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## Science and Innovation Briefings on the R&D Tax Incentive, 2 November 2017 – 15 May 2018

This release contains a number of Science and Innovation briefings on the R&D Tax Incentive. All briefings in this release were sent between 2 November 2017 and 15 May 2018.

Several other briefings sent between those dates were jointly written with the Treasury and Inland Revenue and are being released by those agencies.

### R&D Tax Incentive credit rate

There are a number of annotations throughout the briefings, intended to help provide some clarification for the reader. The most significant of these is on the credit rate of the R&D Tax Incentive.

- Early briefings directly compared the headline rates of tax incentives across jurisdictions. By this standard, the suggested rate appeared, and was referred to, as uncompetitive. MBIE later became aware of the Organisation for Economic Co-operation and Development (OECD)'s system (call the B-index) for more accurate comparisons of different rates.
- Using the B-index formula, the proposed tax credit rate of 12.5% equates to an implied marginal subsidy of 17%, which is much more competitive and in the middle of the pack for OECD countries.

A complete list of the documents is as follows:

	Briefing Number	Briefing Name	Date
1.	0797 17-18	Initial advice about introducing an R&D tax credit	2 November 2017
2.	0890 17-18	R&D tax credit: objectives and timelines	10 November 2017
3.	1862 17-18	R&D Tax Credit: Cabinet Paper on Timing	9 February 2018
4.	1714 17-18	R&D tax credit: main design features	16 February 2018
5.	1892 17-18	R&D tax credit: technical design features	16 February 2018



	<b>Briefing Number</b>	<b>Briefing Name</b>	<b>Date</b>
6.	2131 17-18	Timing of an R&D Tax Credit - Talking Points for Economic Development Committee, 21 February 2018	20 February 2018
7.	2300 17-18	Australian R&D Tax Credit – Analysis and Advice	27 February 2018
8.	2216 17-18	R&D Tax Incentive: Cabinet Paper and Discussion Document	9 March 2018
9.	2498 17-18	R&D Tax Incentive: Launch and Consultation Plan	23 March 2018
10.	2735 17-18	The R&D Tax Incentive Discussion Document: Ministerial and Agency Responses	29 March 2018
11.	2757 17-18	Submission of the Revised R&D Tax Incentive Discussion Document and Cabinet Paper	3 April 2018
12.	2503 17-18	R&D Tax Incentive Discussion Document: talking points for Economic Development Committee, 11 April 2018	10 April 2018
13.	2894 17-18	Transition for Growth Grant customers to the R&D Tax Incentive	11 April 2018
14.	3215 17-18	R&D Tax Incentives in Norway, the UK, and the Netherlands	4 May 2018
15.	3334 17-18	International comparison of R&D tax incentive rates	15 May 2018



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There are also two cabinet papers:

	Type	Document Name	Date
16.	Cabinet paper	Timing of an R&D Tax Credit	9 February 2018
17.	Cabinet paper	R&D Tax Incentive Discussion Document	3 April 2018



## BRIEFING

### Initial advice about introducing an R&D tax credit

<b>Date:</b>	2 November 2017	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	0797 17-18

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	Discuss the objectives of an R&D tax credit with officials.  Agree to forward this briefing to Ministers of Revenue and Finance.	As your timetable permits

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Dr Peter Crabtree	General Manager, Science, Innovation and International	04 901 3907	s9(2)(a)	✓
Richard Walley	Manager, Innovation Policy	04 901 4164		
Nayana Islam	Policy Advisor, Innovation Policy	04 901 4173		

The following departments/agencies have been consulted
Treasury, Inland Revenue and Callaghan Innovation

Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

**Comments**



## BRIEFING

### Initial advice about introducing an R&D tax credit

<b>Date:</b>	2 November 2017	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	0797 17-18

#### Purpose

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To provide you advice on the Government's commitment to introduce a 12.5% R&D tax credit. This paper advises you on the first steps in designing an R&D tax credit and briefly outlines policy considerations for its introduction.

#### Executive summary

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One of your priorities is to introduce a 12.5% R&D tax credit, in support of your goal to raise New Zealand's R&D to 2% of GDP over ten years.

R&D is recognised as a key driver of business innovation, which in turn affects a business's ability to grow and be successful. Business innovation is also important for New Zealand: it can support economic diversification, raise productivity, create high value jobs and improve social and environmental well-being.

There is steady growth in the level of R&D carried out by New Zealand businesses, but levels are still low compared to other small advanced economies and the OECD average. An R&D tax credit could help boost the level of business R&D.

The design of an R&D tax credit will depend on government's objectives. While the primary objective may be to increase business expenditure on R&D (BERD), the scheme could also seek to encourage greater collaboration, attract overseas R&D investment, and/or target particular types of R&D, firms or industries. Numerous design choices are available to achieve these different objectives.

It will also be important to design an R&D tax credit that builds on the steady increases to BERD achieved under the Business R&D Grants Programme (administered by Callaghan Innovation). Early evidence indicates that the Growth and Project Grants are working to increase BERD. There is also a decision to make about whether to continue some grants to complement the tax credit.

It will be important to work through the design of the tax credit thoroughly. A poorly designed tax credit could fail to increase BERD, or lead to much higher than expected costs. Implementing a tax credit will also require primary legislation and operationalisation through Inland Revenue systems. Therefore, 1 April 2019 appears to be the most feasible commencement date for a new tax credit.

## Recommended action

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The Ministry of Business, Innovation and Employment recommends that you:


a **Agree** to discuss the objectives of an R&D tax credit with officials.

*Agree/Disagree*

b **Agree** to forward this briefing to Ministers of Revenue and Finance.

*Agree/Disagree*

s9(2)(a)



Dr Peter Crabtree  
**General Manager, Science, Innovation and  
International**  
Labour, Science and Enterprise, MBIE

2 / 11 / 2017  
..... / ..... / .....

Hon Dr Megan Woods  
**Minister of Research, Science and  
Innovation**

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## Context

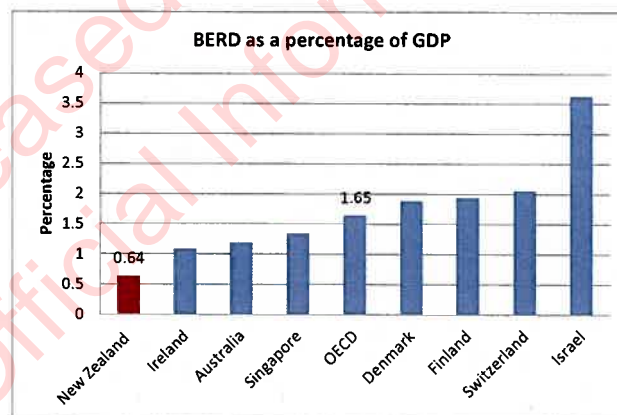
1. One of your priorities is the introduction of a 12.5% R&D tax credit (the tax credit) to lift business expenditure on R&D (BERD).
2. The design of the tax credit will need to be considered alongside other innovation policies that also work towards the Government's goal of lifting R&D to 2% of GDP. Other important policies are public science investments and commercialisation settings, and broader industry and skills policies.
3. As Minister of Research, Science and Innovation you will be responsible for decisions on tax credit design. The Ministers of Revenue and Finance have an interest in this work because a tax credit affects their portfolios. The design of the tax credit will depend on the Government's objectives for business R&D.

## The rationale for supporting business R&D and innovation

4. Business R&D underpins a business's ability to innovate and to compete (along with other factors such as skills, access to markets, and capital). Business R&D is critical to: product and service diversification; increasing labour productivity; growing high quality jobs; and building a resilient economy. R&D and the resulting value from innovation can also improve social and environmental well-being, by making goods better or cheaper, or reducing their environmental impact.
5. It is common for Governments to subsidise business R&D. This is because businesses cannot capture all the benefits from their R&D. The knowledge created from R&D flows between firms through worker mobility, reverse engineering, and product imitation. As a result, businesses are likely to invest less than is socially optimal.

### New Zealand businesses invest less in R&D than most other OECD countries

6. Statistics NZ's R&D Survey found that BERD was \$1,602 million in 2016, up from \$1,246 million in 2014. While it has been steadily rising, at 0.64% of GDP New Zealand's BERD is one of the lowest amongst small advanced economies, and is well below the OECD average of 1.65%.



### Key drivers of BERD growth

7. A small number of firms contribute the bulk of BERD. In 2016, 45% of all BERD was carried out by 30 firms that spent \$10 million or more on R&D, and 26% of all BERD was carried out by six firms that spent \$25 million or more on R&D. Service industries showed the largest growth in BERD, but most of BERD (30%) was conducted to benefit manufacturing. Overseas funding of business R&D in New Zealand continues to grow, but it is still low compared to other small advanced economies.

## Objectives for government support for business R&D

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8. There is scope to increase business R&D using an R&D tax credit; a tax credit is the international gold standard for encouraging business R&D. 28 of 34 OECD countries provide preferential tax treatment for business R&D expenditure. Many of these countries use a mixture of tax incentives and grants, to draw on the benefits of both approaches.
9. The design of a tax credit (and changes to existing grant schemes) will depend on your objectives for BERD. Increasing BERD generally is a key objective, but other possible objectives include: encouraging greater collaboration, attracting overseas R&D investment, and targeting particular types of R&D activity, firms and industries.
10. The section below provides an overview of policy objectives and the design options to achieve them.

### The design of an R&D tax incentive or any other R&D support will depend on what the government is seeking to achieve

#### *Increasing the overall volume of business R&D*

11. Whilst R&D tax credits can target particular industries, they are generally used as a broad-based tool to incentivise R&D across all industries and usually applies to all eligible R&D expenditure performed by the business.
12. You have signalled a rate of 12.5% for a tax credit. Most countries have higher rates (around 25%). The proposed rate is lower than the 20% subsidy rate for the R&D Growth Grants, which are the closest initiative to a broad-based incentive for business R&D. A reduction to the subsidy rate is likely to reduce the growth in BERD by existing performers. It will be important to consider whether the signalled rate is optimal to reach the Government's goal.

Note: This is incorrect. See 1714 17-18 for correction.

#### *The definition of R&D*

13. It will be important to think through which activities will be defined as R&D. It will be important that only desirable R&D activity is eligible for the credit. This will help target activities likely to support innovation, remove uncertainty about what is considered R&D (e.g. mineral exploration) and clarify the boundary between development and post-development activity, or innovative and routine work. A robust R&D definition is important to ensure that businesses cannot re-characterise large amounts of expenditure as R&D, creating significantly higher than expected fiscal impacts without corresponding benefits to New Zealand.

#### *R&D tax credits can be targeted to different firm types*

14. It is hard to target tax credits to particular types of R&D activities, because tax credits are a market-based tool where businesses make the R&D investment decisions.
15. However, R&D tax credits can be targeted to particular types of firms if desired. For example, many OECD countries provide more generous support to younger/early stage firms. This is because younger firms can be important drivers of job creation but are more likely to be credit constrained. Younger and smaller firms also have difficulties in accessing capability, networks of knowledge, and obtaining investment for innovation and growth.
16. New Zealand has a growing number of new high-technology start-ups and a large proportion of small firms. Providing a higher tax credit rate than the standard rate for other firms could be expected to contribute to the growth of these firms. Some countries also provide more flexible terms for the support. For example, young/small firms are able to get their credits refunded if they have no/insufficient tax liability because they are loss making.



17. An existing feature of the tax system includes a R&D tax loss cash-out measure which allows eligible businesses to cash-out tax losses that arise from R&D expenditure. This measure aims to encourage investment in R&D by easing cash-flow constraints on innovative start-ups and reducing the cost and risk of their R&D project. This measure will need to be reconsidered as part introducing an R&D tax credit.
18. A different approach is to limit the tax credit to businesses that spend over a set threshold on R&D. This is used to control costs and incentivise R&D intensive firms, because these firms are most likely to generate significant increases in BERD.

*Attracting foreign owned businesses to conduct their R&D in New Zealand*

19. Foreign-owned businesses can make a valuable contribution to BERD and innovation performance, and strengthen New Zealand's integration into global innovation networks.
20. If you wished to attract foreign owned firms, the tax credit could be available to foreign owned firms as long as they carry out their R&D in New Zealand. Some countries also impose additional restrictions to ensure the benefits are captured locally. For example, requiring key researchers be local, or that there is a national benefit from the R&D.

*Encouraging collaboration*

21. Collaboration on R&D (amongst firms, or between firms and research organisations) can facilitate greater knowledge transfer and enhance technology innovation and development.
22. To encourage collaboration, R&D that businesses contract from a public research organisation could be considered eligible for the credit. Another option is to provide a more generous tax credit rate for R&D expenditure that is contracted from, or carried out in collaboration with research organisations.

*Ensuring additional R&D*

23. Ideally, we would seek R&D over and above which firms would have done without the tax credit.
24. One key means of achieving this is creating stable and predictable incentives. International evidence finds that stable and predictable R&D incentives are likely to be more effective at increasing business R&D investment due to the long-term certainty of support.
25. Another option is to require that businesses increase their R&D expenditure by a certain percent in order to continue to receive the tax credit.
26. A third approach is an incremental tax credit. Under this approach the credit applies to R&D expenditure above a base amount. This minimises the amount of subsidised R&D that would have occurred even in the absence of support. However, incremental-based tax credits are more complex, and hence more costly to implement and use, and most OECD countries that had incremental R&D tax credits have shifted away from this approach.

*It will also be important to take into consideration the underlying objective of New Zealand's tax system when design an R&D tax credit*

27. The underlying objective of New Zealand's tax system is to act neutrally with respect to type and size of firms. A larger incentive for small firms runs the risk of perverse incentives, such as encouraging firms to stay small. There can also be integrity issues if firms re-organise themselves solely to take advantage of higher subsidies. Addressing integrity issues can lead to complexity and instability of the scheme, both of which can undermine achievement of the government's objectives.

## **Current mechanisms to encourage business expenditure on R&D**

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28. The Business R&D Grants Programme, which includes the R&D Growth, Project and Student Grants administered by Callaghan Innovation, are used to encourage business R&D. The grants are tailored to businesses at different stages of R&D performance to achieve different objectives.
29. Growth Grants provide experienced R&D performers with funding certainty to grow their R&D. They are non-discretionary and target large and intensive R&D performers (i.e. available to all businesses that spend \$300,000 and 1.5% of revenue on R&D per year). These grants co-fund 20% of a business R&D programme for three years up to a grant limit of \$5 million per year. The restrictions act to promote R&D intensity and provide fiscal control.
30. Project Grants have a higher co-funding rate (40% of the first \$800,000 of a business's R&D project and 20% thereafter), and are designed to develop less experienced R&D performers. Callaghan Innovation determines eligibility for these grants based on six criteria. There are also three types of Student Grants available to support students to work in R&D active firms, to increase R&D capability in New Zealand and to support business-university ties.
31. The Growth Grants are forecasted to cost \$147 million in 2017/18 rising to \$233 million in 2021/2022. There is \$37.5 million per year available for Project and Student Grant. Annex one provides the current number of active R&D grants and their value.
32. The Business R&D Grants Programme is complemented by other measures to incentivise R&D and innovation in particular sectors (e.g. Primary Growth Partnerships in agriculture) or at stages of business maturity (e.g. repayable grants for start-ups).
33. As part of introducing a tax credit, there are choices about whether to retain some elements of the Business R&D Grants Programme. It would not make sense to keep the R&D Growth Grants if an R&D tax credit was introduced, because they serve the same purpose. The introduction of non-discretionary grants (i.e. Growth Grants) appears to have supported a significant rise in business investment in R&D (see Annex one for more information). The introduction of an R&D tax credit has the potential to build on this.
34. Depending on what the Government seeks to achieve, some grants may complement an R&D tax credit. For instance, grants can make it easier to target a higher level of support to high-quality R&D projects with high social returns. MBIE can provide you with further advice on the possible mix of incentives.

## **Fiscal management**

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35. The fiscal cost of an R&D tax credit and other support will vary depending on the design choices such as the subsidy rate, whether funding is capped, how R&D is defined and firm eligibility rules. However, costs are likely to be lower when the design is relatively simple, and its application processes are clear and easy to follow.

## **Potential risks and mitigations in introducing an R&D tax credit**

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36. There are a number of risks to manage through careful design and implementation of a tax credit. It will be important to create incentives that support growth in BERD. It will also be important to make a smooth transition to the new system, by providing certainty and stability for businesses.
37. Unintended consequence and loopholes created within a policy can lead to high costs for little or no benefit. For example, there is the potential that businesses in the mining,

banking or insurance sectors could re-characterise large amounts of expenditure as R&D, without stimulating innovation in New Zealand

### **The success and effectiveness of the credit will depend on how well it is implemented**

38. Care will be needed to address these risks. This includes careful policy design, thorough consultation and impact analysis, drawing lessons from other countries and building in an appropriate transition plan from the existing grants system.
39. A tax credit will require primary legislation and changes to Inland Revenue systems.

### **Key decisions required to introduce an R&D tax credit**

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40. Because tax rules are enacted through changes to primary legislation, the processes to introduce an R&D tax credit are likely to include:
  - The formation of a Ministerial sub-committee consisting of you and Ministers of Finance and Revenue to drive the introduction of an R&D tax credit.
  - Public consultation on key design features of an R&D tax credit
  - Cabinet consideration of, and agreement on design, features
  - Following Cabinet agreement a budget bid and legislative process for introducing an R&D tax credit will need to be taken forward.
41. Therefore, we recommend that the earliest application date for the tax credit should be 1 April 2019.

### **Next step**

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42. We look forward to discussing your objectives for a tax credit, and how we can support you to achieve these.

### **Annexes**

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Annex one: Further information on the Business R&D Grants Programme

Annex two: Business R&D landscape and initial advice on R&D tax credit design features

# Annex One: Further information on the Business R&D Grants Programme

**Table One: Number and value of existing R&D Grants at 30 September 2017<sup>1</sup>**

Type	Number of Active Grants	Contract Value \$ million (ex GST)	Paid to date (exGST)	Remaining balance (exGST)
R&D Growth Grants	243	633,080,511	333,519,734	299,604,773
R&D Project Grants	299	41,126,641	16,141,841	24,984,800
R&D Student Grants*	121	7,751,184	4,003,800	3,747,384
<b>Total</b>	<b>663</b>	<b>681,958,335</b>	<b>353,665,375</b>	<b>328,336,956</b>

<sup>1</sup>Note contract values include spending since contract started and in future years.

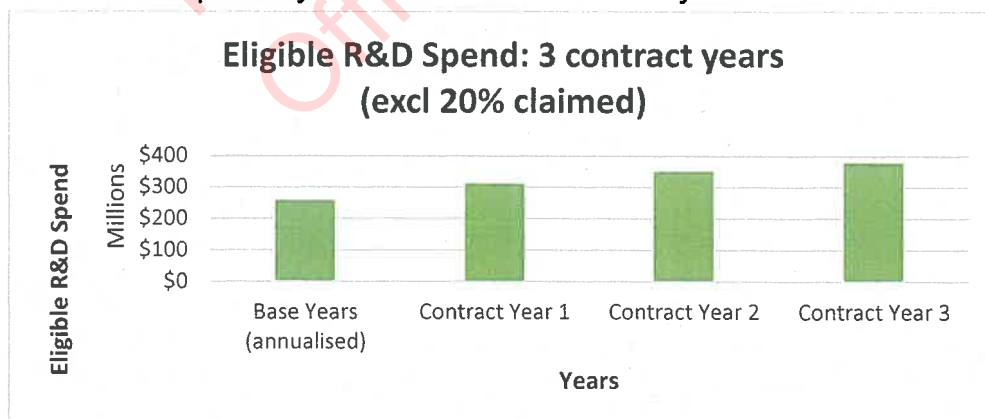
\* In addition there are 135 Student Experience grant contracts approved, awaiting confirmation of students worth \$2.4m. These are included in figures in table 2

**Table 2: Forecast R&D Grants Expenditure as at 30 September 2017 (for existing and new R&D Grant contracts)**

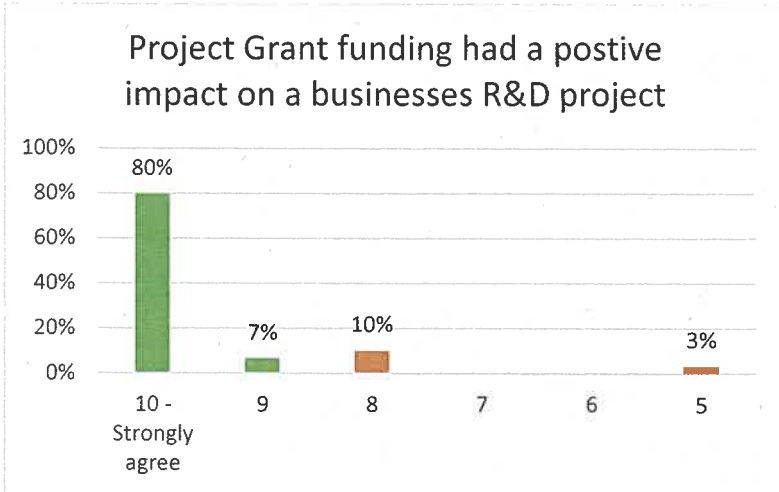
Type	2017/18	2018/19	2019/20
R&D Growth Grants	\$147,600,000	\$166,500,000	\$188,000,000
R&D Project Grants	\$18,582,000	\$20,834,000	\$21,021,000
R&D Student Grants	\$5,118,000	5,066,000	5,179,000
<b>Total</b>	<b>\$171,300,000</b>	<b>\$192,400,000</b>	<b>\$214,200,000</b>

## Early evidence indicates the R&D Growth Grants are working

- The 2016 R&D survey (the first survey to capture the impact of the R&D Grants Programme) showed that BERD grew by 29%.
- 74 businesses that have claimed three years of Growth Grants have increased their R&D spend by a total of 47% over three years.



- 42 companies approved for a Growth Grant had previously been approved for a Project Grant since July 2013. They have transitioned to a stable R&D Programme of at least \$300k per year.
- Overall 80% of those companies strongly agree that the R&D Project Grant funding had a positive impact on their R&D Project.



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**Annex two: Business R&D landscape and initial advice on R&D tax credit design features**

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## Why BERD?

### Business R&D is linked to many potential benefits

- More high-quality, skilled jobs
- New Zealand competitiveness on the world stage
- A more sustainable, diversified economy
- Spillovers into environmental and social benefits

### Government has a clear support role

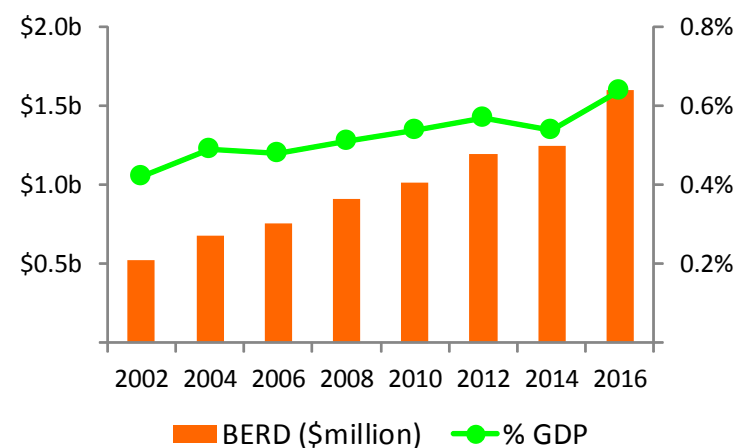
- Businesses underinvest in R&D as they can't capture all the benefits
- Most OECD countries provide some type of support to raise business R&D

## Key Messages

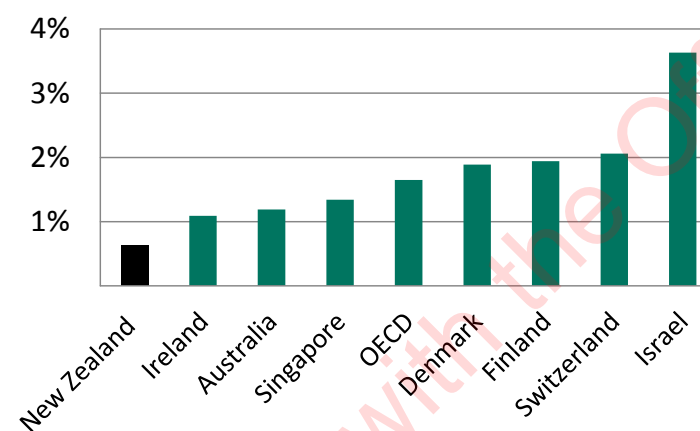
- Business expenditure on R&D (BERD) is growing strongly but remains low by international standards
- The business R&D Grants Programme seems to be raising BERD and we should build on its success
- There are key design choices for a tax credit which depend on the main objective sought
- Significant risks mean careful design is critical to minimise uncertainty for firms, manage fiscal risks and avoid unintended consequences

## Business R&D in New Zealand

BERD has been growing steadily...

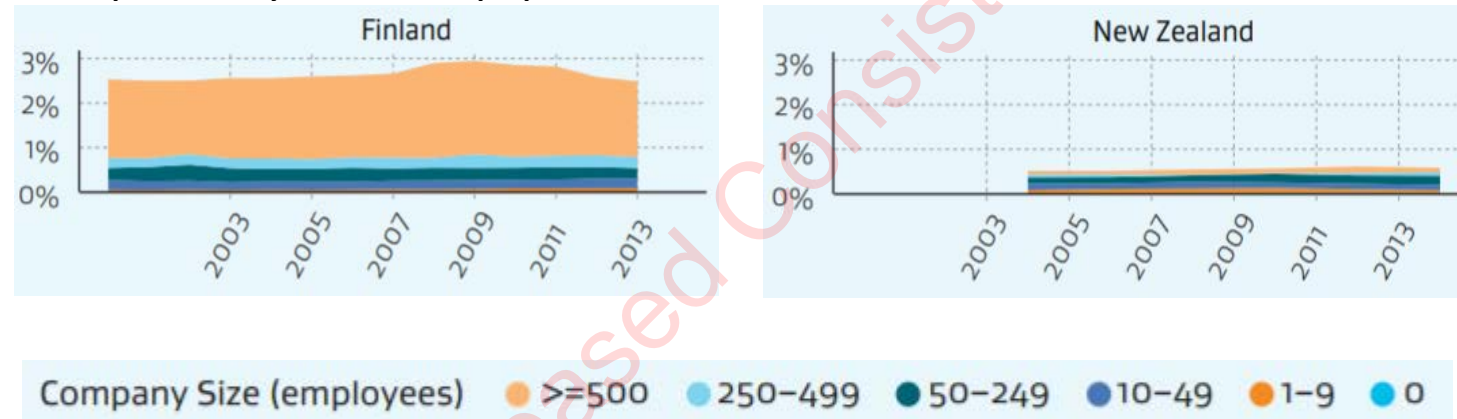


...but is still low by international benchmarks



R&D expenditure tends to be heavily-skewed towards a few very large R&D performers...

R&D expenditure by firm size, as a proportion of GDP:



...But NZ has no very large firms in R&D-intensive sectors:

## What we do now

Callaghan Innovation Grants create stable incentives which appear to be driving higher BERD

- Rolled-out from 2013
- BERD grew by 29% from 2014-2016
- Overall demand for Growth Grants growing strongly
- Firms are growing their R&D investment significantly during the term of the grant

Callaghan Innovation R&D Grants are tailored to firm size

**Growth Grants for large firms**

- **20% co-funding** for firms with BERD > \$300K
- **Capped** at \$5m per year per firm
- **Eligibility requirements** firms with low R&D intensity compared to revenue do not qualify
- **Non-discretionary** works much like a tax incentive

**Project Grants for small firms**

- **40% co-funding up to \$800,000** 20% thereafter
- **Discretionary** – based on six criteria

## Moving forward

An R&D Tax credit would contribute to the proposed goal of growing R&D to 2% GDP

Introducing a Tax Credit offers the chance to refine and build on the impact of the R&D Grants Programme

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## Key design choices

- Rate - 12.5% lower than typical international rates *Note: This is incorrect. See 1714 17-18 for correction.*
- Does the tax credit supplement or replace the existing grants system?
- Should firms be targeted by age/size/R&D intensity?
- Simple volume-based credit or more sophisticated design with marginal incentives and/or caps?
- Eligibility of foreign-owned firms

## What are the risks?

- Fiscal costs are large and uncertain
- Public investment could displace private investment
- Firms need stable, predictable incentives
- Implementation needs a clear transition path
- R&D needs clear definition aligned with objectives
- Unintended consequences and loopholes are possible
- High complexity and administration costs

## What do you want to achieve?

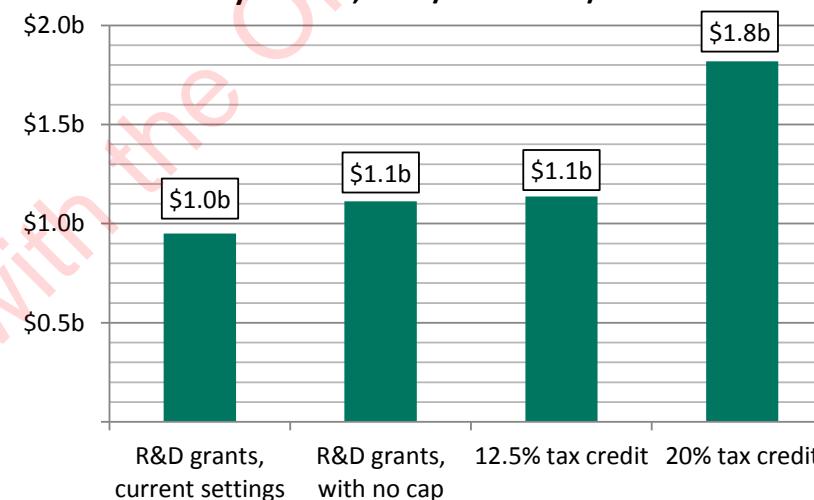
### Potential objectives include:

- Growth in BERD
- Generating high-quality employment
- Attracting and retaining overseas R&D investment
- Economic diversification
- Sustainable growth
- Public-private sector research collaboration

## How much will it cost?

### Fiscal costs vary with design choices

Estimated four year cost, 2018/19 to 2021/22



### Larger firms are a significant driver of costs

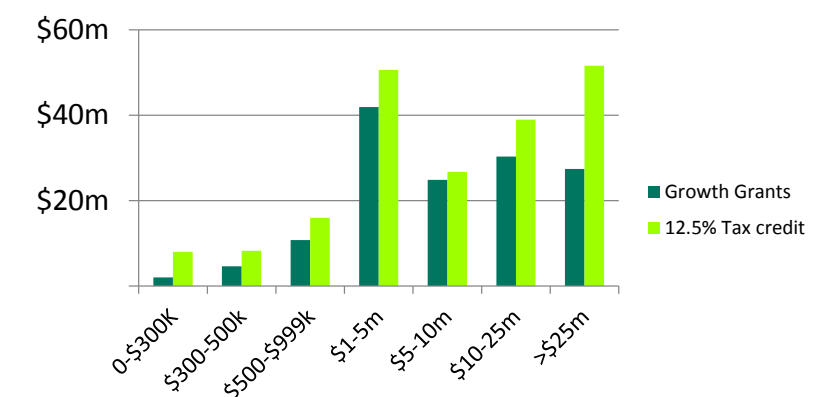
- Firms with BERD over \$1m drive the majority of fiscal costs under Growth Grants
- This effect is exacerbated under simple, volume-based tax credit scenarios
- Design choices can be used to mitigate this risk, but will increase complexity

We estimate \$1.5b has currently been budgeted to support business R&D over this four year period

### Caveats and assumptions

- These are indicative costings only
- Tax credit cost estimates assume **all business R&D is eligible** and costs would be lower if this is not the case
- BERD is assumed to grow at 8% per annum  
**Faster or slower BERD growth will substantially affect long-term fiscal costs**
- More sophisticated modelling will be needed to support policy decisions
- Cost projections will also be sensitive to assumptions around uptake and medium-term firm behaviour change

### Split of cost by firm size (current BERD levels)







## BRIEFING

### R&D tax credit: objectives and timelines

<b>Date:</b>	10 November 2017	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	0890 17-18

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	Discuss the objectives of an R&D tax credit with officials.  Note the proposed timeline for introduction of the R&D tax credit attached at Annex One.  Agree to forward this briefing to the Ministers of Finance and Revenue.	As your timetable permits.

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Dr Peter Crabtree	General Manager, Science, Innovation and International	04 901 3907	s9(2)(a)	✓
Richard Walley	Manager, Innovation Policy	04 901 4164		
Nayana Islam	Policy Advisor, Innovation Policy	04 901 4173		

The following departments/agencies have been consulted
Treasury, Inland Revenue and Callaghan Innovation

Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

Comments



## BRIEFING

### R&D tax credit: objectives and timelines

<b>Date:</b>	10 November 2017	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	0890 17-18

#### Purpose

To provide you further advice on the objectives of an R&D tax credit and possible timelines and costs for introduction.

#### Executive summary

One of your priorities is to introduce a 12.5% R&D tax credit, in support of your goal to raise New Zealand's expenditure on R&D to 2% of GDP over ten years.

You signalled that your objective is to increase the number of firms performing R&D to raise the amount of business R&D across the economy. Within that objective, the design of a tax credit will influence the way it will be achieved. This could be by encouraging (i) firms already performing R&D to do more, (ii) firms not engaging in R&D to start, (iii) overseas firms to perform R&D in New Zealand. Focussing on high-growth start-up firms and attracting overseas R&D is most likely to help diversify and transform the economy.

The key design choices are (i) the credit rate, (ii) whether the credit is capped and (iii) the definition of R&D. The mix of these design choices will affect incentives for different firms. For example an uncapped single tax credit rate is most likely to incentivise existing large New Zealand firms to do more R&D, and may help attract international firm to do their R&D in New Zealand. But these features would increase the cost and fiscal uncertainty of the scheme.

Medium sized R&D performers and high-growth start-ups would benefit most from a targeted tax credit (e.g. higher tax credit rate) or targeted measures such as complementary grants. It will be important to work through which types of support are most likely to be effective at incentivising R&D in this group of firms. New Zealand firms that do not currently engage in R&D may benefit from a tax credit, but will also require a broader range of supports to assist them.

The costs of a tax credit are somewhat uncertain but design choices can be used to manage fiscal risk. There appears to be funding available to support a range of design options. The potential sum indicated by you for R&D support is \$1,649m over four years (\$299m in 2018/19 rising to \$483m in 2021/22). This includes existing R&D Grants funding and Labour's Fiscal Plan allocation for a tax credit.

Implementing the R&D tax credit by 1 April 2019 is tight but possible. Key processes that will need to be followed include detailed policy design, consultation, Cabinet decisions and a legislation process before the tax credit can be implemented.

#### Recommended action

The Ministry of Business, Innovation and Employment recommends that you:

- a **Agree** to discuss with officials the objectives, timeframes and key decisions going forward to introduce an R&D tax credit.

*Agree/Disagree*

- b **Agree** to the following high-level design priorities:
- i. Developing a more definitive / specific set of policy objectives for the R&D tax credit
  - ii. Whether and how the R&D tax credit will target particular firms in the economy
  - iii. How the R&D tax credit will interact with an R&D grants system and how the grants system may need to be redesigned to complement a tax credit.

*Agree/Disagree*

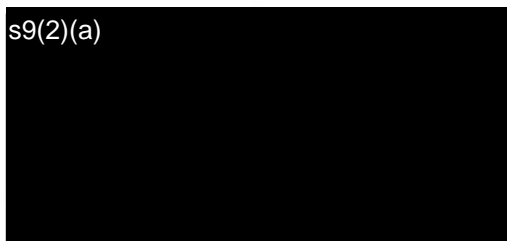
- c **Note** the proposed timeline for introduction of the R&D tax credit attached at Annex One.

*Noted*

- d **Agree** to forward this briefing to the Ministers of Finance and Revenue.

*Agree/Disagree*

s9(2)(a)



Dr Peter Crabtree  
**General Manager, Science, Innovation and  
International**  
Labour, Science and Enterprise, MBIE

Hon Dr Megan Woods  
**Minister of Research, Science and  
Innovation**

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## Background

1. At our first meeting on R&D tax credits [Briefing 0797 17-18 refers] you asked for further information on how to increase the number of firms performing R&D and potential timelines and costings for the introduction of an R&D tax credit (the tax credit).
2. This paper builds on our previous advice to you regarding the design and implementation of a tax credit. Some information from our earlier paper is included here in preparation for you to meet with the Ministers of Finance and Revenue to discuss your priority of introducing an R&D tax credit to support the Government's goal of lifting R&D to 2% of GDP.
3. The paper also discusses what we understand to be your objectives for the tax credit. Given these objectives, it discusses how you may want to consider focusing support. Finally, it provides you with some context for the initial decisions that need to be made about the design of the tax credit and how it may interact with R&D grants (key features of the current R&D grants system are attached as Annex Two).

### Rationale for public support of business R&D and innovation

4. R&D is recognised as a key indicator of business innovation, which in turn affects a business's ability to be successful. Business innovation is critical for New Zealand: it supports economic diversification, raises productivity, creates high value jobs and improves social and environmental well-being.
5. It is common for governments to support business R&D. This is because businesses cannot capture all the benefits from their R&D (the social rate of return is greater than the private return). As a result, businesses are likely to invest less than is socially optimal. An R&D tax credit can help boost the level of business R&D.

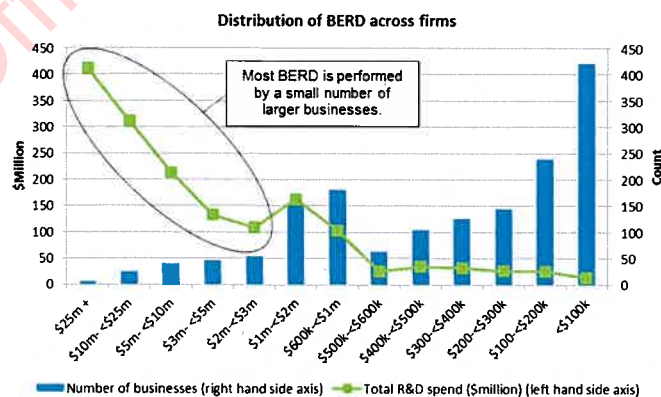
### Current business R&D performance in New Zealand

#### *A small number of firms perform R&D in the New Zealand economy*

6. Business expenditure on R&D (BERD) has been steadily rising, but at 0.64% of GDP it is one of the lowest compared to small advanced economies and is well below the OECD average of 1.65%. The number of businesses that perform R&D in the New Zealand economy is low. Roughly 0.3% of businesses performed R&D in 2016. However, a greater proportion of businesses with more than 50 employees perform R&D (8% in 2016).

#### *A small number of firms contribute to the bulk of BERD in the economy*

7. As seen in the graph below, in 2016 a large amount of all BERD (45%) was carried out by 30 firms that spent \$10 million or more on R&D and 26% of all BERD was carried out by six firms that spent \$25 million or more on R&D. These firms are likely to be on the larger side in terms of employee numbers.



*The majority of businesses performing R&D in New Zealand are relatively small R&D performers*

8. In 2016, 1038 of businesses spent less than \$500,000 on R&D. The firms carried out a total of 8% of all BERD. 423 businesses spent less than \$100,000. We estimate that R&D expenditure between \$100,000 and \$500,000 per year corresponds to an R&D team of between 1 to 4 full-time equivalent employees. See Annex Three for more information on business R&D by industry and sector.
9. We note that the graph above provides a static snapshot of business R&D in New Zealand and that there will be a number of smaller R&D intensive businesses that will be growing rapidly, as well as growing their R&D.

## **Objectives for government support for business R&D**

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### **Government support for business R&D can have multiple objectives**

*You signalled that your objective is to increase the number of firms performing R&D*

10. Increasing the number of businesses performing business R&D is one way of increasing the amount of business R&D across the economy. Increasing the spread of R&D activity across the economy may also help diversify the economy, lift productivity and encourage the development of new sectors. However, some firms, such as a family owned restaurants, may not benefit from investments in R&D

*Government support for business R&D can also contribute to other objectives*

11. Increasing the number of businesses performing R&D is one objective to consider. Other objectives include:
  - Encouraging firms already performing R&D to do more, thus raising their R&D intensity
  - Encouraging overseas firms to perform R&D in New Zealand.

*Encouraging new R&D intensive firms is an objective which is likely to support the diversification of New Zealand's economy*

12. R&D tax credits are a broad-based tool, generally best at incentivising R&D across all types of firms. You have signalled that part of your objective may be to provide greater support towards particular types of firms or activity.
13. Targeting R&D support towards strategically important firms, in particular new R&D intensive firms, may be desirable if your objective is to promote job creation and economic diversification. This can be done through tax credits, but these may not be the best instrument. Generally, the more complex a tax system is (e.g. with exceptions for different firms or different rates), the more open it is to gaming and the more likely loopholes are to emerge.
14. The tax system is not the only tool available for targeting support towards strategically important firms, and some firms will benefit from support initiatives in addition to a tax credit. Support for start-ups in particular will require a suite of policy interventions. Start-ups can support economic diversification but require a mix of inputs such as access to capital, a pool of experienced entrepreneurs, international links, and strong connections between entrepreneurs, investors, and researchers.

*Attracting international businesses to conduct R&D in New Zealand can make a valuable contribution to BERD and the number of businesses performing R&D*

15. Targeting international R&D investment in New Zealand will enable us to strengthen our own R&D capabilities, strengthen New Zealand's integration with global innovation networks, and increase opportunities for employment.

16. One way to increase R&D intensity in New Zealand is to attract foreign investment in R&D and specifically incentivise R&D intensive multinationals to conduct R&D in New Zealand. This means New Zealand captures the positive benefits of international firms' R&D activities. A single, broad-based credit with few limitations will be attractive to international firms, but will also increase the cost of the credit.

*Keeping the tax system simple is also important*

17. The objective of New Zealand's tax system is to operate as neutrally as possible with respect to type and size of firms. As noted, increasing the complexity of the tax system increases the risk of gaming and perverse incentives, and a complex incentive may not be effective simply due to its complexity.

## **Key design choices**

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18. We outline below key design choices for the tax credit and how the mix of design choices incentivises different firms to do R&D and achieves particular objectives.

*The tax credit rate*

19. An R&D tax credit at 12.5% will mean a relative reduction in the amount of support for some firms currently receiving an R&D grant. The current co-funding rate is 20% for Growth Grants, with a \$5 million limit per year. 12.5% is also internationally not a competitive base tax rate for R&D (though many countries have higher base rates but these are not universally available, or are capped quite low). It is also not clear whether a 12.5% rate would affect marginal decision making within firms.

Note: This is incorrect. See briefing 1714 17-78.

*The cap – whether there is a maximum limit on the credit that can be claimed*

20. Having an uncapped tax credit may increase the cost and fiscal uncertainty of the scheme. However, it is plausible that larger firms (and particularly incumbents) will be incentivised to increase their R&D expenditure and overall attract a greater proportion of R&D government funding as a result. An uncapped credit may also attract foreign owned firms to conduct their R&D in New Zealand.

*The definition of R&D*

21. It will be important to think through which activities will be defined as R&D and what is considered as desirable R&D. A broad definition of R&D may increase the risk of funding activity which does not support innovation and lead to businesses re-characterising large amounts of expenditure as R&D, creating significantly higher than expected costs without corresponding benefits to New Zealand. In comparison, a narrow definition of R&D with specific exclusions can limit fiscal costs, ensure that R&D activity supports innovation but may skew activity towards research rather than development activity.

## **The mix of design choices or support will mean varied incentives among different firm types**

22. Different firms will react to the design of a tax credit in different ways. Table 1 illustrates some of the dynamics through the use of hypothetical examples.

**Table 1: Examples of the comparative effects of tax credits vs. status quo**

Example firm	Firm R&D spend	Status quo grant received	Example Option 1: 12.5% uncapped tax credit	Example Option 2: 20% uncapped tax credit	What's going on?
Large R&D intensive international firm	\$100m+	\$5m – R&D Growth Grant	\$12.5m+	\$20m+	New Zealand does not have any of these firms at the moment, but a tax credit could attract them. The maximum growth grant is \$5m, but an uncapped tax credit could provide higher levels of support for these large firms.
Large domestic fruit exporter	\$70m	\$0 – R&D Growth Grant	\$8.75m	\$14m	Some of our domestic firms do not qualify for support at the moment because they do not meet the requirement that 1.5% of their revenue is spent on R&D.
Medium-sized hi-tech medical devices firm	\$25m	\$5m – R&D Growth Grant	\$3.125m	\$5m	These are the types of firms that are driving most of our R&D expenditure growth at the moment. A tax credit may need to be more generous to provide higher incentives for these firms.
Pre-profit high-growth accounting software company	\$30m	\$5m – R&D Growth Grant	\$3.75m	\$6m	We have a small number of these firms, but could grow more. They may need a higher rate, but will also need to be able to 'cash out' a tax credit, as they won't have any tax liability.
New start-up software firm	\$300k	\$120,000 – Project Grant (if successful)	\$37,500	\$60,000	At 40%, the current project grants for small firms are more generous than most tax credits. But they are also discretionary, meaning that the firm is not guaranteed a grant. This helps prevent gaming and wastage, but also means that they may not be effective at attracting or retaining start-ups in New Zealand.
<b>Estimated annualised fiscal cost</b>		<b>\$201.75 million / year</b>	<b>\$212.5 million / year</b>	<b>\$340 million / year</b>	None of the annual fiscal impact figures deal with 'dynamic' effects yet – that is the incentive to relocate R&D to NZ, do more R&D, or do less R&D. 9(2)(g)(i)
<b>Estimated four year fiscal cost</b>		<b>\$807 million</b>	<b>\$850 million</b>	<b>\$1.36 billion</b>	

*Attracting large international firms to conduct R&D in New Zealand may be influenced by the tax credit rate and whether the credit is uncapped*

Note: This is incorrect.  
See briefing 1714 17-18

23. Large international firms considering whether to conduct their R&D in New Zealand may be marginally more attracted with an uncapped tax credit than under current grant settings as they will be able to access a greater absolute amount of co-funding. However, the tax credit rate will also matter significantly for this group of firms. The signalled 12.5% rate is not internationally competitive; most countries have higher rates (around 25%).
24. We expect that the rate and the cap are the features with the greatest impact on the incentives of large international firms. Because they have the largest R&D capacity and budgets, the presence of a large international firm in New Zealand would also mean a significant lift in the costs of the scheme to the Crown.

*Larger domestic firms are also likely to be incentivised to do more R&D if the credit is uncapped*

25. Many of New Zealand's larger domestic firms in established industries may be more incentivised to conduct R&D than under the status quo. Larger firms with low R&D intensity fall below the intensity threshold for accessing support through the current Growth Grants. Uncapped R&D tax credits may therefore expand support for this group quite significantly. Because they are less likely to be considering moving their R&D offshore, the support rate may be less likely to be important to this group.
26. Larger domestic firms in established industries are likely to have enough corporate support capacity to make greater use of the scheme compared with smaller and younger firms. This group is the greatest risk of producing increased costs in the R&D support system while not creating a corresponding lift in BERD (i.e. deadweight).

*Medium sized R&D performers to high-growth start-ups are likely to be incentivised by a higher tax credit rate and targeted measures such as complementary grants*

27. Medium sized R&D performers are currently driving R&D expenditure in New Zealand. We expect these firms will have only a marginally greater incentive to expand their R&D activity under a tax credit. These firms will be most greatly affected by the rate of support.
28. High-growth, medium sized, but pre-profit, firms typically exist in developing markets such as software as a service, or in high-tech manufacturing. These firms are also likely to be looking to internationalise quickly and successfully. As such, these firms will be most affected by the subsidy rate and the cash-out<sup>1</sup> features of a tax credit as they are likely to have no tax liability. The current tax loss cash-out measure in place will need to be reconsidered as part of this. These firms may also be concerned with the definition of R&D, as some of their activity will be more closely aligned with the development side of the process.
29. High-growth knowledge intensive start-ups typically have tighter R&D budgets. While these firms conduct less R&D (in absolute terms) at the start-up stage, they grow into firms which conduct large amounts of R&D. A tax credit alone may mean a reduction in relative support for these firms compared to the current Project Grants where the subsidy rate (40%) is fairly generous. However, this grant provides less certainty to these firms as access to it depends on discretionary decisions by Callaghan Innovation. There is an opportunity to provide either targeted support to these firms using a tax credit (i.e. higher tax credit rate for start-ups), and/or complementary grants (i.e. some form of the Project Grants). 9(2)(f)(iv)

<sup>1</sup> Cash-outs are when tax credits can be refunded if a firm has no or insufficient tax liability because they are loss making.



## Cost

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### **Costs of a tax credit are somewhat uncertain, but design choices can be used to manage fiscal risk**

30. The cost of a tax credit and other support is uncertain at this stage, and could vary significantly with design choices and other unpredictable factors such as the extent of uptake and the growth rate of business R&D.

*You can manage cost with design choices, but these design choices may limit your ability to achieve particular objectives*

31. The main design choices that can be used to manage costs include the tax credit rate, a cap, and R&D intensity threshold (i.e. R&D expenditure above a certain threshold), as well as other design features seen in the figure below. While these design features can reduce the cost of the tax credit they will also reduce the effectiveness of the credit at achieving certain objectives.
32. The indicative cost estimates presented in this paper are based on applying a simple 12.5% (or 20%) rate across all business R&D expenditure. They assume all business R&D is eligible – costs would be lower if this is not the case.
33. The cost estimates also assume business R&D grows at 8% per annum (based on current trends), which would mean a significant private sector contribution to the goal of raising economy-wide R&D to 2% of GDP in ten years. If the tax credit drives faster BERD growth this would mean higher costs and faster progress on the 2% goal.

*There appears to be potential funding available to support a range of design options*

34. You published a fiscal plan for implementing your policies before the election which budgeted \$850m over four years for an R&D tax credit. A further \$800m of funding for the existing Callaghan Innovation Business R&D Grants programme is also included in pre-election economic and fiscal update, giving a total potential budget for support of business R&D of \$1649m over four years.
35. The amount available for funding tax credits would depend on decisions on what aspects of the current Growth Grants programme to retain (if any), and on the transitional arrangements.
36. Table two below shows indicative cost estimates and potential budget over four years. The cost figures assume a tax credit which allows firms to claim for R&D expenditure occurring from 1 April 2019 and which impacts Crown revenues from the 2019/2020 financial year<sup>2</sup>.

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<sup>2</sup> In reality a small reduction in Crown revenue would also fall in the 18/19 financial year. We will do more detailed modelling to forecast the likely phasing.

<b>Table two: indicative cost estimates and potential budget over four years</b>					
	<b>2018/19</b>	<b>2019/20</b>	<b>2020/21</b>	<b>2021/22</b>	<b>4 Year Total</b>
<b>Indicative costs</b>					
12.5% R&D tax credit	-	\$272m	\$294m	\$318m	\$884m
20% R&D tax credit	-	\$436m	\$471m	\$508m	\$1,415m
<b>Potential budget</b>					
R&D Growth Grants	\$161m	\$169m	\$173m	\$146m	\$649m
Project and Student Grants	\$38m	\$38m	\$38m	\$38m	\$150m
<b>Total in PREFU</b>	<b>\$199m</b>	<b>\$207m</b>	<b>\$210m</b>	<b>\$183m</b>	<b>\$799m</b>
Labour Fiscal Plan allocation	\$100m	\$200m	\$250m	\$300m	\$850m
<b>Total potential budget</b>	<b>\$299m</b>	<b>\$407m</b>	<b>\$460m</b>	<b>\$483m</b>	<b>\$1,649m</b>

37. Note that the Labour Fiscal Plan allocates \$100m in 2018/19, but significant additional costs do not arise until 2019/20 under the timeline outlined in this paper (provided in Annex one). Re-allocating this funding to future years would increase the annual amount available for tax credits. Alternatively, it will be important to re-prioritise this funding into the Research, Science and Innovation portfolio in order to achieve your goal of lifting R&D to 2% of GDP.

*There is a risk of fiscal 'blow-out' if BERD grows strongly*

38. The rate of BERD growth could accelerate due to the additional private investment induced by the tax credit and other economic factors. This would increase fiscal costs, especially in out-years. There would be more immediate fiscal risks due to uncertainty about uptake and R&D accounting by firms on roll-out of the tax credit.
39. Maintaining the potential budget currently available for tax credits will maximise your flexibility in design choices while covering the risk of fiscal blow-out.

## **Timeline and Next Steps**

### **Commencement date of the R&D tax credit by 1 April 2019 is tight but possible**

40. Annex one indicates the processes involved and a suggested timeline for achieving the commencement of the tax credit by 1 April 2019. The immediate next phase for developing the tax credit is to develop a Government proposal which can be published for consultation (March 2018 is a feasible target).
41. It is important to allow enough time for consultation so that we can collaborate with the R&D sector when designing the rules, engage with other countries to ensure we are aligned with current best practice, set business expectations early to improve uptake, identify and mitigate fiscal risks, and reduce unintended consequences.
42. Publishing a government proposal for consultation by March 2018 will require you to make some high-level decisions in the coming weeks, followed by more specific decisions addressing specific design features, and then for Cabinet approval to be secured to go to consultation.

43. We recommend first addressing the following high-level design decisions:
- Developing a more specific set of policy objectives for the R&D tax credit
  - Whether and how the tax credit will target particular firms in the economy
  - How the tax credit will interact with an R&D grants system and how the grants system may need to be redesigned to complement a tax credit.
44. If you agree with these initial design priorities we will begin developing advice for you.
45. We also recommend that you begin socialising some of these ideas with your Cabinet colleagues as the decisions are progressing. Cabinet is likely to be extremely busy over the coming months so socialising these issues with other Ministers early is important.
46. We expect that other Ministers with a particular interest in this policy will be the:
- Minister of Finance
  - Minister of Economic Development
  - Minister of Revenue.
47. We will provide you with advice and supporting materials for your discussions with your Cabinet colleagues.
48. We are also developing a contingency budget bid for introducing the tax credit. This will provide funding to cover any costs of the tax credit which fall in the 2018/19 financial year, and sets aside funding for future years. We will consult you on the specifics of this bid as part of our Budget 2018 advice.

## **Annexes**

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Annex One: Potential timeline for the implementation of an R&D tax credit

Annex Two: Current mechanisms to encourage business R&D

Annex Three: Further information on BERD performance

## Annex One: Potential timeline for the implementation of an R&D tax credit

Steps	Process	Timeframe	Dates	Comment
<p>Policy design – MBIE in conjunction with Inland Revenue (IR), Treasury and Callaghan Innovation</p> <p>Policy-related consultation</p>	<ul style="list-style-type: none"> <li>Work with you and other Ministers to develop a high-level structure for the credit</li> <li>Address more detailed policy questions once the proposed high-level structure is clear</li> <li>Selective engagement with R&amp;D firms and overseas jurisdictions to understand what will/won't work in NZ, what's administrable, and how to manage fiscal risk.</li> <li>Cabinet approval for release of consultation document with a relatively detailed government proposal.</li> </ul>	<p>4-5 months for development of proposals for ministerial consideration</p>	<p>Nov 2017- Mar 2018</p> <p>Consultation document released Mar 2018.</p>	<p>The 2008 Act will be a good starting point, but needs to be reviewed because of suspected weaknesses (e.g., inclusion of novelty in definition of R&amp;D, and development of broader powers to give the scheme more flexibility) and increased understanding of how to manage fiscal risk.</p> <p>Discussion with other jurisdictions needs to cover why they have adopted certain policies, and what risks they perceive within their system.</p> <p>A consultation document will provide a complementary source of feedback to the selective engagement.</p>
<p>Implementation design – IR in conjunction with MBIE, Treasury and Callaghan Innovation</p> <p>Design-related consultation</p>	<ul style="list-style-type: none"> <li>Engagement with accounting software providers to understand how collection of data and processing of tax credit applications can be integrated into company processes.</li> <li>Integrating delivery of R&amp;D tax credit with IR's existing programme.</li> </ul>	<p>4-5 months for development of implementation design.</p> <p>This work can proceed simultaneously with policy design.</p>	<p>Nov 2017- Mar 2018</p>	<p>This implies non-standard, but more effective, policy development where stakeholder engagement and implementation occurs alongside resolution of policy questions.</p> <p>IR is part way through Business Transformation – a large multi-year programme – which over the short-medium term limits its operational flexibility. In addition, IR is implementing several projects arising from the Government's 100 day plan.</p>
<p>Finalisation of the design features</p>	<ul style="list-style-type: none"> <li>Consultation with Ministers of Revenue and Finance.</li> <li>Consultation with coalition and support party.</li> </ul>	<p>3-4 weeks</p>	<p>Apr 2018</p>	

Cabinet committee decisions Cabinet	<ul style="list-style-type: none"> <li>Economic Growth Infrastructure Committee</li> <li>Cabinet Legislation Committee</li> <li>Cabinet</li> </ul>	4 weeks	May 2018	
Inland Revenue	<ul style="list-style-type: none"> <li>Drafting of legislation</li> </ul>	3 months	May-Jul 2018	Three months is the minimum time PCO suggests for drafting legislation. It is assumed the minimum will be achievable because parts of the 2008 legislation will be usable. The time for this step might be tight if there is consultation on an exposure draft.
Ministers of Research, Science and Innovation and Revenue	<ul style="list-style-type: none"> <li>Legislation sign-off</li> </ul>	2 weeks	Aug 2018	
Introduction, passing and enactment of Government Bill	<ul style="list-style-type: none"> <li>1<sup>st</sup> reading, Select committee process, 2<sup>nd</sup> reading, Committee of the whole house, 3<sup>rd</sup> reading and Governor General sign-off on legislation</li> </ul>	6-9 months	Sept 2018 – Mar/Jun 2019	
Support for implementation	<ul style="list-style-type: none"> <li>Preparation of guidance material.</li> <li>Staff training</li> <li>Education of potential applicants</li> </ul>	6 months	Sept 2018 – Mar 2019	Occurs at the same time legislation is before the House.
Commencement of the R&D tax credit			1 Apr 2019	Ideally, the legislation would be enacted prior to the scheme's commencement. This will be better in terms of applicant certainty and record-keeping. However, provided the Government's intention to introduce the R&D tax credit from 1 April 2019 is clearly signalled, a small delay in enactment should not be too disruptive. June 2019 is the latest date for enactment without disrupting companies' payment of provisional tax.

## Timing risks

It is important to note, this timeline has been developed without complete knowledge of the risks in three areas crucial to the introduction of the R&D tax credit:

- The capacity of firms that undertake R&D to modify their systems so they can access an R&D tax credit
- The capacity of accounting software providers to develop modules that will integrate applications for R&D tax credits with standard accounting record keeping
- IR's major IT and organisational redevelopment programme – Business Transformation - has implications for its ability to take on new projects.

The likelihood and scale of these risks will become clearer as the design of the R&D tax credit progress.

## **Annex Two: Current mechanisms to encourage business R&D**

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### **The Business R&D Grants Programme, which includes R&D Growth, Project and Student Grants are administered by Callaghan Innovation**

#### *R&D Growth Grants*

Growth Grants have been set up to provide experienced R&D performers with the funding certainty and stability they need to grow their R&D spending in the long term. Businesses at this level know how to carry out and commercialise R&D, so the grant offers a light touch, low compliance cost funding process. Key features of Growth Grants:

- Co-funds 20% of a business's R&D programme for three years with a maximum grant funding limit of \$5 million per business per year.
- Targets businesses that have a proven track record in R&D investment at relatively significant levels.
- The approval process is non-discretionary: Callaghan Innovation determines eligibility based on predefined criteria (i.e. to be eligible businesses need to spend \$300,000 on R&D and 1.5% of revenue on R&D in each of the two years prior to a R&D Growth Grant application).
- If a business is eligible for a Growth Grant, they cannot receive a Project Grant unless the project is in collaboration with another firm.

#### *R&D Project Grants*

Project Grants are intended to support businesses that are relatively inexperienced at R&D. They provide the funding and advisory support from Callaghan Innovation to help up and coming R&D firms to grow into stronger R&D performers. Key features of Project Grants:

- Co-funds 40% of the first \$800,000 of a business's R&D project and 20% thereafter; or co-funds 20 percent of a business's R&D project if the firm has had more than \$800,000 of R&D project funding in the past.
- Targets businesses that do not have a programme of R&D, are generally new to R&D, or have a track record of relatively low R&D investment.
- The approval process is discretionary: Callaghan Innovation assesses Project Grant funding proposals and determines eligibility based on six criteria.

Project Grants also allow for collaboration on joint projects, even if one of the firms is already a Growth Grant recipient, or an international partner. Collaborative Project Grants typically receive co-funding for up to 40% of the eligible R&D expenditure of the project. If one of the partners is already a Growth Grant recipient, they will receive 20% for the collaborative project on top of their Growth Grant funding.

#### *R&D Student Grants*

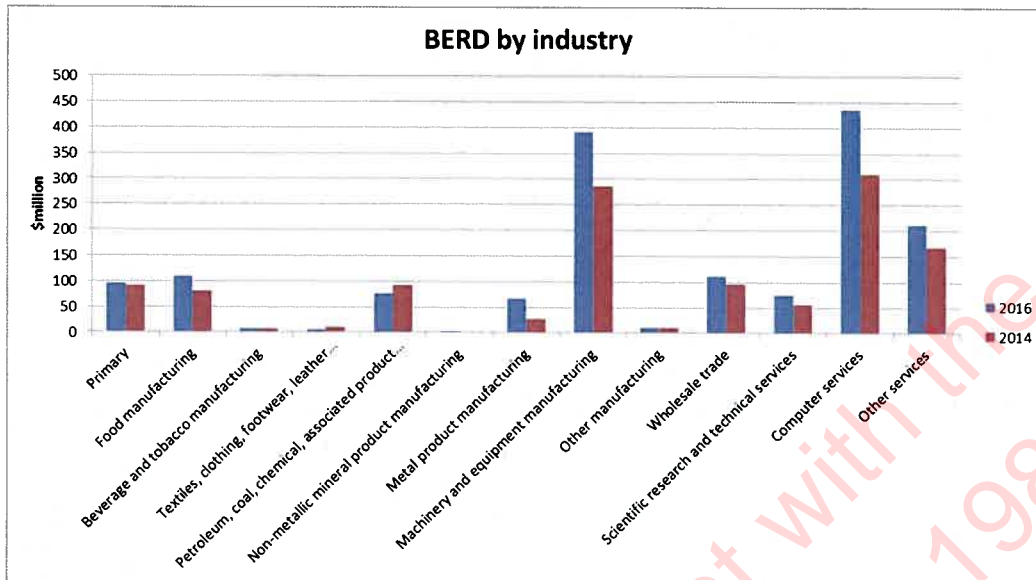
Student Grants provide specific support to undergraduate and postgraduate students to work within R&D active businesses with the aim of increasing R&D capability in New Zealand, better connect businesses to universities and facilitating knowledge transfer. Student Grants include:

- R&D Experience Grant which provides a \$7,200 grant for a business to employ an undergraduate student for 400 hours to work on a R&D project as part of a summer internship.
- R&D Career grants which co-fund 50% of annual salary costs up to \$30,000 to cover the salary of a recent graduate for the first six months of their work on an R&D project.
- R&D Fellowship grants which provide scholarships for Masters students (\$25,000 in value) and Ph.D. students (\$100,000 value) to undertake R&D in a business that has an active R&D programme.

## Annex Three: Further information on BERD performance

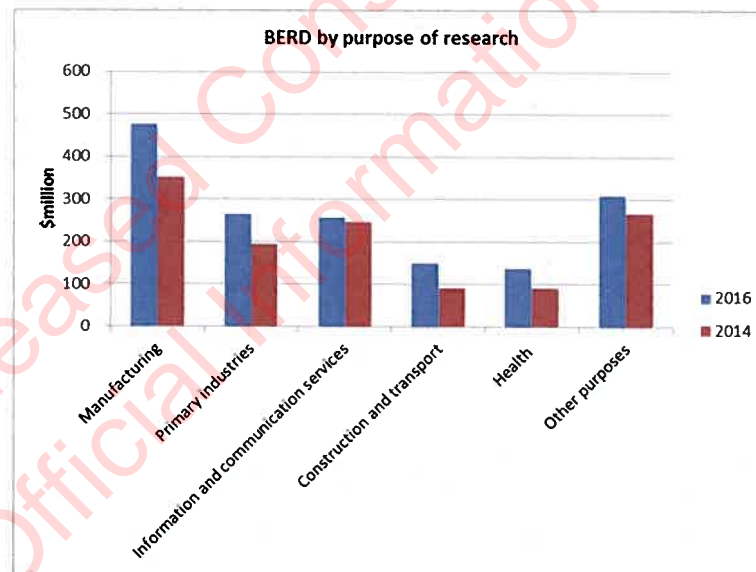
### Business R&D at an industry level

Relatively few industries invest heavily in R&D. The industries spending the most on R&D are machinery and equipment manufacturing and computer services which includes businesses involved in software production or web design.



### Business R&D by purpose of research

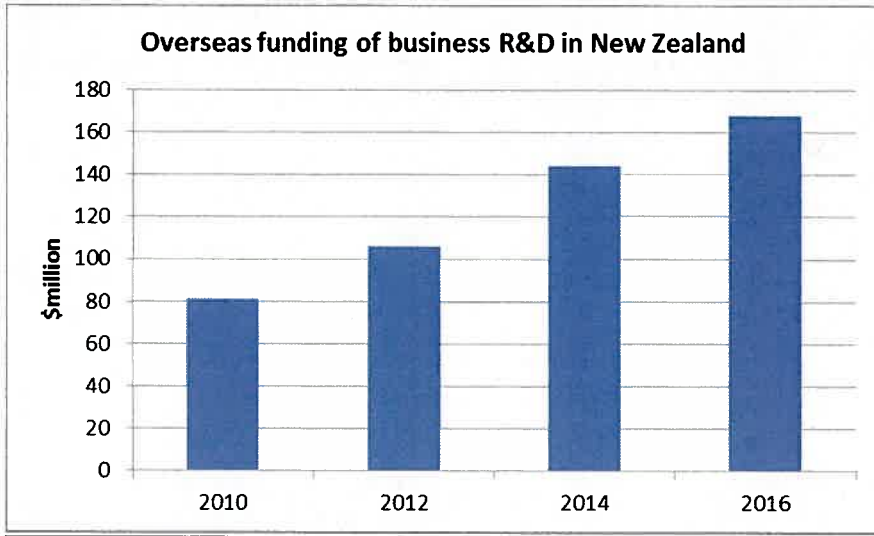
In 2016, the main purpose of business R&D remained to be manufacturing, making up 30% of BERD, this was followed by business R&D for the purpose of the primaries industries and information and communication services.



### Overseas funding of business R&D in New Zealand

Overseas funding of business R&D in New Zealand continues to grow, but it is still low (\$168 million in 2016) compared to other small advanced economies.





### Why is New Zealand BERD low?

50. Factors that influence New Zealand's comparatively low levels of BERD include:

- Industry structure and firm size
  - relatively few/no very large firms doing R&D
  - fewer internationally-focussed firms
  - industry sectors in New Zealand invest less than comparator sectors overseas except for primary and computer service industry
- Small domestic market: means that firms cannot spread the risks and costs of R&D over a large potential market, creating a disincentive to invest
- comparatively undeveloped capital markets

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## BRIEFING

### R&D Tax Credit: Cabinet Paper on Timing

<b>Date:</b>	8 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	1862 17-18 IR2018/024

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Sign and lodge</b> the attached Cabinet paper for consideration at Cabinet Economic Development Committee on 21 February.  <b>Forward</b> the attached Cabinet paper to the Minister of Finance	15 February 2018
Hon Stuart Nash <b>Minister of Revenue</b>	<b>Sign</b> the attached Cabinet paper for consideration at Cabinet Economic Development Committee on 21 February	15 February 2018

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Richard Walley	Manager, Innovation Policy	04 901 4164	9(2)(a)	✓
Keith Taylor	Policy Manager, Inland Revenue			

The following departments/agencies have been consulted
The Treasury Callaghan Innovation

Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

Comment



## BRIEFING

### R&D Tax Credit: Cabinet Paper on Timing

<b>Date:</b>	8 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	1862 17-18 IR2018/024

#### Purpose

To provide you with a Cabinet paper to seek Cabinet approval to introduce an R&D tax credit in April 2019.

#### Recommended action

The Ministry of Business, Innovation and Employment and Inland Revenue recommend that you:

	<b>Min. R,S&amp;I</b>	<b>Min. Revenue</b>
a <b>Agree</b> to lodge the attached Cabinet paper on 15 February, for consideration at Cabinet Economic Development Committee on 21 February	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
b <b>Agree</b> to forward the attached Cabinet paper to the Minister of Finance	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>

9(2)(a)



**Mr. Richard Walley**  
**Manager, Innovation policy**  
Labour, Science and Enterprise, MBIE

08 / 02 / 18

Hon Dr Megan Woods  
**Minister of Research, Science and  
Innovation**

..... / ..... / .....

Keith Taylor  
Policy Manager  
**Inland Revenue**

08 / 02 / 18

Hon Stuart Nash  
**Minister of Revenue**

..... / ..... / .....

## Background

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1. The Minister of Finance, the Minister of Research Science & Innovation, and the Minister Revenue met on 20 December 2017 to discuss the introduction of an R&D tax credit.
2. Your conversation mainly focused on the timing of introduction. In subsequent discussions, you have decided to introduce the tax credit in April 2019.
3. At the December meeting, you asked officials to prepare a Cabinet paper on the timing of the credit, to enable you to consult Cabinet colleagues, coalition partners, and confidence and supply partners.
4. We have redrafted a paper for your consideration following feedback from Ministers. It is now a joint paper from Ministers of Research, Science and Innovation and Revenue. We have changed the date of lodgement from 8 to 15 February and have also included a timeline for implementation of the tax credit (**Annex B**).

## Next Steps

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5. We recommend that you sign and lodge the attached paper by 15 February 2018, for consideration at Cabinet Economic Development Committee on 21 February 2018. We recommend you forward the Cabinet paper to the Minister of Finance prior to the Cabinet meeting taking place.
6. In the meantime, officials are continuing to progress work on the tax credit. We plan to provide a briefing on key policy decisions on 16 February. This will in turn inform the content of a public discussion document, which we hope to release in April following Cabinet consideration.

## Annexes

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Annex One: Cabinet Paper, 'Timing of an R&D Tax Credit'

## **Annex One: Cabinet Paper, 'Timing of an R&D Tax Credit'**

Note: The final version of this document is publicly available. This draft has therefore not been released.

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## BRIEFING

### R&D tax credit: main design features

<b>Date:</b>	16 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking numbers:</b>	1714 17-18 IR2018/083

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Discuss</b> and/or <b>Agree</b> to the main design features and issues for consideration	2 March 2018
Hon Stuart Nash <b>Minister of Revenue</b>	<b>Discuss</b> and/or <b>Agree</b> to the main design features and issues for consideration	2 March 2018

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Dr Peter Crabtree	Manager, Innovation Policy	[Redacted]	s9(2)(a)	✓
Keith Taylor	Policy Manager, Inland Revenue	[Redacted]	[Redacted]	
Becci Whitton	Manager Stakeholder and Government Engagement, Callaghan Innovation	[Redacted]	[Redacted]	

The following departments/agencies have been consulted
The Treasury

Minister's office to complete:

Approved

Declined

Noted

Needs change

Seen

Overtaken by Events

See Minister's Notes

Withdrawn

Comment

## BRIEFING

### R&D tax credit: main design features

<b>Date:</b>	16 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	1714 17-18 IR2018/083

### Purpose

This paper seeks agreement to key design features for the Research and Development (R&D) tax credit to include in a discussion document for public consultation intended to be published in April 2018. A parallel paper seeks agreement on technical design features for the tax credit. A draft discussion document will be prepared based on the decisions from both the papers.

### Executive summary

You are intending to recommend to Cabinet that a Research and Development tax credit (R&D tax credit) for business R&D should be implemented from 1 April 2019.

The objectives of a tax credit are to provide easily accessible support to a broad range of R&D businesses within fiscal constraints, while maintaining trust and confidence in the tax system. Each key design decision will impact these objectives differently and require Ministers to make trade-offs between the objectives.

The key decisions sought in this paper are:

- the rate of the tax credit
- whether eligible expenditure per firm should be capped
- whether the tax credit should be refundable for firms in loss, and
- whether the tax credit should apply to expenditure above a base (on an incremental basis) or whether it should subsidise all eligible expenditure (volume basis).

In addition to lifting business investment in R&D through a tax credit, a comprehensive range of other priorities in the RSI portfolio has been signalled that will complement efforts to lift R&D, and maximise the benefits of research, science and innovation to New Zealand. The impact of the credits on the ability of Callaghan Innovation to support innovation must not be unintentionally undermined.

The design of the tax credits must also maintain public trust and confidence in the tax system. This is essential because the system relies on voluntary compliance. Public trust in the tax system largely hinges on the tax system being seen as fair. And an erosion of trust in one part of the tax system can cascade and undermine compliance in other parts of the tax system.

The policy settings discussed in both this paper and in the technical design features paper reflect the current state of knowledge of R&D and firm behaviour. Their robustness and relevance over time will need to be supported by a flexible regulatory framework and regular evaluation of the costs and benefits of the scheme.

9(2)(g)(i)

In the short term, costs to government will increase as more business R&D activity becomes eligible. The uncertainty comes from not knowing how much of current reported R&D will meet the proposed tax credit definition of R&D, and how many additional businesses will be eligible. Current underreporting and future recharacterisation of activities as R&D will also result in an increased cost of the credit. Uncertainty in the response of businesses means that we do not know how many more firms will undertake R&D and how many will expand their R&D programmes.

9(2)(g)(i)

The four year fiscal expenditure on a 12.5% R&D tax credit is estimated to be \$1 billion. The cost assumes the credit is refundable for firms in loss (from April 2019) and there is no cap on claims. Taking into account tax effects this gives a 17% effective R&D subsidy rate which is in the range of the international average. We recommend signalling a headline tax credit rate of 12.5% in the discussion document.

We recommend that claims should be capped at \$120 million of eligible expenditure to limit the risk of large claims for recharacterised R&D expenditure. This equates to a tax credit of \$15 million at a 12.5% credit rate. The cap has headroom for existing large R&D performers to expand their programmes in the short term, but over time could reduce the incentive on New Zealand's largest businesses to increase R&D spending at the margin. We therefore recommend that measures to mitigate the disincentivising effects of the cap (such as Ministerial discretion or pre-registration showing eligible expenditure) should be consulted on in the public discussion document.

As a general rule, the tax system does not refund losses. However, a tax credit that is carried forward until the firm becomes profitable 9(2)(g)(i) Refunding tax credits to firms in loss creates larger fiscal risks, including risks fraud. It will be complex to design a system to support the loss making R&D firms that the Government may wish to target (through a tax credit or grant mechanism). We therefore recommend that a tax credit without refundability be introduced in April 2019. The discussion document should signal Government support for cash-constrained R&D firms in loss and for that support to be in place from 1 April 2020. Transition and interim issues will arise in relation to that delayed support. We will continue to develop options for tax credit refundability or a complementary grant scheme for cash-constrained R&D firms.

We recommend a volume-based R&D tax credit scheme so that the tax credit applies to all eligible R&D expenditure. Schemes that support increases in the amount of R&D undertaken by a firm can potentially cost less, at least initially, but are complex and would become similar in effect to a volume-based credit over time.

The overall timeframes are very short. The timetable for achieving commencement in April 2019 requires consultation to finish by early May 2018. It is therefore important to resolve policy issues expediently. We will provide drafts to your offices with:

- a draft of a public discussion document by early March, and
- a paper to Cabinet seeking approval to consult publicly and key policy features to be decided prior to public consultation by mid-March.



## Recommended action

The Ministry of Business, Innovation and Employment, Inland Revenue recommend that you:

	Min. R,S&I	Min. Revenue
<b>Agree</b> that public consultation on the R&D tax credit indicates a headline tax credit rate of 12.5%.	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
<b>Note</b> that the rate will be reviewed after consultation.	<i>Noted</i>	<i>Noted</i>
<b>Agree</b> that public consultation on the R&D tax credit should set out that the maximum expenditure eligible for the tax credit per year for a business should be \$120 million	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
If a cap on eligible expenditure is included in the design of the tax credit that you  <b>Agree</b> that mitigation measures, for example a Ministerial discretion or pre-registration, should be included for public consultation.	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
<b>Agree</b> that public consultation on the R&D tax credit should set out that the tax credit be based on the total amount of eligible R&D expenditure incurred by a business in a given year (volume-basis), rather than on the incremental increase in R&D expenditure by that business in that year (incremental basis).	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
<b>Agree</b> that public consultation on the R&D tax credit should be state that a tax credit without refundability be introduced in April 2019.  <b>Agree</b> that that the discussion document signal Government support for cash-constrained R&D firms in loss to be implemented from 1 April 2020.  <b>Note</b> that officials will continue to develop options for refundability or a complementary grant scheme for R&D firms in loss to be implemented from 1 April 2020.	<i>Agree/ Disagree</i>  <i>Agree/ Disagree</i>  <i>Noted</i>	<i>Agree/ Disagree</i>  <i>Agree/ Disagree</i>
<b>Note</b> that officials will draft a public discussion document based on above decisions and decisions from the parallel paper on technical design features.	<i>Noted</i>	

<b>Refer</b> this paper to the Minister of Finance	<i>Referred</i>	
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s9(2)(a)

Dr Peter Crabtree  
**General Manager, Science, Innovation and International**  
Labour, Science and Enterprise, MBIE

16 / 02 / 18

Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

..... / ..... / .....

s9(2)(a)

Vic Crone  
**Chief Executive**  
Callaghan Innovation

16 / 02 / 18

s9(2)(a)

Keith Taylor  
Policy Manager  
**Inland Revenue**

16 / 02 / 18

Hon Stuart Nash  
**Minister of Revenue**

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## Background

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1. You are intending to recommend to Cabinet that a Research and Development tax credit (R&D tax credit) for business R&D be implemented from 1 April 2019.
2. This paper seeks agreement on the key design features for the R&D tax credit to include in a discussion document for public consultation intended to be published in April 2018. A parallel paper seeks agreement on technical design features for the tax credit. Further advice will be provided on changes to Growth Grants and what should happen to firms on grant contracts who exit after the commencement of the tax credit. A draft discussion document will be prepared based on the decisions from the two papers, and any other decisions taken prior to public consultation.
3. Annex 1 to this paper provides an international comparison of R&D concessions that you asked us for.

## Main design features of an R&D tax credit

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4. Tax credits have strengths and weaknesses. The policy settings to be chosen reflect trade-offs between the effectiveness of the scheme, the fiscal costs, design and implementation risks that can be borne, and related mitigations.
5. The objectives of a tax credit are to provide easily accessible support to a broad range of business R&D, within fiscal constraints, while maintaining trust and confidence in the Tax system. Each key design decision will impact these objectives differently. This will require Ministers to make trade-offs between these objectives.
6. The key decision sought in this paper is the rate of the tax credit. The overall cost-effectiveness and focus of the scheme on different types of firms, will mainly be determined by the rate in combination with three other primary design features:
  - whether eligible expenditure per firm should be capped
  - whether the tax concession should be refundable for firms in loss, and
  - whether the subsidy should apply to expenditure above a base (on an incremental basis) or whether it should subsidise all eligible expenditure (volume basis).
7. There are a large number of design settings and combinations of settings that have not been canvassed in this paper. Given the ambitious timeframe to implement the tax credit our approach has been to design the credit largely following the design of the R&D tax credit that was available to New Zealand businesses for the 2008/09 income year with modifications to reflect changes in international best practice, experiences in other countries and the current R&D grants programme.
8. The decisions sought in this paper will form the parameters of the scheme. [REDACTED]  
[REDACTED] Respondents can be expected to provide feedback on all aspects of the proposed tax credit.
9. The choices within the technical design features discussed in the parallel paper will also have a bearing on the expenditure needed to fund the tax credit.
10. The policy settings discussed in both this paper and in the technical design features paper reflect the current state of knowledge of R&D and firm behaviour. Their robustness and relevance over time will need to be supported by a flexible regulatory framework to mitigate aggressive tax planning. The intent to maintain a sustainable and robust scheme should be signalled clearly with a purpose provision in the legislation.

11. The monitoring of the credit discussed above should be supported by regular evaluation of the costs and benefits of the scheme. Evaluation is also recommended by the Treasury.

## Policy context

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### Raising business expenditure on R&D

12. The Government has announced a target of increasing New Zealand's R&D expenditure to 2% of GDP by 2027. The majority of this growth will need to come from increased business R&D (BERD). Encouraging new R&D intensive firms is likely to support economic diversification. Attracting international businesses to conduct R&D in New Zealand can make a valuable contribution to BERD and the number of businesses performing R&D. It can strengthen our own R&D capabilities, strengthen New Zealand's integration with global innovation networks, and increase opportunities for employment. To achieve this target you have agreed to increase support for business R&D, alongside direct government investment.
13. Without government support, businesses will tend to invest less in R&D than is optimal for the country as a whole, as they are unable to capture the full benefits of their investment. The gains from R&D tend to be broadly distributed through, for example, worker mobility, reverse engineering, or product imitation. The support for business R&D is primarily for the purposes of compensating for those benefits that do not accrue to the firm.

### Trust and confidence of the tax system

14. As introduced in paragraph 5 above, the design of the tax credits must maintain public trust and confidence in the tax system. This is essential because the system relies on voluntary compliance. New Zealanders currently show high levels of trust in the tax system as reflected in responses to public surveys and the collection rates for our taxes. This is consistent with the high levels of confidence in public institutions generally in New Zealand.
15. Public trust in the tax system largely hinges on the tax system being seen as fair. Taxpayers rarely pay taxes enthusiastically but generally they will comply voluntarily where they perceive they are being treated equitably vis-à-vis other taxpayers and that the revenue raised is spent wisely. An erosion of trust in one part of the tax system can cascade and undermine compliance in other parts of the tax system.
16. Risks to the tax system that undermine public trust are real, not hypothetical, and have been experienced in New Zealand and other countries. The three ways these risk could manifest with an R&D tax credit are:
  - a) **Fraud.** Refundability of the tax credit, whereby claimants receive payments as opposed to having a lower tax liability, exacerbates the risk of fraudulent claims. [REDACTED] 9(2)(g)(i)
  - b) **Recharacterisation.** If some firms are able to inflate their claims by recharacterising expenditure as R&D expenditure, public confidence in the fairness of the system is undermined, as well as providing unfair competitive advantage to some firms over others. Problems with recharacterisation were seen in the 2008/09 tax credit. [REDACTED] s6(b)(ii) While these particular problems can be addressed, a flexible regulatory approach will be needed to update eligible expenditure and activity criteria in order to manage this risk.
  - c) **Ability of multinationals to shift profits.** Confidence in the R&D tax credit will be eroded if payments are made to firms that appear to be profitable but which pay little tax in New Zealand. While foreign direct investment by multinationals plays a valuable role in New Zealand's economic development, and many multinationals will undertake

useful R&D in New Zealand, some will organise their global business operations to adjust where their profits are reported and minimise the tax they pay in developed countries such as New Zealand.

17. Measures to maintain integrity of the tax system should therefore include:

- a clear legislative signal to maintaining a robust and responsive definition of eligible R&D expenditure
- specific rules and processes to deter fraud
- a regulatory structure allowing for rapid responses to address recharacterisation risks as they emerge
- transparency of claims to allow public scrutiny of who is receiving direct benefits
- administrative resources to allow review of claims
- rules to deter tax credit advisors encouraging illegitimate claims.

### **The R&D Tax Credit complements a range of work underway in the Research, Science & Innovation (RSI) portfolio, including services delivered by Callaghan Innovation**

18. In addition to lifting business investment in R&D through a tax credit, a comprehensive range of other priorities in the RSI portfolio have been signalled that will complement efforts to lift R&D, and maximise the benefits of research, science and innovation to New Zealand. These include:

- A comprehensive programme of work on innovation and commercialisation, focusing on areas that will concentrate activity on Government's goals to diversify our industrial base, grow our ICT sector and transition to a zero carbon economy. In particular, we are looking at the broader commercialisation landscape, and options for strengthening the connections between our research institutions and firms.
- Reviewing the policy settings and interventions for start-ups to enable new high-growth firms to thrive and have a transformative effect on New Zealand's economy.
- Advancing international partnerships between our research entities and their international counterparts. This will increase New Zealand's access to offshore networks, capabilities, infrastructure and markets and ultimately lift our science quality and impact.
- Implementing the Health Research Strategy to create a world-leading health research and innovation system. This work will bring together science, health, research and innovation sectors together to form a more cohesive system.

19. This work will add to the range of supports to businesses through Callaghan Innovation. The tax credit will complement Callaghan Innovation's existing services, and we will aim to ensure that it is designed in such a way as to avoid unintentionally undermining the effectiveness of the Callaghan Innovation model.

20. Finally, a new comprehensive RSI Strategy is being developed that will provide a framework to guide interventions in the RSI system. In parallel, this year Callaghan Innovation will start to implement a new five year strategy, which is currently being co-designed with R&D performers and other key stakeholders in the innovation ecosystem. A well-constructed strategy is intended to have a galvanising effect on the sector, and encourage stakeholders outside of government to align their activities to Government's priorities. It will set out a compelling vision, and how RSI priorities will achieve that vision, focusing on the mission-

critical items that will make the biggest overall difference. It will also outline how RSI will further the Government's broader economic, health and environmental priorities.

## Impact of an R&D tax credit

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21. The R&D tax credit will sit within a wider system of Government support for business R&D.
22. Currently one of ways the government provides support for business R&D is through the Growth Grants scheme which provides 20% co-funding for R&D-intensive firms, capped at \$5m per year. Officials are designing the tax credit on the expectation that there will continue to be a grants system, modified from today's schemes (but with R&D Student Grants unaffected by tax credits), to complement the tax credit.
23. An R&D tax credit would be market-led in the same way as a Growth Grant, in that the tax credit would support R&D activities that business chooses to invest in. Depending on the settings, more firms are likely to be able to access the tax credit than are currently accessing the Callaghan grants schemes, and some very large R&D performers will receive more support<sup>1</sup>.
24. 9(2)(g)(i) [REDACTED]  
9(2)(g)(i) In the short term, costs to government will increase as more, business R&D activity becomes eligible. The amount of increase is uncertain as we do not know how much currently reported R&D will meet the proposed R&D definition under the credit or how many additional businesses will be eligible. Having the credit incentive in place could also lead to claims for additional R&D which is currently not reported and encourage re-characterisation of other activity. Annex 3 has more information on the short term impacts of the tax credit.
25. In the longer term, we can expect the tax credit to lead to greater growth of business R&D, both through more firms undertaking R&D and an expanded R&D programme from those already engaged. 9(2)(g)(i) [REDACTED]  
9(2)(g)(i) [REDACTED]

## Fiscal cost

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26. Without design details, the financial implications of introducing a tax credit are unclear. The financial cost and risk of a tax credit will vary significantly depending on the design of the credit specifically; the rate, cap, and any exclusions. Labour's pre-election fiscal plan sets out an allowance for introduction of an R&D tax credit in 2019, with \$100m allocated in the 2018/19 fiscal year, rising to \$300m in 2021/22. In total, this allows \$850m over the forecast period.
27. Australia and Ireland have experienced large unexpected increases in expenditure on their R&D tax incentives. Officials recently visited Australia to learn from their experience and a report on the conclusions from this visit will be provided to Ministers shortly. Given the increase in expenditure in Australia and the difficulties involved in forecasting these, 9(2)(g)(i) [REDACTED]
28. From 2018/19 to 2021/22 the Growth Grant Multi-Year Appropriation has \$664m appropriated. 9(2)(f)(iv) [REDACTED]

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<sup>1</sup> The tax credit is being designed as a broad based measure and does not have some of the current restrictive criteria of Growth Grants. Five to six Growth Grant recipients currently performing more than \$25m eligible R&D per year and whose Grants are capped at \$5m, will receive more support. Some of the largest R&D performers, previously ineligible for a Growth Grant because of the R&D intensity requirements, will also receive public funding.

29. The fiscal costs shown in this briefing are only those associated with the tax credit, assuming all eligible R&D, for both current Growth Grant recipients and other R&D performers attracts a credit from April 2019. There is no cost or cost saving associated with the Growth Grants scheme included in the figures.

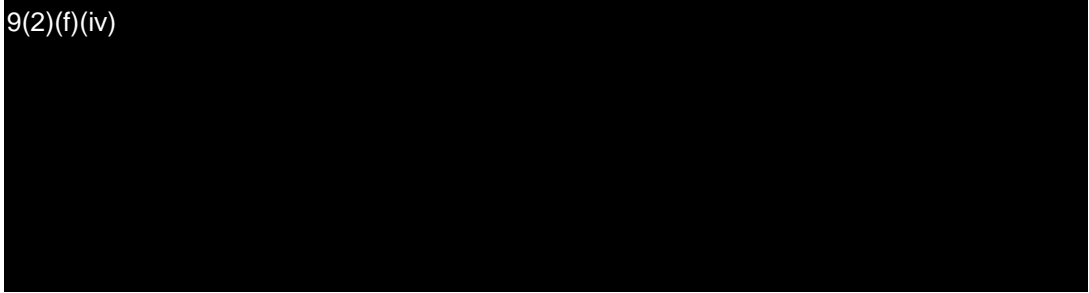
## Rate of the credit

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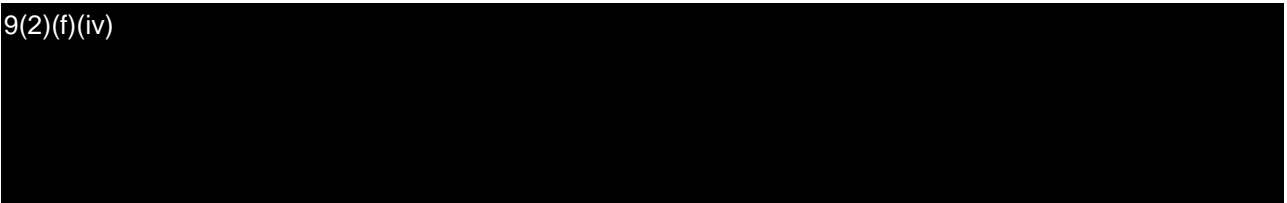
30. It is important to signal an approximate rate for the tax credit in the discussion document as this will enable more meaningful consultation. The total cost of the scheme is affected by a number of settings on which decisions are unlikely until after consultation. Therefore we suggest deferring final decisions on the rate until after consultation so that the fiscal expenditure implications of different rates are clearer.
31. There are several factors to consider in setting the rate of the tax credit: fiscal cost, effectiveness, international comparability, generosity and reach compared to Growth Grants.
32. 9(2)(g)(i) the budget allocation indicated in the Labour Fiscal Plan suggests a headline rate of 12.5% could be affordable under low uptake scenarios (Table 1). The costs shown assume the credit is refundable for firms in loss (from April 2019) and there is no cap on claims.
33. As shown by the 'broad eligibility' scenario, there is a substantial risk that costs could be higher than the budget if our current R&D estimates are low due to under-reporting and if firms re-characterise significant amounts of spending as R&D.
34. The higher rates shown in the table below do not appear affordable without additional funding beyond the Labour Fiscal Plan Allocation. Annex 2 shows further detail on possible costs over a ten year horizon.
35. The target of growing economy-wide R&D to 2% of GDP is challenging because we are starting from a low base (1.3% GDP) and R&D will need to grow at a faster rate than GDP for a sustained period. There are considerable uncertainties in the response of business R&D to the tax credit. Even using firm response rates at the high end of that seen in international studies, it will be challenging to meet the 2% target. Other mechanisms will need to be introduced to build a full package of support for R&D performers and innovative firms.
36. International comparisons on tax credit generosity are not straightforward as several factors influence the effective subsidy rate seen by firms. This includes the corporate tax rate and whether R&D expenses are tax-deductible. Adjusting for these two factors gives an '*effective R&D subsidy rate*' which allows a crude comparison with rates in other jurisdictions.

**Table 1 Estimated cost of different tax credit rates (assumes credit is refundable for firms in loss (from April 2019) and there is no cap on claims)**

9(2)(f)(iv)



9(2)(f)(iv)



37. A simple<sup>4</sup> 12.5% tax credit in New Zealand gives a 17% *effective R&D subsidy rate* which is in the range of the international average (Table 2). Australia's *effective subsidy rate* is also shown as it is an important local competitor.
38. An important factor that the *effective subsidy rates* do not account for is that New Zealand does not currently have a capital gains tax. This increases the attractiveness of developing a start-up company in New Zealand because equity gains on its eventual sale are not taxed.

**Table 2 Effective subsidy rates (1-b index) provided by tax support for R&D in those OECD countries which offer support and in Australia (source: OECD Science, Technology and Industry Scoreboard, 2017)**

	Large, profitable firm	SME, profitable firm
<b>OECD countries which offer support</b>	14% (median) 37% (highest) 3% (lowest)	20% (average) 43% (highest) 4% (lowest)
<b>Australia<sup>5</sup></b>	7%	19%
<b>New Zealand (if there is a 12.5% tax credit)</b>	17%	17%

39. Under a simple 12.5% tax credit current Growth Grants recipients would receive a lower rate of support than currently (assuming the same R&D activities were eligible). Growth Grants are paid pre-tax. The 20% paid through the Growth Grant is equivalent to a 14.4% tax credit for a firm in profit. Loss-making firms receiving Growth Grants might experience a larger decrease in support under a tax credit, since they currently receive 20% co-funding with no tax payable in the current year<sup>6</sup>.
40. **Officials recommend signalling a headline tax credit rate of 12.5% in the discussion document, and reviewing this after consultation.**

## Yearly cap on eligible R&D expenditure

41. The design of the scheme requires a balance between incentivising large firms to undertake more R&D and fiscal risk of large claims being eligible because of loopholes in the tax credit design. Such a claim was experienced with the 2008 credit. To balance these objectives the majority of OECD countries have caps on the amount of eligible R&D expenditure that is eligible for a tax credit.
42. In principle, caps are inconsistent with the aims of the R&D tax credit, limiting support for very large R&D expenditure and potentially reducing the incentive on New Zealand's largest businesses to increase R&D spending at the margin.

<sup>4</sup> Note these figures assume a 'simple' credit, with no cap or other constraints on size of claims or claimants. Such mechanisms would reduce the effective subsidy rate calculated according to this metric.

<sup>5</sup> Note the effective subsidy rates shown for Australia take account of the \$100m cap and lower threshold of \$20,000 on claims. These reduce the effective subsidy rates versus what would be available under a simple tax credit with no cap or lower threshold.

<sup>6</sup> The relative effects on loss-making firms in the longer-term would depend on the relative carry-forward arrangements for losses under Growth Grants and the tax credit, whether firms are eligible for the R&D tax loss cash out and how much value firms place on reduction of future tax liabilities versus current-year cashflow.



43. A cap will add administrative complexity, requiring aggregation rules to prevent company groups breaking down their R&D tax credit claim across separate entities. Such rules may be required if refundability is incorporated in the scheme – see next section on firms in loss.
44. The advantage of a cap is protection against the exploitation of loopholes in the scheme. Large claims that are not associated with genuine R&D could reduce the long-term sustainability of the scheme.
45. However, a cap on its own is a blunt tool which will reduce genuine claims as well as bad claims. Large claims for genuine R&D carried out in New Zealand should be considered a measure of success of the scheme. Mechanisms to mitigate the unintended consequences of the cap should be considered such as a Ministerial discretion to waive the cap or a system of pre-registration.
46. Both these mechanisms have benefits and drawbacks. A discretionary cap would address loopholes but would unavoidably reduce certainty for businesses and be at odds with the non-discretionary and non-targeted nature of tax credits. A system of pre-registration for claims would provide more certainty and limit but not eliminate the exposure to loopholes.
47. Information from Callaghan Innovation and firms' annual reports shows that six firms spent more than \$25m on R&D in 2016 (the current cap on Growth Grants). Together the firms contribute 20% of BERD. Three of those firms spent between \$60-\$100m on R&D.
48. MBIE's Innovative Partnership programme is dedicated to attracting large international R&D intensive firms to New Zealand. Larger firms considering whether to conduct their R&D in New Zealand may be marginally more attracted with an uncapped tax credit.
49. **Officials recommend that claims should be capped at \$120 million of eligible expenditure** to limit the risk of fiscal of loopholes in the scheme. This equates to a credit of \$15 million at a 12.5% rate. Setting the cap at this level provides headroom for existing large R&D performers to expand their programmes in the short term.
50. **If a cap on eligible expenditure is included in the design of the tax credit official recommend that mitigation measures should be included for public consultation.**

## Treatment of firms in loss

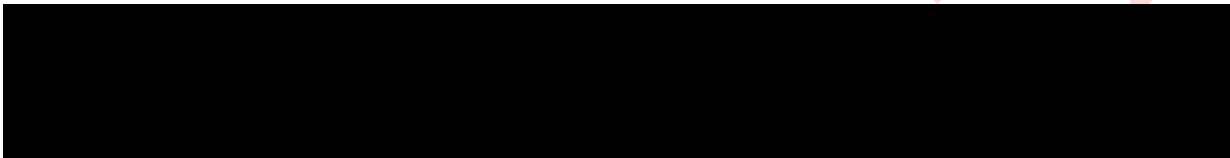
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51. For companies that are in profit, a tax credit will mean a reduction in the amount of tax they pay. For companies that are in loss, the symmetric treatment would be that they are paid out for their tax credit. However as a general rule, the tax system does not operate symmetrically with respect to losses; refunds are not available for losses but instead losses are carried forward to offset future profits.<sup>7</sup>
52. The system of government support for R&D should provide effective support for cash-constrained firms in a loss position. Refundability will be important for some firms in loss, particularly start-ups. Such firms are important within the R&D ecosystem, as a source of value-add employment and the development of a more productive and diversified economy. These firms also typically spend their early years in loss. During this time, they are likely to be cash-constrained. A tax credit that pays out for firms in loss will tangibly assist these firms, whereas carrying forward the credit until the firm becomes profitable **9(2)(g)(i)**  
**9(2)(g)(i)**
53. Internationally, the majority of OECD countries do not allow refundability. Countries that allow refundability place constraints, such as caps on the amount that can be cashed out, systems of prior approval, or limits on the size of eligible firms. Experience in Australia and

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<sup>8</sup> For the 2016 year around 280 businesses in New Zealand spending more than \$100,000 on eligible R&D expenditure would have been in a loss position.

Ireland indicates that the risks of rapid increases in scheme costs are higher with refundability. Refundability also presents greater fraud risks.

54. The situation with respect to taxation and losses for firms undertaking R&D is already relatively complex. There are provisions which make it easier for R&D performing firms to preserve the value of their losses. In addition, the R&D tax loss cash out scheme enables firms to cash out losses arising from R&D expenditure. Eligibility is targeted to R&D start-ups. This scheme was capped at a low level in its first year, 2015/16, but the cap grows each year so that by 2020/21 an eligible firm could receive up to \$560,000.
55. As identified in the paragraphs above, the policy development will also need to cover:
- whether it will be better to provide this support through the tax credit or through a grant
  - how to target refundability to those R&D performers that need this level of support, namely the R&D intensive start-ups
  - the safeguards that need to be built in given the greater risks associated with refundability
  - how this policy would dovetail with the existing R&D tax loss cash out.
56. 
57. Officials will continue to develop options for tax credit refundability or a complementary grant scheme for cash-constrained firms in loss to be implemented from 1 April 2020. This ongoing work should be signalled in the discussion document.
58. This would mean that the current grant scheme would remain until the new support system is implemented. The transition from grants to a tax credit is likely to require a period of overlap rather than a hard date where one stops and the other starts. The disparity between the value of support for Growth Grant recipients and tax credit recipients may also need to be addressed. For the 2019/20 year:
- businesses eligible for a grant could continue in the grants system and receive cash payments
  - businesses in a loss that are ineligible for a grant could enter the tax credit system and carry forward their tax credit to apply against future tax liabilities or to be refunded in future years (eligible businesses could continue to use the R&D tax loss cash-out scheme)
  - other businesses, that are ineligible for a grant and with a tax liability less than what they can claim in a tax credit, would enter the tax credit system and carry forward any unspent tax credits to apply against future tax liabilities or to be refunded in future years.
59. **Officials recommend that a tax credit without refundability be the basis of the scheme to be introduced in April 2019. The discussion document should signal government support for cash-constrained R&D firms in loss and for that support to be in place from 1 April 2020.**

## **Incremental or volume-based concession**

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60. The immediate goal of government support for business R&D is to get more R&D than would otherwise have occurred. A tax credit that applies to all R&D undertaken (volume-based) may appear to reward firms for doing R&D they would have done in any case (deadweight loss). Some countries structure their R&D tax credit to only apply to increases in the amount of R&D undertaken by a firm (incremental schemes) to minimise this effect.

61. We recommend a volume-based scheme because incremental schemes have the following drawbacks:
- they are more complex to design and use, which can deter some firms from applying if applications costs are, or are perceived to be higher than the uncertain benefits
  - they would become similar in effect to a volume credit over time, and as a result the major benefits of the incremental credit would reduce over time, while the complexity of the system remained
  - they can become ineffective if there is an economic downturn and firms cut back on the amount of R&D they undertake
  - if the base level is set by reference to the previous year's R&D, there can be perverse outcomes, such as firms reducing their R&D in one year so as to achieve an increase, and earn a credit, in the following year
  - if the base level is set at a particular year, it can be arbitrary as to which firms benefit.
62. The trend amongst OECD countries is to shift away from incremental schemes and instead base the credit on the total amount of R&D conducted by a firm.
63. **Officials recommend a volume-based scheme so that the tax credit applies to all eligible R&D expenditure.**

## Next steps

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64. We recommend Ministers meet in the week starting 26 February 2018 to discuss the recommendations presented in this paper and provide feedback to officials. We will provide you further advice on the recommendations should you require it.
65. Subject to your feedback, we will progress work on the discussion document.
66. The overall timeframes are very short. The timetable for achieving commencement in April 2019 requires consultation to finish by early May 2018. It is therefore important to resolve policy issues expediently.
67. We will provide a draft of the public consultation document to your offices by early March and draft Cabinet paper in mid-March seeking approval to consult publicly and agreeing to key policy features prior to public consultation.

## Annexes

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Annex 1: International comparison of tax incentive features

Annex 2: Indicative ten year fiscal cost estimates

Annex 3: Indicative estimate of short-term impacts on existing R&D performers

## Annex 1: International comparison of tax incentive features

Feature	Prevalence within OECD	Evidence about effectiveness	Other comments
<i>Tax credit scheme</i>	<ul style="list-style-type: none"> <li>In 2015, 28 of the 34 OECD countries had some form of R&amp;D tax credit.</li> </ul>	<ul style="list-style-type: none"> <li>In an OECD review, 10 out of 17 studies found positive results of R&amp;D support on the amount of R&amp;D conducted, 5 found mixed results, and 2 found negative results.</li> <li>Overall, an elasticity around 1 is estimated, ie, a 1% reduction in the price of R&amp;D leads to a 1% increase in R&amp;D investment.</li> <li>The OECD also found that tax credits may not expand innovation, even if they appear to expand R&amp;D. Reasons: recharacterisation, input price rises, additional activity may be lesser value (eg, smaller firms generate lower returns because they operate in niches and there are fewer spillovers), benefits flowing to slow-growing incumbent firms.</li> </ul>	<ul style="list-style-type: none"> <li>Most countries combine a tax credit scheme with some form of grants scheme.</li> </ul>
<i>Rate</i>	<ul style="list-style-type: none"> <li>The OECD has developed a standardised measure of effective subsidy.</li> <li>Across the OECD, effective rates of subsidy range from 4 to 43%.</li> <li>For New Zealand, a 12.5% tax credit would give an effective subsidy of 17%. This is around the median for OECD countries.</li> </ul>	<ul style="list-style-type: none"> <li>There are no studies that compare the impact of different rates of subsidy in different countries.</li> </ul>	<ul style="list-style-type: none"> <li>The headline tax credit rate can be misleading because countries apply the credit in different ways. For <b>instance, Australia's R&amp;D support is a tax offset</b> which operates differently from a tax credit.</li> </ul>
<i>Age of applicant</i>	<ul style="list-style-type: none"> <li>Very few countries specifically target start-ups and young businesses.</li> <li>Some schemes have subtle support for small or young</li> </ul>	<ul style="list-style-type: none"> <li>The OECD does not report specific results as to whether targeting tax credits to younger firms is more effective at growing R&amp;D.</li> </ul>	<ul style="list-style-type: none"> <li><b>In assessing impacts by age, it's hard to distinguish between genuine new start-ups and spin-outs from incumbents.</b></li> </ul>

Feature	Prevalence within OECD	Evidence about effectiveness	Other comments
	firms (rather than a higher rate of credit), eg, in the use of carry-forward provisions, cash refunds or tax credits for R&D wages		
<i>Size of applicant</i>	<ul style="list-style-type: none"> <li>• 12 out of 28 OECD schemes offer preferential treatment for SMEs.</li> <li>• This is both explicit targeting (higher rates) and subtle support (see above)</li> </ul>	<ul style="list-style-type: none"> <li>• Overall, smaller firms seem to be more responsive to R&amp;D tax credits than larger firms.</li> </ul>	<ul style="list-style-type: none"> <li>• There are some possible downsides to targeting support to small firms, such as additional administrative burdens and incentives for firms to stay small.</li> <li>• Business aggregation and independence rules are necessary for tax supports that target genuinely smaller firms.</li> </ul>
<i>Can multinationals apply?</i>	<ul style="list-style-type: none"> <li>• No scheme appears to favour multinationals (ie, foreign owned firms) over domestic firms.</li> <li>• Equally, countries appear not to exclude foreign owned firms from participating in the scheme.</li> </ul>	<ul style="list-style-type: none"> <li>• The effect of R&amp;D tax incentives on R&amp;D location by MNEs is not known.</li> <li>• Some evidence that location in one country is influenced by costs in other countries</li> <li>• Even if tax incentives affect location of R&amp;D by MNEs, other factors are more important.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>“Using fiscal incentives with the sole purpose of attracting potentially mobile R&amp;D by MNEs is likely to have only limited effects, and it can lead to a dangerous ‘race to the bottom’ among countries.” (Appelt et al (2016), OECD)</b></li> </ul>
<i>Firms in loss</i>	<ul style="list-style-type: none"> <li>• Refundability applies in 13 out of 46 schemes, of which 4 only apply to SMEs</li> <li>• Where there is refundability, this is constrained, either by amount of refund or be deferring when refunds can be accessed.</li> <li>• Carry-over provisions are more common – 32 out of 46 schemes.</li> <li>• Reductions in payroll taxes (eg, cashing out of losses up to the amount of PAYE paid) occurs in 8 out of 46 schemes.</li> </ul>	<ul style="list-style-type: none"> <li>• Ireland has had refundability since 2009. This has led to rapid growth in the cost of the scheme – most of this growth occurred within larger, older multinationals (as opposed to the target of assisting start-ups).</li> <li>• Norway also cashes out credits for firms in loss but requires pre-approval by the government science agency of the research project.</li> </ul>	<ul style="list-style-type: none"> <li>• A potential downside of refundability is that without additional controls it may be used by firms with the ability to shift profits to other jurisdictions.</li> </ul>

Feature	Prevalence within OECD	Evidence about effectiveness	Other comments
<i>Thresholds and ceilings</i>	<ul style="list-style-type: none"> <li>• Most OECD countries impose an upper ceiling on either the maximum amount of qualifying R&amp;D expenditure or the value of R&amp;D tax relief.</li> <li>• Relatively few countries operate a threshold</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• To be effective, ceilings may require aggregation and independence rules</li> </ul>
<i>Volume vs Incremental</i>	<ul style="list-style-type: none"> <li>• In 2015 most OECD countries have volume based schemes.</li> <li>• The trend over the last decade has been to move to volume based schemes.</li> </ul>	<ul style="list-style-type: none"> <li>• Incremental R&amp;D tax credits generate <b>more R&amp;D per unit of taxpayers' money</b> than volume-based schemes, but</li> <li>• Incremental schemes distort the timing of R&amp;D.</li> </ul>	<ul style="list-style-type: none"> <li>• Volume based schemes are simple and predictable. Incremental are complex.</li> <li>• Incremental schemes lead to strategic behaviour to time R&amp;D investments to maximise tax benefits.</li> </ul>

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## Annex 2: Indicative ten year fiscal cost estimates

s9(2)(f)(iv)

Fiscal year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
9(2)(f)(iv)										
Labour fiscal plan allocation	\$0.100b	\$0.200b	\$0.250b	\$0.300b	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown

### Notes and caveats

1. The costs shown assume a 12.5% credit which is refundable for firms in loss (from April 2019) and has no cap on claims.
2. The fiscal costs shown are only those associated with the tax credit. There is no cost or cost saving associated with the Growth Grants scheme shown.
3. The broad eligibility scenario assumes that R&D claimed and deemed eligible for the credit is 50% higher than currently reported by firms under the Stats NZ R&D survey. This is similar to the proportion by which actual expenditure exceeded forecasts under the Australian R&D tax incentive following 2011 changes.
4. The narrow eligibility scenario assumes that only 70% of R&D currently reported by firms under the Stats NZ R&D survey is eligible under the credit. This is the same as the ratio of eligible to total claimed expenditure seen under Growth Grants.
5. Values are rounded to the nearest \$10m.

## Annex 3: Indicative estimate of short-term impacts on existing R&D performers

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1. A simple, 12.5% tax credit would provide support for more R&D than under Growth Grants. Without a \$25m cap on eligible expenditure, \$300,000 lower spend threshold or R&D intensity test, more firms would qualify for support.
2. Based on 2016 reported R&D figures, the estimated short-term impact on value received by firms (equivalent to cost borne by the Crown) under the Growth Grants scheme versus a simple tax credit would be (Figure 1):
  - i. Significantly more firms and value of R&D supported.
  - ii. A slight decrease in the overall level of support provided to current Growth Grant recipients<sup>9</sup>;
  - iii. Relatively less support provided to Growth Grant firms in-loss<sup>10</sup>, in favour of increased support for firms spending over \$25m;

**Note:** The values in Figure 1 are a high-end estimate of the decrease in support experienced by firms in-loss, taking only current-year gains or losses to the firm into account. The true value of current Growth Grants for a loss-making firm may be somewhere between 20% and 14.4% depending on the firm's expectations about if and when it will reach profit and its discount rate.

3. Note that this information is presented as an indicative illustration of where costs fall in the short-term under one possible scenario for tax credit design. The actual incidence of costs will vary substantially with the actual tax credit design, what happens to the Growth Grants scheme, and firms' responses to the new incentives.
4. These estimates combine data from different: administrative data on Growth Grants and R&D expenditure reported by firms in the Statistics New Zealand R&D survey. Since the data sources are not consistent, caution should be taken in drawing firm conclusions from it.

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<sup>9</sup> A 20% Growth Grant equates to a 14.4% tax credit. This is because the Growth Grant is paid pre-tax and is taxable income, but a tax credit is paid post-tax.

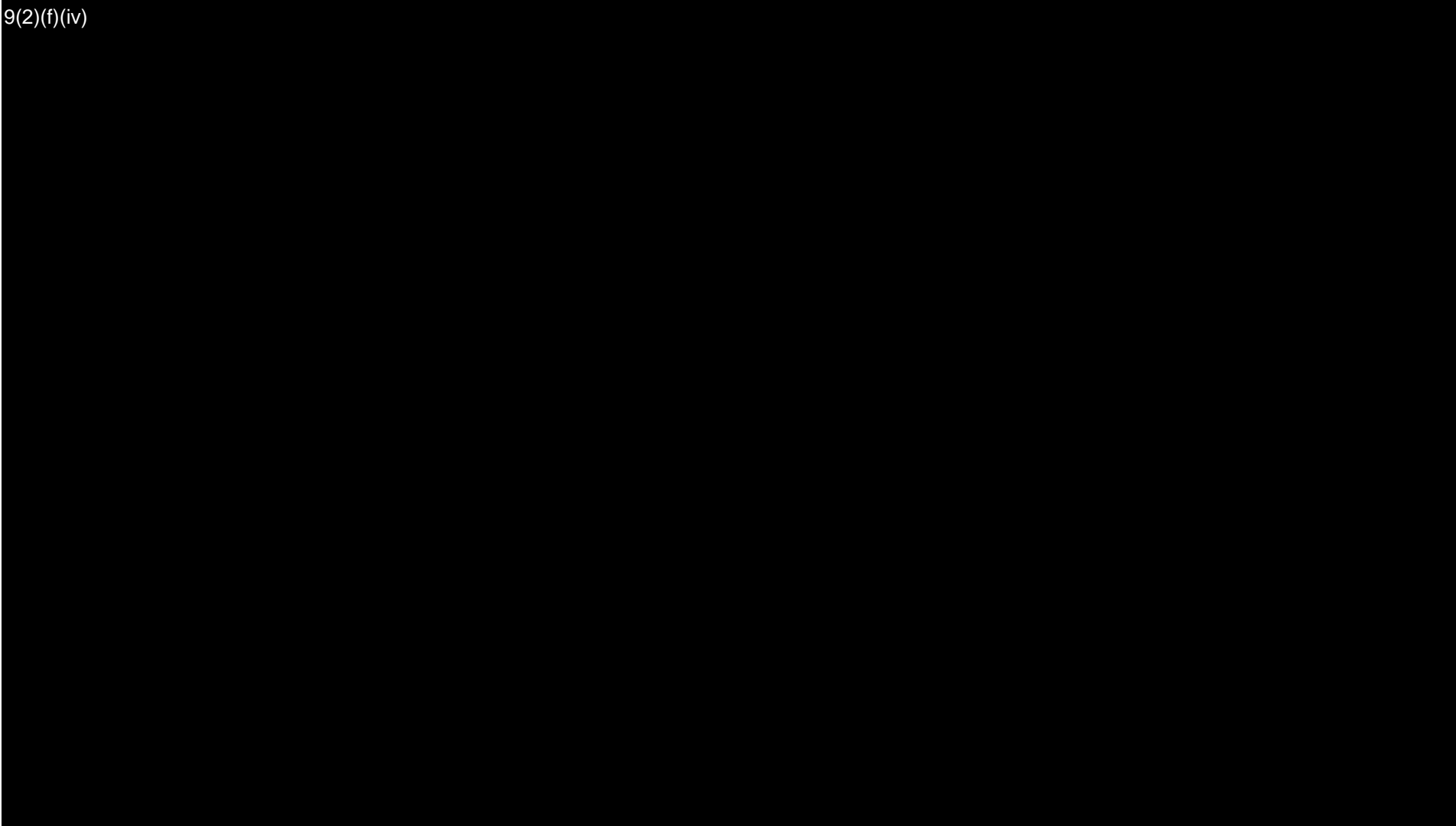
<sup>10</sup> For firms in loss, no tax is payable on the Growth Grant, making it relatively more generous than for firms in profit (which pay tax on the Growth Grant income). A 20% Growth Grant is nominally equivalent to a 20% (refundable) tax credit if only current-year gains or losses are taken into account. The rates shown for firms in loss reflect the 'current-year subsidy' for a firm, but the true value of a Growth Grant may be less in the long-term for a given firm. This is because although a Growth Grant will not give rise to an immediate tax liability for a firm in loss, it could reduce the amount of tax loss it is able to carry forward, thereby increasing its potential future tax liability.



Figure 1

**Estimated short-term gains and losses for existing R&D performers under 12.5% tax credit versus current Growth Grants scheme, based on 2016 R&D**

9(2)(f)(iv)





## BRIEFING

### R&D tax credit: technical design features

<b>Date:</b>	16 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	1892 17-18 IR2018/084

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Discuss</b> and/or <b>Agree</b> in principle to the technical design features and issues for consideration.	2 March 2018
Hon Stuart Nash <b>Minister of Revenue</b>	<b>Discuss</b> and/or <b>Agree</b> in principle to the technical design features and issues for consideration.	2 March 2018

Contact for telephone discussion (if required)			
Name	Position	Telephone	1st contact
Dr Peter Crabtree	General Manager, Science, Innovation and International, MBIE	9(2)(a) [Redacted]	✓
Keith Taylor	Policy Manager, Inland Revenue	[Redacted]	
Becci Whitton	Manager Stakeholder and Government Engagement, Callaghan Innovation	[Redacted]	

The following departments/agencies have been consulted
The Treasury

Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

Comment

# BRIEFING

## R&D tax credit: technical design features

<b>Date:</b>	16 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	1892 17-18 IR2018/084

### Purpose

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To provide advice and seek agreement on technical design features for the research and development (R&D) tax credit. The technical design features will be included in the discussion document for consultation intended to be published in early April 2018. A parallel paper seeks agreement on main design features for the tax credit. A draft discussion document will be prepared based on the decisions from both papers.

### Executive summary

---

This briefing advises and recommends technical design features for the R&D tax credit on entity eligibility, R&D conducted overseas, the definition of R&D, the expenditure eligible for a tax credit, the minimum threshold for R&D expenditure and arrangements for administration and transparency. It also identifies potential topics for public consultation.

#### Entity eligibility

All businesses regardless of legal structure should be eligible to claim the tax credit. This is the most inclusive option and would also accommodate a wide range of Māori business structures, as they are less likely to be incorporated. The tax credit would exclude Crown Research Institutes, District Health Boards and tertiary institutions but include state-owned enterprises. To be eligible, businesses must:

- satisfy the business tax test (with the exception of industry research cooperatives)
- carry out business in New Zealand
- have control over the R&D activities
- bear the financial risk
- effectively own the results.

We propose to specifically consult on excluding R&D funded by in-house commercial activity by Crown Research Institutes and whether businesses wholly or partially owned by public institutions should be eligible for the credit.

#### R&D conducted overseas

The benefits of R&D are localised and best captured when the R&D occurs within New Zealand, but it may not be feasible for a business to carry out its entire R&D in New Zealand. Therefore, we recommend strict limits on the amount of R&D costs incurred overseas that can be eligible for the credit. We propose:

- no more than 10% of the R&D claimed by a firm in any year can be for R&D costs incurred overseas

- for the overseas component to be eligible at least 50% of the R&D activity must be performed in New Zealand.

We do not propose to consult on this issue.

## **R&D definition**

The proposed definition of R&D for the tax credit draws from best practice and international and national lessons and captures the spectrum of research and experimental development undertaken by businesses.

We recommend a list of activities that should be excluded from being eligible which aligns with the standard exclusions in most jurisdictions. Activities are generally excluded to clarify the boundary between innovative and routine activity or experimental development and pre- and post-development work.

We propose to specifically consult on the definition and the exclusion list.

## **Eligible expenditure**

The recommended eligible expenditure for the tax credit has a close nexus to R&D activities. We recommend:

- a list of ineligible expenditure that is not closely related to the R&D activity to reduce compliance and administration costs, to prevent double subsidisation and abuse, and to limit fiscal risk.
- having an explicit rule to prevent businesses from claiming business-as-usual expenditure as part of their R&D expenditure.

We propose to specifically consult on the eligible and ineligible expenditure list and the business-as-usual expenditure rule.

## **Minimum threshold**

We recommend businesses incur a minimum of \$100,000 of eligible expenditure per year to qualify for the credit, unless they contract an approved research provider to perform the R&D. Small claims incur disproportionate administrative costs for the Government, and setting a minimum threshold helps reduce the administrative costs of the system.

We propose specifically consulting on whether the minimum threshold is set at the right level.

## **Administration and transparency**

For the policy to be successful it will need to be delivered effectively. We will consider the design of the administrative system and the respective roles of Inland Revenue and Callaghan Innovation to support business R&D growth. We will provide advice on this in due course.

The R&D tax credit will allocate substantial government funds and therefore safeguards are required. Mechanisms that promote accountability and transparency are essential. We propose consulting on these mechanisms, which include penalties for fraudulent claims and publishing information on tax credit recipients to support policy transparency.

## Recommended action

		Min. R,S&I	Min. Revenue
The Ministry of Business, Innovation and Employment, Inland Revenue and Callaghan Innovation <b>recommend that you agree in principle:</b>			
a	that the credit should be available to all businesses regardless of their legal form	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
b	that to be eligible the business should be carrying out business in New Zealand, own the results, bear the financial risk and have control over the R&D activities	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
c	that State Owned Enterprises should be eligible for the credit	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
d	that all businesses except industry research co-operatives (levy bodies) be required to meet the business test to be eligible for the credit	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
e	that no more than 10% of the R&D claim by a firm in any year can be for R&D costs incurred overseas and for the overseas component to be eligible at least 50% of the R&D activities must be performed in New Zealand	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
f	that a clause is included in the legislation enabling changes to the eligible/ineligible activity and expenditure rules to be made by regulations, rather than by primary legislation.	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
The Ministry of Business, Innovation and Employment, Inland Revenue and Callaghan Innovation <b>recommend that you agree to consult specifically on:</b>			
g	the proposed R&D definition and list of excluded activities	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
h	blanket exclusions on some activities under both core and support activity components of the proposed R&D definition	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
i	the proposed eligible and ineligible expenditure	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
j	rule/rules to exclude business-as-usual expenditure being claimed as part of R&D expenditure	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
k	whether Crown Research Institutions, District Health Boards and Tertiary Institutions and wholly or partially controlled subsidiaries should be eligible for the credit	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
l	a minimum of \$100,000 per year of eligible expenditure being required for an entity to be eligible for the credit except where the R&D is performed by approved research providers	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>

m	the liability and penalty mechanisms to promote accountability	Agree/ Disagree	Agree/ Disagree
n	publishing the names of recipients and the amounts of money they have received with a two-year lag.	Agree/ Disagree	Agree/ Disagree

9(2)(a)  
[Redacted]

Dr Peter Crabtree  
**General Manager, Science, Innovation and International**  
 Labour, Science and Enterprise, MBIE

Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

..... / ..... / .....

16 / 02 / 18

9(2)(a)  
[Redacted]

Vic Crone  
**Chief Executive, Callaghan Innovation**  
 16 / 02 / 18

9(2)(a)  
[Redacted]

Keith Taylor  
 Policy Manager  
**Inland Revenue**

Hon Stuart Nash  
**Minister of Revenue**

..... / ..... / .....

16 / 02 / 18

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## Background

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1. You intend to recommend to Cabinet to introduce legislation to implement an R&D tax credit (tax credit) from 1 April 2019 [1862 17-18 refers]. The tax credit complements a range of work underway in the Research, Science & Innovation portfolio [1714 17-18 refers].
2. You have received a paper [1714 17-18 refers] seeking agreement on main design features, including the rate of the credit, treatment for firms in loss, whether eligible expenditure should be capped and whether the subsidy should apply to all eligible expenditure or expenditure above a base.
3. The technical features discussed in this paper include entity eligibility, R&D definition, excluded activities, eligible and ineligible expenditure, minimum threshold, administration, and transparency.
4. This paper seeks agreement on the technical design features that will be included in a discussion document for consultation in early April 2018. These are areas which we consider will support policy development and help identify potential risks. We anticipate that the sector will also take the opportunity to provide feedback on other aspects of the proposed features of the tax credit. Final decisions on the tax credit will be made after consultation.
5. Given the ambitious timeframe to implement the tax credit our approach has been to develop a credit largely following the design of the 2008 R&D tax credit, with modifications to reflect changes in international best practice, experiences in other countries and lessons from the current R&D Growth Grants.

## Entity eligibility criteria: who can qualify for the tax credit?

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### **We propose all businesses regardless of legal structure should be eligible to claim the tax credit**

6. We consider that the eligibility criteria should be as inclusive as possible, taking into account the different types of businesses that carry out R&D in New Zealand. The criteria should be easily understood, and when applied should not impose unnecessary compliance and administration costs.
7. The options are to limit the scheme to incorporated entities, or allow all businesses regardless of legal structure to claim the credit. The main advantage of limiting the scheme to companies is that it would match the requirements of similar schemes overseas. Also, businesses that carry out significant amounts of R&D are almost always incorporated. Non-corporate businesses include trusts, partnerships, and self-employed individuals that own their business.
8. A disadvantage is that non-corporate entities would need to restructure to claim the credit. Allowing non-corporate entities to be eligible would make the scheme broader and more inclusive than Growth Grants.
9. Not requiring incorporation also supports the Vision Mātauranga policy. This policy<sup>1</sup> encourages research arising from the interface between Māori knowledge and science to deliver effective and innovative products, services and outcomes for Māori and New Zealand. A high number of Māori businesses have non-corporate structures. These

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<sup>1</sup> This includes integrating the policy across government investments in research, and building capability, capacity and networks of Māori and the research community to carry out this work. All research that MBIE funds must give effect to the Vision Mātauranga policy.

structures are created under legislation, collective land titles and treaty settlements<sup>2</sup>, and can involve a large number of owners and complex governance arrangements. This can make it difficult to transfer business operations into a company structure.

10. Officials recommend all businesses be eligible for the credit. This is the most inclusive option and would avoid creating distortions to the way businesses structure themselves. It would also accommodate a wide range of Māori business structures.

### **We propose claimants must meet eligibility criteria to qualify for the credit**

11. We propose that claimants meet the following eligibility criteria to qualify for the tax credit.

#### *Carry out business in New Zealand and have the tax test for 'business' applied*

12. The tax credit targets R&D carried out by businesses, therefore a claimant must carry out business in New Zealand in order to qualify. We suggest that the tax test for "business" be applied. The test involves two aspects:
  - the nature of the activities, which must amount to a profession, trade, manufacture or undertaking
  - an intention to make a commercial profit. Entities that earn exempt income could also meet the business test.
13. Since the aim of the credit is to improve productivity in New Zealand, the scheme should be designed so that the resulting benefits are largely captured in New Zealand. In light of this non-residents may only qualify for the tax credit if they carry out business in New Zealand through a permanent establishment and the R&D is carried out in New Zealand.
14. We are interested in the positive spillovers that arise from business R&D performed in New Zealand. Therefore, it would not be a requirement that intellectual property generated by the R&D has to reside in New Zealand.

#### *Incur R&D expenditure related to their business or intended business and have control, bear the financial risk and own the results of the R&D*

15. A claimant would need to show that the R&D expenditure relates to their business or intended business and that they have control over the R&D activities, bear the financial risk and effectively own the results of the R&D activities. The rationale for this is to:
  - ensure that the credit goes to the party making the R&D investment decision, to enhance and grow their business activities, and
  - prevent double dipping (eg if R&D activities are subcontracted, the credit goes to the party commissioning the R&D and not to someone who performs the R&D on behalf of the other person).

#### *Have control over the R&D activities*

16. Controlling the R&D activity is proposed to mean that the claimant must have the ability to:
  - determine the R&D activities to be undertaken
  - decide on major changes of direction
  - stop an unproductive line of research
  - follow up on an unexpected result
  - terminate the activities or project.

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<sup>2</sup> Trusts are usually used for post-settlement governance of assets.



*Bear the financial risk associated with the R&D activities*

17. The claimant must bear the financial risk of the R&D activity. Where the R&D is subcontracted, the claimant would bear the financial risk if it paid for the activity to be carried out.

*Effectively own the results*

18. The claimant must have gained the right to use the results of the R&D activity in its business without incurring further costs.

**We do not propose to consult on the recommendations relating to entity eligibility.**

**We propose Crown Research Institutes, District Health Boards and tertiary institutions should be ineligible**

19. Crown Research Institutes (CRIs), District Health Boards, tertiary institutions and their associates<sup>3</sup>, and any entities controlled by a combination of those entities, were ineligible for the 2008 R&D tax credit. The rationale was that:
  - the tax credit was intended to stimulate business investment on R&D
  - there were more appropriate and efficient mechanisms to increase R&D in these entities than providing a credit through the tax system.
20. Associates of these entities were excluded as the R&D activity could be transferred to an associate who could claim the concession on the activities instead. The current Growth Grant also excludes these entities and their associates for the same reasons.
21. While our understanding and expectations of these entities has changed since 2008, we consider that, on balance, there may also be merit in excluding them from the new R&D tax credit policy. Firms that commission R&D through public institutions will qualify for the credit and the vast majority of these entities activities are likely to be fully supported by other government research funds. We consider any activity that is not either already fully funded by government or funded by firms will be a small proportion of the institutions' activity, and the simplest and clearest rule will be to exclude them.
22. However, some spin-out or start-up companies owned partially or fully by public institutions may be disadvantaged by a blanket exclusion compared to other similar companies with different ownership structures, if they do not have access to the credit.

**We propose to specifically consult on:**

- whether in-house commercial R&D activity, such as products developed for sale direct to market by CRIs should be eligible for the credit
- the status of companies owned by public entities (which were excluded in 2008) and the extent and technical position of these entity structures and whether they should be eligible.

**We propose state-owned enterprises<sup>4</sup> should be eligible**

23. We consider Crown-owned businesses, such as state-owned enterprises (SOEs), should be eligible for the credit. They are different from tertiary institutions and CRI-owned businesses in that:

<sup>3</sup> Two companies are associated if a group of persons exists whose total voting interests in each company are 50% or more.

<sup>4</sup> There are currently 13 state-owned enterprises.

- SOEs are commercial, for-profit entities. The majority do not receive significant amounts of public R&D funding through other funding programmes.
  - R&D performed by SOEs can have similar economic benefits<sup>5</sup> as business R&D. Excluding SOEs would reduce the potential reach of the tax credit.
24. Under the Growth Grants, SOEs are ineligible for funding. We consider that they should be eligible under the tax credit for the reasons identified above. This would broaden the population of entities eligible under the tax credit compared to Growth Grants.

### **We propose industry research cooperatives (levy bodies) should be eligible**

25. We consider industry research cooperatives that receive voluntary contributions or levy payments for the purpose of R&D (levy bodies) should be eligible for the tax credit.
26. The Growth Grant excludes R&D funded through enforceable levies (levy bodies). We consider this rule to be unfair, as R&D funded through levy bodies is still fundamentally business R&D. This R&D is also likely to result in positive spillovers that are not fully captured by the industry. The key rationale to exclude R&D by levy bodies under the Growth Grants was to limit the cost of the scheme and support R&D programmes performed by businesses themselves. We consider allowing levy bodies to be eligible for the credit would be the most inclusive and fairest option.

### **We propose eligibility for R&D conducted overseas should be restricted**

27. The Government supports businesses to undertake R&D because of the positive spillovers. Where the R&D is conducted off-shore, there are the following concerns:
- the spillovers that arise from that R&D are less likely to accrue to New Zealanders and
  - it is harder to police the veracity of R&D claims.
28. Officials have considered whether off-shore R&D should be excluded from the tax credit. However, there will be some R&D projects where an off-shore element is an inextricable requirement, such as when required for regulatory consent or when access to specialised capability or technology is needed but not available in New Zealand. There are also likely to be wider benefits to the business and New Zealand as R&D conducted overseas can strengthen integration with international innovation networks and leverage connections.
29. Officials therefore recommend a carry-over of the restrictions that applied with the 2008 tax credit:
- the off-shore R&D has to be part of the R&D activities conducted in New Zealand
  - within the project, at least half the R&D expenditure had to be carried out in New Zealand. If more than half the R&D expenditure was off-shore, the R&D expenditure offshore was ineligible, however the expenditure incurred in New Zealand was eligible
  - in any one year, the amount of off-shore R&D claimed could not exceed 10% of the total amount of on-shore R&D claimed.
30. Under Growth Grants, all R&D conducted overseas is ineligible. However, Callaghan Innovation has discretion over the amount of R&D conducted overseas that can be eligible under Project Grants. We consider the Growth Grants rules on overseas R&D expenditure are overly restrictive.

<sup>5</sup> These benefits include the R&D being business-led with a clear pathway to market and building the capacity of the firm to use external knowledge and technology.

**We do not propose to consult on industry levy eligibility, State-Owned Enterprise eligibility and restrictions on R&D conducted overseas.**

## **Definition of R&D: what counts as R&D?**

31. Getting the R&D definition right for the New Zealand context is vital so activities we want to incentivise can be captured by the definition and those we do not are excluded. The definition needs to appropriately capture the spectrum of research and experimental development undertaken by businesses. The R&D definition should be:
- robust, clear and practical as possible so it:
    - is useful for application by eligible entities, accountants and government
    - prevents activities from being recharacterised as R&D
    - is legally defensible and able to be effectively implemented with borderline cases addressed (ie remove uncertainty around what constitutes R&D).
  - guided by international best practice, OECD's Frascati Manual<sup>6</sup>, and lessons from abroad and New Zealand (ie 2008 tax credit and R&D grants).
32. See Annex One for a summary of R&D definitions from Australia, United Kingdom, Ireland and Canada.

### **We propose the definition of R&D should include core and support activities**

33. We propose the R&D definition be made up of core and support activities and also incorporate excluded activities. The proposed definition is outlined below.

#### *Core activities:*

(a) activities 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 and technological uncertainty.

#### *Support activities:*

(b) other activities that are wholly or mainly for the purpose of, required for, and integral to, the performing of the activities referred to in paragraph (a).

**We propose to specifically consult on:** the R&D definition, including what it means in practice for business and to identify any unforeseen impacts.

### **Scope of the definition and the integration of lessons**

34. The Growth Grants uses the New Zealand Equivalent to International Accounting Standard 38 (NZ IAS 38) definition of R&D (See Annex Two for this definition). This has raised some issues as the NZ IAS 38 standard is used to prescribe the accounting treatment for intangible assets as a whole; it is not designed to define R&D, or support interpretation of R&D activity.
35. NZ IAS 38 also defines research and development as separate activities, rather than defining an R&D activity. This can lead users to try and fit their activity to one or the other, rather than considering the general nature of activity, which occurs on a spectrum from initial research through to experimental development.

<sup>6</sup> The OECD Frascati Manual is regarded internationally as setting the benchmark for defining and identifying R&D activities.

36. The definition we propose is a modified version of the 2008 tax credit definition based on lessons from the year it was available and characteristics of R&D set out in the OECD's 2015 Frascati Manual. The definition is also comparable with definitions used by other jurisdictions that have a tax credit. See Annex Two for more information on the 2008 definition and the rationale for modification.

*What does the definition include?*

37. The proposed R&D definition recognises that most businesses do not do basic research and so includes experimental development work involved in "creating new or improved materials, products, devices, processes, or services".
38. The requirement that activities are intended to "advance science or technology through the resolution of scientific and technological uncertainty" ensures funding is only available to solve problems which have not already been previously solved and therefore the R&D attempts to expand the existing knowledge base.
39. The outcome of R&D is inherently uncertain; it is not necessary that the R&D activity be successful to qualify.
40. Supporting activities covered by the second part of the proposed definition are activities that are part of the R&D project but are not conducted using a scientific method or do not advance science or technology themselves, such as literature searches.

**We propose some activities should be excluded from tax credit**

41. Certain activities are routinely excluded from R&D tax incentives. This is broadly:
- because governments do not wish to incentivise a particular activity through an R&D tax concession
  - to remove uncertainty over whether a particular activity could be considered R&D
  - to clarify the boundary between development and pre and post-development activity, or innovative and routine work.
42. The excluded activities are broadly consistent with those in comparable jurisdictions and reflect the exclusions in the 2008 tax credit which were based on the Australian R&D tax incentive. As in Australia, these activities are excluded as core activities but they can be included as support activities.
43. The Growth Grant has a similar exclusion list to remove uncertainty and clarify boundaries around what activities are considered R&D.
44. Activities excluded from core R&D (but which may qualify as support activities) are listed below (see Annex Three for more detail):
- prospecting, exploring or drilling for minerals, petroleum, natural gas or geothermal reserves
  - research in social sciences, arts or humanities
  - market research, market testing, market development or sales promotion (including consumer surveys)
  - quality control or routine testing of materials, products, devices, processes or services
  - the making of cosmetic or stylistic changes to materials, products, devices, processes or services
  - routine collection of information

- commercial, legal and administrative aspects of patenting, licensing or other activities
  - activities involved in complying with statutory requirements or standards
  - management studies or efficiency surveys
  - 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
  - pre-production activities, such as demonstration of commercial viability, tooling-up and trial runs.
45. Officials are considering whether a blanket exclusion should apply to some activities so they are ineligible under both core and support activities. This would reduce the risk of expenditure being recharacterised to be eligible under supporting activities and limit the fiscal risk of activity that has limited/no wider benefit. For example, whether a blanket exclusion should apply for expenditure relating to prospecting, exploring or drilling for minerals, petroleum, natural gas or geothermal reserves (ie where there is a large risk of recharacterised expenditure).
46. Research in social sciences is excluded in each of the jurisdictions considered in the development of the R&D definition. The assumption that this type of research is not a focus of business R&D may no longer be valid and we recommend that it be tested through consultation.

**We propose to specifically consult on:**

- whether R&D in social sciences should continue to be excluded under the R&D activities exclusion list
- whether there should be a blanket exclusion on some R&D activities under both core and supporting activities.

**Expenditure eligible for a tax credit should be directly linked to R&D**

47. To focus the efficacy of the tax credit, expenditure that is eligible for the tax credit should have a direct link to R&D activities, be easily understood and easily measurable. Most jurisdictions have a narrower and simpler eligible expenditure base. For example Australia has a wide base with safeguards which means greater accuracy at the cost of increased complexity.
48. Matching eligibility requirements with accounting and tax rules has compliance and administrative benefits of using existing measuring mechanisms but introduces complexities and judgements imbedded in the tax system. Eligible expenditure in most tax credits is required to be deductible or amortisable, in relation in those that are exempt income that would be deductible, or amortisable, if the income were not exempt.
49. Applying deductibility rules would exclude depreciation on intangibles not listed in Schedule 17 of the Income Tax Act.
50. Issues on when the R&D expenditure is eligible under the tax credit are still being worked through. We will provide further advice on this in conjunction with the discussion document.

## Eligible expenditure

51. We propose the following list of business expenditure would be eligible for the R&D tax credit:

- **Salary and wages** of employees and payments to independent contractors directly and actively engaged in core R&D activity (scientists, engineers) and R&D support activity. For simplicity, some jurisdictions focus on labour costs to the exclusion of expenditure on capital and materials.
- The annual **depreciation on tangible property** used in conducting R&D. We recommend the R&D credit should not apply to assets in a tax depreciation pool unless the pool consisted solely of R&D assets used wholly in conducting R&D. Similarly credits would not be affected by losses or gains on disposal of capital assets.
- The cost of **employee training, recruitment, relocation and travel** when it is incurred directly as a result of R&D activities.
- **Materials incorporated into prototype products and plant.**
- **Overhead costs.** Apportionment is required when overheads are only in part incurred directly for R&D activities. Some jurisdictions only allow overhead costs as a set percent of labour costs to be eligible. We consider it would be useful to seek feedback on this rule, specifically the risks and impact it is likely to have on the sector. We also recommend a regulatory power to exclude overheads that are too remotely connected with the R&D.
- **Items consumed in the R&D process.**
- **Net cost of items processed or transformed in R&D process.**
- **Payments to a person for R&D services** when part or all of an R&D project is outsourced.

52. Refer Annex Four for detailed notes on proposed eligible R&D expenditure items.

## Excluded expenditure

53. Some expenditure is routinely excluded from R&D tax concessions to:

- make it clear that such expenditure does not have a sufficient connection with the R&D activity
- reduce compliance and administrative costs
- prevent double subsidisation
- prevent abuse of the credit (eg concession for excessive input costs for marginal R&D or excessive inputs paid to associates)
- limit fiscal risk (eg use of assets that are the subject of tax avoidance)
- ensure that the expenditure is at risk to the claimant.

54. A recommend list of ineligible expenditure under the tax credit is provided in Annex Four.

## Business-as-usual expenditure rule

55. Under the 2008 tax credit, some firms claimed business-as-usual expenditure as part of their R&D expenditure claim. For this reason, we propose to consult on a rule or rules to ensure firms are not able to claim a tax credit for business-as-usual expenditure (eg any expenditure incurred as part of business production expenditure in the absence of undertaking R&D activity).

## Changes to eligible activities and eligible expenditure

56. A stable R&D definition is important for providing businesses certainty over claimable activities. However, the changing nature of business R&D means we cannot forecast how R&D claims may change in the future and how eligible/ineligible activities and expenditure may need to be adapted to changing circumstances. For this reason we recommend a purpose clause in the legislation enabling changes to the eligible activity and expenditure rules to be made by regulations, rather than by primary legislation.

**We do not propose to consult on the recommended clause to enable changes to the eligible activity and expenditure rules to be made by regulations, rather than by primary legislation.**

**We propose specifically consulting on:**

- eligible expenditure types and what it means for businesses
- the business-as-usual expenditure rule.

## We propose a minimum threshold of R&D should be undertaken to qualify for the tax credit

57. We consider a minimum amount of R&D should be undertaken to qualify for the tax credit and suggest that at least \$100,000 per year be incurred on eligible R&D expenditure to qualify. This equates to roughly one full-time employee and some overhead costs.
58. Most OECD countries require taxpayers to spend a minimum amount on R&D in order to access a tax concession, the rationale being mainly an administrative one. This is lower than the \$300,000 minimum R&D expenditure per year threshold required under Growth Grants, which were designed to target R&D-intensive firms. We consider \$100,000 is at the right level at which the administrative burden and costs are reduced but the majority of firms performing R&D are still supported.
59. The main advantages of setting a minimum threshold are that it:
- helps avoid disproportionate compliance and administrative costs being incurred on small claims
  - excludes minor amounts of expenditure that are not likely to be genuine R&D without having to evaluate whether it meets the eligibility and definitional requirements.
60. The disadvantages of imposing a minimum threshold are it creates inequities that result from having a boundary and disincentivises low levels of R&D by firms. To prevent small firms from being disproportionately affected by the imposition of a minimum threshold, we propose an exception if the R&D services are outsourced to an approved research provider. For an organisation to be an approved research provider, it would need to be capable of performing contracted R&D, have research facilities and charge fees on commercial terms.
61. Using the 2016 R&D survey, a \$100,000 threshold would mean around 26% of R&D performing firms would not be eligible for the tax credit unless the R&D was commissioned from an approved research provider. This would have equated to around \$13m of \$1,602m (less than 1%) of business R&D expenditure being ineligible.

**We propose specifically consulting on:**

- whether the minimum threshold is set at the right level, and indicating to stakeholders there are likely be other support mechanisms to support younger, early-stage firms.

## Administration of the tax credit

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62. For the policy to be successful it will need to be effectively delivered. Administrative constraints will need to be factored in when making decisions in some areas. The relationship between Inland Revenue and Callaghan Innovation and their respective roles will need to be considered as part of administration of the credit and any other support. A clear, simple and easy-to-follow administrative system will be essential to reduce the application burden and costs for all businesses, as well as administration costs for government. Factors that officials will need to consider as part of administrative design include:
- respective administrative roles of Callaghan Innovation and Inland Revenue
  - an upfront registration process for R&D performing businesses
  - an application workspace for R&D businesses to record R&D activity and expenditure information to support the claim
  - changes to the relevant income tax return forms (primarily IR4) to process the tax credit each year
  - record keeping requirements
  - improvements to allow for third-party software to submit information via Inland Revenue's gateway
  - information sharing arrangements to include the tax credit into the integrated data set and national research information system (NRIS)
  - updates to website content, including education and guidance material.
63. The capabilities required to administer an R&D tax credit currently sit within Callaghan Innovation and Inland Revenue. A memorandum of understanding between the two agencies exists to help determine R&D eligibility for the current cashing-out losses policy. This will be reviewed and form the basis for administering the tax credit. Regardless, it is important for businesses to have a single, seamless claim process.
64. You will receive a paper on these administrative issues in due course.

## Transparency

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65. The tax credit will allocate substantial government funds therefore safeguards are required. Mechanisms that will promote accountability are needed. We propose the following mechanisms should be consulted on:

### *Liability and penalties*

- Requiring that a New Zealand resident be held accountable in the event of a fabricated claim.
- Where an advisor's fee is contingent on a successful R&D claim, the accountant is jointly and severally liable with the firm undertaking the R&D where penalties for gross carelessness, abusive tax position or evasion apply.
- Requiring the tax advisor (or auditor) to verify the claim in addition to the applicant, with joint and several liability for gross carelessness, abusive tax position or evasion.
- The standard penalties provisions in the Tax Administration Act apply to R&D tax credit claims.



### *Transparency and evaluation*

- Publishing the names of recipients and the amounts of money they have received with a two-year lag to reduce commercial sensitivity – expressed in dollar bands rather than the exact amount.
  - Integrating collected data from recipients into Statistics New Zealand's Integrated Data Infrastructure and the National Research Information to support evaluation.
  - Participating in the OECD micro-data project that seeks to explore at firm-level the extent and statistical impact of public support for R&D.
  - Making taxpayer-specific information in relation to R&D tax credit claims available to Treasury, Callaghan Innovation and MBIE to support evaluation and policy review.
66. An evaluation framework including data collection requirements to support evaluation of the tax credit will be considered by officials in due course.

#### **We propose to specifically consult on:**

- the recommended penalties to identify potential risks and impact
- publishing the names of recipients and the amounts of money they have received with a two-year lag to identify potential commercial risks or unforeseen impacts.

### **Next steps**

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67. We recommend Ministers meet in the week starting 26 February 2018 to discuss the recommendations presented in this paper and provide feedback to officials. We will provide you with further advice on the recommendations should you require it.
68. Subject to your feedback, we will progress work on the discussion document. There are some issues which officials are still working on, such as what kind of software development should be eligible for the tax credit. Further advice will be provided to you on these topics in conjunction with the discussion document.
69. The overall timeframes are very short. The timetable for achieving commencement in April 2019 requires consultation to finish by early April 2018. It is therefore important to resolve policy issues quickly.
70. We will provide a draft of the public consultation document to your offices by early March 2018 and draft Cabinet paper in mid-March seeking approval to consult publicly and agreeing to key policy features prior to public consultation.

## Annex one: R&D definition – international comparisons

Country of origin	Definition wording
New Zealand – Proposed definition 2018	<p><b>Core activities</b></p> <p>(a) Activities conducted using scientific method that are:</p> <ul style="list-style-type: none"> <li>• performed for the purposes of acquiring new knowledge or creating new or improved materials, products, devices, processes, or services; and</li> <li>• that are intended to advance science or technology through the resolution of scientific and technological uncertainty.</li> </ul> <p><b>Support activities</b></p> <p>(b) other activities that are wholly or mainly for the purpose of, required for, and integral to, the performing of the activities referred to in paragraph (a).</p>
<p>UK</p> <p><a href="#">Legislation</a></p> <p><a href="#">Guidance document</a></p> <p><a href="#">Website guidance</a></p>	<p>s1138 Corporation Tax Act 2010:(2)“Research and development” means activities that fall to be treated as research and development in accordance with generally accepted accounting practice.</p> <ul style="list-style-type: none"> <li>• R&amp;D for tax purposes takes place when a project seeks to achieve an advance in science or technology. The activities which directly contribute to achieving this advance in science or technology through the resolution of scientific or technological uncertainty are R&amp;D. Certain qualifying indirect activities related to the project are also R&amp;D. Activities other than qualifying indirect activities which do not directly contribute to the resolution of the project's scientific or technological uncertainty are not R&amp;D.</li> <li>• To get R&amp;D relief you need to explain how a project: <ul style="list-style-type: none"> <li>-looked for an advance in science and technology</li> <li>-had to overcome uncertainty</li> <li>-tried to overcome this uncertainty couldn't be easily worked out by a professional in the field</li> </ul> </li> <li>• Your project may research or develop a new process, product or service or improve on an existing one.</li> </ul>
<p>Ireland</p> <p><a href="#">Website guidance</a></p>	<p>The research and development activity must:</p> <ul style="list-style-type: none"> <li>• involve systemic, investigative or experimental activities</li> <li>• be in the field of science or technology</li> <li>• involve one or more of these categories of R&amp;D: basic research, applied research or experimental development</li> <li>• seek to make scientific or technological advancement</li> <li>• involve the resolution of scientific or technological uncertainty.</li> </ul>
<p>Australia</p> <p><a href="#">Legislation</a></p>	<p>(1) Core R&amp;D activities are experimental activities:</p> <p>(a) whose outcome cannot be known or determined in advance on the basis of current knowledge, information or experience, but can only be determined by applying a systematic progression of work that:</p> <ol style="list-style-type: none"> <li>i. is based on principles of established science; and</li> <li>ii. proceeds from hypothesis to experiment, observation and evaluation, and leads to logical conclusions; and</li> </ol> <p>(b) that are conducted for the purpose of generating new knowledge (including new knowledge in the form of new or improved materials, products, devices, processes or services).</p> <p>Supporting R&amp;D activities are activities directly related to *core R&amp;D activities.</p> <p>However, if an activity: is an activity referred to in subsection 355-25(2) (excluded activities under core activities); or produces goods or services; or is directly related to producing goods or services; the activity is a supporting R&amp;D activity only if it is undertaken for the dominant purpose of supporting *core R&amp;D activities.</p>
<p>Canada</p> <p><a href="#">Website guidance</a></p>	<p>“Scientific research and experimental development” means systematic investigation or research that is carried out in a field of science or technology by means of experiment or analysis and that is:</p> <ol style="list-style-type: none"> <li>(a) basic research, namely work undertaken for the advancement of scientific knowledge without a specific practical application in view;</li> <li>(b) applied research, namely work undertaken for the advancement of scientific knowledge with a specific practical application in view; or</li> <li>(c) experimental development, namely, work undertaken for the purpose of achieving technological advancement for the purpose of creating new, or improving existing, materials, devices, products or processes, including incremental improvements thereto;</li> </ol>

## **Annex two: R&D definitions and national lessons**

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### **R&D definition under the 2008 tax credit**

The 2008 legislation defined research and development activities as:

- a) systematic, investigative and experimental activities 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.
- b) 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).

### **Rationale for the modification to the 2008 definition**

#### ***The concept of novelty***

Under the previous R&D tax credit rules, an activity would qualify for the credit if it involved “an appreciable element of novelty”.

The “appreciable element of novelty” test was intended to expand the scope of activities that could be eligible for the R&D tax credit by bringing in activities that did not seek to resolve scientific or technological uncertainty but still involved an “appreciable element of novelty”. However, taxpayers interpreted novelty more broadly than intended, creating policy and fiscal risks; hence officials do not propose that it is included in the R&D definition.

Notwithstanding this, the concept of novelty is at the core of the rationale for having an R&D tax credit – there are limited benefits to New Zealand if a business invests in a project that already exists and is publicly available.

However, it is considered that the concept of novelty is already inherent in the terms “an advancement in science or technology”, “new knowledge” and “new or improved materials, products, devices, processes, or services”.

#### ***The concept of systematic***

The 2008 definition used the wording ‘systematic, investigative and experimental activities’. We propose using ‘activities conducted using scientific method’. We believe this change presents a more concise and less complex proposition. ‘Systematic, investigative and experimental activities’ was further defined in legislation as follows:

(a) are planned activities directed towards a “particular purpose and following a logical progression of work involving hypothesis, experiment, observation, and evaluation”. We propose that the term scientific method more accurately describes the nature of this concept and is of greater practical application.

The concept of ‘systematic, investigative and experimental activities’ attempts to address multiple criteria ie systematic is separate to investigative and experimental and it arguably causes confusion to combine them. Additionally, the separate terms investigative and experimental are covered both in ‘scientific method’ and further by the ‘resolution of scientific and technological uncertainty’.

## Definition of eligible research and development expenditure for R&D Growth Grants

Eligible R&D expenditure is defined as those meeting the New Zealand Equivalent to International Account Standard 38 (NZ IAS 38) definition of research and development and expensed under that standard.

### The NZ IAS 38 definitions of R&D are:

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

### Clarifying principle

If necessary, when seeking to distinguish R&D from non R&D, the further advice provided by the New Zealand Financial Reporting Standard 13 (NZ FRS 13) should be applied:

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

### Specific exclusions

To provide further clarification on the definition, some specific activities are excluded. This list is not exhaustive. Activities not specifically excluded are only eligible provided they meet all other features of the definition. Specific activities excluded are:

- Engineering follow-through in an early phase of commercial production.
- Activities related to the construction, relocation, rearrangement or start-up of facilities or equipment other than facilities or equipment solely used for the businesses' R&D (which may be included).
- Routine, ongoing efforts to refine, enrich, or otherwise improve on the qualities of an existing product or process, or to make cosmetic or stylistic changes to it.
- Routine design of tools, jigs, moulds and dies, or seasonal or other periodic design changes to existing products. However, expensed design activities involved in developing a new product or process are eligible.
- Activities involved in ensuring that existing products or processes comply with statutory requirements or standards, and quality control, routine testing or trouble-shooting during commercial production. However, testing in search of significant product or process improvements is eligible.
- Adapting an existing product or process to a particular customer's need or site.
- Supporting, de-bugging or making minor improvements to existing computer software.
- Market research or surveys, market testing, market development or sales promotion, management studies, efficiency surveys or the routine collection of information.
- Any costs involved in protecting, licensing, selling or defending intellectual property or of acquiring or using external intangible assets (eg patent licences).
- Interest expenses or lease payments of any kind, and any overheads that are not closely linked to R&D activities. Eligible overheads include finance, personnel, training, travel,

administration and library activities associated with R&D, and reasonable R&D-related transportation, storage, cleaning, repair, maintenance and security activities.

- Prospecting or exploring for minerals, petroleum, natural gas or geothermal energy.
- Research in the social sciences, arts or humanities.

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Official Information Act 1982

## **Annex three: proposed excluded activities**

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### **Prospecting, exploring or drilling for minerals, petroleum, natural gas or geothermal energy**

It is possible to have R&D concessions for extractive industries – for example, R&D to develop new exploration techniques, but the exploration itself is not R&D. Drilling could be a supporting activity if it is wholly or mainly for the purpose of, required for and integral to the development of a new exploration technique or new equipment – for example, testing new drilling equipment.

### **Research in social sciences, arts or humanities**

The exclusion covers, for example, research in economics, classics, languages, literature, music, philosophy, history, religion, and visual and performing arts. Examples of activities excluded would be the study of the historical development of a language or the role of the family in society, or writing a novel or screenplay.

If a business was developing an innovative product and the development process satisfies the definition, the development is not excluded simply because the product is used in the arts or humanities. For example, if a business develops computer software for use in the film industry in a process that satisfies the criteria in the definition, the software development would not be excluded.

### **Market research, market testing or market development, or sales promotion (including consumer surveys)**

Conducting of market research is recommended to be excluded. However, it can be a supporting activity if the research is wholly or mainly for the purpose of, required for and integral to development of, a product or process.

Example if a business is developing a new can opener for use by people with arthritic hands. It has two options for handle design and selects a group to test both trial models to determine which handle is more easily manipulated. This market testing is eligible as a support activity.

### **Quality control or routine testing of materials, products, devices, processes or services**

Quality control in itself is excluded. However, the development of new or improved methods of quality control testing can be eligible R&D. Quality control could also be a supporting activity – for example, in the development of a new manufacturing process, checking that the products in a trial run meet the desired quality.

### **Making cosmetic or stylistic changes to materials, products, devices, processes or services**

Changes that are purely cosmetic or stylistic (such as changes to colour or pattern) are excluded from being a both core and supporting activity.

For example, this would include design changes for fabrics and wallpapers. 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.

### **Commercial, legal and administrative aspects of patenting, licensing or other activities**

This is post-R&D work which is very unlikely, even in the absence of the exclusion, to qualify as R&D. It is also unlikely to be a supporting activity because patenting or licensing would seldom be wholly or mainly for the purpose of, or required for R&D.

### **Activities involved in complying with statutory requirements or standards**

This exclusion targets routine testing and analysis of materials, products and processes to check that they comply with statutory requirements or standards. It does not apply to development of new technologies to comply with standards. Activities involved in developing, rather than complying with, standards are also not excluded. Checking that new products meet relevant standards can be an eligible R&D support activity.

### **Management studies or efficiency surveys**

This includes studies relating to inventory control (such as Just-in-Time), work practices, industrial relations and feasibility analysis, and time and motion studies. The exclusion also covers industry research – for example, when a company carries out a survey into a particular industry's characteristics and future needs.

These studies or surveys could be a supporting activity. For example, if a manufacturer's improvement to a process is R&D, a monitored test to determine how efficient the new process is would be eligible as a supporting activity.

### **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**

No R&D is involved in simply reproducing an existing product or process from the plans or publicly available information (ie reproducing via reverse engineering).

### **Pre-production activities, such as demonstration of commercial viability, tooling-up and trial runs**

This exclusion is intended to clarify the boundary between R&D and post-R&D pre-production activities.

Example, trial runs could be eligible as a qualifying supporting activity, as could tooling up (for example, to test a new manufacturing process). It is unlikely that demonstration of commercial viability would satisfy the test to be a supporting activity.

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## **Annex four: proposed eligible and excluded expenditure**

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### **Salary and wages**

Salary and wages of employees and payments to independent contractors directly and actively engaged in core R&D activity (scientists, engineers) and R&D support activity is universally eligible in the design of tax concessions. For simplicity some jurisdictions focus on labour costs to the exclusion of expenditure on capital and materials.

Salary and wages would include all remuneration paid to the employee or contractor (allowances, bonuses, commissions, extra salary, overtime, holiday pay and long service pay), and the value of fringe benefits, accommodation benefits and superannuation contributions. The value of all employee share scheme benefits recognised under the new tax rules being enacted in 2018 should also be included.

When an employee or independent contractor is engaged on R&D and other activities, the credit should only apply to the portion of expenditure that relates to time directly and actively engaged in R&D.

### **Depreciation of tangible property**

Annual depreciation on tangible property used in conducting R&D would be eligible for:

- “facilitative” assets that are used in the R&D process but are not the object of the R&D; and
- certain “end-result” assets that are the object of the R&D and are used in the R&D process (for example, testing, analysis and data recording).

The complexity of tax rules for the depreciation of tangible property, aimed at ensuring deductions reflect a fair value of the depreciation loss to businesses, are reflected in the complexity of the rules that apply to capital expenditure in R&D tax concessions. It is possible to simplify some of the rules, which carry an associated risk of not valuing true costs to the business. For example we recommend that the credit should not apply to assets in a tax depreciation pool unless the pool consisted solely of R&D assets used wholly in conducting R&D. Similarly credits would not be affected by losses or gains on disposal of capital assets.

### **Employee training, recruitment, relocation and travel**

The cost of training, recruitment, relocation and travel of employees would be eligible when it is incurred directly as a result of R&D activities.

### **Materials incorporated into prototype products and plants**

The cost of materials incorporated into a trial model or preliminary version of a product or plant should be eligible for the credit.

### **Overhead costs**

Certain listed expenditure on overheads should be eligible for the credit. Apportionment is required when overheads are only in part incurred directly for R&D activities. Rates, utilities (including telecommunications) and insurance and the cost of leasing buildings, plants and equipment should be eligible.

Overheads must be incurred directly for R&D activities. For example, while part of a cleaner’s salary would be eligible for cleaning the R&D laboratory, and part of the secretary’s salary would be eligible for supporting R&D personnel, the cleaning of the secretary’s office would not be eligible.

Some jurisdictions only allow overhead costs as a set percent of labour costs to be eligible. The advantages are it reduces compliance and admin costs, and the risk that all overhead costs are



recharacterised to directly relate to R&D activity. The disadvantage is that it is biased against capital intensive R&D performers and it might encourage all claimants to claim overheads at the set percentage, which could lead to a cost greater than would have otherwise occurred. We consider it would be useful to seek feedback on this rule, specifically the risks and impact it is likely to have on the sector. We also recommend a regulatory power to exclude overheads that are too remotely connected with the R&D.

### **Items consumed in R&D activities**

Items consumed in the R&D process should be eligible for the credit. This should include, for example, laboratory chemicals and stationery.

### **Net cost of items processed or transformed in R&D process**

For items that are processed or transformed during R&D activities, only the net expenditure should be eligible – that is, the excess of the cost of the items which are the subject of processing or transformation, over the value of the output.

### **Payments to a person for R&D services**

When part or all of an R&D project is outsourced, a payment to the person or entity conducting the R&D should be eligible. The performer of the R&D would not get the credit and the payment would relate only to the R&D conducted by the third party. If the payment is for multiple items (such as R&D services and marketing), costs would need to be separately identified.

### **We recommend the following expenditure be ineligible under the tax credit:**

- Interest expenditure
- Loss on sale or write-off of depreciable assets (with one exception)
- Profits on R&D services and property provided by an associate
- Amounts in excess of market value for leasing property of an associate
- Depreciation attributable to the time an asset is not used in R&D
- Certain depreciation deductions on assets acquired from an associate
- The cost of feedstock other than the net cost (eg in relation to the cost of items transformed in the R&D process, only net expenditure would attract the credit– that is the additional cost of the materials which are the subject of processing or transformation of the value of the output)
- The cost of acquiring technology used as a basis for further R&D
- in-house software development costs exceeding \$3 million (except by Ministerial waiver)
  - like the previous 2008 tax credit rules we recommend this proposal to limit the fiscal risk of abuse (i.e. reclassification of routine software development as in-house experimental development)
- Expenditure funded by a government grant or any required co-funding
- Donations
- Professional fees in determining whether the person, activities or expenditure are eligible
- The cost of acquiring intangible assets
- Expenditure of an industry research co-operative funded by an ineligible person
- **Note:** we are considering whether site specific R&D expenditure should be in ineligible.



## AIDE MEMOIRE

### Timing of an R&D Tax Credit – Talking Points for Economic Development Committee, 21 February 2018

<b>Date:</b>	20 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2131 17-18

#### Information for Minister(s)

Hon Dr Megan Woods  
Minister of Research, Science and Innovation

#### Contact for telephone discussion (if required)

Name	Position	Telephone	1st contact
Richard Walley	Manager, Innovation Policy	04 901 4164	s9(2)(a)

#### The following departments/agencies have been consulted

The Treasury, Inland Revenue, Callaghan Innovation

#### Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

#### Comments

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## AIDE MEMOIRE

### Title

<b>Date:</b>	20 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2131 17-18

### Purpose

This aide memoire provides talking points for the Cabinet paper on *Timing of an R&D Tax Credit*. The paper has been lodged for discussion at the Economic Development Committee (DEV) on Wednesday 21 February 2018.

s9(2)(a)



Richard Walley  
**Manager, Innovation Policy**  
Labour, Science and Enterprise, MBIE

20/2/18

### Cabinet Paper – Timing of an R&D Tax Credit

1. We provided the Cabinet paper on *Timing of an R&D Tax Credit* to you on Friday 9 February 2018 [Briefing 1862 17-18 refers]. You have submitted this to DEV for discussion on 21 February 2018.
2. The Cabinet paper recommends Cabinet:
  - a. **Agree in principle** to the introduction of an R&D tax credit and to an April 2019 implementation date pending Budget decisions on funding.
  - b. **Direct** the Ministry of Business Innovation and Employment, Inland Revenue, and Callaghan Innovation (CI) to begin planning transitional arrangements immediately, as a key part of the design work.
  - c. **Agree** to delegate decisions on announcements on timing of the R&D tax credit to the Minister of Research, Science and Innovation, in consultation with the Minister of Finance and the Minister of Revenue.

### Annexes

Annex One: Talking points on timing of an R&D Tax Credit

Annex Two: Questions & Answers

Annex Three: Key statistics on New Zealand R&D

## Annex One: Talking points on Timing of an R&D Tax Credit

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### Background

- We want to build a diverse, sustainable, productive economy. Innovation driven by R&D will enable this to happen.
- We have announced a target of increasing New Zealand's R&D expenditure to 2 per cent of GDP by 2027.
- Most of this growth will come from business R&D. To achieve our target we have agreed to increase our support for business R&D.
- An R&D tax credit will be a major addition to our current system.
- We propose implementing the R&D tax credit from April 2019. This is the earliest we can feasibly introduce a R&D tax credit.

### Comment

- To meet this implementation date the design of the credit will largely follow the design of New Zealand's 2008/09 R&D tax credit.
- We will modify the scheme to reflect changes in international best practice and experiences in other countries, along with our own experience and knowledge gained from 2008/09.
- This will implement a key commitment from Labour's pre-election Fiscal Plan, and give us a head start towards our goal of increasing R&D expenditure to 2 per cent of GDP.

### Existing scheme

- The R&D Growth Grants scheme administered by CI has significant overlap with the tax credit, and will be replaced over time.
- Ensuring a smooth transition from the existing system to a new system that includes R&D tax credits will be essential to provide continuity of support and incentives to businesses. This will encourage firms to increase their R&D, and encourage new firms to do R&D.
- Additional work is taking place on transitional arrangements for grant recipients and extra support for start-ups.

### Risks

- The design of a tax credit must proceed with care. There is a possibility of the possibility of unintended consequences, 9(2)(g)(i)
- This risk will be mitigated as much as possible through the design and consultation process and closely monitored through the early implementation stage.
- Even with the R&D tax credit it will be challenging to meet the 2 per cent target.

### Next steps

- On 28 March, our discussion document, which will describe in detail the government's preferred R&D tax credit design proposal, will be submitted to Cabinet. The document will be used to seek feedback and design input from key stakeholders. I will seek Cabinet's approval for its public release.

## Annex Two: Q&As

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### What are the benefits of a tax credit over the current Growth Grants?

- *More firms are likely to be able to access the tax credit than are currently accessing the R&D Growth Grants because of its ability to have a high cap and no R&D intensity test.*
- *Tax credits offer a greater element of certainty to businesses. Businesses can apply for the tax credit as part of doing their tax return and do not have to separately apply for grant funding.*

### What is the likely impact of the R&D tax credit?

- *R&D has grown strongly in recent years.*
- *The tax credit will apply to more firms doing R&D than the current system of grants.*
- *This means introducing an R&D tax credit is likely to maintain this and probably drive faster growth of business R&D.*
- *To help achieve the goal of raising economy wide R&D expenditure to 2 per cent of GDP, other mechanisms will also be needed to build a full package of support for R&D performers, start-ups and innovative firms.*

### What other forms of R&D support will we provide?

- *Over time we intend to have a full package of support for New Zealand's Innovation eco-system, including support for start-ups. The R&D tax credit will be one form of support amongst many.*
- *Other forms of government support for business R&D include: project and student grants, advice, training, and support in kind, and some smaller research-focused grants, and a limited R&D tax loss cash out.*
- *Attracting large international businesses to conduct R&D in New Zealand can also make a valuable contribution to business expenditure on R&D and the number of businesses performing R&D overall.*
- *We currently target and attract large international businesses who perform R&D to New Zealand through the Innovative Partnerships Programme.*

### What will the R&D tax credit look like?

- *Officials are working on the high-level policy design options for the R&D tax credit. Some of these options include; the rate of credit, the definition of R&D and eligible/ineligible R&D expenditure.*
- *The discussion document we will be submitting to Cabinet on 28 March will outline the design features for public consultation.*

### How are we consulting on the R&D tax credit?

- *We will consult with R&D performing firms (CI grant recipients, start-ups, R&D firms without CI support), intermediaries (independent and in-house accountants, tax*

lawyers) and SOEs, CRIs, Universities as well as other key stakeholders in New Zealand's Science and Innovation system.

- The discussion document will form the basis of this consultation. The details around the consultation process will be included in the 28 March Cabinet Paper.

#### **What will happen to firms who currently have a Growth grant?**

- There are likely to be between 250-300 businesses in receipt of Growth Grants at 1 April 2019. Recipients will be at different stages through their first three year contract or further two year extension.
- Transitioning from Growth Grants to a tax credit will require businesses to plan and implement some system changes, and potentially adapt to a different payment schedule.
- Additional policy work is taking place on transitional arrangements for recipients of Growth Grants, this will be discussed and finalised in the near future.

#### **How will the tax credit treat pre-profit firms?**

- From 2016 data, we know that there are around 280 R&D performing firms in tax loss. These firms cannot benefit fully from the tax credit in the short term because they have no tax liability from which the credit can be deducted.
- Refundability of a tax credit (i.e. tax loss cash-outs) will be important for some firms in loss, particularly start-ups. Such firms are important within the R&D ecosystem, as a source of value-add employment and the development of a more productive and diversified economy.
- Officials are developing options for tax credit refundability or a complementary grant scheme for R&D firms and start-ups for consideration. There are complex issues involved which officials are working through to reduce the risk of illegitimate claims.

#### **Is the April 2019 implementation timing too ambitious?**

- April 2019 is an ambitious timeframe but one we are more than capable of achieving. There are some risks associated with it.
- It will leave us with no space for delays, and there is limited time for design, consultation, and for businesses to prepare.
- Clear and comprehensive transition planning will be important for businesses that currently receive R&D grants to ensure they're not discouraged from performing R&D in the short term.
- I have made a recommendation that Cabinet direct the Ministry of Business, Innovation and Employment, Inland Revenue and CI to begin planning transitional arrangements immediately, as a key part of the design work.

## Annex Three: Key Statistics on New Zealand R&D

How much is allocated for the R&D tax credit under Labour's Fiscal Plan?

	2018/19	2019/20	2020/21	2021/22
Labour's Fiscal Plan allocation	\$100m	\$200m	\$250m	\$300m

How much does the Government currently spend supporting business R&D through the R&D Grants?

	2017/18	2018/19	2019/20	2020/21	2021/22
R&D Growth Grant appropriation*	\$158.9m	\$166.4m	\$174.2m	\$177.8m	\$145.6m
Targeted business R&D appropriation (Student and Project Grants)	\$32.5m	\$32.5m	\$32.5	\$32.5m	\$37.5m

\* Note, outyears' forecast is lower than current demand.

## Supplementary Statistics

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### Statistics New Zealand: R&D Survey Results, 2016

#### Total R&D

- Total economy-wide spend on R&D is \$3.1 billion - 1.25 per cent of GDP.
- The OECD average spend is 2.4 per cent of GDP.

#### Business R&D

- About half (\$1.6 billion) of total R&D spend is by business (0.64 per cent of GDP). This is the value of the R&D business does. Some of this may be funded from elsewhere (i.e. overseas, or through R&D grants).
  - The OECD average business spend is 1.65 per cent.
- Business expenditure increased 29 per cent from 2014 to 2016, and grew at nearly four times the rate of GDP.
- In 2016, government funded 11 per cent of business R&D.

#### Total government spend on science

- Government and higher education spent \$1.6 billion on R&D in 2016 (this is the total value of the R&D government and higher education undertake).

#### Overseas sourced funding of R&D

- R&D funding from overseas has increased from \$194 million in 2014 to \$243 million in 2016 – an increase of 25 per cent.





# BRIEFING

## Australian R&D Tax Credit – Analysis and Advice

<b>Date:</b>	27 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2300 17-18

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Note</b> the contents of this briefing  <b>Share</b> this briefing with the Minister of Finance and Minister of Revenue	2 March 2018

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Dr Peter Crabtree	General Manager, Science, Innovation and International, MBIE	04 901 3907	s9(2)(a)	✓
Richard Walley	Manager, Innovation Policy	04 901 4134		

The following departments/agencies have been consulted
Treasury, Inland Revenue, Callaghan Innovation, DPMC

Minister's office to complete:

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|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

Comments

Released in Official Information Act 1982



# BRIEFING

## Australian R&D Tax Credit – Analysis and Advice

<b>Date:</b>	27 February 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2300 17-18

### Purpose

To provide you with further analysis and advice on the Australian R&D tax credit.

### Recommended action

The Ministry of Business, Innovation and Employment recommends that you:

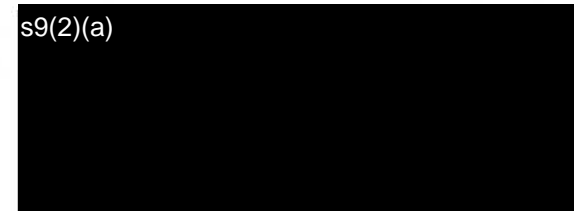
a **Note** the contents of this briefing

*Noted*

b **Share** this briefing with the Minister of Finance and the Minister of Revenue

*Agree / Disagree*

s9(2)(a)



Richard Walley  
**Manager, Innovation Policy**  
Labour, Science and Enterprise, MBIE

Hon Dr Megan Woods  
**Minister of Research, Science and  
Innovation**

27 / 2 / 18  
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## Background

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1. At your meeting with officials on 19 Feb, you considered the joint briefing provided by the Treasury, IRD, MBIE and Callaghan Innovation on feedback from Australian officials on the Australian tax credit [2157 18/105]. As that briefing was mainly factual, you asked MBIE to provide further analysis and commentary on the Australian experience.
2. In addition to our own analysis, this briefing provides a range of commentary and opinion provided by Australian officials, who were engaging with MBIE officials in a free and frank fashion.

### Expenditure on the tax credit has grown while BERD has fallen

3. Growth in expenditure on the Australian tax credit has risen from a projected \$1.9bn per year in 2011 to around \$3.2bn per year in 2016. Over approximately the same period, business expenditure on R&D (BERD) has fallen from around \$16bn per year to \$14bn per year.

s6(b)(i)

s6(b)(i)

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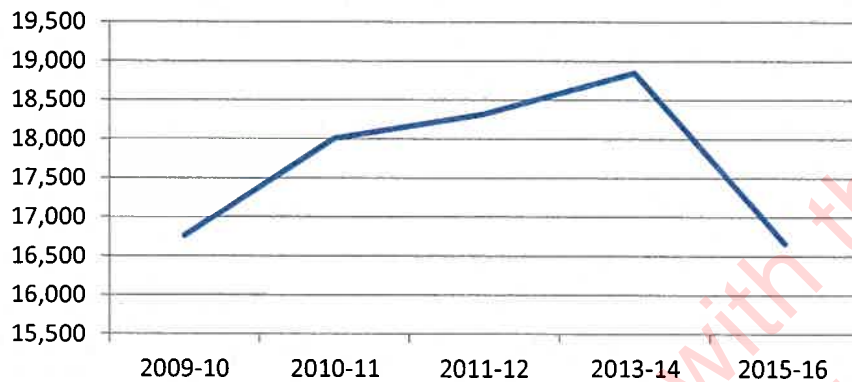
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## Comment

### Why has BERD fallen in Australia?

11. BERD in Australia fell from just under \$18.8bn in 2013-14 to \$16.6bn in 15-16<sup>1</sup>.

Australian Business Expenditure on R&D  
(nominal AUD)

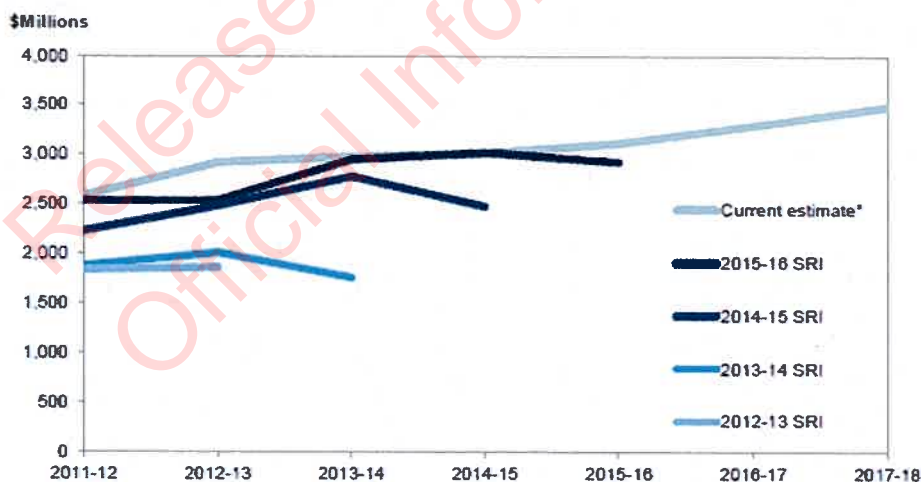


12. The Australian Bureau of Statistics notes that the decrease was largely driven by the Mining and Manufacturing sectors, which decreased R&D expenditure by around \$1bn each from the previous period. We note that these are significant large industries in decline in Australia, particularly since the end of the mining boom.

### Why has expenditure on the Australian tax credit increased?

13. Growth in expenditure on the Australian tax credit has risen from a projected \$1.9bn per year in 2011 to around \$3.2bn per year in 2016<sup>2</sup>.

Cost revisions to the Australian R&D tax credit



\* This figure is taken from the 2016 review report. The 'current estimate' figure is a combination estimate taken from various fiscal information sources in Australia prior to the 2015-16 fiscal year end. 'SRI' refers to the annual Science, Research and Innovation (SRI) Budget Tables, which combine expense estimates from the preceding Budget and Tax Expenditure Statements.

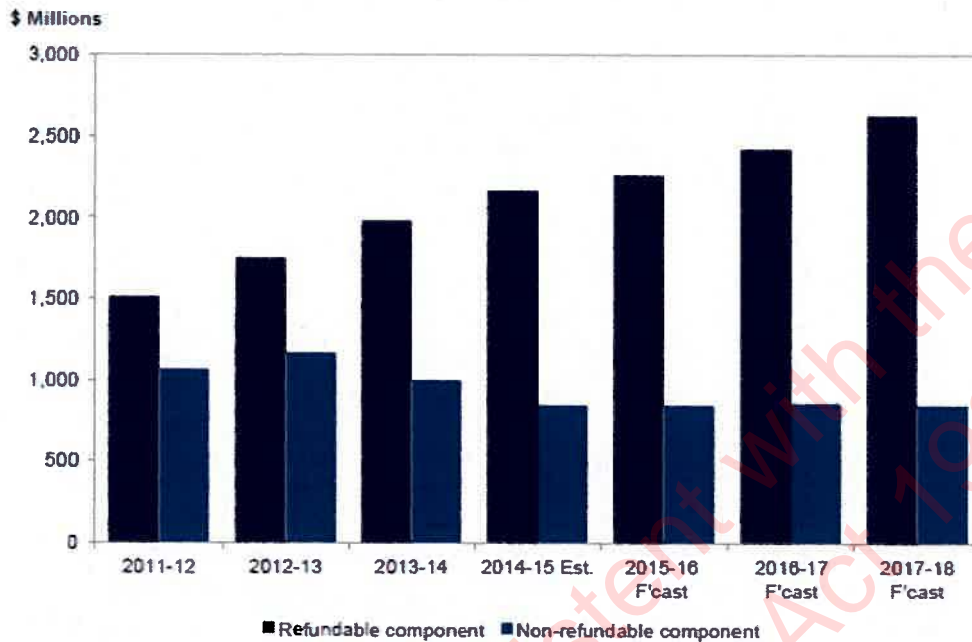
<sup>1</sup> <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8104.0>

<sup>2</sup> <https://www.industry.gov.au/innovation/InnovationPolicy/Research-and-development-tax-incentive/Pages/R-and-D-Tax-Incentive-Review-report-and-submissions.aspx>

14. s6(b)(i)

s9(2)(g)(i) whereby firms with a turnover of less than \$20m can access a refundable tax credit of 43.5%<sup>3</sup>.

*Cost of the Australian R&D tax credit by component*



15. The story of 'expenditure up, R&D down' therefore needs to be approached with some caution. MBIE's interpretation of the Australian situation is that the economy is undergoing a structural transformation, as the older, larger performers of R&D exit, and newer, smaller performers grow and expand, encouraged by the tax credit. The 2016 review notes this growth as being driven by new entrants to the scheme, rather than additional R&D from existing performers. Around 1,000 additional companies have registered for the refundable component each year since 2011-12. As of 2014-15, almost 10,000 registered companies were in the refundable component, around 60 percent of which reported being in tax loss<sup>4</sup>. The average size of the claim has not grown – it has been the number of new R&D performing firms that has driven the cost.

16. s9(2)(g)(i)

17. s6(b)(i)

18. Our advice remains that there is nothing baked in to the concept of a tax credit that means it will spend a lot more money than forecast. Forecasts will definitely remain uncertain for some

<sup>3</sup> <https://www.industry.gov.au/innovation/InnovationPolicy/Research-and-development-tax-incentive/Pages/R-and-D-Tax-Incentive-Review-report-and-submissions.aspx>

<sup>4</sup> *ibid*

time, as it is very difficult to predict how firms will behave in response to the credit. But it is far from certain that our expenditure will exceed our forecast.

#### Australian expenditure on the tax credit and BERD in context<sup>5</sup>

	Australia	New Zealand
BERD % GDP (most recent data)	1.19	0.64
Expenditure on R&D tax credit % GDP	0.17	0.17*

\*Assumes expenditure of around \$450m per annum, or the amount set aside in Labour's fiscal plan plus the current value of Growth Grants

19. The key take-out from the table above is to note that, when controlled for the size of the economy, the current cost of the tax credit in Australia is comparable to the amount of funding potentially available to New Zealand. This level of support is reasonably generous compared to the rest of the OECD, but still places Australia behind countries like Ireland (0.29%), France, and Belgium (both on 0.28%).
20. Australia appears less generous again when both grants and tax credits are counted, but still in the top half of the OECD. In terms of total support for business R&D, Australia is still lower than the UK, the US, Austria, Korea, Ireland, Belgium and France.
21. MBIE's advice is therefore that the amount currently spent by Australia through its tax credit does not appear unreasonable in an international context. 9(2)(g)(i)

#### Has the Australian tax credit led to additional expenditure on R&D?

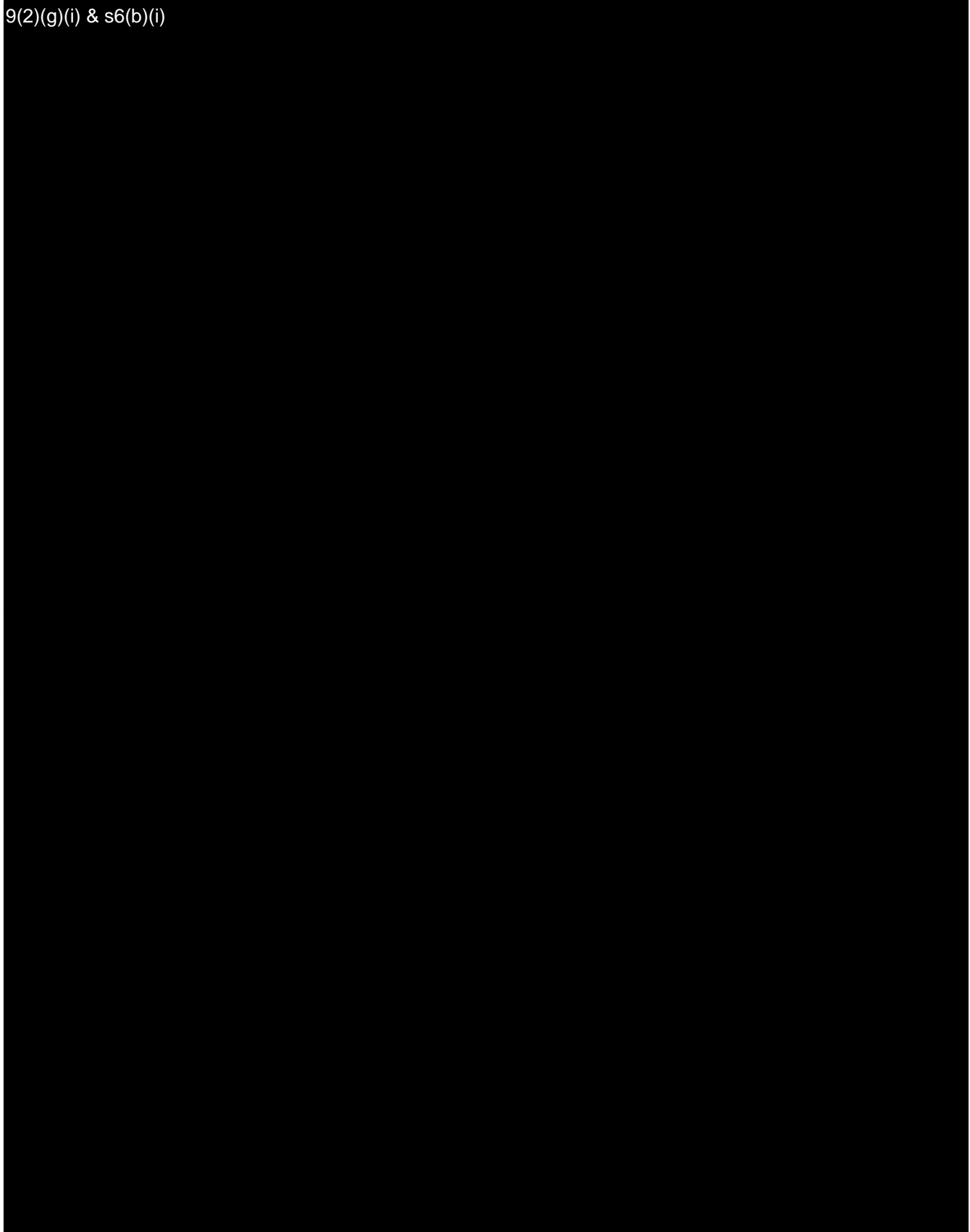
22. MBIE's conclusion, as set out above, is yes, in the SME sector – but this has been offset by a reduction in R&D in larger firms. The 2016 review of the credit quotes research by the Centre for International Economics (this research is not yet available to MBIE) that additionality in Australia is much smaller for large firms than SMEs.
23. The main conclusion from the 2016 review is that the Australian credit has not led to additionality, despite acknowledging that a) additionality is more likely in SMEs, and b) the growth in expenditure has come from SMEs. s9(2)(g)(i)
24. The net result of international research on the benefits of large firms performing R&D in an economy is unclear. While a tax credit may not increase the amount of R&D they do (as per the Australian 2016 report), the R&D they do perform appears to have greater returns to the whole economy than for small firms<sup>6</sup>. Large firms bring resources to the economy that small firms will struggle to provide, such as high-quality managers and entrepreneurs, knowledge of international markets, large capital budgets, corporate finance, and a customer base for smaller high-growth firms. New Zealand, in contrast to Australia, currently lacks any large firms on the scale of Australia, with the exception of Fonterra. We think having more large firms is extremely important for New Zealand.
25. For these reasons, we consider that attracting or growing large R&D performing firms is essential to the New Zealand economy at this time, and a tax credit has an important part to

<sup>5</sup> www.innovationpolicyplatform.org, other than the starred figure

<sup>6</sup> Bloom, N., M. Schankerman and J. Van Reenen, 2013, Identifying technology spillovers and product market rivalry, *Econometrica*, vol. 81, no. 4, pp. 1347-1393.

play in this. Our current understanding of the function of an R&D tax credit as an attractor to large firms is that it is part of the picture, but won't have an effect on its own. Some stakeholders have noted that a tax credit has the advantage of easy comparability with other countries.

9(2)(g)(i) & s6(b)(i)



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<sup>7</sup> <https://industry.gov.au/Innovation-and-Science-Australia/Australia-2030/Pages/default.aspx>

## What can we learn from the Australian experience?

s9(2)(g)(i)

### Next Steps

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37. You are receiving ongoing advice on the development of the New Zealand R&D tax credit.
38. In terms of international comparisons, the OECD is holding a one day workshop on design of tax credits on 5 March. We are currently exploring ways that New Zealand could be represented at that workshop. Comparison to a broader range of countries will provide us with a more thorough set of data and information against which to benchmark ourselves.





## BRIEFING

### R&D Tax Incentive: Cabinet Paper and Discussion Document

<b>Date:</b>	9 March 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2216 17-18 IR2018/133

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Sign and lodge</b> the attached Cabinet paper for consideration at Cabinet Economic Development Committee on 28 March.	22 March 2018
Hon Stuart Nash <b>Minister of Revenue</b>	<b>Sign</b> the attached Cabinet paper for consideration at Cabinet Economic Development Committee	22 March 2018

Contact for telephone discussion (if required)			
Name	Position	Telephone	1st contact
Richard Walley	Manager, Innovation Policy, Ministry of Innovation, Business and Employment	04 901 4164	9(2)(a) ✓
Keith Taylor	Policy Manager, Inland Revenue	04 890 2808	

The following departments/agencies have been consulted
The Treasury Callaghan Innovation

Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

Comment



## BRIEFING

### R&D Tax Incentive: Cabinet Paper and Discussion Document

<b>Date:</b>	9 March 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2216 17-18 IR2018/133

#### Purpose

To provide you with the Research and Development (R&D) tax incentive discussion document (*R&D Incentive – Fuelling Innovation to Transform Our Economy*) for consultation and its accompanying Cabinet paper seeking Cabinet approval for publication.

#### Recommended action

The Ministry of Business, Innovation and Employment and Inland Revenue recommend that you:

		Min. RSI	Min. Revenue
a	<b>Agree</b> to lodge the attached Cabinet paper on 22 March, for consideration at Cabinet Economic Development Committee on 28 March	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
b	<b>Agree</b> to forward the attached Cabinet paper to the Minister of Finance	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
c	<b>Note</b> that subject to Cabinet approval on the 3 April the discussion document is expected to be published on 9 April 2018	<i>Noted</i>	<i>Noted</i>

9(2)(a)

Richard Wailey  
**Manager, Innovation policy**  
Labour, Science and Enterprise, MBIE

9 / 03 / 18

9(2)(a)

Keith Taylor  
Policy Manager  
**Inland Revenue**

9 / 03 / 18

Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

..... / ..... / .....

Hon Stuart Nash  
**Minister of Revenue**

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## Background

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1. On 26 February 2018, Cabinet agreed to the introduction of an R&D tax incentive, in the form of a tax credit, by 1 April 2019, subject to Budget 2018 decisions [CAB-18-MIN-0056].
2. It was noted in the same Cabinet paper that on 28 March 2018 Ministers will submit to Cabinet an R&D tax incentive discussion document for public consultation which describes the Government's preferred tax incentive design proposal.
3. The R&D tax incentive discussion document (*R&D Incentive – Fuelling Innovation to Transform Our Economy*) is attached at **Annex One**.
4. The Cabinet paper attached at **Annex Two** seeks agreement to publish the discussion document, and notes further areas of work underway as part of the wider R&D tax incentive project.

## Discussion Document

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5. The R&D tax incentive discussion document is based on decisions made on the main and technical design features paper you received last month [1714 17-18/IR2018/083 and 1892 17-18/IR2018/084 refers].
6. The R&D tax incentive discussion document also includes measures proposed in the report 'Integrity within the R&D Tax Credit' (IR2018/132 refers), and some technical matters such as the approach to dividend imputation and when expenditure is recognised for the purposes of the tax credit.
7. The R&D tax incentive discussion document also signals where further areas of work are underway, these are: defining eligibility with respect to software, treatment of businesses in tax loss and transition from Growth Grants to R&D tax incentives.
8. You have asked officials to signal in the Cabinet paper your intention to make more changes to the tax system, for example by including the accelerated depreciation of R&D capital assets as part of the design of the R&D tax incentive. Inland Revenue officials are of the view that the Minister of Revenue would appreciate discussion on this point before its inclusion in the Cabinet paper submitted to the Cabinet Economic Development Committee on 22 March 2018.

### *Design and publication*

9. Currently, the R&D tax incentive discussion document is in word format. We intend to go through a design and publication process that will transform the word document into a publication-level document.
10. In addition to the content included in the R&D tax incentive discussion document we are likely to include a number of infographics, pictures and graphs. You will receive a mocked-up designed version of the discussion document by 16 March 2018.
11. We hope to have a publication-level version of the R&D tax incentive discussion document, integrated with any feedback on design and content available to you by 28 March 2018.

### *Consultation plan*

12. The Cabinet paper indicates the R&D tax incentive consultation process will take place between early April and early May 2018. Key research, innovation and science stakeholders will be invited to take part in the process. We will provide you with a briefing covering the detailed consultation plan including the approach to targeted consultation by 16 March 2018.

## Next Steps

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13. We recommend you provide feedback to officials on the R&D tax incentive discussion document and Cabinet paper by 12 March 2018 or as soon thereafter as possible.
14. We recommend that the Cabinet paper be signed and lodged by 22 March 2018, for consideration at Cabinet Economic Development Committee on 28 March 2018. We recommend you forward the Cabinet paper to the Minister of Finance prior to the Cabinet meeting taking place.
15. Subject to Cabinet agreement, the expected publication date of the R&D tax incentive discussion document is 9 April 2018.
16. Following consultation, we will report to you on submissions and our final recommendations.

## Annexes

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Annex One: R&D Tax Incentive Discussion Document

Annex Two: Cabinet Paper

Note: The final versions of these documents are publicly available. The drafts have therefore not be released.

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# AIDE MEMOIRE

## R&D Tax Incentive: Launch and Consultation Plan

<b>Date:</b>	23 March 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2498 17-18

<b>Information for Minister(s)</b>
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>

<b>Contact for telephone discussion (if required)</b>			
<b>Name</b>	<b>Position</b>	<b>Telephone</b>	<b>1st contact</b>
Richard Walley	Manager, Innovation Policy, MBIE	04 901 4164	s9(2)(a) ✓

<b>The following departments/agencies have been consulted</b>
The Treasury, Inland Revenue, Callaghan Innovation

**Minister's office to complete:**

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

**Comments**

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# AIDE MEMOIRE

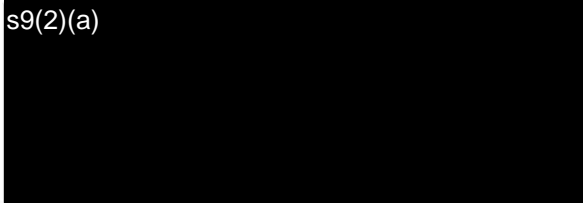
## R&D Tax Incentive: Launch and Consultation Plan

<b>Date:</b>	23 March 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2498 17-18

### Purpose

This aide memoire provides you with a suggested timeline to launch the R&D tax incentive discussion document and gives an indication of the type of event that could be used to support the announcement. It also gives a brief outline of the R&D tax incentive consultation plan.

s9(2)(a)



Richard Walley  
**Manager, Innovation Policy**  
Labour, Science and Enterprise, MBIE

23/03/18

### Public launch of the R&D tax incentive discussion document

#### Background

1. We have provided you with a draft discussion document (2216 17-18 IR2018/133 refers) outlining the Government's proposed design of an R&D tax incentive. The R&D tax incentive discussion document will be used as the basis of public consultation between April and May 2018.
2. Subject to discussions with Government's confidence and supply partners, you are due to submit the R&D tax incentive discussion document to the Cabinet office on 28 March or 4 April 2018. The discussion document will be considered at the Economic Development Committee on 4 or 11 April and then subject to approval by Cabinet on 9 or 16 April 2018.

#### Launch of the R&D tax incentive discussion document

3. Your office has indicated you would like the launch of the R&D tax incentive discussion document to include a press release and an event attached to the launch. We understand this event could involve a successful innovative R&D performing firm that would benefit from the introduction of an R&D tax incentive.
4. Based on the new spending allocated to the R&D tax incentive in Budget 2018, it is likely the launch of the R&D tax incentive discussion document will be viewed as a pre-budget announcement. We also understand there is a desire to keep all pre-budget announcements to within a month of Budget 2018.
5. We are working closely with your office to provide options for a venue and guest list as well as a media strategy for the launch. We will ensure the event is entered in the diaries of relevant Ministers.

6. Dependent on Cabinet sign-off and the need to link the launch of the R&D tax incentive discussion document to Budget 2018, the suggested date for the launch is Tuesday 17 April 2018.
7. We will continue to work with the offices of the Ministers concerned to finalise the details of the launch.

## Consultation Plan

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### *Consultation period*

8. As soon as the R&D tax incentive discussion document is launched we will begin the consultation process. Based on an 17 April 2018 launch date and a six week consultation period, consultation with stakeholders will take place between 17 April and 29 May 2018.

### *Consultation approach*

9. Following the media launch of the R&D tax incentive discussion document key stakeholders will be invited to provide feedback on the design of the R&D tax incentive. Stakeholders will be able to download the discussion document and submit feedback on the MBIE website.
10. Refer to **Annex One** for the list of stakeholder groups that will be invited to provide feedback on the design of the R&D tax incentive. We will also promote the launch of the R&D tax incentive discussion document to the wider public through the media and existing communications channels.
11. In addition to this, officials from MBIE, Inland Revenue and Callaghan Innovation will undertake one-on-one interviews and technical workshops with targeted stakeholder groups. The objective of the consultation is to ensure all aspects of the R&D tax incentive are discussed in depth and any potential issues faced by businesses are explored and understood fully.
12. Refer to **Annex Two** for a list of prospective stakeholders who are likely to be invited to take part in one-on-one interviews and technical workshops. The targeted consultation will take place at various locations through out New Zealand. The participants who attend the workshops and one-on-ones will be selected based on their availability, location and mix of the group.

### *Publication-ready R&D tax incentive discussion document*

13. MBIE designers are working on a publication ready version of the document. The first draft of this designed version will be available for your comment on 29 March 2018. We aim to have a final version of the publication document to support your discussion at DEV (either on 4 or 11 April 2018).

## Annexes

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Annex One: List of key stakeholders

Annex Two: Prospective stakeholders to take part in one-on-ones and technical workshops

## **Annex 1: List of key stakeholders**

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### **Key stakeholders**

Businesses currently receiving Growth Grants

Businesses currently receiving Project Grants

Regional Business Partners Network

Businesses investigating or undertaking R&D activity but not yet receiving or eligible for R&D support from Government

Getting Started Grant recipients

Student Grant recipients and hosting businesses and universities

Callaghan Innovation Research and Technology Services clients

Callaghan Innovation's 'Influencer Group'

Publicly funded research organisations and agencies including Universities

Iwi-owned businesses

State-owned Enterprises (SoEs)

New Zealand Trade and Enterprise

Industry bodies / organisations including:

- Angel Association NZ
- Business New Zealand
- New Zealand Private Equity and Venture Capital Association
- Manufacturers and Exporters Association
- Manufacturing NZ
- Tech and Founder incubators - Icehouse, Powerhouse, Zeropoint
- PrefabNZ
- Creative HQ / Lightning Lab
- NZ Tech
- MacDiarmid Institute
- Economic Development Agencies
- Energy Council (Business NZ)
- Energy Efficiency & Conservation Authority
- National Energy Research Institute
- NZ Chambers of Commerce
- BRANZ
- World Wildlife Fund

Independent accountants

In-house accountants

Third Party Software developers and providers

Start-ups

Tax lawyers

Tax agencies



## Annex 2: Prospective stakeholders to take part in one-on-ones and technical workshops

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Stakeholder group	Technical workshops	
	Participants	Location
R&D performing firms	6-8 participants	Auckland
R&D performing firms	6-8 participants	Christchurch
Start-ups	6-8 participants	Auckland
Start-ups	6-8 participants	Regional location
SOE's	All SOEs invited	Wellington
Crown Research Institutes and University Technology Transfer Offices	All CRIs and University TTOs invited	Wellington

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## BRIEFING

### The R&D Tax Incentive Discussion Document: Ministerial and Agency Responses

<b>Date:</b>	29 March 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2735 17-18

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Agree</b> to incorporate ministerial and agency feedback into the Cabinet paper and discussion document, before submission to the Cabinet Economic Development Committee on Wednesday, 4 April.  <b>Agree</b> to Tuesday 17 April as the launch date for the discussion document.	At your earliest convenience.

Contact for telephone discussion (if required)			
Name	Position	Telephone	1st contact
Veronica Jacobsen	Policy Director, Science, Innovation and International	04 901 3927	<div style="background-color: black; color: white; padding: 2px;">s9(2)(a)</div> <div style="text-align: center;">✓</div>
Harriet Miller	Senior Policy Advisor, Innovation Policy	04 901 8330	

The following departments/agencies have been consulted

**Minister's office to complete:**

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

**Comments**



## BRIEFING

### The R&D Tax Incentive Discussion Document: Ministerial and Agency Responses

<b>Date:</b>	29 March 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2735 17-18

#### Purpose

To provide you with a design draft of the R&D discussion document and accompanying Cabinet paper that incorporates ministerial and agency feedback.

#### Recommended action

The Ministry of Business, Innovation and Employment recommends that you:

- a) **Note** the agency and ministerial feedback to the R&D Tax Incentive discussion document and accompanying Cabinet paper.

Noted

- b) **Agree** recommended changes be made to the Cabinet paper and discussion document for submission to the Cabinet Economic Development Committee Wednesday, 4 April.

Agree/Disagree

- c) **Note** the attached draft of the design version of the R&D Tax Incentive discussion document.

Noted

- d) **Agree** to Tuesday 17 April as the launch date for the discussion document.

Agree/Disagree

s9(2)(a)

Veronica Jacobsen  
**Policy Director, Science, Innovation and International**  
Labour, Science and Enterprise, MBIE

29/03/2018

Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

..... / ..... / .....

## Background

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1. A revised Cabinet paper to ask the Cabinet Economic Development Committee to approve the public release of the discussion document will be provided to your office early next week. This paper has been circulated with your ministerial colleagues. A table with recommended changes to the Cabinet paper and discussion document is at Annex One. A previous version of the Cabinet paper and discussion document was provided to your office on 9 March 2018 [briefing 2216 17-18 refers].
2. We will undertake public consultation on the R&D Tax Incentive proposal through the publication of a discussion document (*R&D Incentive – Fuelling Innovation to Transform Our Economy*). A draft of a design version of the discussion document is at Annex Two.

## Response to consultation

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### **The Cabinet paper and discussion document have been circulated, and there are some recommended changes**

3. The Cabinet paper and the discussion document have been circulated to your ministerial colleagues, including support party ministers. Other government agencies have also been consulted.
4. The feedback has resulted in some suggested modifications to the Cabinet paper and discussion document. A summary of the feedback and recommended changes is in Annex One. We recommend that these changes are incorporated into the final documents.
5. Feedback refers to the word, rather than design, version of the discussion document. The word version is attached at Annex Two

### **Feedback from support parties is still expected**

6. The Green Party and the New Zealand First Party have not yet provided feedback, but are likely to do so in the near future. This feedback will likely need to be reflected in the final documents.

## The R&D Tax Incentive discussion document

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### **The draft of the design version of the discussion document is attached**

7. The R&D Tax Incentive discussion document describes the main design settings and raises topics for discussion. The design version will better engage public discussion through a more accessible layout, and clearer visual presentation of information.
8. The design version of the discussion document is still draft, and design and wording may be changed before it is finalised. If necessary, you may wish to submit the plain word version of the document to Cabinet Economic Development instead.
9. Your office was supplied a draft forward for the discussion document for your feedback on 21 February. This is a joint forward with the Minister of Revenue and

requires your office to consult with his. We are awaiting that feedback before including in the discussion document.

**We recommend the discussion document is launched on 17 April**

10. In an earlier briefing [briefing 2498 17-18 refers] we recommend that Tuesday 17 April would be a preferred date to launch the R&D tax incentive discussion document. Depending on Cabinet approval by 16 April, this is a tight but achievable deadline. If you agree to the 17 April launch date we will begin the communication activities required, including organising a launching event and issuing invitations to key stakeholders for workshops and one-on-one consultation meetings.

**Annexes**

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Annex One: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

Annex Two: Word version of the discussion document

Annex Three: Design version of the discussion document

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**Annex One: Agency and Ministerial feedback on discussion document  
and accompanying Cabinet Paper**

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## **Annex Two: Word version of the discussion document**

The final version of this document is publicly available. This draft has therefore not been released.

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## **Annex Three: Design version of the discussion document**

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The final version of this document is publicly available. This draft has therefore not been released.

Released Consistent with the  
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R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

**Code frame:**

1 = Additional justification for policy changes and/or its intended impacts

2 = Exclusion of social science, humanities and arts

3 = Technical clarification required

4 = Explanation of wider support for innovation or broadening the incentive to support innovation more generally

5 = Comments on transition and role of CI

6 = Comments on evaluation and review

7 = Other

*Note, as we continue with consultation code 3 (technical clarification) will be split out into different technical issues similar to the theme coming through on 'exclusion of social sciences'.*

Minister	Code	Ministerial comment	Our response	Changes to the cabinet paper and/discussion document <b>(suggested changes in red)</b>
Parker				<p data-bbox="1668 406 2047 510">Suggest adjusting paragraph 8 in the CABINET PAPER to the following:</p> <p data-bbox="1668 550 2047 1125"><i>The decision to establish an R&amp;D tax incentive as part of the wider system of support for research, science and innovation is due to its ability to give more businesses greater access to R&amp;D support, and to offer a greater element of certainty to businesses than was available previously through <b>Callaghan Innovation Growth Grants</b>. The impact from the initiative is likely to be faster growth of business R&amp;D in New Zealand over the medium to long term.</i></p> <p data-bbox="1668 1157 2047 1364"><i>We anticipate there being a complementary R&amp;D grant system which has the ability to be more targeted to certain types of firms/industries or R&amp;D to exist alongside the tax</i></p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

				<i>incentive as a wider package of future R&amp;D support.</i>	
Parker			9(2)(g)(i)	Noted	No change to Cabinet paper or DD suggested
Parker				9(2)(g)(i)	<p>Suggest including an additional objective in Section 1 of the DD:</p> <p><i>Introducing a R&amp;D tax incentive will:</i></p> <ul style="list-style-type: none"> <li><i>lead to greater innovative business activity, thus increasing employment, industry diversity international engagement, profitability and overall sustainability.</i></li> </ul>
Woods				9(2)(g)(i)	No change to Cabinet paper or DD suggested

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

			9(2)(g)(i)	
Woods			9(2)(g)(i)	No change to Cabinet paper or DD suggested

			9(2)(g)(i)	
Nash				9(2)(g)(i)

Nash				<p style="text-align: right;">s9(2)(g)(i)</p> <p>Suggest including the new text and question in Section 2 of the DD under Penalties:</p> <p><i>The standard penalties provisions in the Tax Administration Act 1994 would apply to R&amp;D Tax Incentive claims. International experience suggests that the risks around R&amp;D tax credits may be greater when advisors are paid on a contingency basis, as they too gain an incentive to inflate the claim.</i></p> <p><i>Officials are considering whether penalties should be extended where a tax advisor has, or would have, received a direct financial benefit from the claim (in the form of a fee contingent on the R&amp;D Tax Incentive) and the R&amp;D Tax</i></p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

				<p><i>Credit application demonstrates a serious offense. An option being considered is to refine the promoter penalty rules so that the joint and several liability provisions can apply in the circumstances described above.</i></p> <p><i>Question 15: Are there risks with extending penalties to external advisors in this way?</i></p>
Parker			9(2)(g)(i) Noted	<p>Include in DD in Section 1:</p> <p><i>The R&amp;D Tax Incentive is not the only way the Government is ensuring its policies are fit for purpose. For instance, we have also established the Tax Working Group to examine further improvements to the structure, fairness and balance of the tax system.</i></p> <p>Include in CABINET PAPER under The proposed design of the R&amp;D tax credit:</p> <p><i>The R&amp;D Tax Incentive is not the only tax policy being developed or reviewed. For instance, we have also</i></p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

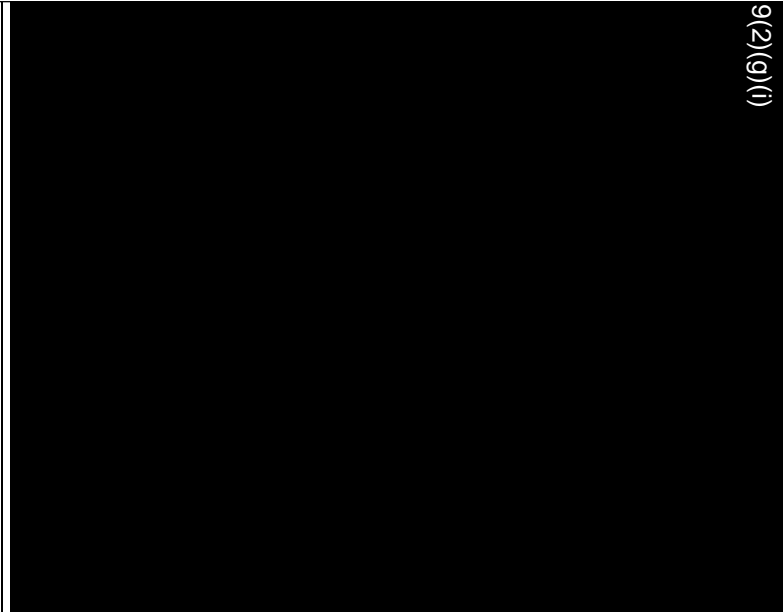
				<i>established the Tax Working Group to examine further improvements to the structure, fairness and balance of the tax system.</i>
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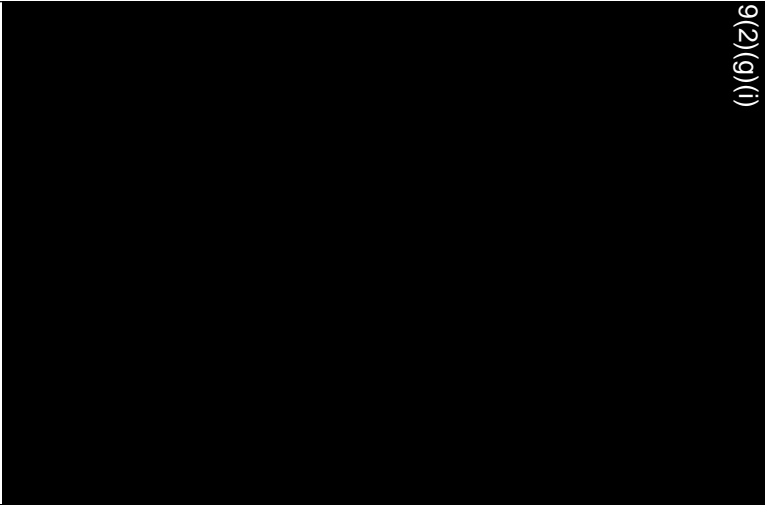
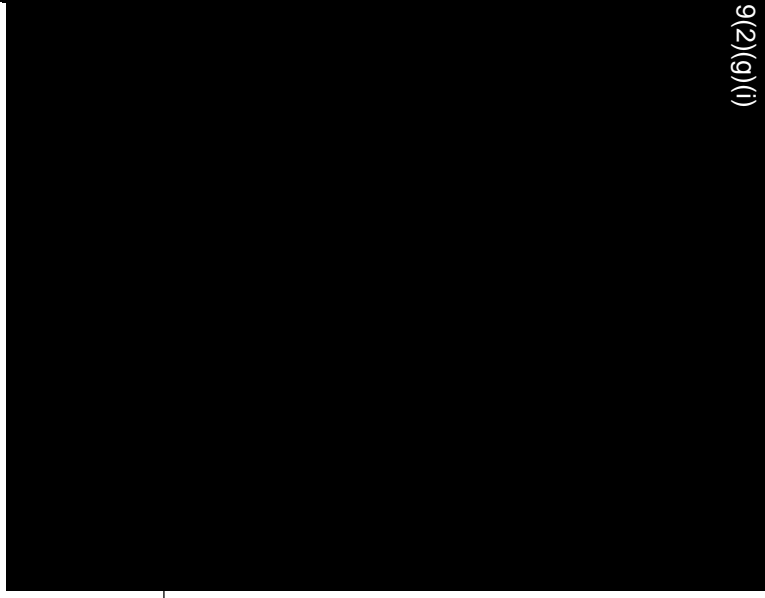
R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

Agency	Code	Agency comment	Our response	
Ministry of Education		<div style="background-color: black; width: 100%; height: 100%; display: flex; align-items: center; justify-content: center;"> <span style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">g(2)(g)(i)</span> </div>	<p>The R&amp;D tax incentive has been designed as broad-based support to encourage increased business expenditure on R&amp;D (BERD). It does not target specific industries or firms. The intended outcomes from these benefits are increased employment, productivity, industry diversity international engagement, profitability and overall sustainability.</p>	<p>Suggest extending para 3 p6 in Section 1 in DD to:</p> <p><i>This is expected to increase growth in business research and development in New Zealand over the medium to long term, encouraging innovation and moving New Zealand towards the type of economy needed to better support our well-being objectives, including increasing employment, productivity, industry diversity international engagement, profitability and overall sustainability.</i></p> <p>Also refer to other changes in Section 1</p>

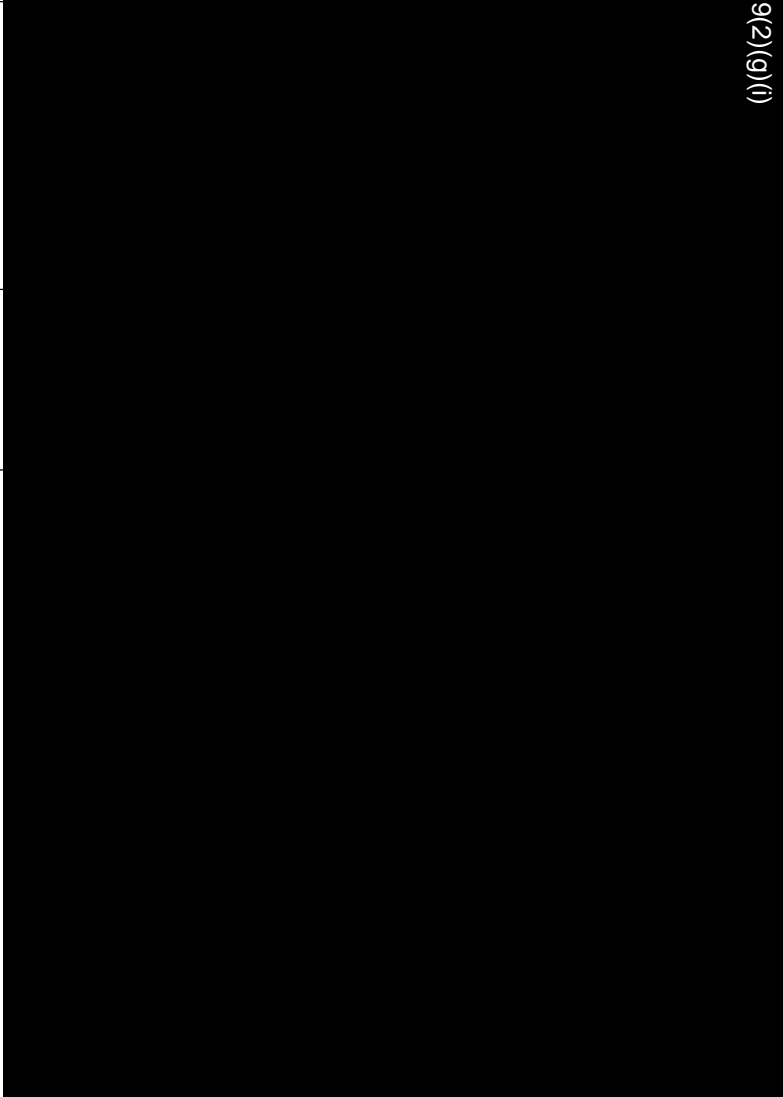
R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

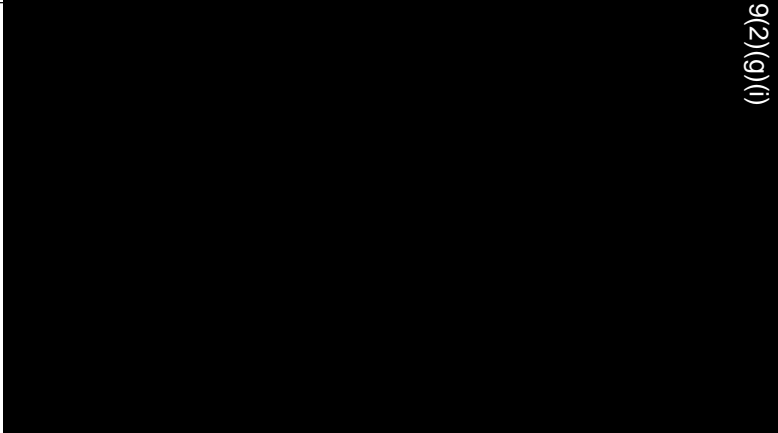
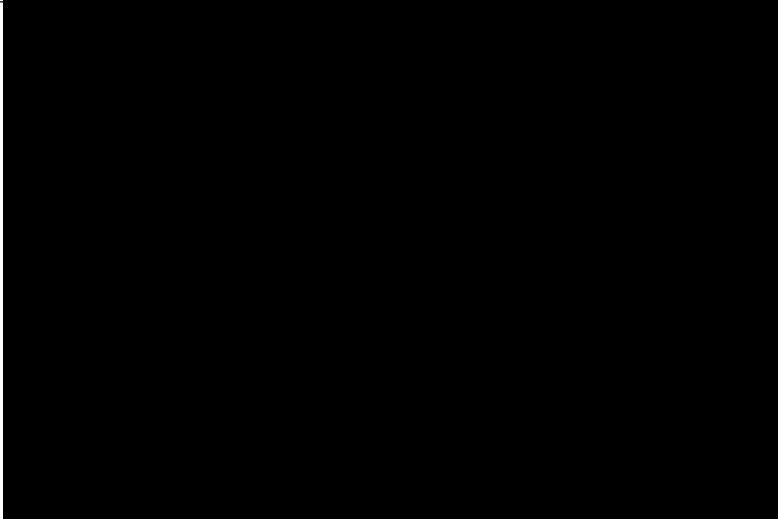
<p>Ministry for the Environment</p>		<p>9(2)(9)(i)</p> <p>The R&amp;D tax incentive has been designed as broad-based support to encourage increased business expenditure on R&amp;D (BERD). It does not target specific industries or firms. It is intended to be a market-led instrument.</p> <p>Through Government signalling (e.g. the zero carbon emission target) and wider environmental trends (demographic changes, technology and climate change etc.) we would expect to see businesses becoming increasingly responsive to solving some of the big challenges that face New Zealand and the world. Expenditure on R&amp;D will be one of the main ways business begins to address these commercial opportunities.</p>	<p>No change suggested</p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

<p>Ministry for the Environment</p>		<p>Ibid</p>	<p>Refer to changes suggested in Section 1</p>
<p>Ministry of Education</p>		<p>Noted and to be considered as part of the consultation phase of the project.</p>	<p>No change to Cabinet paper or DD suggested</p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

MPI		<p style="text-align: right;">(b)(6)(z)</p> <p>Noted and to be considered as part of the consultation phase of the project.</p>	<p>No change to Cabinet paper or DD suggested</p>
Tertiary Education Commission		<p>Noted and to be considered as part of the consultation phase of the project.</p>	<p>No change to Cabinet paper or DD suggested</p>
Ministry of Education		<p>The intention is that public entities can be an Approved Research Provider.</p> <p>The intended approach copies that from 2008. We are not aware of problems with the requirement to charge market prices. Consultation should reveal if this requirement is problematic.</p>	<p>Suggest including the additional content in Section 2 p17 of the DD:</p> <p><i>Approved Research Provider – including public and private entities</i></p>

<p>Tertiary Education Commission</p>		<p>9(2)(g)(i)</p> <p>TEOs and their subsidiaries would not be eligible for the R&amp;D tax incentive. This is in-line with exclusions proposed for SOEs, CRIs DHBs and tertiary institutions and their subsidiaries.</p> <p>Any TEOs could be Approved Research Providers as long as they met the requirements set out in the DD.</p>	<p>Suggest replacing the term 'Tertiary Institutions' with '<i>Tertiary Education Organisations</i>' to ensure all tertiary education organisational types are included in the DD and CABINET PAPER.</p>
<p>Tertiary Education Commission</p>		<p>If the activity in question meets the business eligibility criteria, R&amp;D activity definition and is considered eligible R&amp;D expenditure it would qualify for an R&amp;D tax incentive.</p> <p>However, our understanding of this particular example is that it currently does not meet the various criteria involved but does receive support from the Government through the Innovation Partnership scheme.</p>	<p>No change to Cabinet paper or DD suggested</p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

Tertiary Education Commission	<div style="background-color: black; width: 100%; height: 100%; display: flex; align-items: center; justify-content: center;"> <span style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">(i)(9)(z)</span> </div>	Noted	No change to Cabinet paper or DD suggested
Tertiary Education Commission		If the research in question meets the various criteria involved there is no reason why it wouldn't be eligible for the R&D tax incentive.	No change to Cabinet paper or DD suggested
Tertiary Education Commission		<p>Private Training Organisations and their subsidiaries would not be eligible for the R&amp;D tax incentive.</p> <p>Any TEOs could be Approved Research Providers as long as they met the requirements set out in the DD.</p>	Suggest replacing the term 'Tertiary Institutions' with ' <i>Tertiary Education Organisations</i> ' to ensure all tertiary education organisational types are included in the DD and CABINET PAPER.

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

NZTE	[REDACTED]	<p>9(2)(g)(i) Internationally, there is a mix of countries with a minimum spend threshold and ones without. Compared to other countries our proposed threshold is relatively high.</p> <p>The suggested minimum threshold was developed as part of discussions with Callaghan Innovation and Inland Revenue.</p>	<p>No change to Cabinet paper or DD suggested</p>
NZTE		<p>9(2)(g)(i) A deliberate decision was made not to compare the current system of Growth Grants against the Tax Incentive. This was done to ensure discussion focused mainly on the design features of the tax incentive.</p>	<p>No change to Cabinet paper or DD suggested</p>
MPI		<p>9(2)(g)(i) This infographic compares where NZ sits in terms of its 2% R&amp;D expenditure target by comparison to other countries. It isn't intended to illustrate BERD</p>	<p>Suggest changing the title of the infographic included in the DD on page 5 to reference the 2% target.</p>
MPI		<p>9(2)(g)(i) This infographic is superfluous so likely to be removed from the DD.</p>	<p>No change to Cabinet paper or DD suggested</p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

MPI	9(2)(g)(i)	The median tax rate is more representative than the mean once taking into account the variation between countries by size of population.	No change to Cabinet paper or DD suggested
MPI		Businesses will need to meet all the tests to be eligible. The requirement for an overseas owned company is that it has a fixed establishment in New Zealand.	No change to Cabinet paper or DD suggested
MPI		The text clarifies that ownership of IP is not a requirement. We consider ownership of the results is a different matter from ownership of IP.	No change to Cabinet paper or DD suggested
MPI		This was the wording from 2008, so we would prefer to maintain it.	No change to Cabinet paper or DD suggested



R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

MPI	<div style="background-color: black; width: 100%; height: 100%; display: flex; align-items: center; justify-content: center;"> <span style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: small;">(b)(6)(z)</span> </div>	<p>Noted and to be considered as part of the consultation phase of the project.</p> <p>We would expect all the different elements within core activities to be met. Relaxing parts of the definition would broaden the scope of the tax incentive but with greater fiscal cost and with less targeting to the activities where there is a need for subsidy.</p>	No change to Cabinet paper or DD suggested
MPI		Noted and to be considered as part of the consultation phase of the project.	No change to Cabinet paper or DD suggested
MPI		Noted and to be considered as part of the consultation phase of the project.	No change to Cabinet paper or DD suggested

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

MPI	[REDACTED]	9(2)(g)(i) Noted and to be considered as part of the consultation phase of the project.	No change to Cabinet paper or DD suggested
MPI		Noted and to be considered as part of the consultation phase of the project.	No change to Cabinet paper or DD suggested
MPI		The ineligibility applies to expenditure by the tax credit claimant. It cannot make a donation and include it in its claim for a credit. The exclusion would not rule out donations as a source of funds.	No change to Cabinet paper or DD suggested

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

MPI	9(2)(g)(i)	Noted	Suggest including in the DD:  Approved Research Provider: <ul style="list-style-type: none"> <li>has the capability (including appropriate qualifications and certifications) to perform R&amp;D activities on behalf of other persons</li> </ul>
MPI		Noted and to be considered as part of the consultation phase of the project.	No change to Cabinet paper or DD suggested
MPI		Noted	No change to Cabinet paper or DD suggested
MPI		Noted	No change to Cabinet paper or DD suggested
MPI		These are intended to be brief objectives and are explained more fully in the remainder of Section 1	No change to Cabinet paper or DD suggested
MPI		Ibid	No change to Cabinet paper or DD suggested

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

NZTE	9(2)(g)(i)	The R&D tax incentive is intended to support R&D activity which forms one specific component of innovation. While we recognise that broader innovation activities, such as commercialisation, are also critical to the process we note there are other mechanisms to support these wider activities, for example through NZTE and CI.	No change to Cabinet paper or DD suggested
NZTE		Ibid	No change to Cabinet paper or DD suggested
MPI		Details around the administration of the R&D tax incentive are still to be finalised. It is intended that Inland Revenue and Callaghan Innovation will work together in partnership to ensure that is R&D activity eligible for the tax incentive.	Suggest including in the DD an additional workflow diagram showing how Inland Revenue and Callaghan Innovation might work together as part of the client facing tax system.
MPI		Noted	No change to Cabinet paper or DD suggested

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

NZTE	<div style="background-color: black; width: 100%; height: 100%; display: flex; align-items: center; justify-content: center;"> <span style="writing-mode: vertical-rl; transform: rotate(180deg); font-size: 12px; color: white;">9(2)(g)(i)</span> </div>	At this stage we are focused on ensuring the design of the R&D tax incentive meets the needs of the R&D business as well as meeting Government’s wider objectives.	No change to Cabinet paper or DD suggested
NZTE		Noted	<p>Suggest including a new paragraph under ‘Transition from Growth Grants’ in the DD to:</p> <p><i>Until final decisions by the Government are made Growth Grants will continue as normal.</i></p>
Ministry of Education		Noted	<p>Suggest including a new paragraph in the CABINET PAPER under ‘Measures to ensure the integrity of the tax credit’</p> <p><i>Officials are currently considering what information/data will be required from tax credit recipients to enable evaluation of the costs and benefits of the scheme. An appropriate evaluation plan will be determined once the design settings are confirmed.</i></p>

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

MPI	(1)(g)(9)(i)	Noted and to be considered as part of the consultation phase of the project.	No change to Cabinet paper or DD suggested
MPI		Noted	No change to Cabinet paper or DD suggested
MPI		Noted and to be considered as part of the consultation phase of the project.	No change to Cabinet paper or DD suggested
MPI		We are suggesting a change to penalties in the DD. The change will be more in-line with current practice.	No change to Cabinet paper or DD suggested
MPI		Typically in kind support would be excluded as eligible expenditure because of integrity concerns.	No change to Cabinet paper or DD suggested
Statistics New Zealand		Noted	No change to Cabinet paper or DD suggested

R&D Tax Incentive: Agency and Ministerial feedback on discussion document and accompanying Cabinet Paper

<p>Statistics New Zealand</p>	<p>9(2)(g)(i)</p>	<p>9(2)(g)(i)</p>	<p>No change to Cabinet paper or DD suggested</p>
<p>Tertiary Education Commission</p>		<p>Noted</p>	<p>No change to Cabinet paper or DD suggested</p>



## BRIEFING

### Submission of the Revised R&D Tax Incentive Discussion Document and Cabinet Paper

<b>Date:</b>	3 April 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2757 17-18 IR2018/205

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Sign and lodge</b> the attached Cabinet paper for consideration at Cabinet Economic Development Committee on 11 April.  <b>Forward</b> the attached Cabinet paper to the Minister of Finance	4 April 2018
Hon Stuart Nash <b>Minister of Revenue</b>	<b>Sign</b> the attached Cabinet paper for consideration at Cabinet Economic Development Committee on 11 April.	4 April 2018

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Richard Walley	Manager, Innovation Policy	04 901 4164	s9(2)(a)	✓
Keith Taylor	Policy Manager, Inland Revenue	04 890 2808		

The following departments/agencies have been consulted
The Treasury Callaghan Innovation

Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

Comment





## BRIEFING

### Submission of the Revised R&D Tax Incentive Discussion Document and Cabinet Paper

<b>Date:</b>	3 April 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2757 17-18 IR2018/205

#### Purpose

To provide you with a Cabinet paper to seek Cabinet to approve the publication of the Research and Development (R&D) tax incentive discussion document (*Fuelling Innovation to Transform Our Economy*) for the purpose of consultation.

#### Recommended action

The Ministry of Business, Innovation and Employment and Inland Revenue recommend that you:

		<b>Min. RS&amp;I</b>	<b>Min. Revenue</b>
a	<b>Agree</b> to lodge the attached Cabinet paper on 4 April, for consideration at Cabinet Economic Development Committee on 11 April 2018	<i>Agree/ Disagree</i>	<i>Agree/ Disagree</i>
b	<b>Agree</b> to forward the attached Cabinet paper to the Minister of Finance	<i>Agree/ Disagree</i>	

s9(2)(a)

Richard Walley  
**Manager, Innovation policy**  
Labour, Science and Enterprise, MBIE

03 / 04 / 18

Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

..... / ..... / .....

s9(2)(a)

Keith Taylor  
Policy Manager  
**Inland Revenue**

03 / 04 / 18

Hon Stuart Nash  
**Minister of Revenue**

..... / ..... / .....

## Background

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1. The Minister of Research, Science and Innovation and the Minister of Revenue were sent a draft Cabinet paper and accompanying discussion document on the proposed R&D tax incentive on 9 March 2018 (brief 2216 17-18/IR 2018/133 refers). You requested some changes to the paper and discussion document.
2. The revised version of the Cabinet paper and discussion document was circulated to your Ministerial colleagues and the Government's confidence and supply partners for comment.
3. On 19 March 2018 the Cabinet paper was circulated to a wider group of government Agencies for comment. Agencies that commented on the R&D tax incentive included; the Ministry of Education, the Ministry for the Environment, the Ministry for Primary Industries, New Zealand Trade and Enterprise, Statistics New Zealand, and the Tertiary Education Commission.
4. Ministerial and agency feedback has resulted in suggested modifications to the Cabinet paper and discussion document. A summary of the feedback and recommended changes were contained in briefing 2735 17-18. We understand Minister Woods' office has approved the suggested changes.
5. We have redrafted the Cabinet paper and R&D tax incentive discussion document in line with the recommendations.

## Next Steps

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6. We recommend that you sign and lodge the attached paper by 4 April 2018, for consideration at Cabinet Economic Development Committee on 11 April 2018. We recommend you forward the Cabinet paper and R&D tax incentive discussion document to the Minister of Finance prior to the Cabinet meeting taking place.
7. In the meantime, officials are progressing work on the consultation phase of the project; with a suggested launch date of 17 April 2018 (brief 2735 17-18 refers). We are developing the logistics and communication materials for both the launch of the R&D tax incentive and the subsequent consultation process.

## Annexes

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Annex One: Research and Development Tax Incentive Discussion Document (*Fuelling Innovation to Transform Our Economy*)

Annex Two: Cabinet Paper, Research and Development Tax Incentive Discussion Document

The final versions of these documents are publicly available. These drafts have therefore not been released.



## AIDE MEMOIRE

### R&D Tax Incentive Discussion Document: talking points for Economic Development Committee, 11 April 2018

<b>Date:</b>	10 April 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	2503 17-18

<b>Information for Minister(s)</b>
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>

<b>Contact for telephone discussion (if required)</b>				
<b>Name</b>	<b>Position</b>	<b>Telephone</b>	<b>1st contact</b>	
Richard Walley	Manager, Innovation Policy, MBIE	04 901 4164	s9(2)(a)	✓
Jack Starrett Wright	Graduate Policy Advisor, Innovation Policy, MBIE	04 901 3996		

<b>The following departments/agencies have been consulted</b>

**Minister's office to complete:**

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

**Comments**

Released Consistent with the Official Information Act 1982



## AIDE MEMOIRE

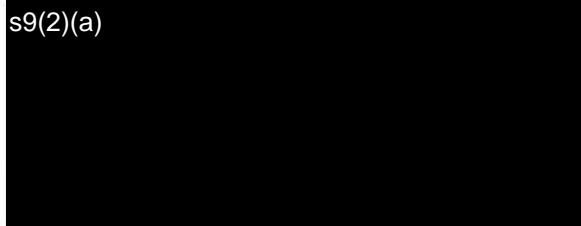
### R&D Tax Incentive Discussion Document: talking points for Economic Development Committee, 11 April 2018

Date:	10 April 2018	Priority:	Medium
Security classification:	In Confidence	Tracking number:	2503 17-18

#### Purpose

To provide talking points for the Cabinet paper on the *Research and Development (R&D) Tax Incentive Discussion Document*. The paper was lodged for discussion at the Economic Development Committee (DEV) on Wednesday 11 April 2018.

s9(2)(a)



Richard Walley  
Manager, Innovation Policy  
Labour, Science and Enterprise, MBIE

10 / 4 / 18

#### Cabinet Paper – R&D tax incentive discussion document

1. MBIE provided a revised Cabinet paper on the R&D tax incentive discussion document to you on Tuesday 3 April. This incorporated relevant ministerial and agency feedback, and was lodged for discussion at DEV on 11 April 2018. A designed version of the discussion document, and feedback from consultation have also been provided to you [Briefing 2735 17-18 refers].
2. Amongst other things, the Cabinet paper recommends Cabinet:
  - a. **Agree** to approve the publication of the R&D tax incentive discussion document.
  - b. **Agree** to delegate authorisation of minor editorial changes of the *R&D Incentive – Fuelling Innovation to Transform Our Economy* document to the Minister of Research, Science and Innovation and the Minister of Revenue.
  - c. **Agree** to delegate decisions on announcements of the R&D tax incentive consultation process to the Minister of Research, Science and Innovation, in consultation with the Minister of Finance and the Minister of Revenue.

- d. **Agree** that an R&D tax credit without refundability will be the basis of the R&D tax incentive to be introduced in April 2019.
  - e. **Agree** that by April 2020 there will be some form of support for businesses in tax loss.
  - f. **Note** that transition planning from the existing R&D Growth Grant system to the R&D tax incentive is underway and that Growth Grant recipients will be consulted independently of the R&D tax incentive consultation process.
3. Talking points for the Cabinet paper are provided at Annex One. Possible questions and proposed answers (Q&As) are provided at Annex Two. Useful statistics on R&D in New Zealand are at Annex Three.

## **Annexes**

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Annex One: Talking points on the R&D tax incentive discussion document

Annex Two: Q&As

Annex Three: Statistics on R&D

Released Consistent with the  
Official Information Act 1982

## **Annex One: Talking points on the R&D tax incentive discussion document**

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### **Background**

- We want to build a diverse, sustainable and productive economy. To do this, we have announced a target of increasing R&D expenditure to 2% of GDP by 2027. This will fuel innovation, and support our broader goals for an inclusive, sustainable, and productive economy.
- On 26 February 2018, Cabinet agreed to the introduction of an R&D tax incentive, in the form of a tax credit, by 1 April 2019, subject to Budget 2018 decisions.
- The tax incentive will be an important addition to the research, science and innovation (RSI) system. It will incentivise business R&D, so the economy can benefit from the broader social returns to business R&D.

### **Public consultation on the proposed design of the R&D tax incentive**

- Before we implement the R&D tax incentive we will undertake public consultation on our proposals through the publication of a discussion document in April and May 2018.
- The discussion document describes the design proposals. These include: the R&D tax credit rate, business eligibility, types of R&D activities and expenditure eligible, minimum R&D expenditure threshold, how businesses in tax loss will be treated, maximum cap on R&D expenditure, and accountability measures.
- The document raises topics for discussion to elicit feedback on particular design settings.

### **Treatment of businesses in tax loss**

- An ideal R&D tax incentive would contain provisions for businesses which have insufficient taxable income to use their tax credits.
- In particular, R&D intensive firms typically spend early years in a tax loss position. There is a need to support these firms, but refundability is a complex area which requires further work and will not be completed in time for the April 2019 implementation date.
- As such, the R&D tax incentive will be “non-refundable” for its first year. But firms will be able to carry forward their credit into subsequent years.
- By April 2020 a mechanism to provide wider support to businesses in tax loss will be developed.
- To ensure businesses in tax loss are not disadvantaged by the design of the tax credit in the first year, officials are working through the best interim measures available to support these firms.

### **Transitional arrangements**

- The R&D Growth Grants administered by Callaghan Innovation have a similar function to the proposed R&D tax incentive, and will be replaced over time.
- Officials are working on an approach for the transition arrangements. Grant recipients will be consulted on this proposed approach independently of the R&D tax incentive consultation process. This will ensure a smooth and efficient transition which does not disrupt growth in R&D.

## Financial implications

- Both Labour and New Zealand First party manifestos included a commitment to the introduction of an R&D Tax Credit. Labour's pre-election fiscal plan sets out an allowance for introduction of an R&D tax incentive in 2019, with \$100m allocated in the 2018/19 fiscal year, rising to \$300m in 2021/22. In total, this allows \$850m over the forecast period.

- 9(2)(f)(iv)

- Reaching 2% goal requires increasing spending to around \$8 billion per year in 2027, across the economy. Estimates predict a significant shortfall. This could be met from an increase in business expenditure on R&D. The R&D tax incentive is an efficient mechanism to encourage business expenditure on R&D.

## Risks

- The design requires careful work. There needs to be an awareness of the possibility of unintended consequences. 9(2)(g)(i) This risk will be closely monitored through the design and implementation stage.
- Measures to ensure the integrity of the scheme and to prevent its abuse have been taken into account.

## Next steps

- By early June 2018, I will submit to Cabinet our final R&D tax incentive policy design for approval based on feedback from the sector.
- Subject to Cabinet approval, legislation will be introduced in September 2018.

## Annex Two: Q&As

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### What is the likely impact of the R&D tax incentive?

- Introducing an R&D tax incentive is intended to drive growth of business R&D.
- The tax incentive will lead to greater innovative business activity. This will increase employment, industry diversity, international engagement, profitability and overall sustainability.
- To achieve the goal of raising economy wide R&D expenditure to 2% of GDP, other mechanisms will be necessary to build a full package of support for innovative firms.

### What are benefits of a tax incentive over the current Growth Grants?

- A broader set of firms will be able to access the tax incentive than can currently access the Growth Grants.
- Tax credits offer a greater element of certainty to businesses as they do not have to separately apply for grant funding, and can apply for the tax credit as part of doing their tax return.
- Our broader system of R&D grants (we invest \$1.6 in research, science and innovation) will continue to function alongside the tax incentive.

### How much will the R&D tax incentive cost?

- based on the design features in the discussion document:

Current estimated cost of the R&D tax credit (million) <sup>1</sup>					
Year	2018/19	2019/20	2020/21	2021/22 & out years	Total
<b>12.5% R&amp;D tax incentive</b>	\$71.2	\$281.5	\$320.8	\$350.8	\$1024.3

### What other forms of R&D support does the government provide?

- The government already invests significantly in research, science and innovation (around \$1.6b). The R&D tax incentive will be one support among many.
- Other forms of government support for business R&D include: Project and Student grants, advice, and support in kind; some smaller research-focused grants; and a limited R&D tax loss cash out.
- Attracting large international businesses to conduct R&D in New Zealand can also make a valuable contribution to business R&D. The Innovative Partnerships Programme targets large international businesses that perform R&D, and attracts them to New Zealand.

### What measures have been proposed to ensure the integrity of the tax incentive?

- To ensure the integrity of the scheme, and that it supports genuine R&D activity several changes from the 2008 R&D tax scheme have been proposed.

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<sup>1</sup> These numbers assume a tax credit a rate of 12.5%, an April 2019 implementation, refundable for firms in loss, a volume-based credit, no cap, 100% of R&D reported in the R&D survey is eligible and that costs cannot be accrued as a Crown liability until returns are filed. The Growth Grants funding has not been taken off these costs.



- Officials are currently considering what information/data will be required from tax credit recipients to enable evaluation of the costs and benefits of the scheme. An appropriate evaluation plan will be determined once the design settings are confirmed. Regular monitoring of the scheme will occur to identify and remedy issues that compromise integrity.
- Additional work is also taking place to extend penalty rules to apply to tax advisors who operate on a contingency fee basis.

### **What are the risks with refundability?**

- Broadly speaking – refundability opens the programme up to greater fiscal risk, and potential rorting.
- The central policy intent is to recognise that the benefits of R&D accrue to society more broadly than the R&D performer. It is not to provide a cash-flow to loss-making firms.
- s6(b)(i)

### **What additional work will be involved in developing a suitable mechanism to support businesses in tax loss?**

- Additional work will cover:
  - how this policy will dovetail with existing provisions in the tax system that support R&D firms in loss, such as the R&D tax loss cash out,
  - whether it will be better to provide this support through the R&D tax credit or through a grant,
  - whether and how to best target this support,
  - the safeguards that need to be built in given the greater risks associated with refundability.

### **Consultation and next steps**

- Consultation on the R&D tax incentive discussion document will take place during April and May 2018. In addition to public consultation we intend to seek feedback from key stakeholders including:
  - R&D performing businesses, including Māori R&D performing businesses,
  - specialists, such as lawyers and accountants,
  - Crown Research Institutes and universities.
- By early June 2018 we will submit to Cabinet our final R&D tax incentive policy designs for approval.
- Subject to Cabinet approval, legislation will be introduced in September 2018.

### **What communication is planned for the announcement of the discussion document and consultation process?**

- Once Cabinet agrees to the discussion document, we intend to publish a press release to signal that the R&D tax incentive consultation process will begin soon.
- We also intend to have an event to launch the discussion document hosted at an R&D performing business to encourage stakeholders to contribute feedback.

- We may align the release of the discussion document with a pre-budget announcement for the R&D tax incentive to provide certainty to business that it will be introduced in 2019.

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## **Annex Three: Statistics on R&D**

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### **Total R&D**

- Total spend on R&D is \$3.133 billion - 1.25% of GDP.
- The OECD average spend is 2.4% of GDP.

### **Business R&D**

- About half (\$1.602 billion) of New Zealand's total R&D spend is by business (0.64% of GDP). Some of this may be funded from elsewhere (ie overseas, or through R&D grants).
  - The OECD average business spend is 1.65%.
- Business expenditure increased 29% from 2014 to 2016, and grew at nearly four times the rate of GDP growth.
- In 2014, government funded 11.1% of business R&D. In 2016, this dropped slightly to 11%. Businesses are spending significantly more than government on the R&D they undertake.

### **Total government spend on science**

- Government and higher education spent \$1.614 billion on R&D in 2016 (this is the total value of the R&D government and higher education undertake).

### **Overseas sourced funding of R&D**

- R&D funding from overseas has increased from \$194 million in 2014 to \$243 million in 2016 – an increase of 25%.



## BRIEFING

### Transition for Growth Grant customers to the R&D Tax Incentive

<b>Date:</b>	11 April 2018	<b>Priority:</b>	High
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	MBIE 2894 17-18 Callaghan Innovation B-18-008

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Discuss</b> and/or <b>Agree</b> to the recommendations on the transition arrangements	16 April 2018

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Richard Walley	Manager, Innovation Policy, Ministry of Business, Innovation and Employment	04 901 4134	s9(2)(a)	✓
Becci Whitton	Manager Stakeholder and Government Engagement, Callaghan Innovation	-		

The following departments/agencies have been consulted
Inland Revenue, Treasury

Minister's office to complete:

Approved

Declined

Noted

Needs change

Seen

Overtaken by Events

See Minister's Notes

Withdrawn

Comment

Released Consistent with OIA 1982  
Official Information

# BRIEFING

## Transition for Growth Grant customers to the R&D Tax Incentive

<b>Date:</b>	11 April 2018	<b>Priority:</b>	High
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	MBIE 2894 17-18 Callaghan Innovation B-18-008

### Purpose

This briefing provides you with information and advice on the options for a transition from the Growth Grants programme to the R&D Tax Incentive, and seeks your views on which options you would like to seek feedback on during the consultation process.

### Recommended action

The Ministry of Business, Innovation and Employment and Callaghan Innovation recommend that you:

- a **Agree** that, for the purposes of consultation, the proposed approach to the transition from Growth Grants to the R&D Tax Incentive be that the Growth Grants programme will end for all Growth Grant recipients on 1 April 2020  
*Agree / Disagree*
- b **Agree** that, alongside the main consultation on the R&D Tax Incentive, the Government seek feedback from Growth Grant recipients on the feasibility of this proposal  
*Agree / Disagree*
- c **Agree** that, alongside the main consultation on the R&D Tax Incentive, the Government seek feedback from Growth Grant recipients on a proposed temporary grant scheme designed to support Growth Grant recipients with insufficient tax liability to use a R&D tax credit immediately  
*Agree / Disagree*

s9(2)(a)

Vic Crone  
Chief Executive, Callaghan Innovation  
11/4/18

Hon Dr Megan Woods  
Minister of Research, Science and  
Innovation

s9(2)(a)

..... / ..... / .....

Richard Wailey  
Manager, Innovation Policy  
Labour, Science and Enterprise  
MBIE

11/4/18

## Background

1. On 26 February 2018, Cabinet agreed to introduce an R&D Tax Incentive on 1 April 2019, subject to Budget 2018 decisions [CAB-18-Min 0056].
2. The Government currently supports business research and development (R&D) through the R&D Grants Programme administered by Callaghan Innovation. The most significant form of funding is the Growth Grant, which provides assistance to long-term R&D performing businesses.
3. In *R&D Tax Incentive: Cabinet Paper and Discussion Document* [MBIE 2216 17-18/IR2018/133] you noted that, given the similarity of their objectives, the R&D Tax Incentive will replace the Growth Grants programme.
4. Ensuring a smooth transition for existing Growth Grant recipients from the Growth Grant scheme to the R&D Tax Incentive will mitigate the risk of a reduction in investment in R&D. Callaghan Innovation estimates that in the 2015/16 tax year, expenditure on R&D by Growth Grant recipients was \$802 million, which covered the majority of business expenditure on R&D (BERD) in New Zealand.<sup>1</sup>
5. In moving to the R&D Tax Incentive, Growth Grant recipients will need to adjust their internal systems to support new eligibility and reporting requirements. They will also need to adjust their financing arrangements to maintain cash flow for their R&D programmes. Growth Grants are paid quarterly in cash, whereas businesses will benefit from the R&D Tax Incentive when they offset the tax credit against corporate-tax payments.<sup>2</sup>

9(2)(g)(i)

6. In addition, businesses with insufficient tax liability are not able to offset the tax credit against their tax payments and hence are not able to benefit immediately from the R&D Tax Incentive. Officials are currently investigating options to provide a "refund" of the tax credit for these firms. However, as advised in our briefing on 16 February 2018 [MBIE 1714 17-18], this will not be implemented before 1 April 2020. Approximately one third of current Growth Grant recipients currently declare a loss for tax purposes and another quarter have a tax liability lower than the tax credit they would receive. For many (particularly those that are cash constrained), the absence of quarterly cash payments will have a significant impact on their financing arrangements.
7. This briefing provides you with a proposed approach to the transition from Growth Grants to the R&D Tax Incentive. This includes specific support for businesses in loss or with insufficient tax liability to use a R&D tax credit immediately, and seeks your agreement to consult on the proposed approach alongside the main consultation on the R&D Tax Incentive.

<sup>1</sup> The R&D Survey estimated that R&D funded by the business sector in 2016 was approximately \$1.37 billion. As the definition of R&D eligible for a Growth Grant differs from the definition of BERD used in the R&D survey, the amounts are not directly comparable. Nevertheless, it indicates that the Growth Grant recipients make up a majority of BERD in New Zealand.

<sup>2</sup> A business is entitled claim for Growth Grant funding quarterly, and usually receives cash two to four weeks following a claim. Businesses that make provisional corporate-tax payments may apply the tax credit on a similar time frame. However, Inland Revenue charges penalties if their provisional-tax estimates end up being unreasonably low, so – at least during the first year of the Tax Incentive, when the new rules are untested – businesses may choose not claim the tax credit until after the end of the tax year.

## Proposed approach to transition

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*The transition arrangements need to balance multiple objectives*

8. The transition arrangements from Growth Grants to the R&D Tax Incentive need to balance competing considerations. The draft public discussion document on the R&D Tax Incentive sets out the following principles for the transition arrangements:
  - Maintain business confidence in government support for R&D
  - Provide certainty and predictability of funding for businesses carrying out R&D
  - Support the successful implementation of the R&D Tax Incentive
  - Avoid a fall in business expenditure on R&D caused specifically by the transition arrangements
  - Provide for a simple and efficient transition for existing Growth Grant recipients
  - Avoid fiscal risk to Government accounts
  - Respond to the needs of various business types while ensuring no firms are specifically favoured or disadvantaged by the transition process.
9. It is unlikely that there is any arrangement that perfectly satisfies all these considerations. Instead we recommend an approach that we believe provides the best compromise between them. In particular we propose that the Government:
  - Allow all businesses with an active Growth Grant on 31 March 2019 to continue receiving their grant until 31 March 2020.
  - Close the Growth Grant scheme to new applicants and extensions on 31 March 2019.
  - Implement a temporary grant scheme mirroring the R&D Tax Incentive to provide support for Growth Grant recipients with insufficient tax liability to use a R&D tax credit immediately.

*Allowing Growth Grants to continue until 31 March 2020 eases the transition for affected firms*

10. We recommend that all businesses with an active Growth Grant on 31 March 2019 be allowed to continue on their Growth Grant until 31 March 2020. This means that all active Growth Grant recipients will be able to receive either a Growth Grant or a tax credit in the first year that the R&D Tax Incentive is in operation. To avoid potential double dipping, businesses will not be able to receive funding from both the Growth Grant scheme and the R&D Tax Incentive in the same tax year.
11. The advantage of this approach is that it will give those Growth Grants recipients that need it more time to adapt their internal systems and funding arrangements to the R&D Tax Incentive.
12. At the same time, those Growth Grant recipients that are ready and willing to move onto the tax credit will be able to do so. Callaghan Innovation estimates that, under the proposed 12.5 per cent rate and eligibility rules,<sup>3</sup> 37 out of 285 currently active Growth Grant recipients will be better off under the R&D Tax Incentive in the 2019/20 tax year, and a substantial number of these are likely to move voluntarily to the R&D Tax Incentive on 1 April 2019.

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<sup>3</sup> This includes the additional eligibility under the R&D Tax Incentive for R&D performed overseas, capitalised expenditure, and no cap on the amount of tax credit they can claim.

13. This approach also minimises the additional cost to the Government of maintaining the Growth Grants scheme. At the proposed 12.5 per cent rate, with accompanying eligibility rules, the fiscal cost of providing the R&D Tax Incentive to Growth Grant recipients is likely to be lower than the cost of providing a Growth Grant.

*Closing applications on 31 March 2019 reinforces that the R&D Tax Incentive is replacing the Growth Grant scheme*

14. We recommend that the Growth Grant scheme be closed to new applicants and extensions to current contracts on 31 March 2019. This means Callaghan Innovation would operate the Growth Grants scheme largely on its current terms through to when the tax credit is launched on 1 April 2019. In particular it means that:
  - New Growth Grants will be available and awarded to businesses up until 31 March 2019.
  - Any Growth Grant contracts that are due to expire before 31 March 2020 will be automatically extended to 31 March 2020.
  - The Ministerial Direction will need to be amended to implement these changes.
15. This approach sends a clear signal that the R&D Tax Incentive is replacing the Growth Grant.

*Implementing a temporary grant scheme that mirrors the R&D Tax Incentive supports more Growth Grant recipients to move onto to the R&D Tax Incentive immediately*

16. We recommend that you direct Callaghan Innovation to design and implement a temporary grant scheme for Growth Grant recipients with insufficient tax liability that mirrors the terms of the R&D Tax Incentive. In particular:
  - This grant will operate as part of the wider R&D Tax Incentive that is to be introduced on 1 April 2019.
  - This grant would be on the same terms as the R&D Tax Incentive (i.e., would be at the same rate, use the same definition of R&D, and have the same eligibility requirements).
  - Businesses would not be able to claim both a grant and a tax credit in a tax year (i.e., they would have to choose one or other form of support).
  - The grant would be available only to existing Growth Grant recipients and would operate only during the 2019/20 tax year.
  - Callaghan Innovation would use the current due-diligence and risk-mitigation processes established for the Growth Grant scheme to ensure only appropriate claims are paid out.
17. The advantage of this that it would provide a greater incentive for Growth Grant recipients with insufficient tax liability to move onto the R&D Tax Incentive before the long-term solution is in place. It would mean that these firms will continue receiving Government support for their R&D in the form of quarterly cash payments and will not have to make alternative financing arrangements (which would be difficult for cash-constrained businesses).
18. Callaghan Innovation estimates that 11 existing Growth Grant recipients that currently have insufficient tax liability to use a R&D tax credit immediately would likely move to R&D Tax Incentive on 1 April 2019 if such a grant scheme were available. It estimates that a temporary grant scheme is likely to require funding of \$38 million.



## Risks and alternative approaches

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*Ending Growth Grants on 31 March 2020 may disrupt the R&D programmes of some firms*

19. The key risk with this approach is that the timeframe for Growth Grant recipients to move to the R&D Tax Incentive may be too short to allow them to adjust their internal systems and financing arrangements, which may disrupt their existing R&D programmes. There is a risk that, if a large number of firms are adversely affected, it could result in a drop in BERD.

*The Government would also need to terminate some Growth Grant contracts early*

20. This approach also means that the Government will need to terminate the majority of active Growth Grant contracts early. At the date of this briefing, approximately 184 Growth Grant recipients have contracts that are due to expire after 31 March 2020.<sup>4</sup> Between now and 31 March 2019 an additional 60 businesses are expected to enter new Growth Grant contracts or to renew their existing contracts, meaning that under this approach the Government would need to terminate 244 contracts before their end date.

*Other approaches may mitigate these risks but have their own downsides*

21. There are two alternative approaches that would mitigate some of these risks:
  - A. Allow all businesses with an active Growth Grant on 31 March 2019 to continue receiving their grant until 31 March 2021 or 31 March 2022; or
  - B. Allow existing Growth Grant contracts to run until the end of the tax year in which they expire.<sup>5</sup>
22. Providing a longer period of overlap (Option A) would allow more time for those businesses that need it to adjust their arrangements. It would also reduce the number of Growth Grant contracts that the Government needs to terminate early and reduce the amount of time by which existing contracts are cut.
23. However, Callaghan Innovation estimates that allowing existing Growth Grant recipients to continue on a Growth Grant until 31 March 2021 or 31 March 2022 will cost an additional \$56 million or \$119 million respectively (relative to ending all contracts on 31 March 2020). It also predicts that 223 of the current Growth Grant recipients would choose to remain on the Growth Grant for the 2020/21 tax year and 222 for the 2021/22 tax year.
24. Allowing existing Growth Grant contracts to continue to their end date (Option B) means that the Government avoids having to unilaterally terminate any existing contracts. Extending them until the end of the tax year also avoids Growth Grant recipients being forced to terminate their contracts early to avoid receiving only partial funding during that year.<sup>6</sup>
25. However, this may still not allow those businesses with contracts that are due to end sooner sufficient time to adjust internal systems and financial arrangements. It also makes an arbitrary distinction between different Growth Grant recipients based on the date when their current contract is due to expire.

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<sup>4</sup> Assuming those that can extend prior to 1 April 2019 do so

<sup>5</sup> For example, if a contract is due to end on 31 December 2020, it would be extended until 31 March 2021.

<sup>6</sup> To reduce administrative complexity, we assume that the Government would introduce a rule that businesses cannot claim both a Growth Grant and a tax credit in the same tax year. As many Growth Grant contracts are scheduled to finish during the middle of a tax year, this means businesses would need to choose between receiving Growth Grant funding for only part of the year or terminating their Growth Grant contracts early and switching to the R&D Tax Incentive at the beginning of the tax year.

*The temporary grant scheme will need adequate controls to ensure only appropriate claims are paid out*

26. Any new grant scheme has to be designed and implemented to ensure that only appropriate claims are paid out. An additional potential complication in this case will be ensuring that the rules for the grant scheme align with those applied to the R&D Tax Incentive more generally.
27. There is likely to be ambiguity in the first year of the R&D Tax Incentive about how the new definition of R&D and accompanying eligibility rules are to be applied. Callaghan Innovation will need to ensure that money is paid out only for R&D that is clearly eligible and to work closely with Inland Revenue to ensure consistent rules are applied. Furthermore, it will also need to develop rules that ensure only those businesses that the grant scheme is intended to help (i.e., cash-constrained businesses with insufficient tax liability to benefit immediately from the R&D Tax Incentive) receive payments under it.
28. Callaghan Innovation has well-developed controls (i.e., due diligence, claim checks, and clawback stipulations) for ensuring that Growth Grants are only paid out for eligible R&D. It will use these as a basis for developing similar controls for the new grant scheme. In addition, because all businesses will be previous Growth Grant recipients, Callaghan Innovation will be well-placed to assess the eligibility of their R&D.

*We recommend seeking feedback through consultation on the proposed transition arrangements*

29. We recommend that, alongside consultation on the main discussion document, the Government seeks feedback from Growth Grant recipients about the feasibility of the proposed one-year overlap between the Growth Grant and R&D Tax Incentive schemes. In particular, we propose asking businesses to provide information on the steps necessary to adjust their internal systems to the R&D Tax Incentive and whether their funding arrangements are likely to be adversely affected. If the feedback obtained during the consultation indicates that a significant number of businesses will be adversely affected by allowing only one year for the transition, we will advise you on an alternative approach.
30. At the same time, we recommend the Government seek feedback on the proposed temporary grant scheme. In particular we propose asking businesses to provide feedback on whether such a grant scheme will provide the necessary support to meet their funding needs until a long-term solution is available.

## **Implementation of the transition**

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31. Implementing the transition may require additional resources for Callaghan Innovation. We will report back to you with an outline of the impact on Callaghan Innovation and options for addressing this.
32. The current Ministerial Direction for the R&D Grants Programme will also need to be amended to implement the proposed approach to transition. We will report back to you with an overview of the required changes and proposed timelines.

## **Next steps**

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33. You have agreed to launch the consultation on the R&D Tax Incentive on 19 April 2018. We propose that, alongside the main consultation on the R&D Tax Incentive, the Government seek feedback from Growth Grant recipients on the proposed transition approach and temporary grant scheme.



## AIDE MEMOIRE

### R&D Tax Incentives in Norway, the UK, and the Netherlands

<b>Date:</b>	4 May 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	3215 17-18

#### Information for Minister(s)

Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

#### Contact for telephone discussion (if required)

Name	Position	Telephone	1st contact
Richard Walley	Manager, Innovation Policy	04 901 4164	<div style="background-color: black; color: white; padding: 2px;">s9(2)(a)</div> ✓

#### The following departments/agencies have been consulted

The Treasury, Inland Revenue, Callaghan Innovation

#### Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

#### Comments

Released in Consultation with the  
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# AIDE MEMOIRE

## R&D Tax Incentives in Norway, the UK, and the Netherlands

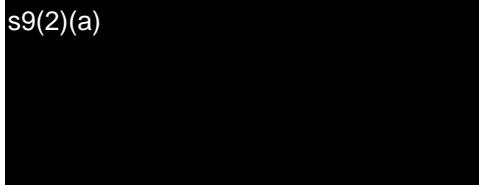
<b>Date:</b>	4 May 2018	<b>Priority:</b>	Medium
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	3215 17-18

### Purpose

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This aide memoire summarises the key information gathered on a trip by an MBIE official to the UK, Norway, and the Netherlands to discuss R&D tax incentives with local officials and experts.

s9(2)(a)



Richard Walley  
**Manager, Innovation Policy**  
Labour, Science and Enterprise, MBIE  
04 / 05 / 18

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Official Information Act 1982

## Background

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1. Between 23-26 April, an official from MBIE visited the UK, Norway, and the Netherlands to discuss R&D tax incentives with local officials and experts. Although the choice of these countries was partially informed by expedience for travel arrangements and availability of local officials, they all have fiscally stable R&D tax incentives that are considered successful domestically. The schemes in those countries are also considered international exemplars of best practice,<sup>1</sup> and have been operating for some time.
2. This report presents the key information gathered on that trip, alongside some analysis and reflections from the conversations.

## Common Themes

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3. The following are common themes emerging from conversations around the schemes.
  - a. All three systems are refundable, make a significant number of their payments through refunds, and local officials consistently considered refundability an essential function of the system.
  - b. The systems are fiscally stable to the extent that officials and governments are not concerned about sudden cost movements. Costs have changed (ie in response to rate changes), but have not grown suddenly and unpredictably. This could be because all three countries have been operating R&D tax incentives for well over a decade, and are experienced with administration of those systems. However, Norway and the Netherlands had both undertaken some form of significant adjustment to the policy to control the cost of their schemes.
  - c. All three systems use R&D 'projects' as the fundamental unit. That is, the schemes fund x% of the cost of an R&D project, rather than the cost of a firm's R&D. Our current proposal will require firms to think and report in terms of projects, but does not seek to fund projects as the basic unit of analysis for the incentive. Strong project thinking, particularly as note in Norway, seems to confer certain subtle but seemingly very valuable advantages in tax incentive schemes:
    - i. It eliminates continuous improvement activities from the schemes (projects have to have a fixed end date).
    - ii. It means subsidised activity has to have a specific goal in mind and be able to articulate that goal – encouraging best practice in R&D in firms, and discouraging firms from recharacterising activity on an ongoing basis.
    - iii. It provides consistent review points for payments as projects end and new projects begin.

The schemes also focused heavily on subsidising variable rather than fixed costs, sometimes (UK) with accelerated depreciation for R&D-related equipment dealt with through a separate scheme.
  - d. Two of the three systems (Norway and the Netherlands) operate pre-approval of projects via their innovation agencies prior to the incentive being awarded. They consider this a valuable control on expenditure and a positive lever on firm behaviour.

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<sup>1</sup> A Study on R&D Tax Incentives – EC Working Paper Nr 52 – 2014, ISSN 1725-7565

- e. Two of the three systems (Norway and the Netherlands) constrain payments from their systems by placing limits related to employment. In the Netherlands, payments from the scheme cannot exceed employment tax collected by the firm (equivalent to PAYE). In Norway, a maximum allowable hourly rate for R&D staff controls costs on a basis related to hours worked. The UK maintained a cap similar to the Netherlands until 2012, when it was abolished following lobbying from industry (the UK large firm scheme, RDEC, still retains this feature). s6(b)(i)
- f. All officials noted that their schemes tended to fund mostly 'development' rather than 'research', even in the UK where the R&D definition focuses tightly on new-to-field knowledge advances.
- g. s6(b)(i)

### The Role of Tax Credits Versus Grants

- 4. The discussion with all officials covered the roles of grants versus tax incentives. This arose because all three countries operate systems which contain elements of grants which could be seen to erode the advantages of tax-based administration. As noted above, Norway and the Netherlands operate systems of pre-approval of claims by their innovation agencies. The UK, for its large business scheme, has moved explicitly to what it calls 'above-the-line' subsidies. That is, all firms receive a refund, which is then taxed – in effect, a grant administered via the tax system.

s6(b)(i)

- a. **Reach.** The tax system is Government's only universal intervention with businesses, that is, one with which all firms have to engage regardless of size or nature of business. If the aim is to engage as many businesses as possible with R&D, the tax system can be seen as a helpful scaffold into that process.
  - b. **Political stability.** Creating the subsidy system in primary tax legislation is seen to offer the benefit of placing a higher bar on potential change, adding to business confidence. It also maintains the perception that funding decisions are rules-based, and not subject to political interference.
- 5. International harmonisation was also seen as a key advantage, but less pressing – the idea that companies making location decisions about R&D could clearly compare schemes which operate on a similar basis.

s6(b)(i) and s9(2)(g)(i)

## Levels of Support For Business R&D

6. One striking feature of all three countries was the high level of support for business R&D delivered via grants which sat alongside tax incentives. All three countries spend roughly the same amount on their tax incentives, close to the international average (~0.1-0.15% of GDP), similar to the amount New Zealand plans to offer. But they also offer significant support for business R&D on top of this – in the case of Norway and the UK, around the same amount again. Non-tax Government support for business R&D in New Zealand, once the tax incentive is introduced, will be much, much smaller.
7. Although MBIE plans to review New Zealand's current non-tax schemes with an eye to possible expansion over the next 12-18 months, considering Government's 2% goal, it will be worth the Government's while considering what additional, larger, 'game-changing' investments at scale could form part of New Zealand's pathway to 2%.

## Individual Country Analysis

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8. The remainder of this report provides descriptions and reflections on individual country systems.

### Norway - Skattefunn

Rate – 18%-20%

Threshold - none

Ceiling – NOK 50m (~NZD 9m)

9. Norway's Skattefunn scheme was introduced in 2000. The key design feature is that it is an SME-focussed scheme, with an explicit objective of raising the engagement of SMEs with the research system. This objective has informed most of the key design choices, which include:
  - a. Pre-approval of claims by the Norwegian research council (roughly equivalent to New Zealand's Royal Society or Science Board). This was considered essential to draw firms into the research system – in the words of Norwegian officials, 'have a researcher help firms get their funding rather than an accountant'.
  - b. Administrative systems which emphasise support to SMEs to structure R&D projects. I received a demonstration of the credit application web tool, which was to all intents and purposes a simple project planning tool for R&D projects.
  - c. A low ceiling on maximum R&D expenditure allowable of NOK 50m, or around NZD 9m. There is no minimum allowable expenditure.
10. Norwegian officials emphasised the role of allowable expenditure in managing the costs of their scheme. Rather than constraining allowable costs through a tight definition of R&D, the Norwegian scheme gives a low limit on an hourly rate for R&D workers (NOK 600, NZD 100), and asks for detailed descriptions of hours to be spent on the project, which are then reconciled at the end of the project.
11. Some concerns had been raised about an inflated number of hours being submitted for projects (this being the only key variable firms were able to inflate), leading in turn to more stringent limits being placed on those calculations in 2007.
12. s6(b)(i) and s9(2)(g)(i)

13. Around 70% of recipients are firms in loss, with the majority of companies having fewer than 10 employees. The refund is paid out at the end of the tax year. A significant percentage of projects are ICT projects – around 70%. The remainder focus in other major sectors – marine (fish farming), and upstream technology support for the petroleum industry.
14. A final interesting feature is that the scheme regularly underspends. This is because forecasts are based on approved projects, but these regularly over-run, and some are not claimed, meaning that not all appropriated funds are claimed by firms in the planned year.

**UK – R&D Tax Credit (SMEs) and Research and Development Expenditure Credit Scheme (large firms)**

Rate – 19% (SMEs), 12% (large firms). Rate for SMEs reduces to 14.5% if refunded.

Threshold – none

Ceiling – ~GBP 7m (~NZD 14m) per project (SMEs), no ceiling for large firms

15. The UK has had an R&D tax credit since 2000, with a number of revisions, including the introduction of a refundable SME credit in 2013. The scheme now consists of two credits – an SME credit of 19%, and a large firm rate of 12%.
16. The scheme is the most ‘traditional’ of the three surveyed, with a basic objective of subsidising business R&D at all levels of the economy. Features of note are:
  - a. The entirety of the large firm scheme is ‘above the line’, which is to say, it is essentially a grant delivered through the tax system, which is then subsequently taxed. All companies receive the subsidy as a taxable grant, regardless of tax liability. The UK provided a number of rationales for this system. They include:
    - i. Scheme visibility, where income from the scheme is immediately apparent to company decision-makers, and adds to revenue (rather than reduces costs)
    - ii. Scheme simplicity, where within- and between-year profit movements do not affect the amount claimed
  - b. The SME part of the scheme operates in the same way as the current proposal for New Zealand – ie a tax credit that is refundable if the firm has insufficient tax liability to claim the full credit – except that the refund is delivered at a lower rate to the credit (14.5% as opposed to 19%). Essentially, if the Government provides cash upfront, the firm has to accept it at a lower rate. This is designed as a probity and public confidence measure. It also reflects the higher cost to the Government of providing the subsidy in cash rather than as a tax credit. The trade-off between obtaining a cash payment immediately and waiting until they are able to use a more generous tax credit is left to firms.
  - c. The definition of R&D focuses on ‘appreciable’ improvement as judged by a competent professional in the field, and seeks to subsidise only activity which leads to a general advancement in the field that will potentially benefit more than one firm.

17. s6(b)(i)

18. s6(b)(i)



s6(b)(i)

## Netherlands – WBSO

Rate – 32% for the first EUR 350,000 (NZD 600,000), 16% after that

Threshold - none

Ceiling – none

19. The Netherlands scheme, WBSO, was introduced in 2006, replacing a previous grant scheme. Dutch officials noted the grant scheme had needed redesign due to problems with loose definitions of R&D and high claims. The shift to a tax credit was partly to comply with EU state aid rules, but also to provide legislated certainty of support to businesses.
20. The two rates, of 32% for the first EUR 350,000, and 16% subsequently, have the effect of providing a higher subsidy to SMEs without the need to identify SMEs separately in the tax law. This appears a sensible solution to the UK's problem of identifying SME entities for its variable rate scheme.
21. The key feature of interest of the scheme is the payment of a credit or refund via the PAYE scheme. This works as follows:
  - a. PAYE works the same in Netherlands as everywhere else – ie it is a personal income tax collected by the employer.
  - b. The actual on-payment is made by the employer to the tax office in a lump sum every month. The WBSO credit is deducted from this lump sum payment, for all firms regardless of overall firm tax liability (which is treated separately).
  - c. This places a ceiling on the amount of the refund (ie there is no further payment if the PAYE ceiling is reached). However, the ceiling is never reached because:
    - i. The PAYE rate is higher than the refund rate; and
    - ii. Outsourced R&D is not allowable under the scheme – only R&D conducted in-house.
  - d. There is no carry-forward if the ceiling is reached, although practically this never happens.

s6(b)(i)

s9(2)(g)(i)

22. Applications for the credit are made in advance. The Netherlands innovation agency approves the application for funding and generates a certificate for the company to pass through to the tax department. The statement notes hours and wages paid. In this regard, it is similarly detailed to the Norwegian scheme in terms of reporting requirements and information provided.
23. As with the other schemes surveyed, an R&D 'project' is the live unit of analysis. However, the aim of the scheme is to get coverage of all R&D within a firm – the project entity is used as an administrative vehicle rather than a serious unit of analysis. Nonetheless, this confers the same benefits of excluding incremental improvements, and providing a natural review point for the incentive for each firm.
24. Fiscal control is accomplished by the potential to vary the base rate – this has happened once so far. Expenditure has increased since 2009, mostly due to the Dutch Government introducing a temporary increase to the rate of support as part of a package of measures in reaction to the GFC.
25. The R&D definition used has two parts that cover research and development separately. In common with the Norwegian scheme, around 90% of the payments are for the 'development' category. The definition is also heavily focused on technological innovation, with social sciences deliberately excluded. [REDACTED]  
s9(2)(g)(i) [REDACTED]

## Next Steps

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26. We are currently consulting on proposals for New Zealand's R&D Tax Incentive. This will provide us with the opportunity to explore design ideas around R&D tax incentives in more detail.
27. We can provide you with a follow-up briefing on any of the design matters noted in this paper, our advice on them, and how they could apply in New Zealand, if you would be interested.



## AIDE MEMOIRE

### International comparison of R&D tax incentive rates

<b>Date:</b>	15 May 2018	<b>Priority:</b>	Low
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	3334 17-18

#### Information for Minister(s)

Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

#### Contact for telephone discussion (if required)

Name	Position	Telephone	1st contact
Richard Walley	Manager, Innovation Policy	04 901 4164	<div style="background-color: black; color: white; padding: 2px;">s9(2)(a)</div> ✓

#### The following departments/agencies have been consulted

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#### Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

#### Comments

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# AIDE MEMOIRE

## International comparison of R&D tax incentive rates

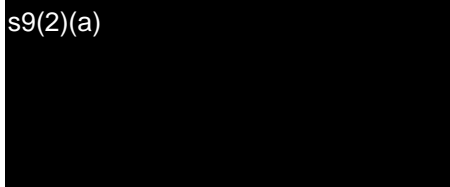
<b>Date:</b>	15 May 2018	<b>Priority:</b>	Low
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	3334 17-18

### Purpose

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To provide you with international comparisons on R&D tax incentive headline and subsidy rates.

s9(2)(a)



Richard Walley  
**Manager, Innovation Policy**  
Labour, Science and Enterprise, MBIE  
15 / 05 / 18

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## Background

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1. At the Research, Science and Innovation officials' meeting on 7 May 2018 you requested an international comparison of the rates of R&D tax incentives across countries.

### International comparison of R&D tax incentive subsidy rates

2. In 2017, 30 of the 34 OECD countries had some form of tax relief for business R&D expenditure. However, substantial variation in the form of the tax relief provided in these countries described below means that comparing the generosity of their tax incentives is not straightforward. In addition, the baseline corporate tax rate and whether the tax incentive is taxable affect the tax subsidy that firms effectively receive in different countries.
  - a. In some countries the incentive permits a firm to subtract more than 100% of eligible R&D expenses before the tax liability is calculated (an **enhanced allowance**), while in others it allows a percentage of R&D to be subtracted after the tax liability has been determined (a **tax credit**).
  - b. R&D tax incentives differ in what happens if a firm does not have sufficient tax liability to use it immediately. In some countries the unused credit can be paid out in full or in part to the taxpayer (**payable** or **refundable**); in other countries it can be **carried forward** to subsequent years.
  - c. Few countries impose a **threshold** (a required minimum amount of R&D), and a majority impose a **ceiling** (a maximum amount of R&D that is eligible), or both, but the levels differ across countries.
  - d. Some countries also provide preferential treatment to particular types of firms, industries, or activities, particularly to small and medium-sized enterprises (SMEs).
3. To facilitate international comparison, the OECD has developed a formula (called the 'B-Index') that accounts for the various differences in the design of tax incentives as described above. The formula calculates the amount of pre-tax income that company would need to earn to break even on an additional dollar of R&D expenditure. This makes it possible to compare tax incentives across countries based on the **implied tax subsidy** that firms effectively receive.
4. Across the OECD, the implied tax subsidy rates range from 3% to 43%. Table 1 below lists the headline rate, the corporate income tax rate, and the implied tax subsidy rates for New Zealand's proposed tax incentive and key comparator countries, taken from the latest estimates by OECD, using the B-Index.<sup>1</sup> This table has also been included as part of your Budget 2018 communications pack.

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<sup>1</sup> Gonzales-Cabral, C., Appelt, S., and Galindo-Rueda F. (2018). *OECD review of national R&D tax incentives and estimates of R&D tax subsidy rates, 2017*. Retrieved from: <http://www.oecd.org/sti/rd-tax-stats-design-subsidy.pdf>

Table 1: International comparison of R&D tax incentive subsidy rates			
Country	Headline rate and type of incentive	Corporate income tax rate	Implied tax subsidy rate (based on OECD B-Index)
<b>New Zealand (proposed)</b>	12.5% <b>tax credit</b> for all eligible businesses	28%	17% <sup>2</sup> for profitable firms 12.5% <sup>3</sup> for loss-making firms
	<b>Current support</b> 20% <b>R&amp;D Growth Grant</b> (equivalent to a 14.4% tax credit for a firm in profit)		20% for both profitable and loss-making firms
<b>Australia</b>	43.5% <b>refundable tax offset</b> to eligible entities with an aggregated turnover of less than \$20 million per annum, provided they are not controlled by income-tax-exempt entities.  38.5% <b>non-refundable tax offset</b> to all other eligible entities.	27.5% for entities under \$25m turnover  30% for all other companies	19% for small, loss-making and profitable firms  7% for large, profitable firms  5% for large, loss-making firms
<b>Canada</b>	35% <b>refundable tax credit</b> for qualifying Canadian Controlled Private Corporations (CCPCs) on up to CAD 3 million of R&D  15% <b>tax credit</b> with 40% refundable thereafter	14.48% for SMEs  26.7% for large firms	30% for small, profitable firms  29% for small, loss-making firms  13% for large, profitable firms  10% for large, loss-making firms
<b>United Kingdom</b>	11% <b>refundable tax credit</b> for large firms  130% <b>enhanced allowance</b> for SMEs	19% for all firms	27% for small, loss-making and profitable firms  10% for large, loss-making and profitable firms
<b>Netherlands</b>	32% <b>refundable tax credit</b> for the first EUR 0.35M on and 16% thereafter  Redeemable against payroll withholding tax	20% on the taxable amount up to EUR 200,000 and 25% on the excess	21% for all firms

<sup>2</sup> Note this subsidy figure assumes a 'simple' credit, with no cap or other constraints on the size of claims or claimants. Such mechanisms would reduce the implied subsidy rate calculated according to the OECD formula.

<sup>3</sup> Note this figure for loss-making firms ignores the current R&D loss tax credit, which provides 28 cents on each dollar of eligible expenditure up to \$476K total eligible R&D expenditure in 2019-20. Including this scheme in the calculation would increase the average subsidy for firms in loss.

<b>Norway</b>	20% <b>refundable tax credit</b> for SMEs 18% <b>refundable tax credit</b> for large firms	24% for all firms	19% for small, loss-making and profitable firms 4% for large, loss-making and profitable firms
<b>Ireland</b>	25% <b>refundable tax credit</b>	12.5% for all firms	29% for small and large profitable firms 23% for small and large, loss-making firms
<b>France</b>	30% R&D <b>tax credit</b> for first EUR 100M, 5% thereafter <b>Refundable</b> immediately to SMEs, and after 3 years for large firms	34.43%	43% for small, loss and profitable firms 26% for large, profitable firms 22% for large, loss-making firms

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Office of the Minister of Research, Science and Innovation

Office of the Minister of Revenue

Chair, Cabinet Economic Development Committee

## Timing of an R&D Tax Credit

### Proposal

- 1 This paper asks Cabinet to approve the timing of the introduction of a Research and Development (R&D) Tax Credit.

### Executive Summary

- 2 Building a diverse, sustainable, productive economy is at the heart of what this Government wants to achieve. This will require more innovation, which is driven by R&D, in particular R&D done by business. The current system of government support for business R&D is through grants, advice, training, support in kind, and some smaller research-focused grants. As a major addition to our current system, we have committed to introducing an R&D tax credit.
- 3 Tax credits have strengths and weaknesses. Therefore, the design of a tax credit must proceed with care, and with awareness of the possibility of unintended consequences, 9(2)(g)(i)
- 4 We propose to introduce an R&D tax credit from April 2019.
- 5 This is an ambitious timeframe. It leaves us with no space for unexpected delays, and there is limited time for design, consultation, and for businesses to prepare. It therefore carries some risks. In particular, clear and comprehensive transition planning will be important for businesses that currently receive R&D grants. We want to ensure we do not discourage those businesses from performing R&D in the short term, and delay progress towards our goal of increasing R&D expenditure to 2% of GDP by 2027.
- 6 We therefore recommend Cabinet direct the Ministry of Business, Innovation and Employment (MBIE), Inland Revenue (IR), and Callaghan Innovation to begin planning transitional arrangements immediately, as a key part of the design work.

### Background

- 7 The Government wants to build a diverse, sustainable, productive economy. This will require innovation which is driven by R&D. This is why we have announced a target of increasing New Zealand's R&D expenditure to 2% of GDP by 2027 – a significant increase from our current 1.27%, but still low by international standards (OECD average is 2.6%).



- 8 The majority of this growth will need to come from increased business R&D. To achieve this target we have agreed to provide increased support for business R&D, alongside direct government investment.
- 9 Without government support, businesses will tend to invest less in R&D than is optimal for the country as a whole, as they are unable to capture the full benefits of their investment. The gains from R&D tend to be broadly distributed through, for example, worker mobility, reverse engineering, or product imitation. Our support for business R&D is primarily for the purposes of compensating for those benefits that do not accrue to the firm.
- 10 The current system of government support for business R&D is through grants (non-discretionary Growth Grants which focus on larger R&D performing firms, and smaller discretionary Project and Student Grants), advice, training, and support in kind, and some smaller research-focused grants. Much of this support is provided through Callaghan Innovation, with some sector-specific elements provided through Crown Research Institutes and the new Regional Research Institutes. There is also a small R&D tax loss cash out available.
- 11 The current outline of business R&D support and how it fits within the Government's wider economic strategy is set out in **Annex A** ('Introducing a R&D Tax Credit').
- 12 A coordinated package of supports will be critical to raising business R&D. As a major addition to our current system, we have committed to introducing an R&D tax credit. Tax credits offer certainty to businesses, and enable them to plan their investments according to a clearly stated set of rules. [REDACTED]
- 9(2)(g)(i)
- 13 The design of a tax credit must proceed with care, and with awareness of the possibility of unintended consequences, the largest of which is an 9(2)(g)(i) [REDACTED]. The size of this risk could be significant. This risk will never be completely eliminated, as firm growth and behaviour, with regards to R&D, is inherently unpredictable.


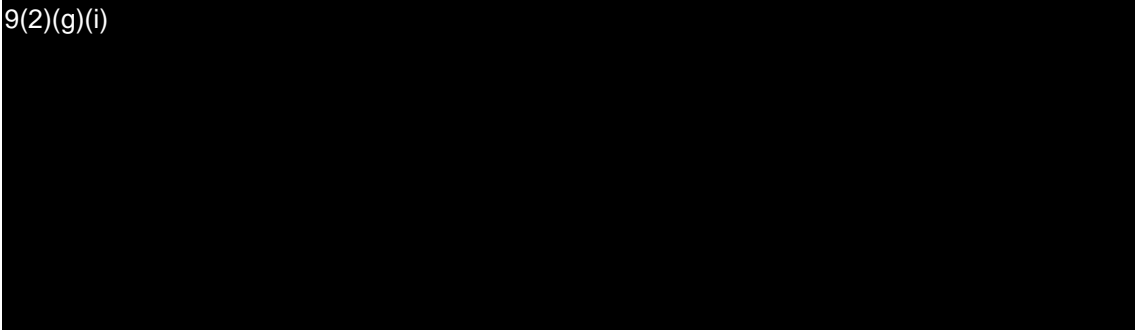
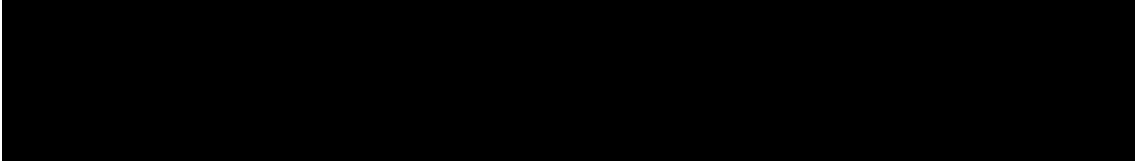
## Comment

- 14 We propose to introduce an R&D tax credit from April 2019. The design of the credit can largely follow the design of the R&D tax credit that was available to New Zealand businesses for the 2008/09 income year. However, we will want to modify the scheme to reflect changes in international best practice and experiences in other countries. Also, the limited experience from 2008/09 suggested some claims did not represent good value for taxpayer money and we will want to change the scheme to address these issues.
- 15 An April 2019 date is the earliest we could feasibly introduce a R&D tax credit, and is an ambitious timeframe. It will implement a key commitment from Labour's pre-election Fiscal Plan, and make a timely start towards our goal to increase R&D expenditure to 2% of GDP. 2027 is a challenging deadline, and we will need to get started early to maximise our chances of getting there. It will also provide confidence for businesses in the longevity and sustainability of the credit. R&D tax credits work because they provide

certainty. An early implementation date will give businesses greater confidence to invest in R&D.

- 16 The timeline for April 2019 introduction is broadly for public consultation in April 2018 on high-level policy design options such as the definition of R&D, with introduction of legislation into the House mid-2018. This means constrained, but achievable, time frames for design decisions such as the rate, drafting legislation, and operational changes necessary to introduce the credit. Refer to **Annex B** for the timeline for implementation of an R&D tax credit by April 2019.
- 17 The R&D Growth Grants administered by Callaghan Innovation have a similar function to that of a tax credit, and will likely be replaced by the credit when it is introduced. Ensuring a smooth transition from the existing Growth Grants system to the new tax credit will be essential to provide continuity of support to businesses, and to continue to encourage firms to increase their R&D.
- 18 There are likely to be between 250-300 businesses in receipt of Growth Grants at 1 April 2019. Recipients will be at different stages through their first 3-year contract or further 2-year extension. Transitioning from Growth Grants to a tax credit will require businesses to plan and implement some system changes, and potentially adapt to a different payment schedule. In addition, approximately 42% of current Grant recipients are loss making companies, and there may be recipients who cannot benefit fully from the tax credit in the short term because they have low or no profits.

## Risks

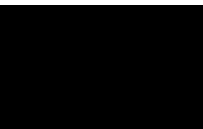
- 19 There are some risks to an April implementation date, which we will need to monitor carefully and mitigate where possible. These are:
  - 19.1 It is a 'minimum viable' option. There is no space for delay in any element of the process leading to introduction. This will also require decisions on a range of interrelated design choices in a short timeframe.
  - 19.2 It provides limited time for policy and implementation design, impact analysis, and policy decisions.   
9(2)(g)(i) 
  - 19.3 
- 20 In terms of mitigation, early provision of information, and clear, comprehensive transition planning will be important for firms currently in receipt of Growth Grants. In particular, this will be necessary to ensure we do not discourage those businesses from performing R&D in the short term, and delay progress towards our 2% goal. In designing the transition, we will need to provide the certainty of funding essential for businesses to have the confidence to invest in R&D, and allow time for businesses to plan how they transition to the new tax credit and R&D support system.

- 21 We therefore recommend Cabinet direct MBIE, IR, and Callaghan Innovation to begin planning transitional arrangements immediately, as a key part of the design work.

### **Consultation**

- 22 The Department of the Prime Minister and Cabinet, the Treasury, and Callaghan Innovation have been consulted on this report.
- 23 Limited initial business consultation indicates a reasonable level of stakeholder comfort with an April 2019 introduction, and informal consultation will be ongoing throughout the design and implementation process. Officials have met with a partner of an accountancy firm that represented many applicants in 2008-09. Her view was that an April 2019 start date was preferable because of the uncertainty created by the scheme previously starting then being disbanded.

### **Financial Implications**

- 24 No decisions with fiscal implications are being sought through this paper. However, the introduction of an R&D tax credit carries both fiscal cost and risk.
- 25 Without design details, the financial implications of introducing a tax credit are unclear. The financial cost and risk of a tax credit will vary significantly depending on the design of the credit specifically; the rate, cap, and any exclusions.
- 26 Labour's pre-election fiscal plan sets out an allowance for introduction of an R&D tax credit in 2019, with \$100m allocated in the 2018/19 fiscal year, rising to \$300m in 2021/22. In total, this allows \$850m over the forecast period.
- 27 From 2018/19 to 2021/22 the Growth Grant MYA has \$664m appropriated.   
9(2)(f)(iv)

### **Human Rights**

- 28 There are no human rights implications arising from the proposals in this paper.

### **Legislative Implications**

- 29 Depending on the decision arising from this paper, we may seek to introduce legislation into the House in 2018. We will bring any proposed legislation to Cabinet for approval prior to introduction.

### **Regulatory Impact Analysis**

- 30 Regulatory impact analysis is currently underway for the policy noted in this paper. This analysis will be presented to Cabinet at appropriate stages of the legislative process.

### **Gender Implications**

- 31 There are no gender implications arising from the proposals in this paper.

### **Disability Perspective**

- 32 There are no specific disability considerations arising from the proposals in this paper.

## Publicity

- 33 We may wish to make an announcement about the timing of the R&D tax credit following the decision in this paper. We recommend that Cabinet delegates further decisions on announcements on timing of the R&D tax credit to the Minister of Research, Science and Innovation, in consultation with the Minister of Finance, and the Minister of Revenue.

## Next Steps

- 34 By 21 February, agencies will submit a briefing, including Ministerial feedback, on the final design proposal for the R&D tax credit.
- 35 By 13 March, agencies will deliver an R&D tax credit consultation document which includes Ministerial feedback for submission to Cabinet.
- 36 On 28 March, Ministers will submit a Cabinet paper with the discussion document attached which describes the Government's preferred R&D tax credit design proposal. Ministers will be seeking Cabinet approval for its public release.

## Recommendations

- 37 We recommend that Cabinet:
- 37.1 **Note** that building a diverse, sustainable, productive economy will require more innovation, which is driven by R&D.
- 37.2 **Note** that we have announced a target of increasing New Zealand's R&D expenditure to 2% of GDP by 2027.
- 37.3 **Note** that the current system of government support for business R&D is through grants (larger non-discretionary Growth Grants, and smaller Project and Student Grants), advice, training and support in kind, and some smaller research-focused grants.
- 37.4 **Note** that we have committed to introducing an R&D tax credit as a major addition to our current system.
- 37.5 **Note** that the Fiscal Plan allocates \$850m from 2018/19 to 2021/22 to an R&D Tax Credit.

9(2)(g)(i)

- 37.7 **Agree in principle** to the introduction of an R&D tax credit pending Budget decisions on funding.
- 37.8 **Agree in principle** to implement the R&D tax credit in April 2019 pending Budget decisions on funding.
- 37.9 **Note** that this is the earliest date we can implement a R&D tax credit, and that it will make a timely start to towards our 2% goal, and provide increased confidence for businesses in the longevity and sustainability of the credit.

- 37.11 **Note** that clear, comprehensive transition planning from the existing R&D Growth Grant system to the R&D tax credit will be an important mitigation for these risks, and will help ensure businesses are not discouraged from performing R&D during the transition.
- 37.12 **Direct** MBIE, IR, and Callaghan Innovation to begin planning transitional arrangements immediately, as a key part of the design work.
- 37.13 **Note** that on 28 March 2018 Ministers will submit to Cabinet a consultation document that will describe the Government's preferred tax credit design proposal. Ministers will be seeking approval for its public release from Cabinet
- 37.14 **Agree** to delegate decisions on announcements on timing of the R&D tax credit to the Minister of Research, Science and Innovation, in consultation with the Minister of Finance and the Minister of Revenue.

Authorised for lodgement

Hon Megan Woods  
Minister of Research, Science and Innovation

Hon Stuart Nash  
Minister of Revenue

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Annex A

# Introducing a Research and Development (R&D) Tax Credit

This is the Government's vision as part of its economic and well-being strategy.

R&D is a key input into the innovation needed to provide competitive advantage and increased productivity

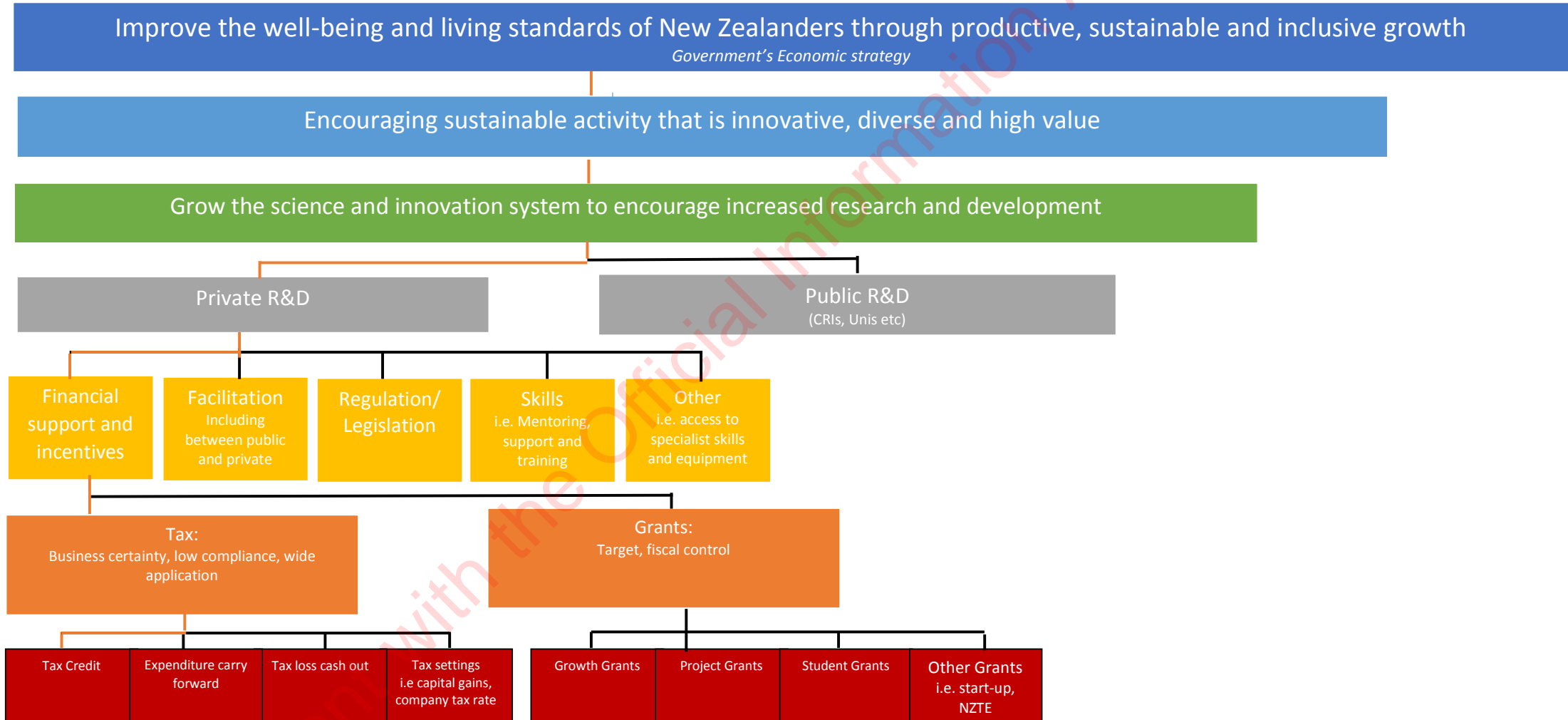
The Government measures this growth through expenditure on R&D across the economy. The coalition agreement outlines a target of 2% of GDP in 10 years.

Private R&D can be increased by encouraging; development or migration of new firms that perform R&D; existing firms to perform R&D; and firms that currently perform R&D to perform more R&D.

Public R&D can also be facilitated through these means. However, with Public R&D, the Government has the added lever of ownership and control over what research is done.

The Government provides financial support to businesses performing R&D to account for positive externalities.

An R&D Tax Credit sits within a range of other financial incentives



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## Annex B: Timeline for the implementation of an R&D tax credit by April 2019

Timeline	Activity	Description	Output
<b>26 February 2018</b> Economic Development Committee on 21 February Consideration at Cabinet on 26 February	<b>Cabinet agrees</b> in principle to the implementation of R&D tax credits by April 2019		Cabinet paper
<b>21 February</b> Submission of briefing with Ministerial feedback included	<b>Design proposal briefing submitted</b> to the Ministers of Finance, Research, Science and Innovation, and Revenue (Ministers) outlining key decisions Ministers will need to make  Design proposal will be in two parts: <ul style="list-style-type: none"> <li>- Main design features</li> <li>- Technical design features</li> </ul>	<b>Ministers will need to make design decisions on:</b>  <u>Main design features</u> <ul style="list-style-type: none"> <li>• Rate of the tax credit</li> <li>• Refundability option for firms reporting a loss/low profit</li> <li>• Cap on tax credit by individual firm</li> <li>• Total fiscal envelope</li> </ul> <u>Technical design features</u> <ul style="list-style-type: none"> <li>• R&amp;D definition</li> <li>• Eligible and ineligible activities</li> <li>• Minimum threshold spend on R&amp;D by firm</li> </ul>	Briefing
<b>13 March</b> Discussion document for public consultation with Ministerial feedback included	Agencies provide Ministers with a <b>discussion document</b> for public consultation based on design decisions	The discussion document will include the Government's preferred tax credit design proposal and its rationale  The content of the paper will be based on the final design briefing approved by Ministers	Discussion document for public consultation
<b>3 April</b> Paper submitted 21 March. Economic Development Committee on 28 March. Consideration at Cabinet on 3 April	<b>Cabinet paper</b> , with discussion document attached, submitted by Ministers to Cabinet seeking approval for public release		Cabinet paper
<b>9 April</b>	<b>Discussion document publicly released</b> on the MBIE and the IR website		Digital version of discussion document
<b>9 April – 4 or 18 May</b> Consultation period will take place over 4 to 6 weeks	<b>Public consultation</b> on discussion document	Public consultation will be open but will also include some targeted consultation with key stakeholders  MBIE will work together with Callaghan Innovation and Inland Revenue to suggest a list of key stakeholders	
<b>25 May</b>	<b>Brief</b> Ministers on public submissions and review the design proposal in-light of submissions, including options for transitional arrangements. Ministers to comment by late-May		Briefing
<b>Early June</b>	<b>Ministers take</b> final design proposal to <b>Cabinet</b> for approval		Cabinet paper
<b>June – August</b>	<b>Drafting of legislation</b>	<ul style="list-style-type: none"> <li>• Drafting of legislation by IR</li> <li>• MBIE to make any changes needed to the Ministerial Direction to Callaghan Innovation on the R&amp;D grants programme</li> </ul>	Draft legislation
<b>Late August – early September</b>	<b>Draft legislation sign-off</b>	<ul style="list-style-type: none"> <li>• Legislation sign-off by the Minister of Research, Science and Innovation and the Minister of Revenue</li> </ul>	Draft legislation
<b>September 2018 – March 2019</b>	<b>Legislation in the House</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> reading, Select committee process, 2<sup>nd</sup> reading, Committee of the whole house, 3<sup>rd</sup> reading and Governor General sign-off on legislation</li> </ul>	Legislation
<b>September 2018 – March 2019</b>	<b>Support for implementation</b> of a R&D tax credit	<ul style="list-style-type: none"> <li>• Preparation of guidance material.</li> <li>• Staff training</li> <li>• Education of potential applicants</li> </ul>	Implementation support documents
<b>April 2019</b>	<b>Commencement of R&amp;D tax credit</b>		

In Confidence

Office of the Minister of Research, Science and Innovation

Office of the Minister of Revenue

Chair, Cabinet Economic Development Committee

## **Research and Development Tax Incentive Discussion Document**

### **Proposal**

- 1 This paper asks the Cabinet Economic Development Committee to approve the publication of the Research and Development (R&D) tax incentive discussion document (*Fuelling Innovation to Transform Our Economy*) for the purpose of consultation. This discussion document outlines the main design features of the R&D tax incentive.

### **Executive Summary**

- 2 On 26 February 2018, Cabinet agreed to the introduction of an R&D tax incentive, in the form of a tax credit, by 1 April 2019, subject to Budget 2018 decisions [CAB-18-Min 0056].
- 3 Before we implement the R&D tax incentive we will undertake public consultation on our proposal through the publication of a discussion document (*Fuelling Innovation to Transform Our Economy*). This consultation will take place between April and May 2018.
- 4 The R&D tax incentive discussion document describes the main design settings (rate, eligibility, R&D activities, eligible expenditure, minimum threshold, maximum cap and accountability measures) and raises topics for discussion (eligibility criteria, usability of the R&D definition, scope of expenditure and exclusions, minimum threshold to qualify, exceptions to the maximum cap, mechanisms to promote transparency and accuracy of claims).
- 5 There are additional areas of work being undertaken in parallel to the R&D tax incentive discussion document. These are: defining eligibility with respect to software, ensuring that businesses in tax loss will be supported from April 2020, and ensuring Growth Grant recipients are transitioned smoothly to R&D tax incentives over time.

### **Background**

- 6 Building a diverse, sustainable and productive economy is at the heart of what this Government wants to achieve. This will require more innovation, which is driven by R&D, in particular R&D done by businesses. The current system of government support for business R&D includes grants, advice, training, support in kind, and some smaller research-focussed grants.
- 7 As a major addition to our current system, we have committed to introducing an R&D tax incentive by April 2019.



- 8 The decision to establish an R&D tax incentive as part of the wider system of support for research, science, and innovation is due to its ability to give more businesses greater access to R&D support, and to offer a greater element of certainty to businesses than was previously available through Callaghan Innovation Growth Grants. The impact from the initiative is likely to be faster growth of business R&D in New Zealand over the medium to long term.
- 9 We anticipate there being a complementary R&D grant system, which would have the ability to be more targeted to certain types of firms, industries or R&D, to exist alongside the R&D tax incentive as part of a wider package of R&D support for businesses.
- 10 Without government support, businesses will tend to invest less in R&D than is optimal for the country as a whole, as they are unable to capture the full benefits of their investment. The gains from R&D tend to be broadly distributed, through for example, worker mobility, reverse engineering, or product imitation. The support for business R&D is primarily for the purposes of compensating for those benefits that do not accrue to the business.
- 11 In addition to lifting business investment in R&D through a tax credit, a comprehensive range of other priorities in the Research, Science, and Innovation portfolio have been signalled that will complement efforts to lift R&D, and maximise the benefits of research, science and innovation to New Zealand.

## **Comment**

### *Public consultation on the R&D tax incentive*

- 12 Public consultation on the proposed R&D tax incentive will take place between April and May 2018. Consultation will be both broad and targeted to ensure feedback from relevant stakeholders is captured and key topics are discussed.
- 13 Stakeholders invited to take part in the consultation will include R&D performing businesses (such as Callaghan Innovation grant recipients, start-ups, R&D firms without Callaghan Innovation support), intermediaries (such as independent and in-house accountants, tax lawyers), State Owned Enterprises (SOEs), Crown Research Institutes, Universities, Māori businesses as well as others in New Zealand's science and innovation system.
- 14 Consultation with stakeholders will take various forms, including emails inviting all stakeholders to take part in the consultation, face-to-face interviews with key influencers, and technical workshops with key segments (such as R&D performing firms, start-ups and intermediaries).
- 15 We will also promote the launch of the R&D tax incentive discussion document to the general public through the media via a press release and by leveraging existing communications channels. The press release will include a link to the discussion document on the Ministry of Business, Innovation and Employment's website.
- 16 Submissions from stakeholders and the general public will be analysed and the results will be used to refine the R&D tax incentive with consideration to fiscal headroom and the trade-offs made between the design's interrelated objectives.

*The proposed design of the R&D tax credit*

- 17 From 1 April 2019 a broad range of R&D performing businesses will be eligible for a tax credit on their R&D investment. Before we implement the R&D tax credit we will undertake public consultation on our proposal through the publication of a discussion document (*R&D Incentive – Fuelling Innovation to Transform Our Economy*, attached in **Annex A**).
- 18 The proposed R&D tax credit has been designed with a number of interrelated objectives in mind; that is to provide easily accessible support to a broad range of R&D businesses, do so within fiscal constraints, and while also maintaining trust and confidence in the tax system.
- 19 The R&D Tax Incentive is not the only tax policy being developed or reviewed. For instance, we have also established the Tax Working Group to examine further improvements to the structure, fairness and balance of the tax system.
- 20 The design settings of the R&D tax credit are described at a high level in the discussion document along with a range of discussion topics. The table below lists the design features of the R&D tax credit and the proposed discussion topics.

<b>Design settings:</b>	<b>Discussion topics:</b>
<ul style="list-style-type: none"><li>• R&amp;D tax credit rate</li><li>• Business eligibility</li><li>• Definition of R&amp;D activities</li><li>• Eligible expenditure</li><li>• Minimum R&amp;D expenditure</li><li>• Businesses unable to use their R&amp;D tax incentive</li><li>• Maximum cap on R&amp;D expenditure</li><li>• Accountability measures</li></ul>	<ul style="list-style-type: none"><li>• Eligibility criteria</li><li>• Usability of the R&amp;D definition</li><li>• Scope of eligible R&amp;D expenditure and exclusions</li><li>• Minimum threshold of R&amp;D expenditure to qualify</li><li>• Exceptions to the maximum cap</li><li>• Mechanisms to promote transparency and accountability</li></ul>

- 21 The document signals that private businesses are the focus of the scheme and that SOEs, Crown Research Institutes, District Health Boards, Tertiary Education Organisations, and their subsidiaries may not be eligible for the R&D tax credit. Stakeholders will be invited to share their perspectives on what the impact of this exclusion will be on business R&D in New Zealand.
- 22 Given the ambitious timeframes for policy development and implementation, the proposal outlined in the discussion document is an R&D tax credit largely following the

design of the 2008/09 R&D tax credit scheme. However, the proposals have been modified to reflect changes in international best practice, experiences in New Zealand and other countries and the current R&D grants programme.

- 23 While the discussion document sets out the broad parameters of the R&D tax credit proposal there are still components of the proposed scheme that are currently being worked through. These areas are signalled in the discussion document and are:
- 23.1 defining eligibility with respect to software,
  - 23.2 ensuring that businesses in tax loss will be supported either by the R&D tax incentive or by a complementary grant scheme from April 2020, and
  - 23.3 ensuring R&D Growth Grant (Growth Grant) recipients are transitioned smoothly to R&D tax incentives over time.

*Measures to ensure the integrity of the tax credit*

- 24 Because businesses will self-assess their eligibility for the tax credit, there is a risk they will claim for expenditure that is not R&D. Perceptions that the scheme is rewarding non-R&D expenditure will undermine its credibility.
- 25 To ensure the R&D tax incentive supports genuine R&D activity a number of changes from the 2008 R&D tax scheme have been proposed in the discussion document, which includes:
- 25.1 committing to monitoring the scheme so as to speedily identify and remedy issues that compromise its integrity,
  - 25.2 a tightening of the R&D definition,
  - 25.3 a rule that would prevent firms claiming R&D when the activity has another purpose (e.g. manufacturing), and
  - 25.4 specifying that where a business has been paid, or expects to be paid, for carrying out the R&D, it cannot claim the credit.
- 26 Stakeholders will be invited to submit feedback on the likely impact of these measures.
- 27 Additional work is also taking place as to whether penalty rules should apply to tax advisors who operate on a contingency fee basis, because experience in Australia indicates this type of arrangement can be associated with low quality claims. Officials are considering whether the promoter penalty rules could be amended to address the behaviour that is of concern.
- 28 Officials are currently considering what information/data will be required from tax credit recipients to enable evaluation of the costs and benefits of the scheme. An appropriate evaluation plan will be determined once the design settings are confirmed.

### *Treatment of businesses in tax loss*

- 29 Ideally the R&D tax incentive would not discriminate between firms in profit or loss. This is especially pertinent for R&D intensive businesses because the economic cycle associated with R&D predisposes these businesses to being in loss. Not discriminating would mean the tax credit would be refundable for businesses in loss or whose tax paid on profits is less than the credit.
- 30 At the same time, it is a standard feature of tax systems that businesses are not refunded for their general tax losses; instead, losses are carried forward. Fiscal risks associated with paying out on tax losses outweigh the economic efficiency arguments, in a general tax sense. Across the OECD, most countries have an R&D tax credit but only a minority make the credit refundable.
- 31 The discussion document signals that the Government wishes to support R&D businesses that are in tax loss or who have insufficient taxable income to use their tax credits (businesses in tax loss) but acknowledges that it is a complex area which needs further work. This additional work will not be complete in time for the April 2019 implementation date and as a result the R&D tax incentive will be “non-refundable” for its first year. The discussion document indicates that by April 2020 an adjusted tax credit scheme or a complementary grant scheme will be developed to provide wider support to businesses in tax loss.
- 32 The additional work involved in developing a suitable mechanism to support businesses in tax loss is likely to cover:
- 32.1 whether it will be better to provide this support through the R&D tax credit or through a grant,
  - 32.2 whether and how to best target this support,
  - 32.3 the safeguards that need to be built in given the greater risks associated with refundability, and
  - 32.4 how this policy would dovetail with existing provisions in the tax system that support R&D firms in loss, such as the R&D tax loss cash out.
- 33 The transition from grants to an R&D tax incentive is likely to require a period of overlap rather than a hard date where one stops and the other starts. Businesses will not be disadvantaged by the restrictions associated with an R&D tax credit in its first year.

### *Transition from Growth Grants*

- 34 The Growth Grants administered by Callaghan Innovation will be replaced by the R&D tax incentive over time as they are funding similar types of activity and have a similar purpose.
- 35 Officials are working on transition arrangements for recipients of Growth Grants. There are various options involved in this transition based on contract end dates and roll-over periods.
- 36 To make an informed decision about transitional arrangements, additional information beyond the scope of the discussion document will be sought from Growth Grant

recipients. This is likely to include; implications on the cash flow of businesses, time and adjustment costs involved, and the fiscal implications of extending Growth Grant contracts.

- 37 The discussion document notes work on transition arrangements is continuing and Growth Grant recipients will be consulted independently of the R&D tax incentive consultation process.

## **Risks**

- 38 The design of an R&D tax credit must proceed with care, and with awareness of the possibility of unintended consequences, the largest of which is an uncapped fiscal risk.
- 39 The implementation of an R&D tax incentive by April 2019 is an ambitious timeframe and there are some risks associated with it. It will leave us with no space for delays, and there is limited time for design, consultation, and for businesses to prepare. Officials have begun to work on transition planning for businesses that currently receive Growth Grants to ensure that they are not discouraged from performing R&D in the short term.
- 40 To mitigate communication risk there needs to be a communications strategy, developed with proactive and reactive Questions and Answers for: businesses transitioning from Growth Grants to the new R&D tax incentive, for new businesses entering the market or expanding into R&D, and for tax accountants administering the changes.
- 41 There is a risk that the R&D tax incentive consultation process will be seen as a pre-budget announcement.

## **Consultation**

- 42 The Department of the Prime Minister and Cabinet, the Treasury, Callaghan Innovation, Ministry for the Environment, Ministry of Education, Tertiary Education Commission, Ministry of Health, Ministry for Primary Industries, New Zealand Trade and Enterprise, and Statistics New Zealand have been consulted on this report.
- 43 In general, there were two key themes from the inter-agency feedback:
- 43.1 The Discussion Document should be more explicit about the outcomes that are sought from the tax incentive and how this instrument will fit with other instruments supporting business R&D and innovation more generally. Changes have been made to the Discussion Document in response to these comments.
- 43.2 Questions and suggestions about some of the design settings. Because we anticipate further feedback from the consultation process we have not made changes to those design settings at this stage. However, that feedback has been collated and will be considered along with other feedback before presenting Cabinet with revised policy proposals.

## **Financial Implications**

- 44 No decisions with fiscal implications are being sought through this paper. However, the introduction of an R&D tax incentive carries both fiscal cost and risk.
- 45 Without the final selection of design details that will come in part out of the consultation process, the financial implications of introducing an R&D tax credit are unclear. The

financial cost and risk of a tax incentive will vary significantly depending on the design of the R&D credit, specifically the tax credit rate, cap, and any exclusions.

46 Labour's pre-election fiscal plan sets out an allowance for introduction of an R&D tax incentive in 2019, with \$100m allocated in the 2018/19 fiscal year, rising to \$300m in 2021/22. In total, this allows \$850m over the forecast period.

47 9(2)(f)(iv)

## **Human Rights**

48 There are no human rights implications arising from the proposals in this paper.

## **Legislative Implications**

49 Following implementation we will seek Cabinet approval to introduce legislation to Parliament this year.

## **Regulatory Impact Analysis**

50 Regulatory impact analysis is currently underway for the policy noted in this paper. This analysis will be presented to Cabinet at appropriate stages of the legislative process.

## **Gender Implications**

51 There are no gender implications arising from the proposals in this paper.

## **Disability Perspective**

52 There are no specific disability considerations arising from the proposals in this paper.

## **Publicity**

53 We intend to make an announcement about the R&D tax incentive consultation process and have an event launch encouraging stakeholders to contribute feedback once its publication is approved by Cabinet.

## **Next Steps**

54 Consultation on the R&D tax incentive discussion document will take place between April and May 2018.

55 By July 2018 we will submit to Cabinet our final R&D tax incentive policy designs for approval.

56 Subject to Cabinet approval Legislation will be introduced this year.

## **Recommendations**

57 We recommend that Cabinet:

- 57.1 **Note** the R&D tax incentive discussion document describes the main design settings (including rate, eligibility, R&D activities, eligible expenditure, minimum threshold, maximum cap and accountability measures) and raises topics for discussion (eligibility criteria, usability of the R&D definition, scope of expenditure and exclusions, minimum threshold to qualify, exceptions to the maximum cap, mechanisms to promote transparency).
- 57.2 **Agree** to approve the publication of the R&D tax incentive discussion document (*R&D Incentive – Fuelling Innovation to Transform Our Economy*).
- 57.3 **Agree** to delegate authorisation of minor editorial changes of the *R&D Incentive – Fuelling Innovation to Transform Our Economy* document to the Minister of Research, Science and Innovation and the Minister of Revenue.
- 57.4 **Agree** to delegate decisions on announcements of the R&D tax incentive consultation process to the Minister of Research, Science and Innovation, in consultation with the Minister of Finance and the Minister of Revenue.
- 57.5 **Note** that the publication of *R&D Incentive – Fuelling Innovation to Transform Our Economy* will likely be viewed as a pre-budget announcement.
- 57.6 **Note** that the consultation period for the R&D tax incentive discussion document will take place between April and May 2018.
- 57.7 **Note** to ensure that R&D tax incentive supports genuine R&D activity a number of changes from the 2008 R&D tax credit scheme have been proposed in the R&D tax incentive discussion document.
- 57.8 **Agree** that an R&D tax credit without refundability will be the basis of the R&D tax incentive to be introduced in April 2019.
- 57.9 **Note** that work is continuing on the development of options for an R&D tax credit refund or a complementary grant scheme to support businesses in tax loss, or, who have insufficient taxable income to use their tax credits.
- 57.10 **Agree** that by April 2020 there will be some form of support for businesses in tax loss.
- 57.11 **Note** that transition planning from the existing R&D Growth Grant system to the R&D tax incentive is underway and that Growth Grant recipients will be consulted independently of the R&D tax incentive consultation process.
- 57.12 **Note** that the R&D tax incentive will replace Callaghan Innovation Growth Grants over time.
- 57.13 **Note** that in June 2018 the Minister of Research, Science and Innovation and the Minister of Revenue, in consultation with the Minister of Finance, will submit to Cabinet a paper that outlines their preferred R&D tax incentive design.

Authorised for lodgement

Hon Megan Woods  
Minister of Research, Science and Innovation

Hon Stuart Nash  
Minister of Revenue