer be on a quarterly basis. This impact may be mitigated if a business can offset the anticipated R&D tax credit against any provisional tax payments. This is difficult however where businesses are uncertain about their tax profit or loss position during the income year.

3. Issues with transitional period

3.1. We believe the transitional period should be as short as possible in order to reduce uncertainty. Ideally there should be no empty period covered by either a Growth Grant or an R&D tax incentive. The Government should honour all Growth Grant agreements which have been made. That is, where a Growth Grant funding agreement has been executed the full amount should be funded. Growth Grants which are extended should have a definitive end date of 31 March 2020 or the end of the business's relevant income year.

3.2. In our view, the transitional period as proposed does not adequately account for entities with balance dates other than 31 March. We have talked to current Growth Grant recipients with a range of balance dates, including 30 June, 31 July and 31 December. Our view is that a business should be entitled to retain its Growth Grant or access the temporary grant for the full relevant income year, irrespective of its balance date.

3.3. As an example, consider a business whose growth grant finishes on 31 December 2019. It would have anticipated being able to extend this by two years (as per the current rules) until 31 December 2021 and factored this into its budget and cash requirements. The Consultation Document proposes that it will only be able to extend this until 31 March 2020, a shortfall of 21 months.

4. Receiving funding from R&D Tax Incentive and Growth Grant in the same tax year

4.1. The Consultation Document states that businesses will only be able to access the Growth Grant **or** the R&D Tax Incentive during the transitional year. In our view, this requirement should not be applied at the entity level but rather at an expense level.

4.2. For example, expenditure is only eligible for the Growth Grant if it is on revenue account. As such, certain development expenses which are capitalised for accounting and tax purposes are ineligible for the Growth Grant but may be eligible for the R&D Tax Incentive. Accordingly,

during the transitional year businesses should be eligible to continue claiming the Growth Grant for previously approved activities and expenses while also being entitled to claim the R&D Tax Incentive for other activities/expenses.

4.3. In addition, businesses may start new projects during the transitional year or late in the prior income year. Unless these projects are already included in the approved Growth Grant, they will not be claimable under the current proposals. If the business is not permitted to make an R&D Tax Incentive claim for these new projects it is possible that projects may be artificially delayed until the following income year. This outcome is contrary to the stated objectives of the transitional provisions.

5. Reluctance to transition

5.1. While Growth Grant recipients have the option to transition into the R&D Tax Incentive from 1 April 2019, we anticipate that many businesses will stick with the programme they are familiar with (i.e. Growth Grants) until they are forced to transition after 31 March 2020.

5.2. This stickiness to the known programme could be minimised if clear practical R&D Tax Incentive guidance materials are provided along with a mechanism for businesses to confirm eligibility for the R&D Tax Incentive in advance (such as an advanced ruling/approval process).

6. Concerns with temporary grant scheme

Take up is likely to be low

6.1. Growth Grant recipients will only opt into the temporary grant scheme where the quantum of the temporary grant will be higher. Few firms are capable of maintaining the level of R&D expenditure required to make the temporary grant more attractive.

6.2. Assuming no differences in the definition of eligible expenditure between the Growth Grant and the temporary grant, a recipient must have over $28.8 million of eligible R&D expenditure per year before the temporary grant offers a higher monetary value.[1] Accordingly, we predict there is likely to be low take up of the temporary grant scheme. This low take up may mean it becomes hard to justify the administrative expenses associated with the temporary grant scheme.

Businesses in a tax paying position may be pushed in to a tax loss position

6.3. The Consultation Document indicates the temporary grant will be available to businesses that are in tax loss or which have insufficient taxable income to use their tax credit.

6.4. We are concerned that some businesses could find they are in a tax profit position while they are receiving the Growth Grant (the grant income and equivalent expenses are typically treated as non-assessable/deductable for tax purposes), but would be in a tax loss position the following tax year when they are claiming the R&D Tax Incentive (R&D expenses would be tax deductable as no grant is received).

6.5. This outcome has a number of implications. In particular, a business:

- May not be eligible for the temporary grant as it was tax paying under the Growth Grant, regardless of the fact that it will now be in a tax loss position under the R&D Tax Incentive.

[1] EY modelling, based on the impact of a Growth Grant (maximum $5 million) treated as excluded income but with equivalent R&D expenditure being non-deductible compared to a 12.5% tax credit reducing income tax liability for a profitable company.

- May continue to pay provisional tax instalments during the transitional year, which further reduces cash flow, when in reality it will be in a tax loss position come year-end.

6.6. Businesses in a tax paying position that are pushed into a tax loss position upon transition to the R&D Tax Incentive should be entitled to access the temporary grant in either year one or year two of the R&D Tax Incentive. In addition, to provide certainty we recommend a business should be entitled to the temporary grant in full if it meets either of the following conditions:

- In the prior income year it received a Growth Grant and reported a tax loss, or
- In the prior income year it received a Growth Grant and reported a tax profit which was less than or equal to the Growth Grant amount.

Difficulty in determining eligibility for the temporary grant

6.7. If eligibility for the temporary grant is dependent on the business being in a tax loss position for the year, it may be difficult for many businesses to determine whether they will qualify for the temporary grant until late in the income year. For example:

- A business may be in a profit position during an income year but experience difficult trading conditions late in the year and subsequently be pushed into a loss position. What would happen in these circumstances? Could the company receive some kind of year-to-date catch up temporary grant payment?
- A business may be in a tax loss position during the majority of an income year and claim the temporary grant during the year, however due to a commercial opportunity it becomes profitable and tax paying in the last few weeks of the year. Would there be a clawback mechanism to recover the amount of temporary grant received? A complicating factor in this situation is that if the grant is not paid, the R&D expenses may become deductable for tax purposes which could put the business into a tax loss position.

6.8. Clear guidance needs to be provided around what would happen in each of these cases.

Impact on R&D investment

6.9. It is evident from the above that the temporary grant scheme as currently proposed is likely to cause confusion and frustration for businesses, especially for businesses trying to model their cash flow. This uncertainty may reduce additional investment which businesses would otherwise make in R&D, especially where any upfront commitment is required.

6.10. These issues are particularly relevant for smaller businesses which have a high R&D intensity during their formative years and for businesses which are in a tax loss or a borderline profit/loss position. We believe this uncertainty is already impacting business cash flow models and valuations and making it more difficult for early-stage businesses to raise capital from investors.

31 May 2018

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Submission to Research and Development Tax Incentive Discussion Paper

Thank you for the opportunity to comment on the above document.

The Manufacturers' Network (formerly known as the New Zealand Manufacturers and Exporters Association) represents the interests of manufacturers throughout New Zealand. Virtually all of our manufacturing members are engaged in exporting or import-competing.

The Manufacturers' Network is New Zealand's only focused and independent voice for manufacturers, tracing its history back to 1879. Manufacturing makes up 12% of New Zealand's GDP, is worth $23bn per year and employs over 250,000 people in mostly highly-qualified and well-paid jobs.

Summary

1. The Manufacturers' Network supports the proposed R&D Tax Incentive scheme in principle, but wants to see a higher credit rate and a lower threshold for eligibility.
2. Having said that, for most New Zealand manufacturers, especially at the smaller end, product and process innovation is an integral part of their operations, happening regularly, frequently and often incrementally. Such innovation will *(i)* struggle to meet the proposed eligibility criteria, and *(ii)* make it difficult and expensive to separate out eligible expenditure, with the $100,000 threshold creating an additional barrier. Feedback from our members is that many wouldn't consider making a claim under the proposed incentive scheme, because the perceived insufficient return on investment of their time and money.
3. We recognise that for government to directly support innovation activities as described above on an individual-company basis through either grants or tax credits is challenging, whatever form is chosen. The lack of uptake of the current Callaghan Innovation Project Grants provides further evidence for that.
4. A change in tax rules to allow for Accelerated Depreciation for (certain types of) machinery and equipment would be a great way to support manufacturing companies that currently face a huge challenge in as much as they have to invest heavily in new (digital) equipment and processes to remain globally competitive, but are struggling to fund these innovations. Such a policy could play a critical role in improving productivity and competitiveness of New Zealand manufacturers.
5. Lack of scale is one of the biggest handbrakes on innovation investment in New Zealand manufacturing. We offer to work with MBIE to develop co-investment opportunities for government in collaborative projects and facilities, such as learning factories (a model that has proved to be highly effective overseas) to address this lack-of-scale issue.

Introduction

We generally support the introduction of R&D Tax Credits. We believe a well-functioning and well-defined R&D Tax Credit would better facilitate and support innovation across a wide range of manufacturing business, potentially improving accessibility for small and medium sized companies who struggle to access support through the grants system.

We believe the Government should be bold with this new policy, choosing a higher rate to significantly increase rates of R&D in the New Zealand economy. We should aim above what many of our competitors are doing if we want to catch up and create future growth and wealth.

We do, however, fear that the combination of the proposed relatively low rate (12.5%) and high threshold ($100,000), combined with a restrictive definition of eligible expenditure along with a high minimum R&D expenditure, will lead most of our smaller and medium-sized manufacturers to the conclusion that "it's not worth the hassle". For the R&D Tax Regime to be successful and meet the aims of increasing New Zealand's R&D spending, the credit needs to be efficiently accessible for small and large companies alike.

The lower rate proposed also puts current recipients of a Growth Grant into a disadvantage. To be useful for such companies, the rules around what is eligible would need to expand from the current Growth Grant to ensure they do not end up with lower levels of support under the new system.

The rate of 12.5% is particularly low when compared to the R&D Tax Credit regime in Australia, our closest and most significant trading partner and competitor for manufactured goods. The Australian regime has two components:

- a 43.5% refundable tax offset for eligible entities with an aggregated turnover of less than $20 million per annum, provided they are not controlled by income tax exempt entities
- a 38.5% non-refundable tax offset for all other eligible entities (entities may be able to carry forward unused offset amounts to future income years).

This significant difference in the amount offered in Australia when compared to the proposed R&D Tax Credit represents a competitive disadvantage for New Zealand companies. Australia is our most significant market for manufactured goods, both for export goods and import-competing.

We believe the proposed rate should be increased, either on implementation or incrementally over time, but starting at 20%. Work should also be undertaken to create a more workable definition of eligible expenditure that better reflects the nature of innovation investment in New Zealand manufacturing.

Given the right incentives, manufacturing will grow its lead on the business R&D investment league table – we currently represent 42% of all business R&D at 12% of GDP and are thus the biggest private R&D investor in aggregate. With the right policy settings, manufacturing will play a core role in meeting the government's target of increasing R&D spending to 2% of GDP by 2027.

The discussion document proposes “no changes to R&D Project and Student Grants” - we agree to leave the Student Grants in place. However, given that most of our members found application and claims processes around the *Project Grants* to be far too cumbersome to be workable, we suggest that these could also be removed, and instead opt for a higher rate of 20% credit instead. To recognise current budget constraints and to reduce fiscal exposure, this could start with the higher rate being capped at say, the first $500,000 p.a. of eligible expenditure, with the 12.5% rate kicking in for all eligible R&D expenditure following until the final maximum cap.

Discussion Questions:

Question 1: If SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?

We believe that it is correct to exclude such institutions from the R&D Tax Credit since they are already Government funded.

Question 2: How well does this definition apply to business R&D carried out in New Zealand?

The proposed definition does not well suit New Zealand manufacturers. The proposed criteria for eligible activities and expenditure will exclude most innovation activity in our smaller manufacturing firms, those with between 6 and 50 employees, and impact larger businesses in the area of process development and innovation. They make up 43% of manufacturing firms, but 87% of those firms that are likely to undertake any significant R&D activities.

The definition is listed as “using **scientific methods** that are performed for the purposes of acquiring new knowledge or creating new or improved materials, products, devices, processes, or services; and that are intended to advance science or technology through the resolution of **scientific or technological uncertainty**.”

Most of our (smaller) manufacturing activity is short-run and with a high level of customer input into product and process improvement. Innovation activities will often be an integral part of manufacturing activities, and the same is true for the people involved. Having to identify and separate out R&D activities from an accounting perspective will be challenging and potentially untidy.

It is interesting, in this context, that one of the specific exclusions for the current Growth Grants is “Adapting an existing product or process to a particular customer’s need or site” – which covers a fair bit of innovation activity in our sector. That particular clause is not part of the current Discussion Paper, but we are concerned that many of the rules and definitions may lead to the same exclusion in practical terms. We have heard feedback from companies who have been part of the Growth Grant program; there have been ongoing difficulties in getting process development activities included.

Question 3: Does this definition exclude R&D that you think should be eligible, please illustrate with examples.

We believe this may well exclude R&D in most manufacturing firms. Many forms of process innovation, which makes up a significant proportion of development work in manufacturing

firms, especially those of smaller size, will struggle to meet these requirements, particularly development which "intends to advance science or technology through the resolution of scientific or technological uncertainty".

As described above, regardless of what has already been developed, manufacturers often still need to innovate to develop new solutions to process improvement problems, or satisfy particular needs from customers. The core challenge for our manufacturers with policies like the proposed R&D Tax Credit is that a lot, if not most, of the innovation they undertake will fall into a 'grey zone' at best, when it comes to eligibility. Which means they are unlikely to have the capability to make the call on 'what's in, and what's out' in-house and will have to draw upon (expensive) expert advice to make these calls, lest they want to risk getting into trouble with the IRD, who will watch this grey zone like a hawk at least for the initial period. Combine that with a relatively low level of potentially eligible expenditure in the first place, and a low 12.5% refund rate, it is likely that many, if not most, won't consider it 'worth the bother' to claim.

The Government needs to better clarify how process development and innovation can meet this definition. Having said that, we recognise that for government to directly support innovation activities as described above on an individual-company basis through either grants or tax credits is challenging, whatever form is chosen. The lack of uptake of the current Callaghan Innovation Project Grants provides further evidence for that.

Lack of scale is one of the biggest handbrakes on innovation investment in New Zealand manufacturing. We offer to work with MBIE to develop co-investment opportunities for government in collaborative projects and facilities, such as learning factories (a model that has proved to be highly effective overseas) to address this lack-of-scale issue.

Question 4: Does the scientific method requirement exclude valid R&D in some sectors, please illustrate with examples?

As described above, process innovation, which makes up a significant proportion of development innovation for manufacturers, especially those of smaller size, will struggle to meet this requirement.

Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?

Most of our manufacturers will struggle to argue that they "intend to advance science or technology through the resolution of **scientific or technological uncertainty"**, even when implementing and developing innovative new processes around leading-edge manufacturing innovations such as 3D printing or Networked Manufacturing, as arguably these technologies have already been introduced elsewhere with a successful outcome.

Regardless of what has already been developed, manufacturers often still need to find their own solutions to process improvement problems, to make product improvements to fit particular needs from customers, all within their expenditure constraints.

This kind of innovation is what allows New Zealand companies to carve out their niche products, processes and markets, and the lack of support in this area will stunt potential growth in the manufacturing sector.

Question 6: How well does this definition apply to business R&D carried out in New Zealand?

See answer to Question 2

Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.

It is fair that any exclusions apply across the board, both for support and core activities.

However, as described above, the exemptions and definitions first need work well for manufacturers' core activities.

Question 8: Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?

No comment.

Question 9: What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?

As laid out before, most of our (especially smaller) manufacturing activity is short-run and with a high level of customer input into product and process improvement. Innovation activities will often be hard to separate from manufacturing activities, and the same is true for the people involved. This may mean, some parts of R&D in manufacturing firms could be considered 'dual purpose', be excluded in full.

This will again, likely impact smaller firms, more than larger manufacturing companies. Larger companies are more likely to have the resources to operate dedicated R&D systems, including dedicated staff. Smaller companies, however, are unlikely to have such dedicated systems and processes. R&D often happens in conjunction with other efforts to solve problems, particularly in the area of process improvement. These may often have dual purposes.

The Government should investigate a way to either include such activities in full or to provide an efficient definition which allows companies to claim a proportion of R&D activities which are defined as dual purpose.

Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?

Limiting eligible expenditure to R&D labour costs alone will ignore many of the additional costs which are incurred when conducting R&D. This may be particularly painful for companies already receiving Growth Grants, by simultaneously limiting eligible spending and reducing the percentage (12.5% down from 20%) which is able to be claimed.

For smaller companies, where those conducting R&D are doing so within other roles of the business, just using labour may cause issues and be difficult to define which time is spent purely on R&D, and what would come under other production roles they play.

In addition, for smaller companies, the inability to claim other R&D expenses in conjunction with staffing costs will further limit their ability to reach the $100,000 threshold.

The policy is using international blue prints written for a manufacturing sector with large companies that have a separate R&D department with its own budget, and scientists and graduate engineers in white coats spending all their time on R&D-related activities as defined above.

Question 11: What are the advantages and/or disadvantages of setting overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?

We would favour the first option in this area: 'include apportioned overhead costs when they are incurred partly for R&D activities.'

Overhead costs can form a significant proportion of undertaking R&D activities – these should be claimable for the proportion which is directly related to R&D activity.

The key here is making the claiming process and associated auditing simple and efficient for companies to work.

Question 12: Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.

No comment

Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?

No comment

Question 14: Are there reasons why continuity rules should not apply to tax credits? Please describe.

No comment

Question 15: Is the minimum threshold set at the right level? If 'no', please provide further details.

The proposed criteria for eligible activities and expenditure will exclude most innovation activity in our smaller manufacturing firms, those with between 6 and 50 employees. They make up 43% of manufacturing firms, but 87% of those firms that are likely to undertake any significant R&D activities.

The current proposal sets a minimum eligible expenditure of $100,000 p.a., though it is also noted that "The minimum threshold will not apply to R&D activities outsourced to an Approved Research Provider" – meaning, in reality, mostly government-funded universities and research institutes. This will implicitly drive smaller manufacturers to use such approved providers to avoid the difficulties in identifying separate R&D activities in-house. Except that our collective experience with using such Approved Providers is that their willingness and/or ability to solve our real-world manufacturing problems often isn't that great.

This minimum threshold is too high if the Government wishes small businesses and manufacturers to be eligible. For many small manufacturers, this threshold is simply too high.

Lowering the threshold will help incentivise smaller companies to start developing their R&D activities, setting them on the path to becoming more significant R&D spenders over time.

Question 16: How important is a cap or a mechanism to go beyond the cap? Please provide further details.

We agree with the use of a cap to eligible spending. However, we believe that a cap could be used to increase support for small and medium sized businesses and provide increased support for some levels of R&D. For example, the R&D Tax Credit could be raised to, for example, 20% for the first $1 million of eligible expenditure, reducing to the 12.5% rate for all spending above this and up to the final cap of $120 million.

Question 17: What features of a Ministerial discretion or pre-registration would make them most effective?

No comment

Question 18: What are your views on the proposed mechanisms to promote transparency and enhance evaluation?

No comment

Question 19: Are there any other risks that need to be managed? Please describe.

No comment

Question 20: What are the risks with making external advisors liable in this way?

No comment

Question 21: What is the right level of information required to support a claim?

No comment

Question 22: What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?

No comment

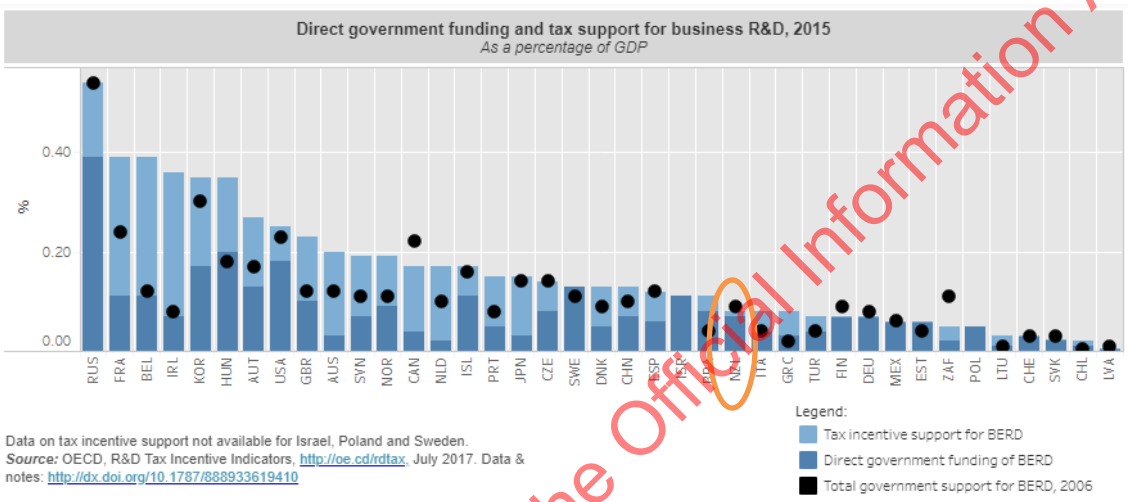
Question 23: What integrity measures do you think Inland Revenue should use?

No comment

Background to R&D Tax Credits

The current grants system, managed by Callaghan Innovation, works well for those (usually larger) companies who have or can justify recruiting the resources required to access them. The majority of manufacturing companies, however, will miss out, receiving no R&D support. This system also has a bias towards product innovation, over process innovation and development, which is core to most manufacturers' competitiveness.

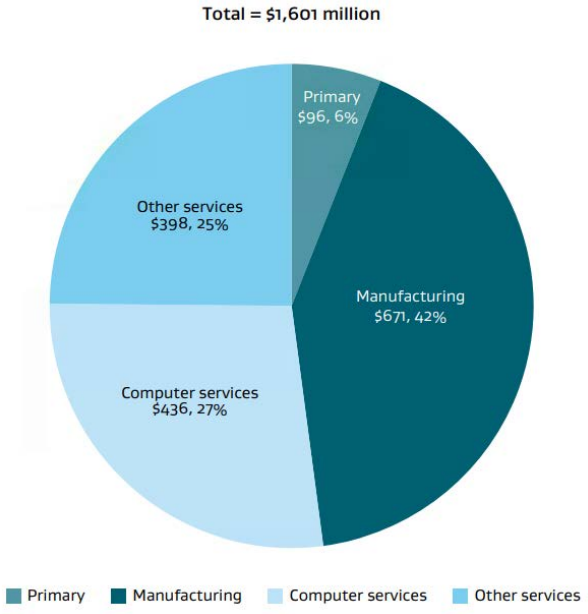
The below graphs, sourced from the OECD, show New Zealand's R&D spend vs the rest of the OECD, as well as how R&D expenditure is treated in terms of tax. It is evident that we are in the bottom half of the park, and have work to do to raise our R&D spending and subsequent innovation levels.



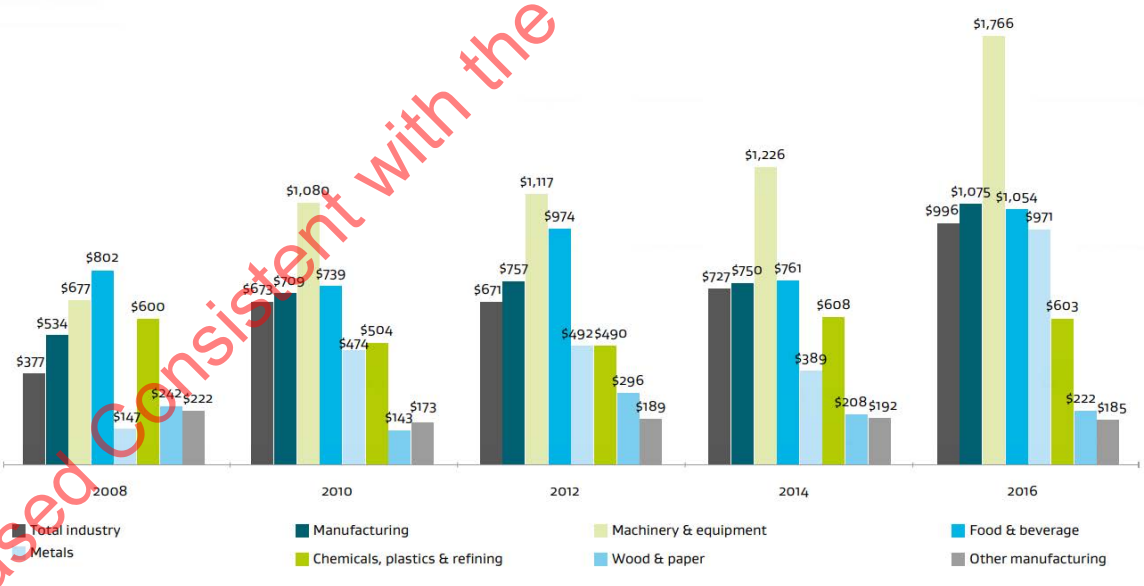
Source: OECD (2017), Gross domestic spending on R&D (indicator). doi: 10.1787/d8b068b4-en (Accessed on 01 December 2017).

Despite low levels of support and overall spending, when compared to the OECD average, currently, the manufacturing sector is the largest spender of business R&D. As seen below, manufacturing makes up 42% of business R&D expenditure.

Business expenditure on R&D by major sector
NZ$ millions; % BERD, 2016



Average R&D expenditure per firm that performs R&D
NZ$000, 2008–2016



The above graph shows the breakdown of R&D spending across the manufacturing sector. Machinery and equipment manufacturing is the standout performer, with the highest average R&D expenditure per firm which undertakes R&D. The average spend of machinery and equipment businesses increased from $1,226,000 of R&D expenditure in 2014 to $1,766,000 in 2016.

A further tax change to include *Accelerated Depreciation* must be part and parcel of this initiative

In its discussion paper, the government says that "The R&D Tax Incentive will not stand alone. It is part of a system of wider government support for New Zealand research, science and innovation. This includes Government support for business R&D continuing to be delivered through the tax system and grants." For us, *Accelerated Depreciation* for plant and equipment is another critical policy the Government needs to introduce alongside the R&D Tax Credits to push our economy in a more productive direction, especially given that – as explained above – we are concerned that the vast majority of investments companies need to make to improve productivity and remain globally competitive will not qualify for the proposed R&D Tax Incentive. Accelerated Depreciation for productive plant and equipment is commonplace in many countries around the world, and the fact we do not have a similar policy puts our manufacturing and export businesses at a disadvantage.

This policy change would help target the area of process development and innovation – an area that successive R&D policies have failed to sufficiently support. It would also better reflect the productive life of equipment, much of which needs to be upgraded these days well before it is fully depreciated under the current system. As a matter of fact, the current depreciation regime stifles innovation in manufacturing processes, as it acts as a disincentive to investing in current manufacturing technologies.

This policy should also be largely revenue-neutral in the medium term – while there may be a loss of tax revenue in the first few years of implementation, as companies are able to claim higher levels of depreciation, this will be offset in later years, when lower levels of depreciation can be claimed and there should be increased tax revenue from higher productivity and profits.

Thank for you for the opportunity to provide feedback to this discussion document. We would welcome future discussions and working alongside the Government to help solve some of the issues outlined.

Regards,

s 9(2)(a) [redacted]

[redacted]

The Manufacturers' Network

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1 June 2018

R&D Tax Incentive Team
Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140

Dear Sir / Madam

Fuelling Innovation to Transform our Economy: A Discussion Paper on a Research & Development Tax Incentive for New Zealand

We are writing to submit on the discussion paper *Fuelling Innovation to Transform our Economy: A Discussion Paper on a Research & Development Tax Incentive for New Zealand* (the "discussion paper"). We are members of the Corporate Taxpayers Group, who is also making a submission; however, given the importance of the topics included in the discussion paper we are also making a separate submission.

We would be happy to be contacted by Officials to discuss any of the points raised in our submission.

About Fisher & Paykel Healthcare

Fisher & Paykel Healthcare Corporation Limited (and its branches and subsidiaries) (the "F&P Group") is a leading designer, manufacturer and marketer of products and systems for use in respiratory care, acute care, surgery and the treatment of obstructive sleep apnea.

Our headquarters, R&D facilities and New Zealand manufacturing operations are located in East Tamaki, Auckland. We also operate a manufacturing facility in Tijuana, Mexico. We have over 4,100 of our people located in over 30 countries worldwide, with the majority located in New Zealand. Our products are sold in more than 120 countries worldwide. Principal sales and distribution sites are located in the United States, the United Kingdom, Europe, Asia and Australia. Our competitors are predominantly headquartered in the United States or Europe with operations in multiple jurisdictions, including in jurisdictions which are already supportive of R&D activity.

Our aspiration is to double our constant currency revenue every five to six years through investing for long term growth in research, technology and the development of our employees.

Fisher & Paykel Healthcare Limited (New Zealand, "F&P NZ") performs and controls all of the R&D for the F&P Group. As at 31 March 2018, 572 employees representing approximately 14% of total F&P Group employees were principally engaged in R&D. F&P NZ reported $94.7m of

R&D expenditure in the year ended 31 March 2018, which represented a 10.1% increase from the year ended 31 March 2017.

F&P NZ engages in R&D activities developing new products or enhancing existing products to introduce to the market, to strengthen our existing position, but also to broaden our opportunities into other clinical areas and support larger patient populations. F&P NZ's prevailing R&D philosophy is that its new products should improve care and outcomes and be innovative to do what is best for patients or technically superior to its competitors' products. R&D is therefore a highly significant and value-creating process for the F&P Group. Product and process development and clinical research is critical to the success of the F&P Group.

F&P NZ expects R&D to continue to be an essential and a highly significant process in relation to continuous development of product technology, increased performance of products and an increased product range.

F&P NZ's IP team works closely with the R&D teams to protect F&P NZ's IP and manage any IP infringement risks. The F&P Group protects its R&D and innovation activity primarily through patents, which include applying for patents for its own R&D and innovation activities and also through identifying and responding to potential patent infringements. This ensures that the F&P Group is the only entity that benefits from its R&D and innovation activities. As at 31 March 2018 F&P NZ had a total of 1,056 patents granted with a further 1,297 pending patent applications.

F&P NZ's R&D expenditure; the number of F&P NZ's employees dedicated to R&D and the number of patents owned and pending as at the years ended 31 March 2014 to 31 March 2018 are summarised in the following table:

F&P Group's R&D Investment for the years ended 31 March 2014 to 31 March 2018

R&D Investment	Year ended 31 March				
	2014	2015	2016	2017	2018
R&D Expenditure (NZD)	54.1	65.0	73.3	86.0	94.7
R&D Expenditure Increase (year-on-year)	18.4%	20.1%	12.8%	17.3%	10.1%
R&D Percentage of Global Sales Revenue	8.7%	9.7%	9.0%	9.6%	9.7%
Number of R&D Employees	403	433	509	563	572
Patents – FPH Group	570	614	697	875	1,056
Patent Applications Pending – FPH Group	526	697	911	1,089	1,297

Summary

We have responded to the questions raised in the discussion paper that are of particular relevance and importance to the F&P Group. We have also addressed other topics in the discussion paper that are not addressed in the questions which are also important to the F&P Group.

The F&P Group welcomes the reintroduction of an R&D tax incentive for entities undertaking R&D in New Zealand as our core business revolves around developing new and innovative products in New Zealand, manufacturing these products in New Zealand and Mexico and selling these products around the world.

Our established New Zealand base of R&D professionals, processes and knowledge and our strong resources and expertise in management and international markets position us extremely well to continue to commercialise our extensive and ongoing R&D project and product pipeline. The flow on benefits of our significant R&D investment in New Zealand are numerous; including a world leading company creating jobs in New Zealand in multiple vocations, increased technical skills and knowledge for New Zealand people that are used in collaboration with an increased number of New Zealand entities, research institutes and health professionals and strong company performance and therefore returns for our shareholders. As a New Zealand headquartered entity we are in an extremely strong position to continue to deliver benefits to the New Zealand economy from our R&D activity, given our substantial activities outside of R&D that are undertaken in New Zealand.

We want to see the longevity of the R&D tax incentive regime and believe that certainty and appropriate compliance are fundamental requirements to ensure the success of the regime for taxpayers and for Government.

Our main submission points are:

1. The definition of R&D should be applied appropriately, leverage the work and guidance from the original 2008/2009 regime and include the novelty concept. A materiality hurdle should not be included.
2. Any exclusions to the definition of R&D should not apply to both core and supporting activities; the specific dual purpose exclusion is too broad.
3. Any restriction on overseas R&D should be set at the eligible R&D level, not on a project basis.
4. Eligible R&D expenditure should not be limited to R&D labour cost and an entity should be able to choose their own overhead allocation method.
5. Software R&D should be included in the R&D tax incentive regime from its commencement date.
6. Pre-registration of large R&D spend (including overseas spend) or spend beyond any cap should be available.
7. Business prepared documentation should be leveraged to ensure compliance.
8. The transition from Callaghan for existing grant recipients should be confirmed as soon as possible, with a grandfathering for existing grant recipients to at least 31 March 2019.

Definition of R&D

Question 2: How well does this definition apply to business R&D carried out in New Zealand?

The F&P Group is largely aligned with the definition of proposed R&D included in the discussion paper. We understand from the discussion paper that the definition is broadly intended to cover "experimental development work to create new or improved materials, products, devices, processes, or services." It is therefore important that the proposed definition is applied, with appropriate compliance, so that entities with genuine R&D have certainty that their R&D activities will qualify for the incentive.

The F&P Group participated in the R&D tax credit regime when originally introduced in New Zealand in 2008/2009 and we support leveraging the work and guidance that was in place and developed for the original regime. We propose that the "novelty" concept that existed in the original regime should also be included in the proposed definition to ensure that genuine R&D in the nature of experimental development work (as noted in the discussion paper) is more definitively captured by the R&D incentive regime.

Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to **both** the problem R&D seeks to resolve and the intended advancement of science or technology?

If a materiality hurdle was introduced to the R&D definition for either the problem or the advancement of science or technology or both this may represent a significant hurdle for entities to overcome. Certain R&D projects on their own may represent incremental advancements of science or technology or may be seeking to solve incrementally small problems, however, when viewed collectively (sometimes over a period of many years) the problem solved and the scientific advancement could be much larger. We believe that the introduction of a materiality test could have unintended consequences where genuine R&D activity is excluded from the incentive regime. A materiality hurdle may also result in entities overstating their activities to meet the materiality hurdle, potentially undermining the incentive regime. We suggest that the definition of R&D does not need to be limited in this way.

Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.

The F&P Group recommends that any exclusions should not apply to both core and supporting activities. The proposed excluded activities in the discussion paper are very broad and activities undertaken in these areas, can in certain circumstances, lead to or be an important part of a genuine R&D project.

In our situation, a large number of our products are required to meet standards set by foreign authorities or be registered with foreign authorities (such as the Food & Drug Administration in the United States) before they can be introduced to market. We regard the process of designing our products to meet a standard as a core R&D activity because of the systematic process that we follow and the uncertainty that we overcome.

When these **standards** change there is also often an uncertainty that is required to be overcome and this is achieved through a R&D project using experimental development and the advancement of science and technology. This activity should not be an excluded activity.

In addition, whether a product or process is capable of **commercial production** is often an uncertainty that must be overcome before experimental product development is complete. As our products are used by patients we must be confident that we can manufacture our products with sufficient volumes, at a sufficient cost and at the required quality standard. We must be absolutely confident that there is no patient risk before actual production commences (for which we acknowledge is not part of an R&D activity). This demonstration of commercial viability should not be excluded from being an eligible activity.

Further, some of our product development originates from product surveillance information that is gathered from users and customers in the market. This could be seen as the **routine collection of information** or data. This data and information is feed into a product development (R&D) activity that solves an uncertainty or problem and results in an advance of science and technology. It is therefore crucial that this information collection is not excluded from the definition of R&D.

Question 9: What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?

We believe that the specific exclusion of dual purpose activities could limit too many genuine R&D activities. Clinical research that is undertaken by third parties (such as hospitals) but controlled and funded by the F&P Group often forms the basis of our product development. This type of research meets the broad definition of R&D that is conducted systematically, solves an uncertainty and problem, is conducted to gain new knowledge and results in an advance of science and technology. However, the results of this clinical research may potentially also be

used for non-R&D purposes, such as marketing, to demonstrate the clinical benefits of our products.

We support that the R&D definition is sufficiently limited so that only genuine R&D activities qualify, however, we believe that a specific exclusion for dual purpose activities goes too far.

Overseas R&D

The F&P Group's R&D is principally undertaken in New Zealand, however, in certain fields the expertise and specialist knowledge is not currently available in New Zealand. In this situation it is necessary for F&P NZ to engage with international specialists on an R&D project. The degree of international specialism (and therefore expenditure) required for each project will differ from project to project and may be less than or more than 10 percent of eligible expenditure on a project by project basis, and for projects taking multiple years may vary significantly from year to year. However, when using an international specialist in an R&D project that is funded and controlled from New Zealand the knowledge and specialist skills are transferred back to New Zealand (through the teams involved and the project sharing) and so the same ancillary benefits from undertaking the R&D in New Zealand are available.

In our case, as part of our R&D activity we regularly consult and interact with international respiratory specialists at world leading international hospitals and research institutes because the expertise does not exist in New Zealand. Our involvement with these international specialists can be on a long term project basis (sometimes lasting several years). This international involvement may be front loaded (as an example) so that a greater proportion of overseas spend is incurred in one particular year of a multiple year project. However, over the project term we would expect that the vast majority of the R&D is undertaken in New Zealand and that the knowledge transfer and other benefits would also accrue in New Zealand.

We suggest that there should be some reasonable restriction on the quantum of overseas R&D expenditure, however, this should be set at the eligible R&D expenditure level and not on a project by project basis. In addition, a pre-registration system (also described below) could deal with larger overseas spend and multiple year projects.

Eligible expenditure on R&D

Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?

The F&P Group does not support limiting eligible expenditure to R&D labour cost. This method would not sufficiently recognise and reward the true cost of undertaking R&D activities in New Zealand, especially for capital intensive R&D activities.

In our case, while a large proportion of our R&D expenses are labour costs there are other costs which are fundamental to our R&D activities. These other costs include the operating costs of our specialist R&D facilities in Auckland and engineering supplies and materials that are consumed during the R&D process or included in prototypes developed as part of the R&D process.

We invest significant resources in our headquarters and facilities in Auckland to undertake R&D and other activities, such as manufacturing, sales and marketing, supply chain and other support activities. These facilities, as well as the highly skilled employees that work in the facilities are an attractive factor for other skilled employees to join our team and contribute to the further economic development of the F&P Group and therefore New Zealand.

Question 11: What are the advantages and/or disadvantages of setting overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?

The F&P Group does not agree that allowable overheads should be set as an absolute percentage of R&D labour costs. Every entity will have a different cost base for their particular

circumstances and R&D activity profile. An absolute percentage would not recognise or reward the true cost of genuine R&D for capital intensive companies and could potentially over recognise and over reward those entities with a lower capital intensity.

In our view, one of the fundamental objectives of the R&D incentive regime is certainty and this includes how overheads are dealt with. We consider it appropriate that an entity has a choice to use their own overhead allocation method (with documentation support) or an allocation method/s approved by the Commissioner and set out in administrative guidance (as a safe harbour). This should provide flexibility for taxpayers and also certainty for taxpayers and the Government while also recognising and rewarding genuine R&D activity.

Software

Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?

The F&P Group agrees that software should be part of the R&D tax incentive regime from the date that the regime goes live. If the novelty concept is included in the R&D definition, we believe that this should encompass software R&D.

Cap on expenditure

Question 16: How important is a cap or a mechanism to go beyond the cap? Please provide further details.

We appreciate that a cap on eligible R&D expenditure per taxpayer has a number of benefits, including protection around the fiscal cost of the regime and the long term sustainability of the regime. However, given our significant increasing R&D expenditure in New Zealand we believe that there must be a mechanism to go beyond the cap where there is clear genuine R&D activity. Because of the size of our global organisation and our R&D and sales experience we are in a very strong position to commercialise our R&D projects leading to substantial benefits for New Zealand and the economy and we should not be unduly penalised for this success.

Question 17: What features of a Ministerial discretion or pre-registration would make them most effective?

The F&P Group's preference for expenditure above the proposed cap, and indeed also for entities with a large R&D spend is a system of pre-registration. The most important requirement to promote sustainability and deliver the benefits in the R&D tax incentive system is certainty for both taxpayers and Government and Officials.

Generally, there is a choice to be made on what activities are undertaken and where they are undertaken, this is also true of R&D activities. It is particularly important for entities with a large R&D spend that upfront certainty can be achieved on the treatment of their R&D spend and ultimately their R&D tax incentive credit. This will enable better and well informed decisions to be made.

Therefore, we believe that entities with large R&D spend (amount to be determined, but could reference existing Callaghan Growth Grant limits) and/or a large number of R&D employees could have the option of entering into a pre-approval regime (covering multiple years) where advance information is provided on expected R&D projects and expenditure (most of which is already prepared as part of business planning and budgeting purposes). We would also expect a regular check-in takes place to ensure that plans and expenditure did in fact eventuate.

Information

Question 21: What is the right level of information required to support a claim?

The F&P Group's fundamental requirements of the R&D tax incentive regime is that of certainty and appropriate compliance. This should lead to longevity and sustainability of the regime as the focus is on undertaking the R&D activities which lead to the wider benefits to New Zealand

and the economy and not an unduly onerous and obtrusive documentation process. However, we also recognise that checks need to be made to ensure that only genuine R&D activities are remunerated as we believe in extending the skill and knowledge base with genuine R&D activities.

We suggest that existing business prepared documentation should be leveraged as much as possible as these documents typically contain all of the required detail on the objectives of the project and the uncertainty that the entity is trying to overcome by the R&D activity. As also outlined above, we support a system of pre-registration to give certainty to large spend taxpayers. In any event it is imperative that any documentation requirements are communicated to taxpayers as early as possible before the commencement of the regime.

Transition from Callaghan

We understand that the transition from the Callaghan growth grant regime is still to be determined, but the overall goal is to ensure that there is no disruption to funding from either the grant regime or the R&D tax incentive regime. Our Callaghan growth grant expires on 30 September 2018, leaving a potential gap of at least six months before the proposed R&D tax incentive regime is applicable. Ordinarily we would now be beginning the preparation of our Callaghan growth grant renewal application, which involves time and effort from a number of our employees. However, we understand that it is possible that current Callaghan growth grant recipients will automatically have their grants extended to at least 31 March 2019. We strongly urge Officials to follow this approach and to communicate to current grant recipients as early as possible. This will ensure that grant recipients, such as us, are not using resources to understand and comply with the two regimes at the same time (preparation of our extension request and understanding of the new R&D tax incentive regime).

Concluding comments

We are a large New Zealand headquartered business focussed on R&D and employing a growing number of people both in New Zealand and offshore. We support the Government's innovation focus and the proposed R&D tax incentive in New Zealand. We believe that the Government should continue to support businesses such as us, so that we can continue to be based in New Zealand, undertake our value creating activities in New Zealand and pay the majority of our taxes here. Our ongoing success will ultimately lead to benefits for the New Zealand economy. The longevity of the R&D tax incentive regime is key to us and we encourage the Government to ensure that taxpayers have certainty about the regime and that the compliance to ensure genuine activities are recognised and rewarded is appropriate.

Please let us know if you have any queries in relation to our submission, or would like to discuss any of the points further.

Yours faithfully

s 9(2)(a)

To:	**MBIE by Email: RDincentive@MBIE.govt.nz**
From:	**Powerhouse Ventures Limited**
Subject:	**Feedback submission for proposed R&D Tax Incentive Scheme**
Submitted:	**31 May 2018**

Introduction

Please see below our submission and feedback on the discussion paper on the Research and Development Tax Incentive entitled: "Fuelling Innovation to transform our economy".

About Powerhouse Ventures Limited (ASX Code "PVL")

Facts about Powerhouse Ventures Limited:

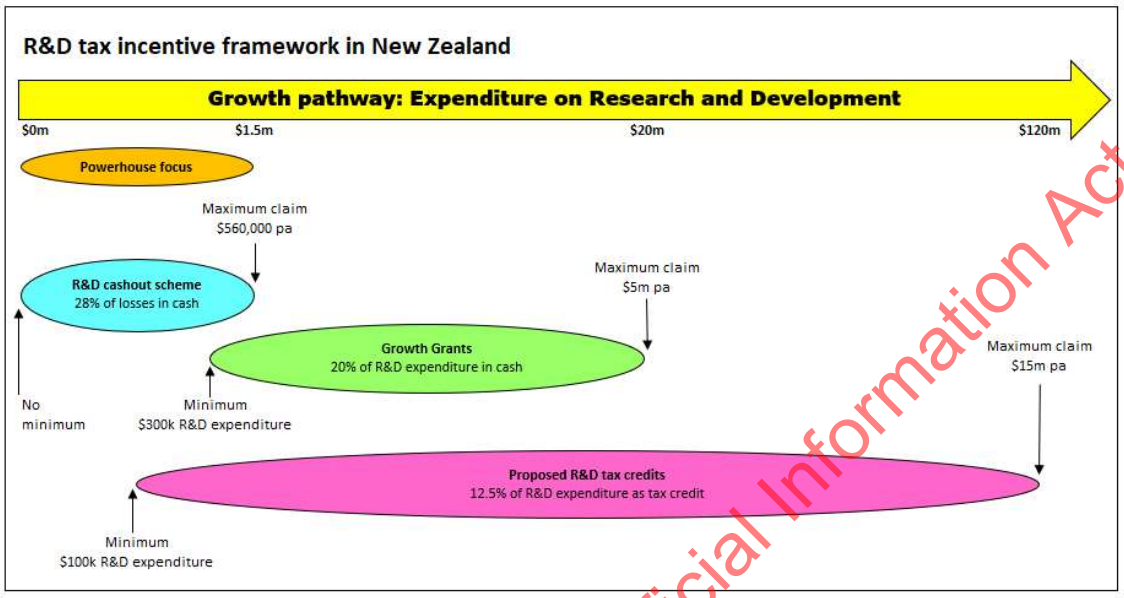
- Leading Technology Incubator in New Zealand under Callaghan Incubator support scheme
- Successful Initial Public Offering on ASX in October 2016, raising A$10.2 million
- Owns large minority stakes in 25 investee start-up companies
- Investees range from start-ups to one listed company (CropLogic – ASX Code "CLI)
- Incubated CropLogic from start up to IPO in September 2017, raising A$8 million
- Main operational focus is on Seed stage companies
- Many investees use Callaghan repayable loan scheme
- Investee spin-out companies rely on small investment rounds (typically $100k-$500k) and exhaust funds within 18 months as they validate technology through R&D spend
- Minimal focus on "Growth Grants" as these are targeted at post seed stage companies

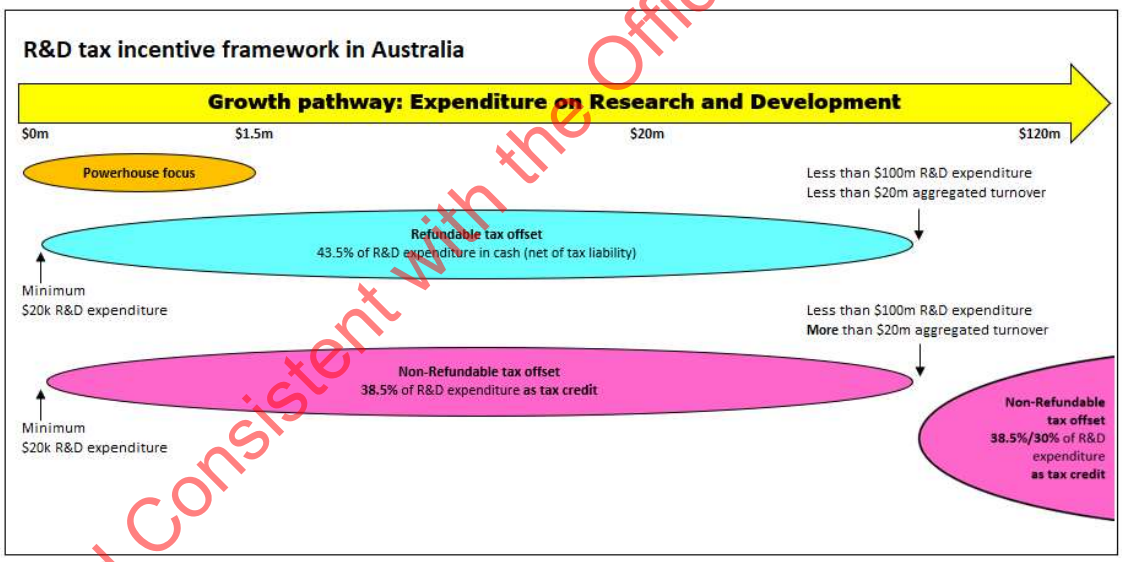
General Comments

The questions put forward by the discussion document are commented on below. We note that the questions do not examine the comparison with the Australian R & D incentive schemes. Powerhouse believes that this comparison is important due to the interdependency of the two economies including capital and investment transfers, movement of human capital, knowledge and Intellectual Property (IP). Significant difference between the two schemes is likely to impact decisions about the location of R & D activities and the benefits that flow from these activities.

A comparison with the Australian R & D tax incentive environment reveals a much more extensive use of a cash-back scheme. We see this element as particularly desirable to stimulate R & D, innovation and growth in the start-up sector where cash refunds are far more incentivising than non-refundable tax credits – in short they act to sustain early-stage companies through their most critical and difficult stages.

The following diagrams summarise the high-level schemes that exist or are proposed by the respective New Zealand and Australian regimes:





The key differences in the schemes offered in New Zealand and Australia include:

- Significantly deeper incentive rates (43.5%-30.0% vs 28.0%-12.5%)
- Significantly wider applicability of the refundable tax credit/cash back scheme

Powerhouse proposes that New Zealand look to implement/extend the refundable cash back scheme as we see this as the single most critical element for Small and Medium sized Enterprise (SME) R&D.

Within the Powerhouse portfolio of 25 companies, 7 companies would most likely have failed without the support of the R&D cash back scheme.

Questions

Question 1: If SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?

Powerhouse's view is that partly owned SOE entities that are on a "spin out" trajectory should be able to benefit from the R&D scheme.

Some SOEs (meaning collectively SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions), especially CRIs and Universities, seek to commercialise research by forming companies in order to "spin out" the technology into entities that will attract external investment seeking commercial returns.

At the early stages of this process the SOEs typically retain large majority stakes until private equity investment dilutes the founder shareholders in subsequent funding rounds at higher valuation. This diluting process may take several years to reduce the founder stakes to minority stakes. In the meantime, the large SOE ownership stake may disqualify the spin-outs from benefiting from the R&D scheme.

Powerhouse Example

Within the Powerhouse portfolio, the following commercial spin-outs have been excluded from benefiting from the existing R&D incentive scheme:

- s 9(2)(b)(ii) [redacted]
- s 9(2)(b)(ii) [redacted]
- s 9(2)(b)(ii) [redacted]
- s 9(2)(b)(ii) [redacted]

Whilst these companies have survived without access to the scheme, it would unquestionably have made their pathway more comfortable and certain had access been possible.

See Appendix A and Portfolio Profiles for further details.

It is Powerhouse's view that a carve out should be included within the scheme that allows entities on a "spin out" trajectory to benefit despite initial high SOE ownership proportion.

Question 2: How well does this definition apply to business R & D carried out in New Zealand?

The definition is useful in that scientific method is core to the definition. This focus creates the potential to protect and retain (perhaps through patents) the resulting knowledge for the enduring benefit of the New Zealand economy.

It is Powerhouse's view that the definition should include activities to commercialise the results of scientific work within the definition of support activities.

Question 3: Does this definition exclude R & D that you think should be eligible, please illustrate with examples.

Yes. The definition should include activities to commercialise the results of scientific work within the definition of support activities.

Where patented research has been transferred to a spin-out entity, the activities of that entity to develop and commercialise that research should be included within the definition of support services that are eligible for the incentive. Their exclusion seems unduly harsh and will curtail spin-out activity and therefore the size and success of the early stage technology rich eco-system in New Zealand. This sector is currently strong and the proposed definition will unduly harm the sector.

Question 4: Does the scientific method requirement exclude valid R & D in some sectors, please illustrate with examples?

The definition will likely exclude software development activities.

Powerhouse Example

powerhouse

s 9(2)(b)(ii) [redacted]

It is Powerhouse's view that the eligibility on the basis of "novelty" should be retained.

This is justified as novel approaches to problems with existing inferior solutions can be a significant driver of wealth creation and innovation, creating economic benefits to the national community. This is despite the fact that the novel approach does not necessarily extend the envelope of scientific knowledge.

Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?

A key ingredient to successful commercialisation of R&D or knowledge is the presence of a customer need, or problem that must be solved.

It is Powerhouse's view that the "problem" test is appropriate and indeed critical.

In Powerhouse's experience, the lack of a significant customer need will naturally (eventually) inhibit an ill-conceived spinout which demonstrates a self-limiting mechanism guided by the market. In such cases the spinout will fail, limiting the extent of the R&D or commercial activity. As such, an embedded focus on commercialisation based on customer need is essential.

It is Powerhouse's view that the second test of advancement of science or technology should continue to include "novelty" as a separate limb for eligibility as discussed under Q4.

The impact of applying a strict "and" test would be to reduce eligible R&D, reducing R&D levels, particularly in areas specifically focussed on market need.

Question 6: How well does this definition apply to business R&D carried out in New Zealand?

The New Zealand economy and R&D effort is small compared to other OECD countries. It follows that the scale and depth of R&D falling within the scientific method definition is lower in New Zealand than elsewhere.

It is Powerhouse's view that the definition should be wider in New Zealand to reflect this environment and include the application and commercialisation of existing scientific method in novel ways.

In this way the New Zealand government will establish a broader scheme capable of transforming the New Zealand economy and stimulating exciting new jobs in the innovation sector.

Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.

It is clear that exclusion of support services will facilitate greater targeting of limited funds.

However, it is Powerhouse's view that the following support services should be eligible for the R&D incentive as commercialisation is such a strong driver of wealth creation and innovation:

- **Market research, testing and development**
- **Commercial, legal and administrative aspects of patenting and licensing**
- **Pre-production activities**

Commercialisation and innovation drive wealth creation through the satisfaction of customer needs. When customer needs are satisfied via a superior offering (whether superior in price or quality) customers reward the new entrant with increasing business leading to trapped margin and wealth creation.

There is a danger that R & D that is funded and developed in New Zealand is transferred or copied outside of New Zealand and the benefit of the R & D effort is lost.

A very effective way to protect R & D and IP is through fast commercialisation. This maximises speed to market, growth to critical mass, niche dominance and the development of ecosystems around the R&D and IP.

Innovation Ecosystems in particular are geographically "sticky" and can lead to job growth, retention and direct and indirect tax receipts – i.e. the economic dividend and identifiable payback.

Question 8: Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?

Powerhouse Example

Two examples from the Powerhouse portfolio are:

- s 9(2)(b)(ii) [redacted]
- s 9(2)(b)(ii) [redacted]

See Appendix A and Portfolio Profiles for further details.

Powerhouse is of the view that the inclusion of these two exciting companies within the R & D tax incentive scheme is critical and desirable. Both companies (and others like them outside of the Powerhouse portfolio) are deserving of taxation support. They are exemplars of exactly what the Government should be trying to nurture and support in New Zealand's innovation and research and development community.

Question 9: What is the likely impact on business R & D in New Zealand if dual purpose activities are ineligible for the R & D Tax Incentive?

In the start-up space, expenditure is incurred for specific and targeted purposes and siloed within small and separate corporate entities (spin-outs). Therefore, the dual-purpose issue is unlikely to be present within such granular entities.

As such, incentive funding targeting R & D in start-ups is more likely to result in increased R & D spending.

Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R & D labour cost?

In the start-up environment, companies need the flexibility to be able to perform work internally with employees, or contract out to external specialists - whichever is the most efficient. It is inefficient and wasteful to always conduct the work in-house, particularly when (greater and proven) expertise already exists within a potential contractor company/entity.

Powerhouse Example

s 9(2)(b)(ii) [redacted]

See Appendix A and Portfolio Profiles for further examples.

Powerhouse's view is that limiting eligible expenditure to R & D labour cost will lead to research being undertaken in-house, where faster and less expensive pathways already exist elsewhere. This may have the consequence of slowing down the commercialisation process for some technologies and prolonging technical solutions to real-world problems. It will also lead to wasted expenditure through any inherent bias towards supporting just R & D labour cost.

To this end ideally the R & D incentive should not create bias in this decision process. Start-ups are likely to and should be encouraged to use contracted-out services to limit research duplication and increase the pace of innovative product development and commercialisation.

Question 11: What are the advantages and/or disadvantages of setting overhead costs as a percentage of R & D labour costs? What would the appropriate percentage be?

Powerhouse has no preference for either method.

However, in order to create a vibrant R & D ecosystem, it is generally beneficial to encourage high local labour content.

Question 12: Are there any reasons why expenditure related to R & D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.

Powerhouse is comfortable with the inclusion of the "at risk rule" that requires claimants to bear the financial risk of the R & D activity.

Such a rule is likely to de-risk investment decisions which will encourage R & D that leads to opportunities for commercialisation.

Powerhouse's view is that R & D that will produce opportunities for commercialisation should be prioritised for targeting, as these opportunities are most likely to create an enduring economic dividend as discussed in Question 7 above.

Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R & D software activities?

Almost all innovation now includes an element of software development and IT expertise.

In general Powerhouse supports the inclusion in the tax credit scheme of R & D in software activities.

One way to do this is to include software development activities that include novel approaches and fall within the start-up subset of companies

This would encourage the coding ecosystem whilst ensuring that funding leakage does not occur to larger entities that may be tempted to apply the incentive to business as usual activities.

Question 14: Are there reasons why continuity rules should not apply to tax credits? Please describe.

Powerhouse strongly believes that the benefits of R & D incentives should be transferable through changes of ownership proportions. Imposition of continuity requirements is damaging to the start-up environment by reducing flexibility in funding structures. This flexibility is vital to ensure that appropriate funding is received at critical points in the growth path and that the right strategic partners enter the ownership structure at the appropriate moment.

Powerhouse Example

For example a typical scenario for a Powerhouse investee company could be a start-up that is initially majority owned by a University or Crown Research Institute, with Powerhouse taking a small minority stake. Once Powerhouse had become more familiar with the technology, follow up funding could result in a majority stake. A further capital raise from the Powerhouse network could then dilute the Powerhouse stake to a large minority (our ideal positioning). Finally a significant strategic investor may take a majority stake on order to provide a distribution or technology pathway to market (e.g. Powerhouse investee company Veritide). Alternatively, further funding could be obtained via an IPO (e.g. Powerhouse investee company Croplogic).

Loss of incentive benefits at any of these restructuring rounds would lead to additional hurdles to be overcome, potentially derailing the capital rounds and hindering the growth pathway.

Almost all Powerhouse portfolio companies would be adversely affected by share continuity constraints due to high growth characteristics and frequent capital rounds.

Loss of incentive benefits at any of these restructuring rounds would lead to additional hurdles to be overcome, potentially derailing the capital rounds and hindering the growth pathway.

Question 15: Is the minimum threshold set at the right level? If 'no', please provide further details.

Powerhouse's view is that $100,000 is too high for the minimum threshold. Many start-ups perform R&D below this threshold, as they are starting from nil expenditure by definition.

We cite the Australian threshold of $20,000 as being a more appropriate level. It is desirable that potential R & D activity in New Zealand does not migrate to Australia following the lower eligibility threshold.

The answer to avoiding disproportional administration and compliance costs is to reduce compliance requirements to a level that is appropriate to the amount incentive being claimed.

Business in tax loss/ R & D tax loss cash-out scheme

The discussion paper has explained that policy targeting this area will not be resolved before the introduction of the Tax Incentive in April 2019.

Despite this, Powerhouse would like to express the view that it is vital to retain this scheme in order to support the start-up environment.

Start-ups need cash to survive. Many if not most start-ups have 'cash critical' moments in their growth path and life cycle. The cash is needed in the early years because Tax credits (that can only be claimed if future years when profits arrive) provide almost no incentive or de-risking to start-ups for which year to year survival rarely is certain. Furthermore, the level of the proposed tax credit at 12.5% is too low to change behaviour, especially when received as a deferred benefit.

It is Powerhouse's view that the R & D tax loss cash-out scheme will complement the proposed R&D tax incentive and should be retained to run in parallel and at the current rate of 28%.

Question 16: How important is a cap or a mechanism to go beyond the cap? Please provide further details.

Powerhouse makes no submission.

Question 17: What features of a Ministerial discretion or pre-registration would make them most effective?

Powerhouse makes no submission.

Question 18: What are your views on the proposed mechanisms to promote transparency and enhance evaluation?

We fully support mechanisms to promote transparency and enhance evaluation noting that these are consistent with best practice in corporate governance.

Question 19: Are there any other risks that need to be managed? Please describe.

Powerhouse makes no submission.

Question 20: What are the risks with making external advisors liable in this way?

Our view is that contingent fees encourage abuse and that it is desirable to mandate against contingent fees or to structure the penalty framework to make the risk profile unattractive. Powerhouse cites the Australian example where widespread abuse has been facilitated by external advisors. This has been widely reported in recent times leading to the Australian government to recently attempt to reconfigure its R & D incentive framework.

Question 21: What is the right level of information required to support a claim?

Our view is that compliance requirements should be tailored to match the size of claims, most likely in broad bands. Compliance requirements in the start-up environment should be especially light and supported by claim "facilitators" seeking to assist rather than "compliance enforcers". This would reflect the lack of compliance specialists available to resource starved start-ups.

Question 22: What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?

Powerhouse agrees with the approach to encourage third-party offerings for claim processing.

Question 23: What integrity measures do you think Inland Revenue should use?

Refer answer to Q 21 above.

Next Steps

Powerhouse offers to meet with relevant MBIE officials in Wellington or Christchurch to discuss our submission and any specific issues or questions you may have.

Please contact Powerhouse as follows:

s 9(2)(a)
[redacted]
[redacted]
[redacted]

s 9(2)(b)(ii)

s 9(2)(b)(ii)

Powerhouse portfolio companies

AuramerBio is a point of care biosensor company. Its novel technology allows for the accurate measurement of extremely low levels of biologically relevant molecules at the point of care. This will allow health professionals to obtain the answers and make treatment decisions, all within the time-frame of a patient consult.

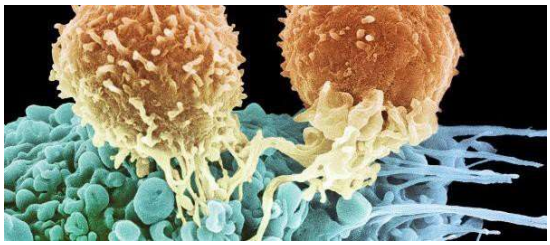
AuramerBio's first product is being developed to monitor fertility hormones at levels not currently possible with existing methods. The technology can be rapidly adapted to measure a wide range of targets in liquid samples (saliva, urine, blood, environmental water) providing access to a large number of future market opportunities.

Cancer immunotherapy helps to stimulate a patient's own immune system to kill cancerous tissue. It is a new class of treatment, complementary to traditional treatments (surgery, radiation and chemotherapy). It offers a more

targeted approach to eliminate tumour cells while minimising side-effects for the patient.

Avalia Immunotherapies has developed a novel technology platform to generate therapeutic vaccines for cancer immunotherapy. The new technology can also be used to make prophylactic vaccines for the prevention of infectious disease.

Avalia Immunotherapies intends to build a product pipeline and partner with larger biotech or pharmaceutical companies to progress new treatments into the clinic.



UPSTREAM
MEDICAL TECHNOLOGIES

CROPLOGIC™

Many patients present in Emergency Departments (**ED**) each year with chest pain. One in eight has a life-threatening disease. Causes for this pain are many; heart, lung, gastrointestinal, bone, muscle and nerve problems. ED physicians require rapid and accurate methods to determine which patients require immediate lifesaving medical treatment.

Upstream Medical Technologies (**UMT**) has a novel technology platform built on many years of research. This provides a new class of diagnostic tests designed for ED use. These tests detect life threatening heart and associated diseases. The lead assay can detect imminent heart attack BEFORE tissue damage occurs.

UMT is building a pipeline of tests that enable earlier diagnosis for improved patient recovery.

High-volume crop growers and processors have significant challenges ahead in order to meet rising food-demand. Growers need to optimise resources and processors need to plan to ensure efficient processing.

CropLogic delivers specialist agronomy services to growers using technology developed over 30 years at The New Zealand Institute for Plant & Food Research. CropLogic brings together crop science, environmental data and agronomic expertise to offer input for daily decision making that improves on typical "rule of thumb" recommendations. In addition to its expert system, CropLogic provides the telemetry required to gather field data.

Following more than 65,000 acres of field trials in the USA, NZ, Australia and China, CropLogic is embarking on strategic acquisitions of agronomy services companies in target countries.

Cirrus has developed an easily adopted process technology that significantly improves the mechanical properties of plated coatings in electronics, aerospace, and hi-tech manufacturing, without degrading the conductivity, corrosion resistance or appearance of the coating material.

Cirrus technology has been developed and patented at The University of Auckland and is currently in early evaluation with some of the world's largest manufacturers, manufacturing process and chemistry suppliers.

EdPotential delivers software-as-a-service products based on advanced algorithms and data analysis capability, enabling schools to make more informed decisions, enhance teaching practice, saving teachers time and improving student outcomes.

EdPotential is cloud based and designed specifically for analysis of school assessment results, allowing teachers to query assessment data, analyse the data to identify gaps and strengths and act to develop solutions to target student achievement.

Many of New Zealand's leading schools are now utilising EdPotential software, delivering better student outcomes and saving schools and teachers significant time compared to manually entering and processing data.

Hot Lime Labs

Objective Acuity is a breakthrough digital health company that achieves early detection of vision and related disorders leading to changing lifelong healthcare and learning outcomes.

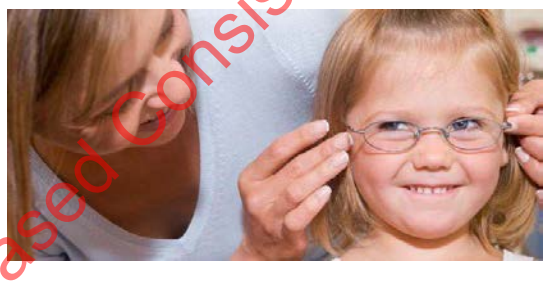
There are many approaches to the measurement of vision and development disorders but all rely on a co-operative subject and are intrinsically subjective.

Objective Acuity's first product is an objective measurement device that stimulates optokinetic nystagmus (OKN), an indicator of an intact vision pathway to determine poor vision.

Clinical trials are about to get underway in children (200) and adults (120) to complete market validation, with a first market launch forecast for 2018.

Hot Lime Labs is a spin-off from Callaghan Innovation and is developing CO_2 capture systems for biomass boilers in order to supply commercial greenhouse growers with low-cost, renewable CO_2 which they commonly use to accelerate plant growth and so increase their yields.

Their unique technology uses a limestone based material – Hot Lime – as a "CO2sponge" in a simple, filter-like reactor, which allows recovering clean CO_2 from biomass combustion gases. The very high CO_2 capacity of the material and the simplicity of the reactors means that CO_2 can be produced at less than half the cost of current t



Ferronova is an Adelaide-headquartered medical device company, bringing together patented magnetic probe technology from University of South Australia and magnetic nanoparticle technology from Victoria University of Wellington.

Current cancer staging technology uses gamma probes with radioactive tracers; these have significant logistical issues and, due to their low resolution, are not suitable for more complex cancers.

The Ferronova magnetic probe and tracer system is being developed to allow staging of complex cancers, initially targeting oral cavity and other head and neck cancers. Improved staging of these complex cancers is anticipated to allow better treatment, lower patient morbidity and reduced healthcare system costs.

The marine and aquaculture industries face significant fouling issues, resulting in decreased yield, increased operating costs and increased corrosion. Antifouling coatings are utilised extensively however they are typically expensive, ineffective or pose significant risks to the environment. The current industry standard, copper-based antifouling paints, are widely used but are highly toxic.

Inhibit Coating's surface coatings display strong antimicrobial activity against E. coli, and also prevent the settlement of diatoms (microscopic algae). Preliminary antifouling tests show very good static resistance to biofouling in the New Zealand marine environment.

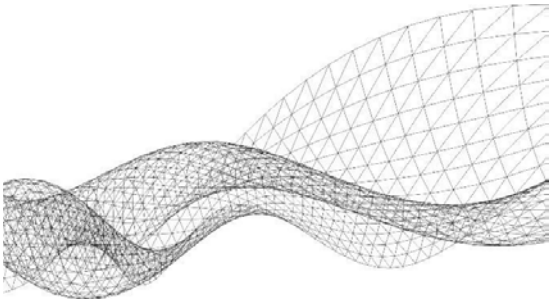
Orbis Diagnostics is developing in-line milking measurement for protein, fat, somatic cell and progesterone. Dairy farmers need to determine ratios and concentration of milk solids (protein and fat) for which they are paid, detect early signs of bovine mastitis through somatic cell counts; and improve reproduction through progesterone monitoring.

Orbis' microfluidic technology is expected to measure more parameters, be more accurate and timely than existing practice, providing the farmer with actionable insight for each cow in their milking herd.

2.2gForce has been established to commercialise energy dampers developed by University of Canterbury researchers.

Energy dampers operate as "shock absorbers" that dissipate the kinetic energy of movement and cushion the impact between structures.

They are versatile, cost effective and can be designed to protect structures from wind load, thermal motion or seismic events.



Hapai Transfer Systems is developing a range of innovative low force lift and transfer devices to radically improve the independence and mobility of incapacitated and frail patients.

HT Sytem's innovative patient lifter concept will be used to assist frail and immobile patients to be transferred by a carer between sitting positions.

Using their lifter, a carer can easily pivot the patient around their centre of gravity without the need for bulky power units.

Their design team is working with carers and patients in real home situations to make sure they provide a comfortable, safe and easy to use solution.

Silventum is a company that will commercialise novel nanochemistry technology developed at the University of Otago which confers dental filling materials with resistance to bacterial infection.

Silventum is a dental materials business that is commercialising a novel platform for filling materials that have enhanced mechanical, structural and aesthetic qualities and resist bacterial decay better. This will result in reduced levels of dental decay, or caries, which is the most prevalent disease in humans.

Silventum arises from a collaboration between the Department of Chemistry and the Faculty of Dentistry at the University of Otago.

Pharmaceutical companies currently spend

~US$1.5b developing each new drug. It can take 12–24 months for the pre-clinical trials of

~250 prospective drugs, with only 5 proceeding to clinical trials. These companies have a strong need for tools that will speed up this elimination process and aid getting drugs onto the market quicker.

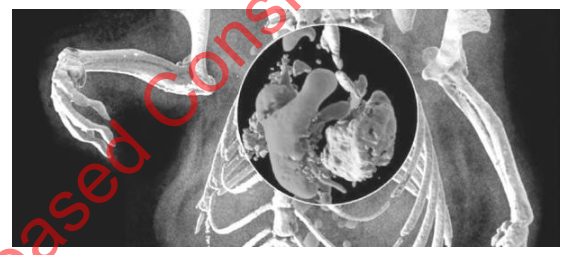
MARS Bioimaging (**MBI**) has developed a small animal x-ray molecular imaging system that has spectral resolution, using CERN developed detector technology. This additional "colour" information provides new imaging capabilities.

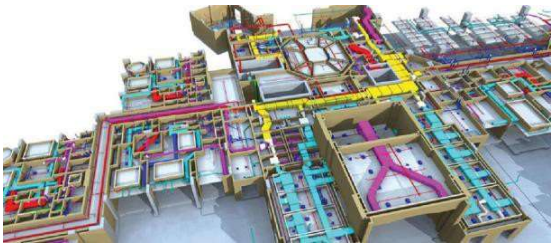
Having initially targeted key opinion leaders, MBI has launched its first commercial release system and is now building a human scanner.

The architecture and construction industry is going through a rapid shift from 2D CAD (Computer Aided Design) to modelling buildings in full 3D BIM (Building Information Modeling).

Modlar's core product is a network which connects architects to building products manufacturers. This allows architects to more easily discover, discuss and specify real world products into their projects in full 3D. This in turn speeds up the design process and reduces errors on site.

Having raised approximately NZ$3 million of venture capital, the company is now rapidly expanding into the North American market. Modlar is currently used by 130,000+ professionals globally including 80% of the world's top 100 firms.





SolarBright is positioned to capitalise on the LED and Solar LED lighting phenomena that are changing the way the world is illuminated.

SolarBright is taking its innovation and manufacturing excellence to the international market with customers in over 20 countries, including the World Bank, government agencies, local authorities and blue-chip companies.

SolarBright's approach of innovation and collaboration has led to use of its patented products in a wide range of applications and markets – from the supply and installation of solar street lighting in Pacific islands to development and manufacture of PATeye, the world's first commercially-available solar-powered ice-detection road stud.

The food industry is driven by food-safety. Detection of harmful microorganisms through improved process control leads to higher quality food, with better shelf-life and fewer product-recalls. Annually in the US, one in six people become ill and there are 200,000 hospitalisations and 4,000 deaths, all attributable to food poisoning.

Veritide is the creator of disruptive technology for real-time detection of faecal contamination on meat within meat processing plants. Providing both portable hand-held devices and fixed full carcass scanner technology Veritide scanners can be integrated throughout each stage of the food processing line.

Working closely with major meat processors in Australasia, Veritide's platform technology has many other applications in food, health and bio-safety areas.

Within the food-processing industry, food-safety is driven by eliminating bacterial contamination which can be harboured by cracks in industrial vessels such as tanks, dryers, silos.

Historically these vessels have been serviced by scaffold or rope-based inspections, a hazardous process which is prone to errors.

Invert Robotics provides remote inspection services to global blue-chip customers using its proprietary robotics technology. The mobile climbing robot system allows identification, recording and reporting of cracks in mission critical infrastructure.

Invert is currently expanding geographically into Europe, following success with inspection of milk silos and dryers in Australasia.

The global mobile marketing sector is a high-growth area that is seeing innovation as technology and marketing mix, with

consumers becoming increasingly 'connected' and smartphone technology becoming almost ubiquitous in the modern world.

Motim Technologies has developed a range of mobile interaction technologies, based on expertise in computer vision, augmented reality, image-recognition and mobile-software development alongside creative experience and expertise.

Securing direct relationships with major global brands is validation that Motim has a special proposition and the ability to execute and deliver on a global stage.

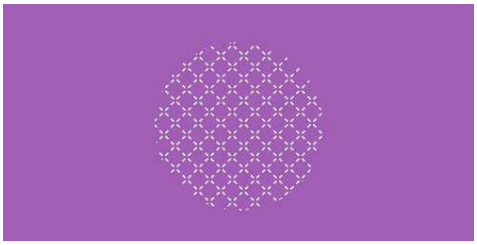
Many industrial and commercial operations manage controlled environments, where variables such as temperature, humidity and air quality need to be maintained within specific limits and dangerous substances such as toxic gases need to be contained.

Photonic Innovations (**PIL**) uses a combination of ultra-reliable, connected sensors combined with cloud-based data management to offer solutions that address these challenges with minimal human intervention. Under a recurring revenue business model, PIL will monitor environmental variables, take corrective action and use the data to provide added value services such as predictive maintenance and energy management. The first target market is cold stores where patented highly reliable laser-based detection of gas leaks forms the platform for an Internet of Things business.

Mammography is the dominant method of breast cancer screening in New Zealand. However, mammograms are much less effective with radio-dense tissue (affecting 40% of the screened population).

The University of Canterbury has developed a painless, zero-radiation screening technology unaffected by radio-dense tissue.

Tiro Medical will develop technologies to enable more accurate diagnoses and treatments across a range of medical areas, improving care whilst reducing expenditure. Tiro's initial focus will be on the breast screening market, developing the University's technology for use as a supplementary scan to mammography of radio-dense tiss



Instructions for Completion

The purpose of this Template is to assist New Zealand start up and growth entities respond to:

- "Fuelling Innovation to Transform our economy - A discussion paper on a Research and Development Tax Incentive for New Zealand" issued in April 2018 by the New Zealand Government.
- "Managing the transition from Growth Grants to R&D tax Incentive" also issued in April 2018.

Given the importance of research and development incentives to the sector it is hoped that the provision of a template will assist in more entities providing a submission and assist in influencing the agencies as to what the key issues that need addressing are.

The Template has been constructed through discussions with start-up and growth companies on issues that are felt to be pertinent to the sector.

The Template should be edited to fit the opinions and facts of the submitting entity. You may not agree with all the points in the Template and hence edits/deletions/insertions are encouraged.

Highlighted (yellow) parts of the template are where edits are required.

The template aims to address some of the specific questions raised the discussion paper (refer Appendix 1 of the document) and hence there is specific reference to these questions. The intention of the template is not to address all the questions but address the key ones that are pertinent to your entity. You may feel that the grants process doesn't need to change in which case you should stress this view.

We encourage you to either attend one of the collaboration sessions run by EY (dates in the covering email) or read the discussion paper – attached to the email.

The template does not necessarily represent the views of EY or any of the employees of EY.

Submissions are required by 1 June 2018 and can either be:

- Submitted through MBIE's website; or
- Emailed to RDincentive@MBIE.govt.nz; or
- Posted to:

R&D tax incentive team
Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140

31st May 2018

R&D Tax Incentive Team
Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140

Dear Sir/Madam

R&D Tax Incentive Submission

Thank you for the opportunity to provide a response to the discussion paper "Fuelling Innovation to Transform Our Economy" (dated April 2018).

This submission is specifically in relation to R&D Tax credits by way of refundability and the continuation of the Callaghan Growth Grant.

Background

RiverWatch LTD develops water quality monitoring devices that provider 24/7 real-time water quality data. The data can be sent into the cloud from almost any location and formulated for dissemination with other data such as weather and soil. Our company is a science commercialisation company and we rely on donations and funding from the company directors to operate. We have developed a great product but have struggled to obtain the necessary level of funding for our R&D.

Removal of uncertainty around the R&D tax incentive system

Having a solid and stable R&D tax incentive scheme is critical to start-up and growth entities. It provides confidence to entrepreneurs that financial support will be available throughout the lifecycle of the research and development process. Without a strong degree of legislative certainty we envisage there will be less entrepreneurs willing to embark on research and development activities.

A stable research and development incentive scheme is also important platform for entities to raise capital; giving investors' confidence that the business have sufficient capital to be supported through its growth phase.

The current uncertainty is also decreasing business value, and in some situations this is potentially worth millions of dollars.

R&D Tax Credits needs to be refundable for start-up/early stage companies
The R&D Tax Incentive which is to be introduced from 1 April 2019 is proposed to be "non-refundable" and therefore the support it will provide to start-up and early stage businesses which are usually in a tax loss position is negligible. These businesses will only be able to carry forward their tax credit to a future tax year. This proposal is inconsistent which many global R&D tax credits (e.g. Australia, UK and Canada) which are refundable to early stage companies in a tax loss position.

As the Government undertakes further assessment of this issue we strongly urge it to consider a "refundability" mechanism and that these refunds are paid on a quarterly basis. Start-up companies need cash in order to fund their ongoing R&D Activities and to accelerate the growth of the business. While there is uncertainty around the refundabiltiy of the R&D Tax Incentive it will be more difficult for early stage businesses to raise capital from investors.

Callaghan Growth Grants
We note that the Government is proposing that the Growth Grant Scheme will end 12 months after the start of the R&D Tax Incentive. While we support the introduction of the R&D Tax Incentive, our view is that the Growth Grants should continue as well, or that all grants that have been written and executed should be allowed to run until completion. Growth Grant funding has already been built into the business' cash flow and valuation models therefore the premature cancellation of the Growth Grant directly impacts both of these items. While there is uncertainty around the Callaghan Grant programme it will be more difficult for early stage businesses to raise capital.

We also strongly urge the NZ Government to consider offering a combination of both Growth Grants and the R&D Tax Incentive, so that start-up companies can access both programmes (but not for the same activities/expenses). By offering both programmes the Government provides start-up businesses with options, encouraging them to be innovative.

Minimum threshold (Question 15)
The minimum eligible expenditure threshold is proposed to be set at $100,000 in order for a company to qualify for the R&D Tax Incentive. While this minimum threshold does not apply to R&D activities outsourced to an Approved Research Provider, we think this threshold is too high for start-up companies. Many start-up businesses run very light for the first year or so, and often they don't pay the founders. As such, the true "cost" to the business and shareholders to reach $100,000 of overheads and other direct costs would be much higher.

We recommend the minimum expenditure threshold is reduced $20,000 in order to allow early stage companies to access the R&D Tax Incentive at a time when it is material to their ongoing activities.

Compliance costs (Question 21)
The purpose of a broad based R&D Tax Incentive is to encourage business to undertake R&D in a manner which is streamlined and supportive to their stage of growth. However, we are concerned that the compliance burden will be very high for SMEs. The reporting, capturing and compliance costs for SMEs is likely to be high and in some instances may be prohibitive to access the R&D Tax incentive.

To enable a streamlined compliance process, we ask that good clear guidance materials are published, and that application processes are designed to be streamlined. If not, time poor early

stage companies will need to engage a consultant, which is just another cost to cash poor businesses.

Software activities eligible for R&D support (Question 13)
The proposed definition appears to focus on more traditional laboratory-based R&D whereas software development activities are significant to NZ's early stage companies. A scientific definition of R&D which includes "material advance in science or technology" will restrict the type of software development activities which qualify. This definition appears to focus on research, not development.

R&D in software is a significant part of our business. Although we don't necessarily 'material advance' science and technology we development software to solve complex technology problems and deliver new products. This type of R&D should qualify.

Often our R&D will use off the shelf hardware with new software to produce a product that is innovative to the market. This requires research and development as well as testing before its commercial release. Dual purpose activities are now very common.

Dual Purpose R&D Activities (Question 9)
Start-up and early stage companies are usually focused on developing new products based on customer-focused innovation. This enables us to create products which have real-world appeal. To achieve this, the R&D needs to occur in a commercial environment, and is often undertaken in collaboration with potential customers. As a result, most of these R&D activities have multiple purposes, even if R&D is the main purpose.

We think the sole purpose test should be replaced with another requirement which indicates the main purpose of the activity needs to be R&D, but it's not always the sole purpose.

R&D expenses (Questions 11 & 12)
The Discussion Document proposes to limit the expenses a company can claim to only labour costs or to apply a standard overhead rate. While this might streamline the compliance process, it would have some direct disadvantages for start-up companies. Small companies that are very early stage, in order to keep costs low, often don't pay the founders. Therefore, limiting the R&D expense to labour expenses would be unfairly detrimental to early stage companies. Furthermore, in this circumstance, applying a standard overhead rate based on labour costs would also reduce the company's ability to include the actual costs it spends on the R&D project. The best solution would be to just let companies claim the costs they actually spend on the R&D.

Please make contact if you have any questions.

Yours sincerely

s 9(2)(a)

[redacted]

RiverWatch ltd

s 9(2)(a) [redacted]

Auckland Tourism, Events and Economic Development
An Auckland Council Organisation

AUCKLAND

1 June 2018

R&D Tax Incentive Team
Ministry of Business, Innovation & Employment
PO Box 1473
Wellington 6140
New Zealand

Kia ora kotou,

Research and Development Tax Incentive Discussion document

Thank you for the opportunity to respond to the proposal to introduce an R&D tax credit. As Auckland's economic development agency and as the designated Regional Business Partner for the Auckland region, we have a keen interest in any initiative that supports our businesses to grow and succeed and any initiative that encourages higher rates of business expenditure on R&D (BERD) is to be welcomed.

There is widespread recognition of the importance of innovation to long term economic growth and we welcome the Government's commitment to this agenda. Research and Development (R&D), as one component of the innovation process, is a key element and can create wider social returns and not just private returns. More R&D should translate into more innovation outcomes and generate wider spillover benefits. Global evidence also suggests that private returns to R&D positive in most countries and higher than returns from regular capital investment.

For Auckland, innovation generally and R&D specifically, has an important role to play in supporting future economic growth and in helping to address the challenge of low productivity which is holding back our economy and acting as a brake on shared prosperity and inclusive growth. Given the significant role that Auckland plays in the performance of the New Zealand economy, there are also wider benefits for the country that would emerge from enhanced innovation and R&D outcomes for the city.

Evidence from the Auckland Business Monitor (2017) showed that while 82% of Auckland businesses had undertaken innovation in the previous 12 months, only 44% of business had specifically undertaken R&D, and only 14% of businesses had collaborated with the tertiary sector on R&D projects.

On a general level, ATEED is supportive of the principles upon which the proposal is based but would emphasise the need to look at R&D as part of wider innovation policy framework. Innovation is not linear process and there is a need to consider the proposal alongside any further proposals MBIE may have to enhance New Zealand overall innovation system.

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aucklandnz.com

As a policy initiative, there are benefits that will arise from an approach which is easy to implement through the tax system and creates a more market led approach which avoids the risk of picking winners. It is however, important to consider what the international evidence says about the effectiveness of R&D tax credits. In 2015, the What Works Centre for Local Economic Growth undertook a systematic review of evaluations of programmes that aim to support innovation. The review considered around 1,700 studies from the UK and other OECD countries, of which 21 were impact evaluations that covered R&D tax credits.

The review findings showed that while R&D tax credits can positively impact R&D expenditure, this is not always the result. In addition, the impacts may be influenced by firm size and small firms are slightly more likely to benefit, given that they are more responsive to changes in tax credits. However, smaller firms may also be more likely to reclassify innovation related activity as 'formal' R&D.

The review also found that there is surprising little evidence on the impact of R&D tax credits on the broader issue of innovation, for example as measured by patents or self-reported innovative activity. There is also little evidence of the effect of R&D tax credits on wider economic outcomes, with only 1 of 3 studies showing consistently positive effects on productivity, employment, profits, sales or turnover.

Consequently, the evidence shows that while tax credits will generally positively impact the level of R&D expenditure, particularly for younger and smaller firms, there is less evidence that this will leave to greater innovation, better firm performance or more longer term economic growth. In addition, consideration needs to be given to the rate of intervention. International evidence shows that tax credits need to offer large enough cut in R&D costs for firms to respond positively and there is a risk that, particularly for larger firms the credit might crowd out investment that might have happened anyway.

The review also raises some interesting issues in terms of the spatial dynamics of policies, noting that while innovative activity tends to cluster and that local ecosystems have unique characteristics, the benefits of innovation is not always spatially bounded and traditional local cluster programmes have a very poor success rate.

Turning specifically to the questions raised in the consultation document. ATEED has consulted internally, drawing upon the expertise of our Business Innovation Advisors who work closely with innovative businesses across Auckland. Their responses to each of the questions are summarized in the following table.

Question from Discussion paper:	ATEED response:
Question 1: If SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?	1. It depends on the mandate of respective "SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries". Of those that are focused solely on R&D, funded by the Crown, then tax credit would seem less like to stimulate further R&D. 2. It may also be the case that these entities might benefit already from stimulated business R&D if they perform contract R&D. 3. However, those that have a commercial mandate, particularly their subsidiaries, should be eligible. They are often competing with private businesses, here and overseas, and should not be disadvantaged by these proposals. 4. Some subsidiaries are formed by the Crown entities solely to commercialise IP -e.g. spinout companies from university Commercialisation Offices. These would benefit greatly from more commercial R&D (c.f. academic R&D), assisted by Tax Credits.
Question 2: How well does this definition apply to business R&D carried out in New Zealand?	1. This definition of qualifying R&D activity applies well to requests for R&D assistance from STEM companies encountered by ATEED. 2. The greatest frustration / shortfall encountered by ATEED's clients with the current definition is in having Market Validation, Industrial Design and some Digital activities discounted or excluded. Having these included as Support Activities would be very useful in the guidance of Research towards successful commercialisation. 3. There is increasing need to integrate social sciences (including psychology and behavioural science) into digital platforms, e.g. psychology (stress management) in digital platforms for H&S, HR and risk management tools. These can have very challenging R&D issues, including Artificial Intelligence, Machine Learning and Natural Language Processing. 4. It is also important to note the general merging of technology with social science and psychology, but also with wellness, the arts and humanities. 5. The proposed definition is also an advance on the current IAS38-based definition in that subsequent "commercial production or use" is not required -it would seem that activities with an as-yet unclear commercial benefit would qualify as would those intended for societal benefit. 6. This definition should also work well for R&D activities surfacing in the next few years.

Question from Discussion paper:	ATEED response:
Question 3: Does this definition exclude R&D that you think should be eligible, please illustrate with examples.	1. Proposed working definition of qualifying R&D activity looks fine, however refer to responses to Question 2 above.
Question 4: Does the scientific method requirement exclude valid R&D in some sectors, please illustrate with examples?	1. It would be very helpful to have a working definition of "Scientific Method". 2. This systematic approach of hypothesis, experimentation and validation to problem solving generally needs to be promoted to NZ businesses as best practice. 3. The inclusion of scientific method looks fine -it is sufficiently wide to include current digital methodologies such as AGILE. It would also seem to include Design Thinking[1]
Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?	1. The application of a materiality test seems fraught. How would "materiality" be proven? In advance or in hindsight? 2. However, a problem may well be material to the business and its prospective customers. Its resolution might be being investigated by several entities, globally. Depending on the resolution, this might or might not be a material advance in science or technology. 3. The overall intention should be focussing businesses on, and supporting them in, innovating through systematically solving problems. 4. The requirement for perceived "novelty" is useful to include -as noted the resolution to a problem might be hidden within another business. However, having a business unknowingly performing seemingly parallel invention / R&D can be useful as they might discover an improved resolution -also the benefit to society is increased if two competing resolutions emerge.
Question 6: How well does this definition apply to business R&D carried out in New Zealand?	1. This definition of support activities applies well, however refer to responses to Question 7 under.
Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.	1. Yes, "the exclusions should not apply to support as well as core activities" because parts of the following activities should be included as support activities: a. "research in social sciences, arts or humanities" -this can be a precursor to successful R&D in

[1] Design Thinking definition: https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process

Question from Discussion paper:	ATEED response:
	the fields of Artificial Intelligence and of Usability (of invented technology). b. "market research, market testing, market development or sales promotion (including consumer surveys)" but in the specific discipline of Market Validation -from prospect interviews, designing the solution that needs to be invented to resolve the problem that the R&D is targeting -i.e. guiding/scoping the intended R&D; c. "the making of cosmetic or stylistic changes to materials, products, devices, processes or services" but in the specific discipline of Industrial Design -i.e. ensuring the usability of the "new or improved materials, products, devices, processes, or services", again to aid successful commercialisation. d. "commercial, legal and administrative aspects of patenting, licensing or other activities" however pre-R&D investigation of the IP landscape (including FTO investigations) should qualify, to enable guiding/scoping the intended R&D; e. "activities involved in complying with statutory requirements or standards" where these guide/scope the intended R&D. f. "the reproduction of a commercial product or process by a physical examination of an existing system or from plans, blueprints, detailed specifications or publicly available information" -this could be a valuable R&D precursor, similar to a literature search, if it results in, or avoids waste in, R&D to find a new solution. g. "pre-production activities, such as demonstration of commercial viability, tooling-up and trial runs" where these are used to investigate manufacturability and so guide/scope the intended R&D.
Question 8: Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?	1. With R&D proposals being presented to ATEED there is increasing use of Social Science[2] in the areas of Machine Learning and Big Data within Artificial Intelligence. Examples are in the anticipation of individuals' and group's actions when working collaboratively on software, interacting via desktop devices and the more limited handheld devices. 2. Specific examples of businesses are

[2] https://en.wikipedia.org/wiki/Social_science "the science of studying social groups"

Question from Discussion paper:	ATEED response:
	a. s 9(2)(b)(ii) b. c. d. e. 3. Social Sciences are also used in investigating multiple facets of human/robot interactions. 4. Successful commercialisation requires understanding of how society should benefit -R&D excluding Social Sciences is fraught (and has caused many commercialisation failures in history).
Question 9: What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?	1. It would seem better to permit activities conducted for a R&D purpose to qualify and to exclude those for a non-R&D purpose. Penalising (i.e. excluding) R&D activities through their association with non-R&D activities seems overly onerous. For the 12.5% credit contemplated, would not a substantiated allocation of expenses between R&D and non-R&D be pragmatic? 2. Furthermore, in small businesses, dual purpose activities de-risk R&D.
Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?	1. If this was the only cost eligible for a business to claim the tax credit, then it risks the business overstating its R&D labour cost. It would also seem to favour digital/software industries with high labour costs. 2. However, employment for R&D would be encouraged. But engagement with independent contractors and external experts, with attendant knowledge transfers, would be discouraged - particularly for early stage businesses for which such R&D expertise is critical. 3. There are other costs involved in conducting R&D, including external experts, specialist equipment, materials etc. These are contemplated in the second option "Direct and indirect costs as eligible expenditure" which seems more comprehensive, ties to Australian practice and ties to the measurement of R&D (i.e. all R&D expenses) as a percentage of GDP.
Question 11: What are the advantages and/or disadvantages of setting	1. Setting "overhead costs as a percentage of R&D labour costs" seems a pragmatic solution -from

Question from Discussion paper:	ATEED response:
overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?	experience with Callaghan Innovation R&D grant funding applications, this works well. 2. Callaghan Innovation uses a derived average of 20% of internal R&D wage costs as a proxy for R&D overheads -this seems a good starting point. 3. The concern about a "bias against capital intensive R&D activities" seems over stated -their actual R&D overheads might be smaller and they might also be claiming significantly for depreciation on R&D capital assets.
Question 12: Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.	1. No reasons are obvious to us -proposal looks reasonable.
Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?	1. As per ATEED response to Question 4 above, the definition of core activities, as applied to digital activities, looks fine. Some R&D activities such as AGILE and Design Thinking are covered in the support activities. 2. Including, within reason, "testing and software development" where they test/assist the manufacturability / usability of software seems reasonable, assisting the successful commercialisation of that software's R&D. 3. Including the integration of multiple platforms seems reasonable. Also the investigation of new software languages and tools for possible use in a R&D project.
Question 14: Are there reasons why continuity rules should not apply to tax credits? Please describe.	1. Continuity rules should apply so that value is maximised for existing and future shareholders. Presumably this is supported by overseas jurisdictions' experiences.
Question 15: Is the minimum threshold set at the right level? If 'no', please provide further details.	1. Yes, the initial threshold seems reasonable. Presumably this is based on overseas jurisdictions' experience. 2. Also, this level seems about right if we can presume that Callaghan Innovation Project Grant co-funding and Student Grant funding will remain. 3. However the rationale behind excluding expenditure on an Approved Research Provider is unclear. Also both the need for Approved Research Providers is unclear as is how they will be monitored.

Question from Discussion paper:	ATEED response:
Question 16: How important is a cap or a mechanism to go beyond the cap? Please provide further details.	1. Our general view is that while there should be a cap, there should be a mechanism to go beyond the cap, which would therefore allow for unanticipated scenarios.
Question 17: What features of a Ministerial discretion or pre-registration would make them most effective?	1. The two should be blended such that businesses exceeding the cap would pre-register, in consultation with The Ministry, however the Minister would have the final say. 2. There should also be clear definition of the criteria and on the assessment mechanisms. Plus a requirement for ongoing dialogue between the Ministry and the Company so that there are "no surprises" for either party, particularly if their R&D activities substantially change.
Question 18: What are your views on the proposed mechanisms to promote transparency and enhance evaluation?	1. Mechanisms look fine however more immediate, anonymised data could be useful. It would be useful if this was tagged by region and sector. 2. Also transparency on ongoing Government thinking on the effectiveness of the Incentive as well as transparency on thinking on possible changes to eligible activity and expenditure -again, "no surprises".
Question 19: Are there any other risks that need to be managed? Please describe.	1. There is an opportunity to remove reputational risk for Callaghan Innovation and/or ATEED by removing the question in Project Grant co-funding applications: "Are you aware of any issues (past, current or potential) relating to your business, its Owners or Directors (or equivalent), or your products or services that could bring New Zealand's or Callaghan Innovation's reputation into disrepute?" - this question has been used inequitably in the past. 2. Another concern we have is that Business As Usual expense is disguised as R&D expense, so increasing the perceived R&D percentage of GDP for NZ but both harming Crown revenues and diluting focus on actual R&D.
Question 20: What are the risks with making external advisors liable in this way?	1. This proposal seems wise.
Question 21: What is the right level of information required to support a claim?	1. R&D roadmap or planning document, plus relevant evidence of incurred costs. Underpinned with possibility of IRD audit and Callaghan Innovation scrutiny.

Question from Discussion paper:	ATEED response:
Question 22: What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?	1. Callaghan Innovation has considerable experience with managing claims for R&D reimbursement, including process and software.
Question 23: What integrity measures do you think Inland Revenue should use?	1. ATEED has no view on this at this time.

Any other comments:

1. **Value of relationships and relationship management**

   a) An unintended consequence of moving to Tax Credits rather than grants is the potential to decrease the engagement with the Regional Business Partner team and/or Callaghan Innovation team. The relationship with Business and Innovation advisors as sources of connections and advice can assist the company in their pursuit of innovation, R&D and business growth. A tax credit shifts the relationship to those in the business dealing with financial management and with the IRD.

   b) The relationship built with the company allows our ATEED Economic Development team to gather knowledge of the company, their products, team, aspirations and capabilities to help procure and match other opportunities to grow and internationalise Auckland businesses. These opportunities arise through programmes and opportunities provided by Auckland Council/ATEED and other partners including government departments.

2. **Existing Callaghan Innovation R&D Project and Student Grants.**

   c) The continuation of these will be very much appreciated by businesses and students - ATEED receives positive feedback on these and ongoing demand. The application to these grants of the criteria for eligible R&D activity will be very beneficial -currently seeming R&D activities are being excluded to the detriment of businesses and students.

   d) ATEED regularly receives feedback that the application process for Student and Project grant co-funding improves the outcome of the project by forcing the company to look at the project in more detail.

3. **Growth Grant 20% payment vs proposed Tax Incentive 12.5%**

   a) The rationale of the two systems need to be very clearly communicated to New Zealand business. We understand that the current Growth Grant is a payment (so subject to 28% corporate tax) while the proposed Tax Incentive is a 12.5% of eligible expenditure rebate on corporate tax.

   Therefore, $100 spent on eligible R&D earns $20 payment under a Growth Grant, then taxed 28% to a net-of-tax receipt of $14.40. Under the proposed Tax Incentive $100 spent on eligible R&D earns a 12.5% rebate, so a net-of-tax receipt of $12.50. The reasoning for this $1.90 reduction will need explanation to NZ business.

4. **Eligibility of Overseas R&D (p.18).**

   The eligibility of some overseas R&D is very useful. However, the wording on page 19 concerning 10% expenditure then 50% expenditure is not clear to us.

5. **Innovative Partnerships (p.27).**

   The attracting of "large international R&D intensive firms" to NZ sounds very useful. ATEED looks forward to continuing to assist with this through our business attraction and investment activity focussed on key international markets.

6. **"Avoid a fall in business expenditure on R&D (p.31).**

   From our discussions with business, more, targeted, messaging needs to be directed to R&D businesses now to keep them engaged with, and stimulated by, New Zealand's R&D and innovation ecosystem.

Thank you for the opportunity to respond to this consultation and ATEED is happy to provide further clarification and input as required.

Kind regards,

s 9(2)(a)

Submitter:

s 9(2)(a) [redacted]

[redacted]

[redacted]

[redacted]

Introduction – NZBIO Industry Body

One in three New Zealand workers is employed in a small business, and combined they contribute a third of New Zealand's gross domestic product. The report outlines the statistics on New Zealand's 515,046 small-to-medium enterprises (SMEs), and the more than 900,000 workers that the business with 20 staff or less employ.[i] SMEs make up about 97 per cent of businesses in New Zealand, and almost 70 per cent of them are single-worker businesses and are represented in every industry in the country. The biotechnology sector is no exception.

NZBIO is a vibrant member-based organisation focused on growing New Zealand's prosperous bioeconomy. NZBIO members commonality is they have a strong science and research at their heart, or they are closely associated with research institutions or research organisations. NZBIO encourages scientific collaboration both nationally and internationally to create partnerships driving innovation, competitiveness and sustainability that add value to our New Zealand export market.

NZBIO members are from research organisations, small to medium business, angel groups, venture capital, corporates and service providers. These members come from the agritech, healthtech, industrial, environmental and foodtech sectors. NZBIO has over 120 members with the majority of its members in the category of small-to-medium enterprises (SMEs).

NZBIO is focused on creating an enabling environment for its members and to remove barriers and encourage collaboration.

The overall output and outcomes is to:

- strengthen closer collaboration between academia and industry to speed-up innovation through knowledge exchange,
- support companies creating new IP and products,
- students and postgraduate researchers into internships in companies,
- facilitate cross-sectoral transfer of know-how and exploiting relevant synergies to create added value for New Zealand through convergence of approaches,
- and improve the creation of value add,
- enhanced productivity to make an impact on economic growth.

The impact of these outcomes help tackles societal challenges, using the application of biotechnology to increase productivity and competitiveness.

Summary

NZBIO is aware that the NZ Government is currently seeking feedback on the proposed design of a new R&D Tax Incentive.

The introduction of a Research and Development Tax Incentive is part of the Government's economic strategy to help improve the well-being and living standards of New Zealanders through better productivity, sustainability and inclusive growth.

There needs to be careful consideration to the approach to distributing tax incentives as:

- using R&D tax credits to grow or attract large R&D performing firms is essential to the New Zealand economy, however
- 97 per cent of businesses in New Zealand are made up of SMEs and these are the companies that rely on research and development funding and a steady cash flow

"NZBIO supports that no one size fits all in terms of driving innovation"

Responses to Consultation Document

The 23 questions are quite specific about the implementation of the R&D tax credit, however NZBIO submission is to highlight that the majority of the NZ biotech companies are:

1) SMEs
2) pre -revenue
3) cash flow is very challenging
4) research and development intensive, therefore fit into the definition for R&D
5) high risk research
6) can rely on international capability required for product development as not all technology or capability exists in New Zealand
    a. *a higher level of overseas R&D tax credit should be able to be claimed (provided evidence can be provided these contracts could not be undertaken in NZ)*
    b. *the proportion of overseas expenditure which could be claimed should be considered over the total project life and not just in a single year as certain part of the project life cycle might need to be done overseas. Which may render the claim invalid.*
7) requires both labour and new equipment as part of their research and development of products and services
    a. *Biotech is very equipment/capital intensive, and our business would favour the broader range of eligible expenditure costs and not just labour costs.*
8) create added value products/services and employ higher educated staff and pay higher wages
9) NZBIO recommends that the Callaghan Innovation Growth Grants or similar grants (20% tax rebate) are retained for R&D intensive SME companies
10) significant part to the New Zealand economy

On size fits all R&D Tax credits favours the large companies, however, disadvantages the SME business.

[i] Small Business Sector Report, Ministry of Business, Innovation and Employment, June 2017.

Oji Fibre Solutions

Discussion Paper on a Research and Development Tax Incentive for New Zealand

Submission by: Oji Fibre Solutions, June 1, 2018

Introduction

Oji Fibre Solutions (OjiFS) is a pulp, paper and packaging company with operations based in New Zealand and Australia. We employ over 1650 people. We manufacture market Kraft pulp, container board and a range of corrugated board packaging products and paper bags principally for the horticulture, dairy, meat and beverage industries. We export to over 15 countries, while the majority of the packaging products are sold to domestic customers. Producing more than 1million tonnes per year of pulp, paper and packaging products, OjiFS is NZ's largest manufacturer of recyclable bioproducts and its largest producer of bioenergy.

OjiFS supports the proposed R&D tax incentive. We welcome proposals aiming to encourage more industry led R&D. As a large exporter we believe New Zealand needs to consider our competitiveness in these areas. We note the reference to an OECD median at 12.5%. However, Canada, an important competitor in our sector, provides 15-35% credits. To us, 12.5% is a good start but we suggest a careful analysis of incentives in direct-competitor countries is needed.

Specific Responses

We believe New Zealand's R&D system, needs to become more efficient at importing and adapting technologies from overseas. Globally, much of the focus of R&D in the pulp, paper and packaging industry is in bio-technologies and bio-based packaging aiming to contribute to a low emissions economy. This investment is at large scale and is competitive. Our parent company is investing in these areas in Japan. More incentives in New Zealand will encourage OjiFS to invest in New Zealand-specific applications of the emerging technologies. As a small open economy, New Zealand has opportunities to benefit from this type of collaboration.

Question 1: Excluding SOEs, CRIs etc.

For the above reasons we support excluding CRIs and other government-owned research organisations from the tax incentive, if it encourages "technology pull" based on business innovation needs rather than a "science push". We do not have a view on SOEs.

Questions 2 to 8: R&D definition

OjiFS recommends an R&D definition to support commercial applications i.e. provide for "development". We believe the proposed definition and other aspects of scheme places too much emphasis on research over development. We would question whether this is appropriate given the aim is to help business undertake a greater amount of R&D.

We also recommend extending tax credit eligibility to include environmental sustainability, customer/market development activities, and 'software'. Our reasoning is:

- The Government's vision for the scheme includes "an environment we can be proud to leave to future generations";
- Retention and expansion of NZ's primary sector requires that we produce more from less. The transition to a low-emission economy and cleaner water requires a similar focus.
- Information technology continues to change the modern global economy beyond all predictions and at pace. OjiFS is a manufacturing business. IT will be important to innovation in our operations and the distinction between software and other 'research' is not always clear.

Many of NZ's critical economic constraints relate to environmental carrying capacity and the need to transition the economy to a lower dependence on Greenhouse gas emissions and water. Research aimed at resolving problems and limitations with existing products and services is generally misconstrued as 'development' but is well proven to lead to new and novel solutions and opportunities.

Question 9: Dual purpose activities

The exclusion of dual purpose activities from any R&D tax incentive is a major challenge for large industrial manufacturing operations like ours. In order to undertake and to implement R&D and innovation pulp and paper mills must develop a thorough understanding of the consequences any changes to one part of the plant may have on other parts of the plant and other products of the process. This can only be done through trials, which may contain activities which might be considered non-R&D but are an essential part of the innovation pathway. For this reason we believe the definition should allow for dual purpose activities.

R&D carried out overseas

OjiFS believes some R&D activities carried out overseas will benefit New Zealand so the credit should support this. However, the proposed limits are too restrictive (10% if more than half is in NZ). They should be increased. As an exporter our R&D will include developing new products for overseas markets (e.g. a packaging innovation) or adapting overseas technologies for NZ conditions (e.g. Japan-based biotechnologies).

Question 15 Thresholds

OjiFS considers the $100,000 threshold level to be appropriate. A lower figure would lead to a disproportionate level of compliance and administrative costs relative to relevant R&D expenditure. And it is advisable to set a cap on R&D expenditures, especially for capital intensive industries.

Questions 16 and 17 – Caps

While the proposed cap is reasonably large at $15million, as a large business, owned by a very large global business, we welcome ideas for providing for very large R&D expenditure. We suggest pre-registration should be the preferred mechanism as Ministerial discretion may bring risk of government picking winners or developing informal networks which may lead to the diversion of research effort indirectly related to the stated purpose for the tax credit.

Conclusion and Contact Details

OjiFS recognises the value of R&D to its businesses and to NZ's future prosperity and the environment. We would be happy to expand on the matters raised in out submission on request and look forward to the opportunity for further involvement in the development of research related tax and other policy.

Contact:

s 9(2)(a)
[redacted]
TASMAN MILL
s 9(2)(a)
[redacted]

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1st June 2018

RESEARCH AND DEVELOPMENT TAX INCENTIVE

Hill Laboratories is New Zealand's largest independent analytical laboratory, who currently receives an R&D Growth Grant which has enabled us to drive our R&D activities forward each year. This in turn has benefited our clients, who are largely involved in New Zealand's primary sectors and environmental management. We are pleased to be able to have the opportunity to submit feedback to the discussion paper on a Research and Development Tax Incentive for New Zealand.

In general Hill Laboratories supports R&D Incentives that help drive a growth in R&D activities and is pleased to see that the proposed new scheme intends to be able to capture a greater number of businesses that may not have qualified under the various R&D grant schemes. As a note though Hill Laboratories has been very happy with the current Growth Grant scheme especially for the following reasons:

- Certainty - once we had approval from Callaghan we had certainty around our eligibility and cash flow
- Cash flow – the quarterly claim process ensured regular cash flow against costs already incurred
- Administration – once approved and set up, the grant was very easy to administer with little complexity and costs

It would be great to see certainty, ease of administration and regular cash flow as part of the new R&D Tax Incentive.

A few areas we would like to make special comment on are:

Tax credit percentage
We feel that the 12.5% tax incentive could be higher to match at least the after tax benefit of the current R&D scheme, and act as a real incentive for companies to shift their focus and spending into the R&D space.

Cash-flow
The current scheme enables regular cash-flow which assists companies as they spend on R&D to be able to re-invest in and grow R&D. We would hope this could be maintained going forward, or at least taken into account through the transitional period.

As this is now a credit against residual tax, it is assumed that one could include in estimates for provisional tax purposes and therefore deduct from the three provisional tax payments. One concern is that if estimates are not calculated correctly or the IRD assesses some of the R&D claim is not allowed, there is the potential of Use of Money interest on shortfall in provisional tax. We would be looking for some clarity on this going forward.

If not taken into account in the provisional tax payments but rather recoverable once the yearly tax return is completed this would delay cash-flow considerably.

IRD administration
With the R&D tax incentive coming under the IRD's jurisdiction, this could have unintended consequences for companies and their directors if a claim in made that is not approved following the IRD's assessment or as a result provisional and residual tax is underpaid. It would be great to get some clarity around that.

Callaghan's role
Callaghan has been a great source of support around the R&D grants and we would support an ongoing role for Callaghan in assisting companies with understanding the new requirements, as well as a way of connecting to other organisations. We would also like to see a possible involvement by Callaghan in pre-approval to assist organisations with certainty around their claims and processes.

Pre-approval
It is hard to see from the proposal whether or not there would be any pre-approval so that companies will remain compliant with tax regulations when they come to make their claims. Some guidance and clarity in this area would be useful.

Transition from current R&D Grant to R&D Tax Incentive
We would advocate for a transition period where one could pro-rata the year between the grant and new tax incentive if a grant ends during the period 1 April 2019 and 2020.

Comments to some of the specific questions on the proposal
Q2 and Q4 and Q5. Definition
We feel that the definition "using scientific methods" may be too narrow to capture a significant portion of R&D being undertaken within New Zealand. Whilst here at Hill Laboratories we do focus predominately on science, there is increasing Information Technology-related development being undertaken which could be unintentionally excluded from the definition.
Secondly the proposal suggests that the "credit is only available for solving problems that have not already been solved" which may well limit organisations from claiming some R&D activities that may in their view be a new problem and/or new way of doing things, which the IRD deems otherwise.
We feel further clarity on the definition as well as some examples would be useful.

Q7. Activities excluded from the tax incentive
It is often necessary to perform trial runs as part of R&D, especially in the development phase, and so would question the exclusion of "pre-production activities, such as demonstration of commercial viability, tooling-up and trial runs", and it would be good to see this area reconsidered.

Q10. Direct labour costs
We see that there would be a distinct disadvantage to many organisations in limiting the eligible expenditure just to the labour component, as a significant amount of R&D costs relate to associated costs like utilisation of assets and other resources.

Q11. Treatment of overhead costs

As mentioned in the proposal a distinct disadvantage of allocating the overhead costs as a percentage of R&D labour costs is that it might disadvantage capital high R&D activities. An approach could be to apportion costs based on the driver of the costs, so some may be people driven and therefore labour costs may be appropriate, some costs may be capital asset driven and therefore utilisation may be a better driver to apportion those costs.

Q12. Commercial consideration

A lot of organisations undertake R&D, and more specifically the "D" of R&D, with an aim to solve a problem and ultimately commercialise the outcome. The concern would be that one could argue then that a lot of the R&D activities "could reasonably be expected to receive consideration", and therefore limit the expenditure eligible for the R&D tax incentive. In particular, we are spending an increasing amount of money on software development and data science, to develop new processes, products and services for our clients. We are being innovative in some of the things we are doing, and we hope to create some new value and successfully implement it in-house, to position us to then develop new services and products based on that IP. s 9(2)(b)(ii) [redacted] Data science and software development are expensive undertakings, and organisations are often limited by their own resources and profits, and as with us may well result in receiving a consideration in the future and so feel some clarity on this would be useful to ensure that this investment in development is eligible for the R&D Tax Incentive.

Yours faithfully

s 9(2)(a) [redacted]

s 9(2)(a) [redacted]

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COMMENTS ON R&D TAX INCENTIVE

INTRODUCTION

Trinity Bioactives Ltd is a contract research organisation (CRO) based at the Callaghan Innovation Quarter in Gracefield, Lower Hutt.It undertakes research and development projects, investigations and consultancies for companies involved in the biotechnology sector. As it has a number of collaborators who provide complementary services, it can provide a comprehensive facility to clients. Currently it has a client base of approximately 90 organisations ranging from small start-ups and SMEs through to large entities with multi-national distributions and sales.

Trinity Bioactives has been in existence for the past 24 years, initially as the Bioactivity Investigation Group (BIG). Consequently it has built up considerable knowledge and experience of R & D in the biotechnology sector in association with New Zealand organisations.

s 9(2)(a)

Question 1: If SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions, and their subsidiaries are excluded from the tax incentive, what will the likely impact be on business R&D in New Zealand?

There are several types of research that these organisations undertake.

1. Some of their research activities are sub-contracts to other entities. We believe that this proposed arrangement should have negligible effect on these.
2. Some of their research is funded by competitive grants. For example, a CRI may get a grant from such a fund. Others private enterprises may also get similar grant from these same sources. If these organisations could not obtain the tax credit but the private enterprises could, then the former would be at a disadvantage.
3. Some of the research of these organisations is funded from within their own budgets (internally funded). If they could not claim a tax credit for this work, they would be at a disadvantage. For this research and development they should have similar eligibility as do other businesses.

Question 2: How well does this definition apply to business R&D carried out in New Zealand?

This is probably a fairly accurate definition.

Question 3: Does this definition exclude R&D that you think should be eligible, please illustrate with examples.

This definition does not include the following which would be important aspects of research and development:

1. Clinical studies in both human and animals. These are very important steps in the marketing of products, both for human and animal applications. These studies are necessary for both registration of products and processes and also for developing markets.
2. Database searching. In the establishing of the prospects of the product or service that are to be developed, it is essential to know what is already known, what might be conflicting (especially in the areas of protected IP and freedom to operate). If research is to be undertaken, a knowledge of the appropriate methodology and approaches is a pre-requisite. All of these aspects will require database searching and this is fundamental in a large number of research undertakings.
3. A business often may need to consult with external parties in relation to the research either being proposed or during its progress. These could include assessment and review of reports and protocols so as to establish the feasibility of new processes and products.

Question 4: Does the scientific method requirement exclude valid R&D in some sectors, please illustrate with examples?

Restricting eligible undertakings to investigations and research that involves just the scientific method only is much too restrictive. There are a number of aspects of research and development that are outside of this definition that should be eligible. Some examples of these are:

1. The planning of the research and development proposals will have costs associated with it. These are essential to the performance of satisfactory investigations including the execution of the scientific method. As well it may be worth having these proposals assessed independently and there will be a cost associated with this.
2. Review of papers, reports etc. This can be at several stages. For example, as part of the planning, the available literature on the topic including published papers, patents etc need to eb assessed. Likewise a comprehensive review of a research project that is undertaken either internally or even by a contractor may need to be performed by an expert. This is a valid research cost.

3. There may be other consultancies that could be considered as a research and development activity and so eligible for the credit.

Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?

If the result of a research and development project was the advancement of science and technology and this advancement was significant, then it is quite likely that the developer would wish to protect the novel IP. Because, if was not protected, the advancement might become public knowledge and so would be available to others. It is difficult to assess exactly what the impact might be. Obviously it would be dependent on the nature and importance of the advancement.

Question 6: How well does this definition apply to business R&D carried out in New Zealand?

This definition would be part of the business R & D. Our response to Question 4 above is relevant to the response to this question.

Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.

In principle, these exclusions should apply. However, there are likely to be some 'grey' areas. This covering of these would be achieved by the tightening of some definitions for various activities. For example, claims associated with the costs of patenting and of licensing would come within these considerations. Also the costs of compliance with statutory and regulatory requirements associated with the products, services or processes that are being or have been developed.

Question 8: Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?

No comment

Question 9: What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?

If dual purpose activities were completely excluded, this would be unreasonable and unfair. It would be better to devise tests and apply them to determine what of the activity is genuine R & D. However how this might be achieved is likely to be complex.

Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?

In biotechnology R & D there are many more aspects than just labour. These include the costs for purchasing or hiring equipment, the maintenance and operational costs associated with equipment. As well there are aspects that mentioned above in response to Question 4.
In biotechnology, probably a more important aspect is that companies will contract much of their research because they do not have the resources to conduct it in-house. Such contracts which will

involve multiple aspects will be invoiced by the contractors to the company. These invoices should be able to be included in the company's eligible expenditure in a claim.

Question 11: What are the advantages and/or disadvantages of setting overhead costs as a percentage of R&D labour costs? What would the appropriate percentage be?

The setting of overheads as a percentage of labour costs is frequently used in research costing and so we would agree with this as a principle.
However if this formula is used there are a number of aspects of what should be included as a genuine overhead will be debatable and so the level of claim will rely on the honesty of the business (eg depreciation, employee expenses).
We agree with many of the risks that have been itemised in the Discussion paper.

Question 12: Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive?
Please describe.

No comment

Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?

No comment

Question 14: Are there reasons why continuity rules should not apply to tax credits?
Please describe.

While we do not have strong opinions on this question, we would prefer to see continuity rules applied.

Question 15: Is the minimum threshold set at the right level? If 'no', please provide further details.

A threshold of $100,000 is very high. Many businesses would undertake some R & D (often preliminary or proof of concept) which would be less than this but would be genuine R & D. The amount involved in this type of endeavour would often be even less when conducted 'in house'. So a threshold will exclude many SMEs and start-up companies.
As well the continuity rules in question 14 above would have to apply. Many of these SMEs and start-ups will not be making a profit and so tax credits are not of any use unless some continuity applies and may need to be available for a number of years. In our experience in the biotechnology field, some R & D benefits can take some time to be realised.
If R & D is contracted to an approved provider, then no threshold is in operation. For our 26 years experience as a research provider in the biotechnology area, there are numerous small businesses for whom this is essential. Thresholds will stifle R & D for entrepreneurial companies as they do not have budgets for extensive R & D and will not benefit from any tax credit in the year of the expenses.
The graph 'Distribution of BERD across firms' (page 24 of the Discussion document) shows that many of the firms (approximately 50%) spend less than the $100,000 proposed as the threshold. From our experience as a R & D provider, many of these are spending much less than $100,000. The level for

this group may well be averaging around $20,000 to $25,000. We can provide more details on this and also numerous examples.
Consequently if this scheme is implemented, many will not be able to benefit from it.

Question 16: How important is a cap or a mechanism to go beyond the cap?
Please provide further details.

No comment.

Question 17: What features of a Ministerial discretion or pre-registration would make them most effective?

No comment.

Question 18: What are your views on the proposed mechanisms to promote transparency and enhance evaluation?

With regards to transparency, the proposed 2 year period before publication should be after the tax credit was approved, not from the time of applying for it.
We think that a number of companies would not want the granting of the tax credit to them be made public. Certainly they would not want details of the actual R & D projects made known. In many cases they may not want it to be known that they had been undertaking R & D and approximately how much they were spending on it.
The question really is why does the tax credit for this activity need to be made public, especially when no other allowances with respect to taxation are public information.

Question 19: Are there any other risks that need to be managed? Please describe.

With respect to international companies, the structure of them in relation to the overall taxation system, in New Zealand needs to be monitored closely. Many of these companies have strategies to minimise their tax liabilities.
However it is to be anticipated that the majority of the businesses taking advantage of this credit will be genuine New Zealand companies which are attempting to develop products and services that will benefit the New Zealand economy in the first instance.

Question 20: What are the risks with making external advisors liable in this way?

We do not see any risks with this proposal. In fact we do see advantages with extending the penalties to advisors. The threat may lead to a reduction in 'inflated claims'.

Question 21: What is the right level of information required to support a claim?
Essential information to be submitted as part of the R & D claim should be full details of the R & D, including the hypothesis where appropriate.
If goods and/or services are provided by external parties to the claimant, then records of these costs either be available or submitted (eg invoices). These could be uploaded as attachments to accompany the claim. As well registration details of the R & D providers should eb provided. However this, on its own, would not be sufficient evidence.

We would endorse the proposal to have statements and instructions in the guide regarding the record-keeping.

Question 22: What opportunities are there for customers to submit R&D Tax Incentive claims via third party software?
We have no knowledge or experience with such opportunities.

Question 23: What integrity measures do you think Inland Revenue should use?
As part of the auditing of claims for R & D tax benefit5s, there may be a need to bring in expert advice and/or consultation. As it is expected that a number of the R & D projects will be quite technically and scientifically sophisticated, external assessments may be required reasonably often. This will be in addition to the normal auditing procedures that IRD would utilise.

s 9(2)(a)

1 June 2018

Submission by

to the

Ministry for Business, Innovation & Employment (MBIE)

on the

Fuelling Innovation to Transform our Economy – A Discussion Paper on a Research and Development Tax Incentive for New Zealand

1 June 2018

s 9(2)(a)
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s 9(2)(a)

FUELLING INNOVATION TO TRANSFORM OUR ECONOMY – A DISCUSSION PAPER ON A RESEARCH AND DEVELOPMENT TAX INCENTIVE FOR NEW ZEALAND
SUBMISSION BY NZTECH[1]

1.0 INTRODUCTION

1.0 NZTech welcomes the opportunity to make a submission to the Ministry of Business, Innovation and Employment (MBIE) on the Discussion Document *'Fuelling Innovation to Transform our Economy'*, referred to as the 'Discussion Document'.

1.1 NZTech, as a member of the Affiliated Industry Group within BusinessNZ, has built its submission using the core of the BusinessNZ submission maintaining the relative points of alignment and adding in specific points relative to the technology ecosystem.

1.2 On several occasions, NZTech has encouraged the introduction of R&D tax credits, however this is in the context of it being an additional method of stimulating R&D and not as a complete replacement to growth grants or creating a situation whereby previous recipients of growth grants will receive less when transitioned to tax credits. Additionally, NZTech has, for several years, been encouraging a review of how R&D is defined, particularly with respect to software development and high growth technology firms. This consultation process provides an excellent opportunity for the government to undertake this review.

2.0 SUMMARY OF RECOMMENDATIONS

2.0 **NZTech's primary recommendation is for:**

(a) ***The Government to undertake a full review of how software R&D and R&D in high growth hi-tech firms actually happens, through close engagement with the tech sector, so as to be able to design an R&D incentive scheme that supports the country's fastest growing sector;***

2.1 Notwithstanding its primary recommendation, if the Government decides to introduce R&D tax credits, NZTech recommends:

(b) ***That the transition from growth grants to R&D tax credits involve (a) a rolling over of the growth grants during transition, (b) an extension of the growth grants out to 31 March 2021, and (c) further work is undertaken to better understand the implications on high growth hi-tech firms, in particular software firms;***

(c) ***The R&D tax credits' definition places a greater emphasis on development, with an option for the definition to specifically include the word 'development';***

(d) ***That determining eligible expenditure on R&D is based on a broader range of direct and indirect costs (including options for determining appropriate overhead expenditure);***

(e) ***That R&D software activities are adequately addressed and recognised in the further work currently being undertaken by officials, and changes to growth grants are delayed until this process is complete.***

R&D Grants

2.2 As outlined in the Discussion Document, the R&D tax credit will not stand alone. After stopping the R&D tax credit scheme in 2008, the previous Government introduced the R&D grant system.

2.3 Although not perfect, the general view of businesses that have gone through the process and received a growth grant is that the scheme has worked well. It has been fairly simple to use both for applying and complying, while supporting cash flow and facilitating innovation, particularly in the early stages. There has also been a greater level of certainty, particularly as once pre-approval has been given, the focus then can be both on research and

[11] Background information on NZTech is attached as Appendix One.

development. Last, the grant schemes - particularly the growth grant – have led businesses to undertake projects they would not otherwise have undertaken.

2.4 However, there has been ongoing eligibility issues for software firms and this process should offer an opportunity to stop and better understand how R&D works in high growth hi-tech firms and software firms in particular.

Transitioning from Growth Grants to the R&D Tax Incentive

2.5 As well as the R&D Discussion Document, we note the Government has also released a Discussion Document entitled *'Managing the Transition from Growth Grants to the R&D Tax Incentive'*. While NZTech does not intend to submit on that Document, we note that those who currently receive growth grants will be able to do so until 31 March 2020. Current growth grant recipients have the option of transitioning to the R&D tax credit scheme from 1 April 2019, with 31 March 2019 the closing date for any new growth grant applications and extensions to existing growth grant contracts. The rationale behind this phasing out, is that the Government will be funding similar types of activity through the R&D tax credit, which they view as having a similar purpose. To the best of our knowledge, we have not seen any indication from the Government that any other types of R&D grants will be phased out, although this is obviously possible given the shifting nature of policy development.

2.6 While R&D growth grant recipients will eventually transition to the R&D tax credit scheme, our members have noted the following critical concerns:

- Overall, companies currently receiving the growth grant will most likely receive less money, making them less likely to innovate,
- As it is a tax based scheme it will automatically exclude most high growth software firms that which run at high levels of losses as they aggressively invest in product development and market expansion,
- The transition period from the growth grant to the tax credit will create business uncertainty.

2.7 A broadening of the scope for what is classified as R&D expenditure would assist with the first concern (discussed in more detail below) while the growth continuation of some form of growth grant, or at least a significant extension to the transition period while more work is done to understand the implications for high growth tech firms would assist with reducing uncertainty.

Recommendation: That the transition from growth grants to R&D tax credits involve (a) a rolling over of the growth grants during transition, (b) an extension of the growth grants out to 31 March 2021, and (c) further work is undertaken to better understand the implications on high growth hi-tech firms, in particular software firms.

Rate of the R&D Tax Credit Scheme

2.8 The Discussion Document states the R&D tax credit will be set at 12.5%. This is below the 15% rate previously introduced under the 2008 tax credit scheme and lower than the 20% growth grant (14.4% after tax) over the last four years. A relatively low 12.5% does not seem consistent with the aspirational goals outlined in the Discussion Document.

2.9 While we understand the risk of total fiscal cost has seen the Government err on the side of caution by way of setting a lower tax credit rate than previously, obviously existing growth grant users will receive a lesser amount. Also, the lower the rate the lower the probability of a business applying for a tax credit given both actual costs and opportunity costs need to be taken into account. Much like the corporate tax rate, the rate for the R&D tax credit scheme sends an upfront signal to the global market about how seriously investment into innovation and technology is regarded, especially if a primary aim is to drive multi-nationals to shift R&D activities to New Zealand.

2.10 As we will discuss in response to question 16 below, there is an inverse relationship between the rate of the R&D tax credit and a cap on the amount a business can claim each year.

3.0 SPECIFIC DISCUSSION DOCUMENT QUESTIONS

3.0 The Discussion Document has asked a series of questions relating to the introduction of an R&D tax credit. We would like to take the opportunity to comment on some of these questions.

Question 2: How well does this definition apply to business R&D carried out in New Zealand?
Question 3: Does this definition exclude R&D that you think should be eligible, please illustrate with examples.
Question 4: Does the scientific method requirement exclude valid R&D in some sectors? Please illustrate with examples.
Question 5: What would the impact be on business R&D in New Zealand if a materiality test was applied to both the problem the R&D seeks to resolve and the intended advancement of science or technology?
Question 6: How well does this definition apply to business R&D carried out in New Zealand?

3.1 The key to any definition, particularly in relation to R&D, is that it is easily understood by those applying for the credit, has few loopholes and yet is broad enough to capture those at whom the scheme is aimed. In short, a balancing act is required to satisfy both administrators and recipients.

3.2 We are pleased to see the Government has taken the opportunity to investigate definitions for tax incentive provisions based on international best practice. There are countries that are similar to New Zealand in various respects and have success stories (including software) around which to draw on for any R&D incentive approach introduced to New Zealand.

3.3 The Discussion Document states the current definition of R&D used in the R&D grant system and for income tax deductibility, based on the New Zealand equivalent to International Accounting Standard 38 (NZIAS 38), is not considered suitable. This means any new definition on top of the one used for R&D grants is likely to create significant compliance and administration costs, especially as the existing definition is simpler to use for taxpayers already familiar with it for accounting purposes.

3.4 Regarding the definition now proposed for R&D tax credits, we note that the 2007 Act defined R&D as:

1. *Systematic, investigative and experimental activities (SIE) that are performed for the purposes of acquiring new knowledge or creating new or improved materials, products, devices, processes or services and that:*

   - *are intended to advance science or technology through the resolution of scientific or technological uncertainty;*

     or

   - *involve an appreciable element of novelty.*

2. *Other activities that are wholly or mainly for the purpose of, required for, and integral to, the carrying on of the activities in paragraph (a).*

3.5 The new definition of R&D (below) is in many ways very similar to the definition used in 2007:

(a) Core activities: those conducted using scientific methods that are performed for the purposes of acquiring new knowledge or creating new or improved materials, products, devices, processes, or services; and that are intended to advance science or technology through the resolution of scientific or technological uncertainty.

OR

(b) Support activities: those that are wholly or mainly for the purpose of, required for, and integral to, the performing of the activities referred to in paragraph (a).

3.6 Despite the similarities between the 2007 and the new definitions, NZTech members who receive the current R&D grants and/or would look to apply for the R&D tax credit scheme generally agree the tax credit eligibility criteria are too greatly weighted toward 'R', rather than 'D'. Some even see the scheme as an 'R' only scheme. The problem with the imbalance between the scheme's two key aspects is that businesses predominantly spend money on 'D' than 'R'. Therefore, we are concerned that if the current definition is introduced, the ability for many businesses to apply for and succeed in getting the R&D tax credit will be greatly affected.

3.7 Also, this limitation will be even more evident when smaller businesses are considered. While larger businesses will have some capacity to undertake research, in reality this is far less likely for SMEs. The financial costs that represent a larger proportion of their total capital mean SMEs, typically, do not focus on research.

3.8 As a first step to address this imbalance, we believe the definition requires a greater emphasis on 'development'. While we have no strong views as to the exact wording that would largely rectify this problem, a positive start would be to include the word 'development' in the definition.

Recommendation: That the definition for R&D tax credits places a greater emphasis on development, with the definition specifically including the word 'development'.

3.9 The current and proposed definitions of R&D also prevent startup software companies from engaging with the proposed R&D tax credit scheme. Successful software companies have rapid growth rates however with software startups the focus tends to be on growth of users not profit with most startups running significant losses as they invest in product development and market expansion. This would exclude them from an R&D tax incentive scheme.

3.10 New Zealand has a growing number of successful software firms like Xero, Pushpay, Soul Machines, Vend, PikPok, and Grinding Gears who spend significant amounts on R&D as their products need constant development. These firms run at a loss as they invest in global market growth and product development and yet will have no access to tax incentives as they are loss making.

3.11 The consultation document says "The Government is committed to providing a better policy option to support these businesses. However, the policy issues are complex and will not be resolved in time for the introduction of the Tax Incentive in April 2019 […] The existing R&D tax loss cash out scheme may be reviewed as part of any further policy work but no changes will be made to it for the 2019-2020 income year." It appears that the consultation about the tax credit policy admits that there is a lack of knowledge on how to apply R&D criteria to software and that this isn't aimed at startups, yet the proposal is still to phase out the growth grants making it even harder for software companies to engage in R&D incentives.

3.12 The tech sector is the fastest growing part of the economy, it already accounts for 9% of exports and has the fastest employee growth, the highest paid employees, and the highest spend on R&D. The suggestion to remove growth grants without due respect for the implications on this fast growing part of the economy is not recommended.

Recommendation: That the transition from growth grants to R&D tax credits involve (a) a rolling over of the growth grants during transition, (b) an extension of the growth grants out to 31 March 2021, and (c) further work is undertaken to better understand the implications on high growth hi-tech firms, in particular software firms.

Question 7: Are there any reasons why the exclusions should not apply to support as well as core activities? Please describe.

3.13 In addition to discussing the specific issue of dual purpose activities in question 9 below, the only other point we wish to raise is that it needs to be made clearer to the business community that the excluded activities obviously do not reach the threshold for the R&D tax credit scheme (are not core activities). However, as support activities (part (b) of the definition) there is a higher likelihood they would be included. But many businesses will simply see the excluded list and automatically assume it applies to the entire definition.

Question 8: Please provide any examples where social science research is/has been a core part of business R&D in New Zealand?

3.14 On balance, in most instances we believe research on social sciences, arts or humanities should not be included as part of R&D incentives. While we support research into these areas, we believe this will not bring about the level of innovation, investment and productivity the Government is seeking.

3.15 However, an exception to this should be where social science research activities are integral in R&D initiatives, such as using artificial intelligence to better understand the social implications for new product developments.

Question 9: What is the likely impact on business R&D in New Zealand if dual purpose activities are ineligible for the R&D Tax Incentive?

3.16 While NZTech appreciates the stance taken regarding dual purpose activities – namely an R&D tax credit would be better targeted if it applies to an activity conducted solely for an R&D purpose – we strongly urge caution. In almost all situations, a business will undertake R&D for the purpose of making income as businesses are generally not narrowly defined by research activity. They have, continuously, to be sufficiently nimble to look for opportunities in the market where R&D is undertaken with the end purpose of commercialising the work. Therefore, to apply the tax incentive solely to R&D purposes without recognising the associated purpose of commercialisation would inhibit almost all businesses from applying. For instance, it is common practice in

certain industries to de-risk the commercialization aspect of R&D by pre-selling where possible to recoup part of the cost soon after completion.

Question 10: What are the advantages and/or disadvantages of limiting eligible expenditure to R&D labour cost?

3.17 Of the two approaches that are outlined for determining eligible expenditure, NZTech strongly prefers the second approach whereby it is based on a broader range of direct and indirect costs (including options for determining appropriate overhead expenditure). While the labour cost method may be simpler, it would not maximise the potential of the regime to raise R&D expenditure and therefore reaching the goal towards 2% of GDP.

Recommendation: That determining eligible expenditure on R&D is based on a broader range of direct and indirect costs (including options for determining appropriate overhead expenditure).

Question 12: Are there any reasons why expenditure related to R&D activities for which commercial consideration is received should be eligible for a tax incentive? Please describe.
Question 13: What variations or extensions to the definition of core activities are required to ensure it adequately captures R&D software activities?

3.18 Software R&D has become increasingly important in our economy. The fact that it has accounted for approximately 40-50 percent of the value of grants in the last three years is testament to this. Also, we would presume the level and depth of R&D software activities has grown exponentially since New Zealand last had an R&D tax credit ten years ago.

3.19 We are pleased to note the Discussion Document mentions officials currently undertaking additional work to see how the R&D definition should apply to software. However, we are concerned the definition of R&D tax credits is very similar to the one used in 2008 and feedback from our members has been that many struggled to meet the 2008 tax credit definition when it came to software. Therefore, unless there is a meaningful discussion on ensuring the barriers to including software are at an appropriate level (such as opening the definition up to the novelty aspect for software), there is a high likelihood that in many instances software activities will be excluded.

3.20 Concern has been raised above regarding the indication that the changes to growth grants will occur relatively soon potentially without having time to fully understand the implications for software companies and New Zealand's fastest growing sector. Work on understanding how R&D works in the software and high growth tech sector needs to be addressed with urgency.

Recommendation: That R&D software activities are adequately addressed and recognised in the further work currently being undertaken by officials, and changes to growth grants are delayed until this process is complete.

Appendix One - Background information on NZTech

NZTech is the voice of the technology ecosystem in New Zealand. A purpose driven, not-for-profit, membership funded non-governmental organisation (NGO) whose purpose is to create a prosperous New Zealand underpinned by technology. NZTech represents 19 technology associations and over 800 organisations from across the technology ecosystem that combined employ more than 10% of the New Zealand workforce:

NZTech represents:

- New Zealand Technology Industry Association (NZTech)
- Artificial Intelligence Forum of New Zealand (AIFNZ)
- AgriTech New Zealand (AgriTechNZ)
- Blockchain Association of New Zealand (BAANZ)
- Canterbury Tech
- Education Technology Association of New Zealand (EdTechNZ)
- Financial Technology & Innovation Association (FinTechNZ)
- GovTech World
- New Zealand Game Developers Association (NZGDA)
- New Zealand Health IT Association (NZHIT)
- New Zealand Biotechnology Association (NZBIO)
- New Zealand Software Association (NZSA)
- Precision Agriculture Association of New Zealand (PAANZ)
- Spatial Industry Business Association (SIBA)
- Tech Leaders Association
- Tech Marketers Association
- Tech Women Association
- The New Zealand IoT Alliance (IOTA)
- Virtual Reality and Augmented Reality Association (VRARNZ)

Submission on proposed Research and Development Tax Incentive (RDTI)

Venture Taranaki, 1 June 2018

Venture Taranaki is Taranaki's regional development agency, delivering economic development and tourism promotion services and programmes across the region. Venture Taranaki is a Regional Business Partner and works closely with MBIE and Callaghan Innovation to facilitate research & development funding for Taranaki businesses.

One of Venture Taranaki's focus areas as an economic development agency is providing support for local businesses to undertake research and development to help grow their business. Incentivising innovation is key to enabling our businesses to innovate and adapt and helps build a stronger and more resilient regional economy.

Many of our comments in relation to the RDTI do not fit neatly within the discussion questions outlined in the discussion document. Consequently, we have structured our submission to begin with comments about the proposed tax incentive generally, followed by discussion of the broad themes canvassed by the discussion questions.

General comments

As an organisation working closely with New Zealand businesses undertaking research and development, Venture Taranaki welcomes a focus on how government can further encourage and grow research and development activity for the betterment of businesses and the New Zealand economy as a whole.

It's important that any alterations and/or additional incentives and programmes to support and encourage research and development and innovation activity, do in fact, better meet the needs of businesses, and not dilute that support.

Businesses benefit from both funding support and engagement support to build capability and innovation within their business. The current grant programme model does also expose and encourage businesses to engage with either Callaghan Innovation and/or Regional Business Partner staff who connect, support and help develop research and development and innovation skill and practice within the business. It is unclear how the tax incentive programme will encourage a higher level of quality research and development and innovation practice, or how it will sustain the level of additionality that current grant programmes encourage.

Support for businesses looking to undertake R&D projects

The 12.5% RDTI will see a significant reduction in the financial support available for many businesses looking to undertake R&D projects. These businesses may currently be eligible for either a 20% Growth Grant or a 40% R&D Project Grant. It is unclear how the RDTI will reach a more diverse range of businesses or increase New Zealand's R&D activity and expenditure. Removing the

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intensity requirement does potentially open up eligibility for some businesses, but does not necessarily mean that these businesses would utilise the tax incentive to increase their research and development investment.

The existing grants scheme for R&D requires businesses to work with a Regional Business Partner (RBP) on their application for co-funding. This allows the RBP to identify any support that the business may need and also to connect them in with the local innovation eco-system where they can access further expertise and advice to help with their R&D initiatives and with the broader business activities they undertake. We believe this support is essential to help the businesses turn their R&D activity into commercial success. How will the quality and success of the R&D activity be monitored under the new system?

The RDTI process means that fewer businesses will engage with Callaghan Innovation, and as a result, take up of Callaghan innovation improvement programmes will likely be less. We would anticipate this resulting in less productive R&D spending with fewer successful outcomes.

RDTI process

The RDTI is an end-of-year process that requires businesses to manage their cash-flow to fund their R&D activities up-front. The current system allows for funds to made available quarterly which is much easier for businesses to manage from a cash-flow perspective.

Transition to the RDTI scheme

Companies currently on a Growth Grant who have a three year rolling R&D plan will now need to change that plan to allow for both the removal of the Callaghan Innovation 20% contribution and the cash flow implication of the tax credit – much later receipt of funds versus the grant. Reducing R&D expenditure would be a likely outcome.

Companies who have recently qualified for a Growth Grant and have had their application in the IMS application system, but not yet approved, prior to the R&D Tax Incentive announcement will have applied on the understanding that they were applying for a 3 year grant and planned accordingly. Again R&D could be expected to decrease beyond 2020 to stay on that budget. This may negatively impact on the relationship of trust between these companies and the government.

A transition period that retained the 3 year Growth Grant contract for both existing companies and those with applications in the system would respect the existing contracts, protecting jobs and allowing companies to keep to pre-planned budgets. It would also promote goodwill between those involved in private sector R&D and government. In this case, the R&D Tax Incentive could be implemented sooner while existing Growth Grants ended in parallel at the close of their respective 3 year terms. It is not clear that all Growth Grants need to complete on the same date as they started at different times.

If the Growth Grants were allowed to continue to the end of their 3 year term then there would be no need for the complex tax loss temporary grant.

In summary, the best option for businesses to transition from a Growth Grant would be for those on the 3 year contract, or in the IMS application system, to complete that contract term with no

renewal. For those contracts in 2 year renewal, to complete that term with no further renewal. Once finished, each company then applies for the R&D Tax Incentive for R&D spend from the point at which the Growth Grant ended.

Discussion Question Themes

R&D Definition

As currently worded, we anticipate the definition of R&D would exclude a high proportion of currently co-funded business R&D, resulting in a decrease in this activity around the country. This definition could also be interpreted to exclude some software R&D.

We believe the focus of any incentives in this space should be supporting New Zealand businesses to be commercially successful, rather than focussing primarily on the generation of new science and technology.

A business' R&D programme may require external expertise to resolve scientific or technological uncertainty for the business, rather than generating 'new' knowledge. The business needs to resolve this uncertainty to move forward with their commercial plans for their product and/or service. Existing science and technology is not necessarily available to businesses due to intellectual property issues. Much commercial R&D remains inaccessible to others due to the need to protect the commercial interests of the parties involved.

Eligible expenditure on R&D should include more than only direct labour costs but also indirect costs. In an economy dominated by small firms it is all the expertise for any new R&D is available in-house. Sub-contracted expertise in engineering and prototyping for example is an efficient way to manage varying requirements and should be included in RDTI consideration as it is overseas.

Exclusion of SOEs, Crown Research Institutes, District Health Boards, Tertiary Institutions

We have concerns about this exclusion as the number of eligible businesses will decrease because of the reduced definition that only refers to private business. There are a number of businesses who have a percentage ownership from SOEs etc which will now be excluded. The recommendation is to align more with Callaghan Innovation's eligible business definition which allows up to 50% ownership by SOEs.

R&D Threshold

The proposed $100,000 threshold appears to be arbitrary and may not achieve the desired outcomes. The rationale for the $100,000 threshold seems to be convenience of processing rather than anything beneficial to New Zealand businesses.

This threshold is too low and may mean that businesses are not putting significant investment into R&D activity. The low threshold could impact on a business' ability to choose an R&D Project grant (which is funded at 40% of R&D costs) as an option if an RDTI is mandated at spends over $100,000 per year. Our recommendation is to align the tax credit threshold with the R&D Growth Grant threshold which is a minimum spend of $300,000 each year.

Scientific method requirement

Valuable R&D activity may be undertaken by a business that is not reliant on the strict application of the scientific method, for example, experimentation with known science or technology applications within a situation specific to the business.

This definition may exclude some applied R&D. The definition should incorporate the need to investigate opportunities rather than just solve problems. It is also not helpful for R&D in the software / digital sector – this is noted as an issue on page 22 of the discussion document and should be resolved fully prior to any change.

The requirement to advance science and technology is not necessarily relevant to business growth and commercial success. There will be many examples of businesses throughout the country working on R&D initiatives that use existing science and technology. It is necessary to the commercial success of these businesses for them to undertake the R&D that is relevant to their business activity and that will give them a competitive advantage in the national and international market place.

Support activities

Given the long list of exclusions, the definition of supporting activities is narrower than which currently exists. Incentives for support activities should be assessed on the degree to which they are integral to the R&D activity and its potential for contributing to the commercial success of the business undertaking it.

Some of the support activities listed in the discussion paper are associated with R&D and are often the mechanism that enables the R&D to happen. The cost of these should be subject to R&D incentives in the manner described in the proposed R&D definition and not have a blanket exclusion imposed. For example, to create new, environmentally safer geothermal technology would require some testing by drilling – potentially excluded in a blanket ban. Making a smartphone larger is arguably a stylistic change but a great deal of R&D is required to ensure that this can be done with structural integrity. A new paint colour equally will have performance characteristics to manage by both the producer of the paint and those specifying it in their own product application. The work done on both the stylistic change and technical performance may be done by the same person on the same project on the same day and so be impractical to delineate.

Other support activities are part of a business' operational activities and are incorporated into the business model and pricing strategy of the business.

Labour costs

Out-sourced labour may be a major component of an R&D project and assistance with the costs of this labour would be helpful. A 12.5% tax credit received once a year towards these costs would represent a considerable loss in assistance available under the existing scheme.

R&D providers cost their labour to include all their overheads (materials, equipment etc) and it shouldn't be assumed businesses are able to purchase 'labour only' support for their projects.

If this is intended to incentivise businesses to develop their own in-house R&D capability it should be noted that this will not be feasible for many small to medium sized businesses and will put them at a disadvantage relative to their larger counterparts. It is also important to encourage businesses to utilise external expertise where this would add value.

The bias against capital intensive R&D activities is a disadvantage of creating a standard overhead allocation for labour units. Different operators will have different overheads, for example, a sole operator working from home compared to a well-resourced labour unit within a large organisation. If implemented, percentage-based overheads should be in a stepped model based on the size and nature of the operator.

Social science as R&D

There is an example of a hospital bed manufacturer who undertook considerable research into how and why hospitals and hospital staff were using their equipment. The manufacturer was able to use this knowledge to undertake award-winning, technological development of their product. This research could be classified as 'social science' or 'market testing' as it was focused on studying ergonomics and human behaviour. Social science research is integral to the success of some R&D projects.

Eligibility of overseas R&D activity

While we support the inclusion of overseas R&D in the RDTI consideration, there does not appear to be an exclusion for supporting existing R&D resources within New Zealand. The notes outlined for calculating overseas R&D costs appears to enable businesses to use lower-cost offshore R&D providers even if the relevant R&D capability exists within New Zealand.

Dual purpose activities

It is counterproductive to require businesses to make an artificial distinction between business activities and R&D activities. An alternative approach could be to require businesses to estimate the amount of 'business as usual' activity within an R&D project.

R&D expenditure for which commercial consideration is received

If a business already has funding for the proposed R&D initiative from another source then it would not be appropriate for the government to double up on this funding. Ultimately, a business' costs will be built into their pricing structure meaning that they will receive "commercial consideration" for the investment they have made into R&D to develop their product and/or service.

Businesses in tax loss

It should be a priority to resolve the opportunities for businesses either pre-revenue or otherwise in tax loss, or whose tax credit is greater than their tax liability to be able to carry forward their tax credit to a future year. Uncertainty on this aspect could negatively impact R&D investment.

Approved Research Provider

The rationale and practicalities of creating a registration scheme to appoint Approved Research Providers are unclear, with no real ability to discern the advantages of such a scheme able to be taken from the discussion document.