Regulatory Impact Statement

Cashing-out research and development tax losses

Agency Disclosure Statement

This Regulatory Impact Statement has been prepared by Inland Revenue.

It provides an analysis of:

- whether the current tax treatment of losses for research and development (R&D)-intensive start-up businesses is appropriate; and
- the options to allow R&D-intensive start-up businesses more timely access to their tax loss deductions.

Consultation on these issues took place via an officials' issues paper, *R&D tax losses*, released in July 2013, which sought feedback on various features of a proposed set of tax rules that would allow R&D-intensive start-up companies early access, by way of a "cash-out" (refund), to tax losses arising from qualifying R&D expenditure. Following a review of written submissions, officials from Inland Revenue and the Treasury met with a number of interested parties. Submissions were received from professional services firms, industry and other professional bodies, R&D companies and individuals, and were generally in favour of the proposal. Submitters raised issues with some of the proposed policy settings as well as overall concerns around the compliance costs of the initiative. Of particular concern were the proposed rules for the R&D wage intensity threshold, the proposed administration regime and the neutrality and integrity measures.

The preferred option is to allow R&D-intensive start-ups to cash-out, or refund, their tax losses arising from qualifying R&D expenditure. This proposed initiative removes a barrier to investment in R&D start-ups which arises from the current treatment of tax losses.

The estimated average fiscal cost of the proposed initiative is $15 million per annum. The accuracy of this estimate could be affected by changes in key assumptions, especially the number of companies who receive a cashed-out loss, the overall repayment rate of the cashed out loss (which depends on both the firm survival rate, and the ability to recover the value of the cashed-out loss from companies that sell intellectual property or undergo a change in ownership), and the timeframe for repayment. If the number of firms that receive a cashed-out loss or the repayment rate is higher or lower than expected, both the average fiscal cost and year-to-year variation could change.

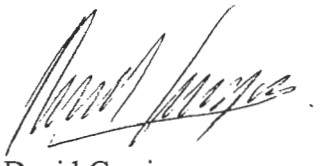
The administration regime for the proposed initiative has not yet been decided. This will be the subject of a Business Case scheduled to be determined by Cabinet in June 2014. It is therefore not possible to assess the compliance costs arising from the proposed administration regime in this RIS. However, the relative compliance costs of the various administration options will be one of the key criteria considered in the Business Case. Finalisation of the administration regime is also necessary before any changes can be legislated for.

The proposed initiative will apply from income years starting on or after 1 April 2015. Legislative amendments to give effect to the measure should therefore be included in the next available omnibus tax bill which in turn means that the legislation is unlikely to be passed ahead of the 1 April 2015 start date. It is anticipated that there would be a degree of

retrospectivity compared to the start date, but as this initiative is advantageous to taxpayers this should not be of concern. Even with legislative introduction in early 2015, it should be passed by the time that taxpayers' losses crystallise for the first year of the proposed initiative at the end of 2015/16 income year.

The Treasury were involved in the development of the policy options discussed in this RIS.

There are no significant constraints, caveats or uncertainties concerning the regulatory analysis undertaken. None of the policy options considered impair private property rights, reduce market competition, or override common law principles. Instead, the preferred option is likely to increase incentives for businesses to be innovative. Taxpayers will incur compliance costs to satisfy the eligibility and reporting requirements of the initiative, but on the whole the proposed initiative is advantageous to taxpayers.



David Carrigan
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21 March 2014

STATUS QUO

1. The tax system in New Zealand is based on the principle of broad-base, low-rate taxation, as set out in the Government's Revenue Strategy. This means that alternative forms of income and expenditure are taxed as comprehensively and as evenly as possible. These principles ensure that overall tax rates can be kept low and even (thereby minimising the influence that taxation has over economic decisions), whilst also maintaining New Zealand's revenue base.

2. The Government's policy of broad-base, low-rate taxation means that the current tax treatment of research and development (R&D) expenditure in New Zealand is largely consistent with the tax treatment of other forms of business expenditure. There are very few provisions that we expect will distort incentives to innovate.

3. There is an asymmetric tax treatment of profits and losses under the status quo which is particularly pronounced for R&D start-ups. This asymmetry arises because profit-making businesses can deduct expenses from their, or their group companies', assessableincome in the year that these expenses are incurred. In contrast, loss-making businesses typically have to carry expenses that contribute to tax losses forward to future years, so they can be offset against future income.

4. This treatment for losses ensures that any deductions for expenses incurred during periods of loss can be offset against profitable group companies or eventually be utilised when the business begins to earn profits. It can, however, cause a delay in the utilisation of deductions for loss-making businesses relative to profitable ones or ones with profitable group companies.

5. Although the status quo creates a timing asymmetry which can disadvantage loss-making businesses, there are good reasons for requiring taxpayers to carry losses forward or allowing taxpayers to offset their losses against the profits of another company in the same group of companies. Without these provisions there would be a strong incentive for businesses to create artificial losses as a means of receiving value from the loss. Under current tax settings, however, this risk will always be capped at the level of the otherwise net income of the group. As such, allowing offsets within a group or requiring taxpayers in general to carry losses forward are essential integrity measures in the tax system.

PROBLEM DEFINITION

6. Small businesses can face particular challenges when carrying out R&D, often because of restricted access to capital and uncertain cash-flows during their early development. Although there are a number of possible reasons for this (see problem scope), these challenges are likely to be compounded by status quo tax settings, which delay the ability of loss-making businesses to use their tax deductions.

7. There are two key tax issues here. Firstly, although the status quo provides mechanisms for tax losses to be utilised, they do cause a delay for loss-making start-ups relative to profitable ones. This creates a cash-flow bias against loss-making businesses or groups which is expected to be particularly significant for small, R&D-intensive start-ups. This is expected to have a negative impact on such businesses' propensity and ability to invest in R&D, and the probability of successful innovation.

8. Secondly, the status quo can also penalise businesses that do not generate sufficient profits to fully utilise their deductions or offset their losses. This is because current tax provisions effectively mean that losses can only be used going forward if the original owners subsequently engage in a profitable business. In cases where this does not occur, businesses will have incurred tax-deductible expenditures that cannot be utilised. While this is less of a problem for R&D start-ups as they are able to defer R&D expenses, the status quo still makes the use of expenditure contingent upon successful innovation (or future income earned by the same group of investors). The risk of incurring this potential additional sunk cost represented by expenditure that will not create a tax benefit is likely to provide an additional disincentive to invest in R&D projects at the margin.

9. Thus, the core problem considered in this RIS is the inability of R&D start-ups to access their tax deductions in a timely fashion, or even at all.

10. As mentioned above however, there are good reasons for the status quo. Refunding tax losses, instead of requiring these to be carried forward, would give rise to significant tax base risk. Specifically, this could encourage the creation of artificial losses by taxpayers to reduce their taxable income and could have the effect of reducing government tax revenue. As such, requiring taxpayers to carry losses forward is an essential integrity measure in the tax system, and there needs to be a strong case for changing this treatment of tax losses, particularly as the proposed initiative could be seen as a precedent for wider changes to the tax treatment of losses.

Scope of the problem

11. Although many other businesses can also be said to suffer from similar cash-flow and capital constraints, there are strong theoretical and empirical grounds for believing that R&D-start-ups face particularly challenging obstacles. This is because of:

- Information asymmetries – these arise when potential lenders have less information about the value of an R&D project than the company itself, which can lead to a break-down in the provision of financing that would be worthwhile if both parties were equally well informed. This is especially prevalent for R&D start-ups given:
    - the novel and/or experimental nature of R&D;
    - the lack of proven commercial experience; and
    - the lack of a proven market for the final product.

- High sunk costs – which mean that R&D expenditures often have a low, or zero, resale value in the event of failure. This means that R&D start-ups often have little in the way of collateral that can be used to secure debt-financing.

- High up-front costs – the natural profit cycle for innovative projects tends to involve high up-front costs and consequently, longer periods in tax loss. This implies that the problem faced by R&D start-ups is not just their overall ability to access capital, but also timely access to capital.

12. These challenges interact, potentially making it very difficult for R&D start-ups to access capital in a timely manner at an important stage of their development. In contrast, other businesses do not normally face the same difficulties when seeking lending, nor do they face the same level of uncertainty over their ongoing profits/losses. As a result, we consider the

scope of the problem to be limited to R&D-intensive businesses, particularly those that are small and in their start-up phase.

Scale of the problem

13. There is an inherent difficulty in assessing the scale of the problem as the counterfactual is highly uncertain. Specifically, it is not possible to gauge the number and value of R&D businesses that could potentially have been successful (or would not otherwise have been impeded) in the absence of the capital and cash-flow constraints outlined above.

14. However, empirical evidence shows that small R&D-intensive businesses have a significantly lower probability of being successful with long-term loan applications than other businesses and that the probability of success decreases as R&D intensity increases. Venture capital can address some of these problems, but evidence from different countries indicates that small and medium businesses tend to rely on internal equity financing, and prefer to seek bank loans if external financing is required. However, recent evidence indicates that banks in New Zealand are not necessarily well engaged with the financing needs of small start-up businesses, and have relatively high levels of risk aversion compared with UK and US banking models in supporting early stage companies or projects.[1]

15. Nearly all submitters who commented on the problem definition, as presented in the issues paper, agreed with our overall characterisation of the problem, and that the scope should be targeted to R&D-intensive start-ups and pre-revenue taxpayers.

OBJECTIVES

16. The overall objective of this policy review is to reduce a bias against investment in R&D start-ups arising from the current treatment of tax losses. Any policy option should also satisfy the objectives of the Government's Revenue Strategy, which seeks to achieve a fair and efficient tax system by:

- maintaining revenue flows;
- minimising economic distortions;
- minimising compliance and administrative costs; and
- minimising scope for avoidance and evasion.

17. It is also necessary to consider the objectives of the Government's Business Growth Agenda (BGA). The BGA identifies business innovation as one of six key areas for building national innovation and growth. Current work in the business innovation work stream involves ensuring the business environment, including regulatory settings, is set to give businesses confidence to innovate. Removing barriers to investment in R&D start-ups arising from tax settings is entirely consistent with the Government's objectives in the BGA.

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[1] Boven, R., Harland, C., and Grace, L. *Plugging the Gap: An Internationalisation Strategy.* (Auckland: The New Zealand Institute, 2010).

18. We recognise that there are likely to be trade-offs between the policy objectives. For example, the preferred option minimises economic distortions but will involve some compliance costs to ensure the integrity of the tax system.

REGULATORY IMPACT ANALYSIS

Options identification

19. As the core policy problem stems from the asymmetric treatment of tax losses under the status quo, the nature of the solution set is essentially binary; we can either maintain the status quo or consider ways to remove the asymmetry for the desired target group.

20. Removing the asymmetry would involve allowing certain businesses to access an amount of their tax loss deductions arising from qualifying R&D expenditure in the year that the expenditure is incurred. In practice, this means that eligible businesses would be entitled to a receipt (the cash-out) from the Government amounting to 28 per cent of their tax losses in each relevant tax year. In turn, businesses that access their tax losses early through a cashed-out loss would no longer be able to carry these losses forward to be deducted against future income.

21. This is the main policy option that has been developed as it directly addresses the identified policy problem. Although other options were initially considered as ways of removing the asymmetry, these were discounted early on as they were not considered to directly address the core policy problem. Other options considered during the policy process were:

- a profit-contingent loan;
- a grant;
- allowing taxpayers to carry their tax losses forward with interest; and
- lowering the shareholder continuity threshold.

22. A profit-contingent loan was discounted because it did not address the tax distortion arising from the inability of R&D start-ups to access their tax losses in a timely fashion, or even at all.

23. A grant to R&D start-ups was also discounted as it did not remedy the policy problem, and would have had a significantly greater fiscal impact.

24. Allowing R&D start-ups to carry their tax losses forward with interest was discounted as it would not assist R&D start-ups with their cash-flow and capital constraints. While it would have addressed the distortion arising from R&D start-ups not being able to access their tax losses in a timely fashion, it would not have addressed the distortion arising from the potential wasting of the tax loss asset had the business failed to make a return.

25. Lowering the shareholder continuity threshold was raised by submitters as an alternative, and was briefly considered as a replacement for allowing R&D start-ups to cash-out R&D tax losses. Lowering the shareholder continuity threshold, with accompanying safeguards and measures to reduce risks around existing losses being used inappropriately,

would allow for greater changes in ownership without tax losses being forfeited. Companies that are capital-constrained would be able to take on further equity from new shareholders without having to balance this against the forfeit of (some of) their accumulated tax losses.

26. Lowering the shareholder continuity threshold would not have addressed the same core policy problem. The R&D tax losses initiative is specifically targeted at assisting cash-flow and capital-constrained R&D start-ups who are unable to access their tax losses while the alternative proposal would be much broader, assisting any business that risked forfeiting tax losses through changing or introducing new shareholders.

27. In addition, sections EJ 22 and EJ 23 of the Income Tax Act 2007 allow taxpayers to allocate deductions for R&D expenditure taken under section DB 34 to a later income year after the shareholder continuity breach takes place. This means that R&D start-ups can already introduce new equity without forfeiting tax losses arising from R&D expenditure. Consequently, lowering the shareholder continuity threshold was not seen as a sufficiently close replacement to allowing R&D start-ups to cash-out R&D tax losses, and was not considered any further in the context of the current policy review.

28. As a result, although only one core policy option has been developed fully in this RIS, many variants of this option have been considered and consulted upon. These are discussed in the "options analysis" section below, and have been assessed with reference to the status quo.

Description of the preferred option

29. Under the preferred option taxpayers that meet certain eligibility criteria will be entitled to cash-out a certain amount of their R&D tax losses. The benefit of the tax losses will be delivered by way of a cash refund equal to 28 percent of the tax loss. Only certain qualifying R&D expenditure will be permitted to contribute to the tax loss that can be cashed-out. A loss which has been cashed-out will no longer be eligible to be carried forward to be deducted against future income.

30. The key design features of the preferred option are set out below.

Administration

31. In response to submissions concerned about the potential compliance costs of the proposed administration process, the administration process for the initiative is still under revision. This will be the subject of a Business Case that will determine whether the policy will be administered either by Inland Revenue only, or in partnership with Callaghan Innovation, the Crown entity that administers government funding to innovative businesses. This is scheduled to be determined by Cabinet in June 2014.

Eligibility criteria

32. The proposed initiative will apply to R&D-intensive start-up companies who are in a tax loss position and resident in New Zealand for tax purposes. These requirements must also be met on a group basis, if the company is part of a group.

33. The initiative is restricted to certain companies only to ensure effective targeting. Companies listed on a recognised stock exchange are ineligible because they are not cash-flow and capital-constrained to the same degree as unlisted R&D start-ups. Also, companies

that have flow-through treatment of tax losses, such as look-through companies, are excluded. Any developments in this area, such as the establishment of a stock exchange that targets high-growth and innovative firms, will be followed closely.

R&D wage intensity

34. Additionally, R&D-intensive start-up companies must spend at least 20 per cent of their total wage and salary expenditure on R&D to be eligible for a cashed-out loss. This measure includes shareholder salaries, contracted labour, and 66 per cent of expenditure on contracted R&D. This requirement must also be met on an overall group basis, if the company is part of a group.

Definition of R&D

35. To be eligible for a cashed-out loss, a taxpayer must be carrying out eligible R&D. The proposed definitions of "research" and "development" are based on the New Zealand equivalent to International Accounting Standard 38 (NZIAS 38). This is consistent with the current definitions of "research" and "development" used in the Income Tax Act as well as by Callaghan Innovation. Guidance will be provided to support potential applicants.

36. The agency that administers the definition (Callaghan Innovation or Inland Revenue) and the way in which the definition is legislated for (as a process or as a statutory test) is dependent on the result of the Business Case.

Excluded expenditure

37. Certain expenditure items will not be eligible expenditure. They are:

- interest expenses on R&D;
- the purchase of existing R&D assets;
- R&D undertaken offshore; and
- finance lease payments for R&D equipment.

38. Expenditure on "operating leases", as defined in the Income Tax Act, will be included as eligible expenditure. Operating leases are typically shorter-term leases that are not substitutes for financing a purchase with debt (these are "finance leases" and will remain excluded).

Amount of R&D tax losses to be cashed out

39. Qualifying taxpayers will be able to cash out, for the relevant year, the lesser of:

- 1.5 times their eligible R&D salary and wage expenditure;
- total tax losses;
- total qualifying R&D expenditure; and
- the overall cap on eligible R&D tax losses.

40. The initial cap will be set at $500,000 of losses, which amounts to a cashed-out loss of $140,000. This will rise eventually to $2 million, equivalent to a cashed-out loss of $560,000. This cap reduces its fiscal risk, especially in the early years of the new rules when there will be uncertainty over the response of R&D start-ups to the changes. Gradually increasing the cap will help ensure that the benefits of the cashed-out loss will not be reduced by an increase in demand for R&D inputs that will result in an increase in the cost of carrying out R&D, rather than an increase in R&D itself.

41. The 1.5 times multiplier applied to the R&D salary and wages expenditure is intended to help R&D start-ups cash-out losses that are incurred as a result of other non-salary and wage R&D expenditure. The different ways of calculating the amount of the cashed-out loss is necessary to ensure R&D start-ups with and without a large proportion of salary and wage expenditure to total expenditure (subject to meeting the wage intensity threshold) have similar access to the policy.

Loss recovery events

42. The overall policy intent is to provide a temporary cash-flow benefit for R&D start-ups that will be repaid out of their future taxable income. However, of the R&D start-ups that derive a return from the investment, not all derive a return that is taxable. Often the return is not realised until the intellectual property is sold. If the value of the cashed-out loss is not recovered from the sale proceeds, then the interest-free loan becomes a grant, and the fiscal risk of the policy is much greater.

43. As an integrity measure, we propose that loss recovery should take place for the R&D start-up when a taxpayer with a cashed-out loss or investor makes a capital return, but only to the extent of the cashed-out loss. The "loss recovery events" would be when:

- the company sells intellectual property;
- when 90 per cent of shares in the company are sold;
- the company becomes non-resident (for tax purposes); or
- the company is liquidated.

44. The liability to return the value of the cashed-out loss is the responsibility of the company rather than the shareholder for compliance reasons. A threshold of 90 per cent, rather than 100 per cent, accounts for management interests being retained in situations when private equity sells out. Although the liability is on the company, we expect that shareholders will indirectly bear this liability as any buyer knowing of the loss recovery rules should pay less for the shares than they would otherwise.

45. If the company changes its tax residence or liquidates, we propose that there be a deemed sale of intellectual property at its market value and that losses be recovered to the extent that a profit is made on that deemed sale.

Mechanism to recover losses

46. R&D start-ups will be required to reinstate their tax losses through a cash payment if a loss recovery event takes place. The payment to reinstate losses will not be deemed income

for tax purposes, but represents the loan repayment necessary to convert their cashed-out losses back into losses arising from R&D expenditure to carry forward to apply against future income.

47. To illustrate how this would work in practice, a taxpayer eligible for a cashed-out loss has in year 1 a $100 cashed-out loss (equivalent to $28) and $100 of losses being carried forward. In year 2, the taxpayer sells intellectual property receiving a capital return of $500. This is a loss recovery event and the taxpayer is required to return the value of the cashed out loss - $28 - to Inland Revenue in order to have their loss of $100 reinstated. Consequently, the loss is reinstated and the taxpayer will now have $200 of losses being carried forward to apply against future taxable income.

Analysis of the preferred option

Economic implications

48. The preferred option is expected to:

- provide some relief for the financing constraints faced by R&D-intensive start-ups during the initial loss-making phase of the innovation cycle; and

- reduce the amount of any tax losses accumulated by R&D start-up companies that will be forfeited in the event of failure.

49. This is expected at the margin to have a positive impact on incentives to invest in R&D and the likelihood of successful innovation. It is not possible to quantify these benefits as there are no comparable policies in operation elsewhere. However, in bringing forward the benefits of deductibility, the proposal essentially transfers a timing advantage from the Government to eligible businesses. It is expected that this timing advantage will be much more valuable to target businesses (cash-constrained R&D start-ups) than to the Government. Therefore, the primary economic impact of the proposal (taking into account the opportunity cost to the Government of delayed tax revenue, but before taking into account administration/implementation costs) is expected to be positive at the margin.

50. It is important to point out that this option is not the same as a conventional tax subsidy such as an R&D tax credit. This is because, prima facie, this option does not alter a company's overall tax liability as any tax deductions that are taken early can no longer be taken in the future. However, the option does provide a time value of money benefit to eligible businesses as it reallocates tax benefits from the future to the present. This benefit is expected to be of value for target businesses as the reallocation across time also coincides with a rebalancing of tax liabilities from periods of loss to periods of profit.

51. Since the start of initial policy development, the OECD have also recently indicated that 'R&D tax incentives should be designed to meet the needs of young, innovative "stand alone" firms without cross-border tax planning opportunities'[2]. This is because:

- Young businesses are considered to play a crucial role in employment creation, with evidence from 15 OECD countries over 2001-11 indicating that young firms (aged 5

[2] Maximising the benefits of R&D tax incentives for innovation. OECD policy brief, October 2013

years or less) generated almost 50 per cent of all new jobs created despite accounting for only 20 per cent of total (non-financial) business employment.[3]

- The global tax system is considered to create an uneven playing field for small, domestic businesses *vis-a-vis* large multinationals which can take advantage of cross-border tax planning opportunities.[4]

52. As a result, this option is expected to be well targeted.

Fiscal costs

53. Allowing early access to tax losses involves an opportunity cost to the Government from the tax loss that is cashed-out. Although this amounts to a reduction in tax revenue in the year that losses are cashed-out, this is partially recovered when businesses eventually make assessable income. This is because losses that are accessed early can no longer be carried forward to be offset against future income. As a result, the direct fiscal costs of the policy largely amount to a timing concession (relative to the status quo) for businesses at the expense of the Government.

54. However, in the case of those businesses that never become profitable (or do not generate profits sufficient to cover the value of the cashed-out loss), the cashed-out loss will effectively amount to a (partial) grant. Technically however, this is the "correct" (i.e. neutral) tax treatment for businesses that do not generate sufficient profits.

55. Our estimates of the fiscal costs of the policy indicate that the net effect of these various factors will result in an annual average fiscal cost to the Government of $15 million per annum. This estimate is based on evidence from the R&D business survey on the number of businesses expected to satisfy the eligibility criteria for the policy, and information from IR4 income tax returns about the value of their losses.

Administration/implementation costs

56. The overall administration and implementation costs for a scenario where Inland Revenue partners with Callaghan Innovation are currently estimated at $2.9 million for 2014/15, $4.4 million for 2015/16 and $1.8 million thereafter from 2016/17. These estimates are expected to be an upper limit for a range of options.

57. As noted above, the administration regime for the initiative has not yet been decided. This will be the subject of a *Business Case*, This is scheduled to be determined by Cabinet in June 2014.

Compliance costs

58. Compliance is an important element of this initiative, as although the overall policy is business-friendly, the desired target group (R&D-intensive start-ups) is unlikely to be well equipped to deal with a high compliance burden. In addition, evaluation of the recently discontinued R&D tax credit revealed that a non-trivial portion of the benefits were captured by professional tax advisory services rather than R&D businesses. However, certain

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[3] Maximising the benefits of R&D tax incentives for innovation, OECD policy brief, October 2013

[4] Maximising the benefits of R&D tax incentives for innovation, OECD policy brief, October 2013

compliance measures are necessary to ensure that the initiative is not gamed or abused by applicants.

59. Key changes made to reduce compliance costs for taxpayers have seen the R&D wage intensity measure change and the loss recovery rules simplified, which are discussed in detail in the consultation section.

60. It is not possible to assess the compliance costs arising from the proposed administration regime, as this has not yet been determined. However, it is known that R&D start-ups are not equipped to handle a high compliance burden. Consequently, the relative compliance costs of the various options will be one of the key criteria considered in the Business Case. Regardless of the outcome of the Business Case, the information that taxpayers will be expected to provide as part of the application process is intended to be consistent with the information an R&D start-up would be expected to have on hand as part of effective project management, and maintaining intellectual property records and accounting systems.

61. Although the initiative will inevitably place a compliance burden on applicants, and it is not possible to quantify these compliance costs, it is expected that these costs will (for most businesses) be outweighed by the benefits, especially for R&D start-ups with appropriate information management systems, as noted above. The compliance costs of applying to Callaghan Innovation for a government grant for R&D funding also provide a useful guide on reasonable compliance costs proportionate to the size of the cashed-out loss. It is also expected that compliance costs would be highest in the first year that a taxpayer applies for a cashed-out loss. With many R&D start-ups likely to be eligible to receive a cashed-out loss for a number of income years, compliance costs should reduce over time as taxpayers become increasingly familiar with the compliance requirements of the policy.

Risks

62. The primary policy risk is that the initiative could be seen as a precedent for a more general change to the tax treatment of losses, noting that the stock of tax losses was calculated to be $44 billion in 2010. This risk should be mitigated by making it very clear that this is a very narrow proposal targeted specifically at removing a tax impediment to innovative start-up ventures.

63. We have explored the sensitivity of the estimated fiscal cost to changes in key assumptions. In particular, this includes the number of firms who receive a cashed-out loss, the overall repayment rate of the cashed out loss (which depends on both the firm survival rate, and the ability to claw-back from firms that sell intellectual property or undergo a change in ownership), and the timeframe for repayment. This additional sensitivity analysis indicates that if the number of firms who receive a cashed-out loss or the repayment rate is higher or lower than expected, both the average fiscal cost and year-to-year variation could change.

64. Another risk is that the initiative is poorly targeted and includes taxpayers outside the target group of R&D start-ups. This would reduce the effectiveness of the policy while increasing its fiscal cost. This occurrence is thought to be of relatively low risk as the eligibility requirements are relatively narrow and focus on excluding companies that are able to use their tax losses or are not cash-flow and capital-constrained.

65. There is some risk that taxpayers could attempt to recharacterise non-R&D expenditure as R&D expenditure to meet the eligibility requirements or inflate the size of their cashed-out

loss. This risk will be mitigated by using wage and salary expenditure to determine eligibility and as a basis (with a multiplier to approximate other R&D expenditure) for calculating the amount of the cashed-out loss. Wage and salary expenditure is harder to recharacterise compared with other types of expenditure.

Social, environment and cultural impacts

66. There are no social, environmental or cultural impacts associated with the preferred option.

Net impact of the preferred option

67. As mentioned above, the proposal can be considered as transferring a timing advantage from the Government to eligible businesses. On balance, this timing advantage is expected to be much more valuable to target businesses (cash-constrained R&D start-ups) than to the Government, and is therefore expected to have a positive impact at the margin on incentives to invest in R&D as well as the likelihood of successful innovation.

68. On balance, the preferred option largely meets the objectives of the project. Allowing R&D start-ups to access their tax losses from qualifying R&D expenditure reduces the distortion from the current tax treatment of losses. There is some fiscal risk but the overall estimated cost of the option is lower than that of a grant as this option only provides a timing advantage to R&D start-ups that is repayable out of future returns. Particular emphasis has been placed on providing a balance around reducing compliance and administration costs with minimising avoidance and evasion following public consultation; however, the administration regime is still to be determined. The proposed initiative is consistent with the Business Growth Agenda as it removes a barrier to investment in innovative businesses.

69. As a result, it is expected that the net benefits of the policy (before taking into account administration and implementation costs) will be positive relative to the status quo. We also consider it highly unlikely that the overall administration costs will change the nature of this assessment as this analysis has considered an administration regime option with a relatively high cost – although we note that these are still subject to finalisation in the Business Case.

CONSULTATION

70. An officials' issues paper, R&D tax losses was released by the Treasury and Inland Revenue for public consultation on 23 July 2013. A total of 24 submissions were received from a range of submitters including professional services firms, industry and other professional bodies, R&D companies and individuals.

71. Officials have also undertaken discussions with tax policy officials from the United Kingdom and Australia to discuss their experience with the operation of similar R&D tax initiatives.

Submissions on the policy framework

72. The response from submitters was broadly positive, with the intent of the policy generally well received. Submitters were concerned with the overall complexity and compliance burden of the proposed solution, which would make it difficult and/or expensive for small R&D start-ups to comply with the policy's requirements. They felt that the overly

restrictive nature of the eligibility criteria and a possibly time-consuming and complex application process were likely to be most problematic in this area.

73. Submitters also suggested alternatives to a cashed-out loss. It was questioned whether the tax system is the appropriate vehicle to provide an R&D incentive. The Ministry of Business, Innovation and Employment has much greater expertise in assessing what is "true" R&D, and using the tax system adds complexity to what could be a much simpler loan scheme. A relaxation of the shareholder continuity rules was also proposed. The current requirement of 49 per cent of the original shareholding to maintain continuity is seen as a problem for many R&D start-ups, who breach the continuity threshold through the addition of new equity, and forfeit tax losses. Allowing taxpayers to cash-out losses addresses a problem, rather than the root cause of the current shareholder continuity rules.

74. As a result of consultation, we focused on updating the policy design with changes that we believed would alleviate compliance costs and complexity. These changes are noted in the policy detail section.

75. The alternatives suggested have not been considered further as they do not address the particular policy problem of the inability of R&D start-ups to access in a timely fashion, or at all, their tax losses. The loan scheme suggestion will reduce the cash-flow constraint faced by R&D start-ups, but not the wasted losses. The shareholder continuity proposal is less targeted and there are already provisions in the Income Tax Act which allow losses arising from R&D expenditure to be protected from a breach.

Submissions on policy details

76. As mentioned above, submitters generally agreed with the overall objectives of the proposals as described above. However, written submissions on the issues paper and later meetings and conversations between submitters and Inland Revenue and Treasury officials also focussed on the detailed policy proposals put forward in the issues paper.

77. Although many of the features of the final policy proposal are consistent with the issues paper, the following table sets out the specific proposals that attracted the most submissions. For each issue it restates the original policy proposal and, if the final policy proposals have been altered as a result of consultation, what has changed and why. Where key submission points were not advanced as part of the final proposal, it explains the reasons why they were not considered appropriate:

Issues paper proposal	Submissions	Officials' response
R&D definition The issues paper proposed using the definitions of "research" and "development" that are already used in NZIAS 38 and the Income Tax Act 2007.	One group of submitters (mostly from professional services firms and industry bodies) noted that there is already a level of familiarity with this definition, which makes it more appropriate than developing new one. The alternative view (mostly from R&D companies) is that this definition will require R&D start-ups, which are understandably unfamiliar with accounting standards, to seek expensive external assistance.	It is proposed that Callaghan Innovation will determine the R&D eligibility of the applicant on behalf of Inland Revenue. The agencies' definitions of "research" and "development" do not materially differ as Callaghan Innovation's definitions of "research" and "development", like the ones currently in use in the Income Tax Act 2007, are based on the New Zealand equivalent to International Accounting Standard 38 (NZIAS 38). Concerns raised by submitters are valid, but some sort of definition of R&D is inevitable. Guidance to applicants should help reduce compliance costs in this area. The agency that administers the definition (Callaghan Innovation or Inland Revenue) and the way in which the definition is legislated for (as a process or as a statutory test) is dependent on the result of the Business Case.
R&D wage intensity The issues paper proposed that companies must spend at least 20 percent of their total PAYE wage and salary expenditure on R&D to be eligible for a cashed-out loss. This measure excluded shareholder-employee salaries and would require suppliers of outsourced R&D to provide an invoice to the company detailing the R&D wage and salary costs of the contracted work. This approach was intended to reduce potential abuse of the policy.	Submitters raised concerns that using the R&D wage intensity measure proposed in the issues paper would severely curtail access to the policy because R&D start-ups often use alternatives to PAYE wages and salaries. R&D start-ups may use shareholder-employee salaries, contracted labour and sweat equity (where equity replaces salary compensation for employment) instead of PAYE wages and salaries because of the greater flexibility they offer to companies with cash-flow constraints. Submitters also noted that the costs for outsourced R&D are commercially sensitive; for example it could indicate their profit margin. The contracted supplier of the R&D would be unlikely to provide this information to the contractor in the invoice.	It is proposed that companies must spend at least 20 percent of their total wage and salary expenditure on R&D to be eligible for a cashed-out loss. This includes shareholder salaries, contracted labour and contracted R&D within the measure in addition to PAYE wage and salary expenditure. For contracted R&D, this will be achieved by deeming 66% of contracted R&D expenditure as wage and salary expenditure on R&D; this is consistent with the 1.5 times multiplier method for determining other R&D expenditure used as part of calculating the amount of tax losses that can be cashed out. Sweat equity, where an employee receives shares in the company as remuneration, remains excluded from the R&D wage intensity measure as the equity provided cannot be valued objectively or accurately
Exclusion of listed companies	Submitters advised that listed R&D-intensive companies remain capital-constrained. It was noted that excluding	The proposal is consistent with the issues paper. Any developments in this area, such as the establishment of a stock

The issues paper proposed that companies listed on a recognised stock exchange are ineligible because they are not cash-flow and capital-constrained to the same degree as R&D start-up companies.	listed companies provides a disincentive for growing R&D companies to list on a stock exchange.	exchange that targets high-growth and innovative firms, will be followed closely by officials.
Excluded activities The issues paper proposed a list of excluded activities based on the previous R&D tax credit, as well as excluding clinical trials and late stage software development. This was based on officials' concerns, based on experiences with the previous R&D tax credit, that despite these activities being associated with technological progress, they may not actually meet the definition of R&D. Including these activities could pose a fiscal risk as expenditure on these activities is significant.	Submitters opposed the exclusions of clinical trials, and provided further information of what they entail. Clinical trials go through a number of stages. In general, stage one and two clinical trials are exploratory in nature while stage three (and four, if undertaken) confirms existing findings from earlier trials. Submitters also opposed the exclusion of late stage software development and requested greater clarity around the exclusion. Submitters generally accepted that there were aspects of software development that were not R&D, especially in the area of 'end-user testing', but detailed guidelines should be provided around what is and what isn't R&D in this space.	We propose using Callaghan Innovation's list of specific exclusions from their Growth grant, which lists excluded activities that will not be considered R&D. This is similar to the list of excluded activities already proposed in the issues paper and that was used for the previous R&D tax credit. The list is not exhaustive and activities not listed must still satisfy the R&D definition. If the Business Case is not approved and Callaghan Innovation is not involved in the administration of the policy, it is likely to be preferable to revert to the list of excluded activities proposed in the issues paper. The two lists are materially the same, but using the list based on the previous R&D tax credit will provide additional familiarity for Inland Revenue.
Excluded expenditure The issues paper proposed the following exclusions: - Interest expenses on R&D. - The purchase of existing R&D assets. - R&D undertaken offshore. - All lease payments for R&D equipment. - Expenditure funded by government grants or research funding.	Submitters noted that many R&D start-ups are not able to finance the purchase of capital equipment with either debt or equity, but can only afford to lease the equipment initially.	The proposal is largely consistent with the issues paper. These expenses were excluded on the basis that they may distort economic decisions, endanger the integrity of the policy, or create inequity between taxpayers in a similar position. Leasing and financing with debt are not substitutes in this situation. Excluding this expenditure would reduce the qualifying R&D expenditure unnecessarily for the targeted group. Officials therefore propose not excluding expenditure on operating (shorter-term) leases. Expenditure funded by government grants has also been removed from the exclusion list as this expenditure is generally not deductible, and therefore does not contribute to a loss.
Loss recovery rules The issues paper proposed that loss recovery should take	Submitters were concerned that such an approach would involve significant compliance and administration concerns around knowledge of the level of cashed-out	To address these concerns, we propose that when 90% of the shares in the company are sold, loss recovery is triggered for the company.

place when: - the company sells intellectual property; - the sale of the company; - a 5% shareholding was sold and that loss recovery income should arise to the shareholder involved. The overall policy intent is to provide a temporary cash-flow benefit for R&D start-ups that will be repaid out of their future taxable income. However, of the R&D start-ups that derive income, not all derive income that is taxable. If the value of the cashed-out loss is not recovered from capital (non-taxable) gains, then the interest-free loan becomes a grant, and the fiscal risk of the policy is much greater. Therefore measures are proposed to recover the value of the cashed-out loss where investors or the R&D start-up makes a capital return.	loss the company held. The 5% threshold was also much too low.	Loss recovery should take place when a taxpayer with a cashed-out loss or investor makes a capital return, or to protect the integrity of tax base. "Loss recovery events" are: - the company sells intellectual property; - 90% of the shares in the company are sold; - the company becomes non-resident (for tax purposes); or - the company is liquidated. The 90% threshold, rather than 100%, is to account for possible private equity ownership interests being retained. We expect that shareholders will indirectly bear this liability as any buyer knowing of the loss recovery rules should pay less for the shares than they would otherwise. We propose requiring R&D start-ups to reinstate their tax losses if a loss recovery event takes place. The payment to reinstate losses will not be deemed income for tax purposes, but represents the loan repayment necessary to convert their cashed-out losses back into losses arising from R&D expenditure to carry forward to apply against future income. This also reinforces that cashed-out losses are in the nature of a loan and not a grant.

CONCLUSIONS AND RECOMMENDATIONS

78. For the reasons set out in the "Regulatory Impact Analysis" section of this statement, we recommend that a set of tax rules be enacted that would allow R&D-intensive start-up companies to "cash out" (or refund) their tax losses arising from qualifying R&D expenditure, rather than carrying the loss forward to deduct against future income.

79. We also recommend that the revised rules have the key features set out from paragraph 29 of the "Regulatory Impact Analysis" section.

80. The Treasury was consulted and agrees with our conclusions and recommendations.

IMPLEMENTATION

81. The proposed initiative will have some system implications for Inland Revenue which contribute to the implementation costs. Both the systems implications and implementation cost will vary depending on the administrative option chosen.

82. The proposed initiative should apply from income years starting on or after 1 April 2015. It should therefore be included in the next available omnibus tax bill scheduled for later this year, which in turn means that the legislation will not be passed ahead of the 1 April 2015 start date. It is anticipated that there would be a degree of retrospectivity compared to the start date, but as this initiative is advantageous to taxpayers this should not be of concern. Even with legislative introduction in early 2015, it would be passed by the time that taxpayers' losses crystallise for the first year of the policy on 31 March 2016.

83. The changes will be communicated to taxpayers through the usual legislative means, including a detailed commentary to the bill when introduced and a summary of the final rules in a Tax Information Bulletin once the enacting legislation has received Royal Assent. Inland Revenue will also provide guidance for potential applicants on eligible R&D.

84. The proposed initiative is a complement to other tax and non-tax R&D incentives. The R&D grant programmes administered by Callaghan Innovation target more mature innovative businesses relative to the smaller and younger R&D start-ups targeted by the R&D tax losses policy.

85. Taxpayers will continue to self-assess their tax liability; however, their R&D eligibility and R&D expenditure will be assessed by either Inland Revenue or Callaghan Innovation. This is necessary to reduce a fiscal risk arising from taxpayers outside the target group of R&D start-ups erroneously claiming a cashed-out loss or applicants recharacterising non-R&D expenditure to obtain a larger cashed-out loss.

MONITORING, EVALUATION AND REVIEW

86. Monitoring the effect of these changes will fall under Inland Revenue's responsibilities under the generic tax policy process (GTTP). The GTTP is a multi-stage process that has been used to design tax policy in New Zealand since 1995. The final stage of this process contemplates the implementation and review stage, which can involve Inland Revenue conducting a post-implementation review of the legislation and identifying any remedial issues.