

R&D tax losses

An officials' issues paper

July 2013

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CHAPTER 1

Introduction

- 1.1 One of the major problems faced by small start-up companies undertaking research and development (R&D) is having uncertain cashflows or access to capital to fund further development.
- 1.2 These problems can be compounded by current tax settings, which require a tax loss to be carried forward and deducted against future taxable income. R&D-intensive start-up companies are particularly affected as:
 - They expect to be in an ongoing tax-loss position over consecutive periods through the research and development phases.
 - They do not have other sources of income to apply the tax loss against.
 - The high-risk nature of R&D investment increases the risk of failure.
 - In some cases, they do not realise any gain on the investment until they sell the R&D output.
- 1.3 Consequently, R&D-intensive start-up companies are unable to use their tax losses in a timely fashion, or in some cases, at all, increasing the cashflow problem.
- 1.4 Requiring taxpayers to carry losses forward is an essential integrity measure in the tax system to protect Government revenues from a number of risks. However, R&D-intensive start-up companies face a unique set of potential market failures and tax distortions that could be reduced by changing the treatment of some of their tax losses. As a possible solution, we suggest allowing R&D-intensive start-up companies to cash out their tax losses arising from qualifying R&D expenditure, instead of carrying these losses forward.
- 1.5 Allowing these companies to access their R&D tax losses early would help to reduce capital and cashflow constraints, and alleviate biases against R&D arising from current tax settings.

Summary of suggested changes

- 1.6 The suggested changes target R&D-intensive start-up companies. To be eligible, applicants would need to meet the following criteria:
 - Company (and also group, if the company is part of a group) R&D expenditure on wages and salaries must be at least 20 percent of total expenditure on wages and salaries (the wage intensity threshold).
 - The company (and also group, if the company is part of a group) must be in a tax-loss position for the applicable income year.

- The applicant must be a company resident in New Zealand.¹ The company also cannot be a look-through company, listed company, qualifying company or special corporate entity.
- 1.7 The suggested R&D definition is based on the existing New Zealand equivalent to International Accounting Standard 38 (NZIAS 38), which is already used in the Income Tax Act 2007. It will be necessary, however, to exclude certain expenditure items and activities from the proposed R&D wage intensity threshold of 20 percent of the total group wage and salary expenditure and/or qualifying R&D expenditure, to ensure correct targeting and neutrality.
- 1.8 The amount of the loss that can be cashed out under the proposals will be the lesser of:
- 1.5 times the company's eligible R&D salary and wage expenditure in the relevant year;
 - total qualifying R&D expenditure in the relevant year; and
 - total tax losses in the relevant year.
- 1.9 Initially, the suggested maximum cap on eligible losses that can be cashed out will be \$500,000, which equates to a cashed-out loss of \$140,000 at the company tax rate (28%). This cap would rise incrementally each year up to a maximum cap on eligible losses of \$2 million. Increasing the cap gradually allows for greater control over any fiscal risk.
- 1.10 Loss recovery rules would be included to protect the neutrality and integrity of the suggested policy, while also minimising its fiscal risk. These rules would recover the value of the cashed-out loss when a taxpayer derives a return from the sale of:
- intellectual property from R&D the company has performed;
 - some of the shares in the R&D company; or
 - the R&D company itself (all of its shares).

How to make a submission

- 1.11 You are invited to make a submission on the proposed reforms and points raised in this issues paper. Submissions should be addressed to:

R&D tax losses proposal
C/- Deputy Commissioner, Policy and Strategy
Inland Revenue Department
PO Box 2198
Wellington 6140

¹ And not treated as non-resident under a double tax agreement.

Or email policy.webmaster@ird.govt.nz with “R&D tax losses proposal” in the subject line. Electronic submissions are encouraged. The closing date for submissions is 30 August 2013.

- 1.12 Submissions should include a brief summary of major points and recommendations. They should also indicate whether it would be acceptable for officials to contact the authors to discuss the points raised, if required.
- 1.13 Submissions may be the subject of a request under the Official Information Act 1982, which may result in their release. The withholding of particular submissions on the grounds of privacy, or for any other reason, will be determined in accordance with that Act. Those making a submission who consider there is any part of it that should properly be withheld under the Act should clearly indicate this.

CHAPTER 2

Background

- 2.1 The Government's Business Growth Agenda emphasises the importance of innovation to help grow New Zealand's economy. Innovation creates new sources of economic growth by delivering new products and generating improvements in the quality and cost of existing products. Encouraging business innovation is one of the seven key initiatives of the Government's Building Innovation workstream, which recognises that R&D is a key element in the innovation process.
- 2.2 High up-front costs associated with undertaking R&D mean that relative to other investment projects, the profit cycle for innovative projects tends to be much more heavily skewed towards early losses. This can pose a particularly significant barrier to undertaking R&D for innovative start-up companies.

Current tax settings for R&D

- 2.3 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.² This means that alternative forms of income and expenditure are taxed as evenly as possible, to ensure that overall tax rates can be kept low, while also minimising the influence that taxation has over economic decisions. This policy means that the current tax treatment of R&D expenditure in New Zealand is largely consistent with the tax treatment of other forms of business expenditure.

Tax deductibility of R&D expenditure

- 2.4 Expenditure on R&D that is regarded as an expense for accounting purposes is generally deductible for tax purposes. Section DB 34 of the Income Tax Act 2007 allows a person a deduction for expenditure they have incurred on research or development if that expenditure is expensed under paragraph 68(a) of NZIAS 38 Intangible Assets.
- 2.5 Under section DB 34 of the Income Tax Act 2007 and NZIAS 38, expenditure on an intangible item is immediately deductible for tax purposes until the NZIAS 38 asset recognition criteria are met. The intangible asset recognition criteria require an entity to demonstrate all of the following:
- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
 - its intention to complete the intangible asset and use or sell it;
 - its ability to use or sell the intangible asset;
 - how the intangible asset will generate probable future economic benefits. Among other things, the entity can demonstrate the existence

² Available at <http://www.treasury.govt.nz/budget/2012/fsr/14.htm>

of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset;

- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- its ability to measure reliably the expenditure attributable to the intangible asset during its development.

2.6 Once all of these asset-recognition criteria are satisfied under NZIAS 38, any further development expenditure is capitalised rather than immediately deducted. In certain circumstances, this expenditure can be deducted as depreciation over the life of the asset for tax purposes.

Timing of deductions

2.7 The Income Tax Act 2007 also grants special treatment for the timing of deductions for R&D expenditure. Sections EJ 22 and EJ 23 can permit taxpayers to allocate all or part of this deduction granted under section DB 34 to later income years, provided that the relevant taxable income would not have been derived but for the R&D expenditure. There is no limit to the amount of losses that taxpayers can allocate to future income years under this provision.

2.8 This provision was introduced to recognise that many R&D firms introduce additional equity during the R&D process. Without the provision described above, a breach of shareholder continuity would result in the accumulated losses carried forward being extinguished. Instead, taxpayers can allocate the expenditure (that gives rise to the losses) to an income year after the shareholder continuity breach (if any) takes place.

Sale of successful output from R&D

2.9 The current tax settings tend not to tax the profits from the sale of successful R&D. This is because the sale of companies (which own the successful R&D) is considered to be a sale of capital and therefore outside the scope of the tax base. The exception to this is income from royalty payments or the sale of patents, which is taxable.

Current treatment of tax losses

2.10 The current approach to the treatment of tax losses is to allow loss offsets between companies with a 66 percent common shareholding. Without this rule, losses would be effectively quarantined in the individual company concerned, and income would have to be earned in that company before the tax benefit of the losses could be realised. In reality, this could involve a significant time period.

2.11 Alongside the loss offset rules for “traditional” companies, changes have been made more recently to allow flow-through treatment for limited partnerships and eligible companies that elect to do so. Under these rules losses pass through to their partners and shareholders, thus allowing the tax

benefit of the losses to be realised to the extent the partners or shareholders have other taxable income.

- 2.12 It can be argued that as losses are the inverse of profits, they should be treated symmetrically. In other words, just as profits are liable for a tax payment, losses would be eligible for a negative tax payment (that is, a receipt from the Government). In practice, this is generally achieved through the mechanisms of intra-group loss offsets or loss pass-through provisions.
- 2.13 Allowing what amounts to a refund inherently involves an element of risk to the tax base as it incentivises the creation of artificial losses as a mechanism for sheltering otherwise taxable income of group companies or partners/shareholders. Under current tax settings, however, this risk will always be capped at the level of the otherwise taxable income. Without this limit there would be greater pressure on other buttressing rules such as shareholder continuity or general anti-avoidance rules.
- 2.14 The only set of losses that are not used immediately are those where the loss-making company does not have a profit-making company in its group or the partners/shareholders do not have sufficient taxable income to absorb the loss.
- 2.15 This paper explores whether, in certain circumstances, the Government should allow R&D start-up companies earlier access to tax losses arising from R&D expenditure when no offsets are possible. This would reduce the distortions created when there is an asymmetric tax treatment of tax losses (given wider exacerbating factors affecting these companies noted in Chapter 3). As the current stock of losses for all firms was approximately \$45 billion in May 2013, any change from the status quo must be approached with a high degree of caution.

CHAPTER 3

Problem definition

- 3.1 Current tax provisions delay the ability of loss-making businesses to use their deductions as they are required to carry the losses forward. This provides an important integrity measure in the tax system to mitigate the creation of artificial losses. However, these current tax settings create a cashflow problem for certain companies in an ongoing tax loss position.
- 3.2 This cashflow bias is particularly significant for companies undertaking R&D. This is because:
- The natural profit cycle for innovative projects tends to have a longer period of tax loss before making a profit.
 - Many R&D-intensive companies are carrying on high-risk investment which may never be profitable.
 - The ultimate cash return may not arise until the resulting capital asset is sold.
- 3.3 This can increase the cost of investing in R&D rather than in other assets.
- 3.4 Problems can be compounded for start-up companies undertaking R&D who are already likely to suffer from broader capital constraints as a result of, for example:
- *Lack of collateral* – R&D-intensive start-up companies typically have fewer fixed tangible assets and the intangible R&D assets being created can be difficult to value upfront. This means there is often little in the way of collateral that can be used for debt financing.
 - *Information asymmetry* – This arises when lenders have less knowledge than the R&D start-up company about the value of the R&D assets being created and the level of risk associated with their creation. This is especially prevalent for R&D-intensive start-up companies given the novel and/or experimental nature of R&D, and they have no proven track record in successfully developing R&D assets. Consequently, this can lead to less lending to or investment in R&D-intensive start-up companies.
- 3.5 Empirical evidence shows that small R&D firms have a significantly lower probability of being successful with long-term loan applications than other businesses,³ and that the probability of success decreases as R&D intensity increases.⁴ 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

³ Freel, M. S. (1999), *The Financing of Small Firm Product Innovation Within the UK*, Technovation 19, 707–719.

⁴ Freel, M. S. (2007), *Are Small Innovators Credit Rationed?*, Small Business Economics 28, 23–35.

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.⁵

- 3.6 These factors, and the cashflow problems noted above, may lead to fewer R&D-intensive start-up companies being established and less R&D being undertaken by existing R&D-intensive start-up companies.
- 3.7 Current tax provisions can also penalise businesses that engage in R&D that ultimately turns out to be unsuccessful. This is because current tax provisions state that losses, in this case from unsuccessful R&D, can only be used going forward if the original owners subsequently engage in a profitable business. The current rules therefore make the use of previous tax losses contingent upon successful innovation or future income earning by the same group of investors. The risk of incurring this potential additional sunk cost is likely to discourage investment in marginal R&D projects further.

Summary

- 3.8 Current tax loss rules increase the cashflow constraint experienced by companies in a tax loss position. However, for R&D-intensive start-up companies, this bias is compounded as a result of longer periods of tax loss for innovative projects, broader capital constraints and difficulties in securing lending or investment. On the other hand, when successful innovation is sold there is generally no taxation impact.
- 3.9 Other businesses do not normally expect to make significant ongoing losses, nor do they face the same difficulties when seeking lending. Therefore there are strong grounds for continuing the existing treatment for other firms in tax losses, both as a buttress and also because the existing rules do provide a mechanism for losses when there is also taxable income.

Submission points

- Is this the right characterisation of the problem?
- Is this a significant problem in practice (given the existence of look-through companies and limited partnerships)?

⁵ Boven, R., Harland, C., and Grace, L. *Plugging the Gap: An Internationalisation Strategy*. (Auckland: The New Zealand Institute, 2010).

CHAPTER 4

Suggested policy changes

- 4.1 The policy solution set out in this paper is to allow loss-making R&D-intensive start-up companies to cash out (that is, obtain early access to) some or all of their tax losses arising from R&D expenditure in the year in which the expenditure is incurred. This should reduce the market failures and tax distortions that can be a deterrent to investment in R&D, and create a more economically neutral outcome for such companies.
- 4.2 Under this proposal, eligible businesses would be able to cash out the taxable value of their R&D losses in the year they were incurred. In practice, this means that eligible R&D companies would be able to claim up to 28 percent (the current company tax rate) of their tax losses from the Government in any given year.
- 4.3 Officials suggest that eligibility be targeted to R&D-intensive start-up companies by restricting the refund to:
- loss-making companies whose R&D intensity (based on a ratio of R&D expenditure on wages and salaries to total wage and salaries expenditure) exceeds a specified threshold; and
 - an overall cap on the amount that can be cashed out in any given year.
- 4.4 We suggest that the threshold for R&D intensity is set at 20 percent, to ensure that the refund is appropriately targeted to highly innovative businesses. Eligible R&D companies would be able to cash out up to 1.5 times their R&D expenditure on salary and wages, provided that this amount does not exceed their total tax losses or total qualifying R&D expenditure in the relevant tax year. In practice, this means eligible businesses would be able to cash out the lesser of:
- 1.5 times the company's R&D expenditure on salary and wages;
 - total tax losses; or
 - total qualifying R&D expenditure.
- 4.5 In addition, there would be an overall cap on the amount of losses that would qualify to be cashed out. This would help ensure that the full benefits of the proposal are targeted principally to smaller companies, given the higher relative cashflow benefit the cash-out would have for these companies. It is suggested this overall cap would initially be set at \$500,000, eventually rising to \$2 million.
- 4.6 Any losses cashed out under the proposal would no longer be carried forward to be offset against future income. However, taxpayers would still be eligible to carry forward any losses in excess of the amount cashed out. This means that remaining losses would be accorded the same treatment as losses under the current rules.

- 4.7 Several aspects of the eligibility criteria are included within the scope of this consultation, including features of the eligibility criteria, the cap on eligible losses, and the appropriate definition of R&D. We will discuss and be seeking your views on these features in Chapter 5.
- 4.8 To further reduce risks to the tax base, it is also suggested that the value of any remaining cashed-out losses be recovered upon the sale of any developed intellectual property, shares in the company, or sale of the company itself. These integrity measures are set out in more detail in Chapter 7.

Expected benefits

- 4.9 This proposal is expected to:
- provide some relief for the financing and cashflow constraints faced by R&D-intensive start-up companies during the initial loss-making phase of the innovation cycle;
 - remove a tax distortion against undertaking innovation, making the tax system more neutral for businesses targeted by the policy change; and
 - remove the risk that any accumulated tax losses of an R&D-intensive start-up will be lost in the event of failure.
- 4.10 These expected benefits are aligned with the underlying policy rationale set out in Chapter 3.
- 4.11 It is difficult to quantify the benefits from this proposal in terms of its marginal impact on R&D expenditure or the probability of successful innovation. As noted in Chapter 3, however, there is a relatively strong consensus in the academic and tax policy literature that young R&D-intensive businesses are likely to face difficulties in accessing sufficient capital, so are likely to benefit from this proposed policy change.
- 4.12 The proposal provides a cashflow benefit to eligible companies as it rebalances tax liabilities from periods of loss to periods of profit. It should be noted that it does not alter a company's overall expected tax liability as any tax deductions that are taken now can no longer be taken in the future.⁶
- 4.13 Evidence indicates that the proposal should be well targeted to start-ups as those companies that would be eligible for the proposed policy are, on average, younger than other R&D-intensive companies.⁷
- 4.14 In addition, by restricting eligibility of the cash out to those companies above a specified level of R&D intensity means that any tax benefit will be better targeted towards those businesses incurring tax losses due to intensive R&D activity, rather than for other reasons.

⁶ This assertion is conditional on the R&D company being successful. If the company fails to earn income, the cashed out loss will effectively become a grant as the loss-making company is able to use some of their tax losses.

⁷ Research and Development Survey 2010, details available at http://www.stats.govt.nz/browse_for_stats/businesses/research_and_development/ResearchandDevelopmentSurvey_HOTP2010/Technical%20Notes.aspx

- 4.15 It is proposed that a cap on the amount of loss able to be cashed out will increase over time. This should help limit the risk that the new policy causes an increase in demand for scientists and engineers, and consequently in their wages, due to the finite supply of these workers in the short term. If that situation arose, part of the potential benefits of the R&D cash-out would be reduced as the cost of carrying out R&D would increase, rather than increasing the amount of R&D performed. A gradual phase-in will therefore help to maximise the potential benefits of the policy change in terms of increased R&D activity.

CHAPTER 5

Policy design

- 5.1 It is suggested that three criteria will determine the eligibility of applicants for a cashed-out loss. Applicants will need to meet the following criteria:
- Company (and also group, if the company is part of a group) R&D expenditure on wages and salaries must be at least 20 percent of total group expenditure on wages and salaries.
 - The company (and also group, if the company is part of a group) must be in a tax-loss position for the applicable income year.
 - The applicant must be a company resident⁸ in New Zealand. The company also cannot be a look-through company, listed company, qualifying company or special corporate entity.

R&D wage intensity

- 5.2 It is proposed that a ratio of expenditure on wages and salaries for R&D to total expenditure on wages and salaries (R&D wage intensity) will be used as one of the eligibility criteria for the cash-out. Under this proposal, companies (and also groups, if the company is part of a group) that spend at least 20 percent of their total wage and salaries expenditure on R&D (as defined in the section below) would be eligible for the cash out, provided they also meet the company and tax loss criteria discussed below.
- 5.3 Evidence from the Research and Development Business Survey⁹ indicates that loss-making R&D-intensive businesses tend to spend a greater proportion of their wage and salary costs on R&D than other businesses, particularly smaller and young businesses.
- 5.4 One explanation for this is that during the initial loss-making phase of the innovation life cycle, businesses invest a greater proportion of their labour costs in R&D for the initial creation of intellectual property. However, the composition of wage and salary expenditure changes as activities shift towards production and sales, leading to a gradual fall in the proportion of R&D staff (compared with non R&D staff) employed as the business matures. This is supported by evidence from the Research and Development Business Survey, which shows that both older and larger firms have significantly lower ratios of R&D expenditure to total expenditure on salaries and wages.
- 5.5 Setting a R&D wage intensity threshold (of at least 20 percent) will help to ensure the policy is highly targeted towards assisting R&D-intensive start-up companies.

⁸ Residents for this policy will not include resident companies that are treated as non-resident under a double tax agreement.

⁹ Research and Development Survey 2010.

- 5.6 Any expenditure on wages and salaries related to “excluded activities” (listed later in this section) will also not be eligible to be included in the calculation of R&D expenditure on wages and salaries.

Contracted R&D

- 5.7 Under the suggested changes, a business which contracts another entity to undertake R&D services on its behalf will be able to count the outsourced R&D expenditure on wages and salaries towards its calculation of R&D wage intensity, subject to the same excluded activities listed later in the section. In practice, the contracted supplier of R&D will need to provide an invoice to the purchaser which details both the overall R&D wage and salary costs subject to PAYE for the contracted work, and the cost of any other qualifying R&D.

Shareholder salaries

- 5.8 Using expenditure on salaries and wages will enhance the integrity of the policy. While Inland Revenue can monitor a taxpayer’s total expenditure on salaries and wages through the PAYE system, there is no equivalent source of information for other types of expenditure. Consequently, it is proposed that shareholder salaries be excluded from the R&D wage intensity threshold calculation if they are not subject to PAYE. Basing the eligibility criteria on salary and wage expenditure should help to reduce potential abuse of the policy. It is expected that this approach will also ease the compliance and administrative costs of the proposal, given it is based on existing information.
- 5.9 However, it is recognised that companies incur other expenditure in undertaking R&D beyond that on salary and wages. A proposal to allow some or all of this additional R&D expenditure (based on a multiplier of a firm’s R&D wage and salary expenditure) is discussed later in this chapter.

Tax-loss position

- 5.10 To be eligible to have a tax loss cashed out, a taxpayer must be in a net tax loss position. Eligibility for the cashed-out loss will be restricted to losses incurred in the current income year. For example, taxpayers completing a return for the 2015–16 income year will only be able to access a cashed-out loss for a tax loss incurred in the 2015–16 income year. There will be no ability to cash out tax losses from previous income years. Allowing this would create a significant risk to the tax base as losses could be “mined” from companies with existing losses but no sources of current income.

Company and grouping restriction

Company eligibility

- 5.11 Only certain companies will be able to access the cashed-out loss; look-through companies, listed companies, qualifying companies and special corporate entities will be excluded. No other business structures – for example, partnerships or trusts, will be eligible for a cashed-out loss. A corporate partner in a partnership carrying out R&D can be eligible for a

cashed out loss, and will be able to include the R&D activities of the partnership as they flow through to the corporate partner. Furthermore, to be eligible a company must be resident in New Zealand and not treated as non-resident under a double tax agreement. These features will enhance the targeting of the proposed policy and reduce its complexity.

- 5.12 Current tax loss rules can create a cashflow bias for companies in a tax loss position. However, some entity structures already have their own flow-through treatment of tax losses, including look-through companies and limited partnerships. These business structures may therefore not be similarly subject to the issues faced by a company without a flow-through tax-loss treatment as they could have other income to offset their losses against.
- 5.13 Another issue faced by small R&D start-ups are the particular capital constraints noted in Chapter 3. These are less of an issue for listed companies, as their listing on a stock exchange should give them greater access to capital.
- 5.14 Restricting cashed-out losses to companies also ensures that tax losses will only be cashed out at the company tax rate, which is currently 28%. This reduces a potentially complex aspect of the proposal, namely that different types of taxpayers are often taxed at different rates. Partnerships would be particularly difficult because their flow-through tax treatment, combined with individual differences in the allocation of tax losses between each partnership's respective partners, would make attempting to cash out losses at the marginal rate of each partner complex and impractical.
- 5.15 It is also standard practice in similar tax jurisdictions to restrict R&D incentives to companies only. Both the new above-the-line R&D tax credit in the United Kingdom and the R&D tax incentive in Australia restrict eligibility to companies only.

Grouping rules

- 5.16 We consider that, in determining whether a company meets the criteria for this proposed policy (for example, being in a loss position and having a high R&D wage intensity) the company should be considered together with other companies (and entities) that share similar ownership. Without such a rule, the targeting of this proposal to small, R&D intensive start-up companies could fail.
- 5.17 In particular, we are concerned with two specific situations:
- when an ineligible entity incorporates a subsidiary that might be eligible; and
 - when a group of shareholders of an ineligible company incorporates a sister company that might be eligible.
- 5.18 An example of this first situation would be a large firm with a low R&D intensity. It could incorporate a new company and direct that company to carry out its R&D functions. Without a rule to prevent it, that new company

would be eligible to have its tax losses refunded, even though the two companies considered as a whole would not be.

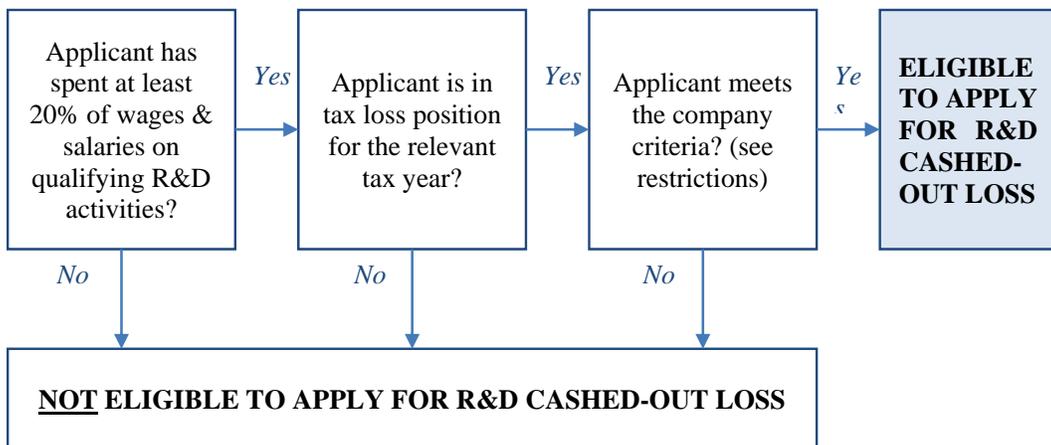
5.19 An example of the second situation would be a group of shareholders who own a company that has largely finished some R&D and is now starting to promote a product for sale. These promotion activities will mean the company is likely to fall below the required R&D wage intensity of 20 percent as they take on non-R&D staff. However, if the shareholders incorporate a new sister company to solely carry out promotion, the original company will continue to have a high R&D wage intensity. It would therefore be eligible for the tax loss refund on its R&D spending. Again, this is inappropriate: the two companies considered as a whole would not be eligible.

5.20 The intention is that these grouping rules, as far as practicable, should not impact on genuine small R&D companies. These companies are likely to have a simple corporate structure so we believe this should be achieved. Nevertheless, we would be interested to hear from submitters about:

- whether, in practice, a small R&D firm is generally a standalone entity or forms part of a larger corporate group; and
- the typical shareholding arrangements of a start-up R&D firm: how many shareholders are there, what percentage of the company do they own, and how does this change over the company's life?

Summary flowchart

5.21 The diagram below summarises the various criteria determining whether an applicant would be eligible for the cash-out proposal.



Company size

- 5.22 Restricting eligibility to companies below a certain size has been considered, but is not being proposed in this paper. For example, one method of doing this would be to limit eligibility to companies whose turnover is below a certain amount. This approach is not favoured as current eligibility rules should be sufficient to target the policy to small R&D-intensive start-up companies, and this would be another measure of eligibility that Inland Revenue would have to monitor.

Submission points

- Do the eligibility criteria effectively target R&D-intensive start-up companies? Are there any additional eligibility criteria that should be included?
- Are there likely to be difficulties arising in using these criteria? Are there possible unintended consequences? Is the 20 percent R&D wage intensity threshold appropriate?
- Do you anticipate any problems with the proposed arrangements for dealing with contracted R&D; either for purchasers or suppliers of R&D?
- Does the section on grouping rules accurately describe the risks in relation to grouping? Have any situations been omitted?

Definition of R&D

Proposed definition

- 5.23 It is proposed that existing definitions of research and development are used as they are described in the New Zealand equivalent to International Accounting Standard 38 (NZIAS 38), and consequently the Income Tax Act 2007. These are:
- Research is original and planned investigation is undertaken with the prospect of gaining new scientific or technical knowledge and understanding.
 - Development is the application of research findings or other knowledge to 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.
- 5.24 Experiences from the previous R&D tax credit in New Zealand showed that a new definition created significant compliance and administration costs. While it is important that a narrow definition of R&D is used to ensure that the policy is targeted, in practice this is very difficult. Using the existing definition is simpler for taxpayers already familiar with it for accounting purposes. However, to ensure the policy stays targeted, the level of qualifying R&D expenditure will be limited, based on expenditure on salaries and wages and a multiplier, as outlined in the next section.

Excluded activities

- 5.25 Certain activities (noted below) did not qualify directly as part of the R&D definition for the tax credit. Expenditure on these activities was excluded because they took place in a post-development phase, related to routine work, and/or there was an indeterminate relationship between the activity and economic growth.
- 5.26 Expenditure on such activities will also not be included for the purposes of calculating the qualifying R&D expenditure for a cashed-out loss or for calculating expenditure on wages and salaries on R&D activities for the proposal presented in this paper. The reasons for the exclusion are generally consistent with its wider policy intent, as many of the activities noted below take place later in the R&D process when the R&D company is less likely to be capital and cashflow-constrained.
- 5.27 The excluded activities for the now repealed R&D tax credit were:
- prospecting for, exploring for or drilling for minerals, petroleum, natural gas or geothermal energy;
 - 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;
 - making 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; and
 - pre-production activities such as a demonstration of commercial viability, tooling-up and trial runs.
- 5.28 In addition, it is proposed the following activities are also excluded in the suggested changes:
- clinical trials; and
 - the late stages of software development (for example coding).

Excluded expenditure

- 5.29 Some expenses that a taxpayer incurs should also not be included for the purposes of:
- determining R&D wage intensity (which is used to determine whether a firm is eligible for the cash-out); and
 - determining total qualifying R&D expenditure (which is used in calculating the amount of tax losses a firm can cash-out).
- 5.30 Expenses are excluded on the basis that their inclusion could create an economic distortion, inequity between taxpayers in a similar position, or alternatively endanger the integrity of the proposed policy. Expenditure items that we propose excluding are:
- *Interest expenses related to R&D.* Including interest expenses will encourage debt financing over equity financing.
 - *Purchases of existing R&D assets.* This R&D has already been created and would allow taxpayers to artificially inflate their R&D expenditure by buying and selling existing R&D assets.
 - *R&D undertaken offshore.* Allowing this expenditure would be undesirable because of potential re-characterisation risks.
 - *Lease payments.* These can include an implicit interest payment; allowing this as R&D expenditure but excluding interest expenses is likely to bias leasing over the purchase of capital items with debt.
- 5.31 We also propose to exclude any expenditure funded by government grants, or research funding, for R&D. This is to ensure that companies are not able to benefit twice by obtaining an additional cash out for research funded by government grants.
- 5.32 Outsourced R&D will be eligible for the purchaser (but not the provider) subject to the same set of eligibility criteria applying to the purchase as described earlier in the paper.

Submission points

- Recognising that too loose a set of criteria could leave significant scope for abuse and undermine the integrity and durability of the proposal, is the definition of R&D, when combined with the other criteria, sufficiently robust?
- Are there other definitions of R&D used by companies that could be used for the suggested changes?
- Would excluding government grants cause specific distortions? If so, what would be the nature and magnitude of these distortions?

Determining the amount of tax losses to be cashed out

- 5.33 Companies that are eligible for the proposal will be able to cash out all or part of their tax losses in the relevant tax year. As with the eligibility criteria, we suggest linking the overall amount that can be cashed out to the company's salary and wage expenditure on R&D.
- 5.34 Specifically, we suggest that companies that qualify for the proposal should be able to cash out up to 1.5 times their R&D salary and wage expenditure, provided this amount does not exceed the company's total tax losses, or its total qualifying R&D expenditure in the relevant tax year. The rationale for linking the amount of the cash-out to a company's R&D wage and salary expenditure is consistent with the R&D wage intensity criteria discussed earlier. The multiplier of 1.5 which is applied to R&D salary and wage expenditure is intended to help companies cash out losses that are incurred as a result of other R&D expenditure that is not related to salary and wages (such as capital expenditure and overheads).
- 5.35 In practice, this means companies that qualify for the proposal will be able to cash out the lesser of:
- 1.5 times their eligible R&D salary and wage expenditure in the relevant year;
 - total tax losses in the relevant year;
 - total qualifying R&D expenditure in the relevant year; and
 - the overall cap on eligible losses for the relevant year (see next section).
- 5.36 This is illustrated by the examples below.

Examples of determining the size of available R&D cash-outs

This box contains some numerical examples to illustrate how the size of the R&D cash-out is calculated.

	Total tax loss	R&D-related salary/wage expenditure	Total qualifying R&D expenditure	Total amount of losses available to cash out
Company A	\$200	\$100	\$180	\$150
Company B	\$200	\$100	\$140	\$140
Company C	\$ 50	\$100	\$180	\$50

Company A – The company has spent \$100 on R&D wage and salary expenditure so, given the 1.5 multiplier, a total of \$150 could potentially be eligible for cashing out. As this amount is less than the company's total qualifying R&D expenditure (and also its total tax loss) the full \$150 is available to be cashed out.

Company B – Total qualifying R&D expenditure (\$140) is less than 1.5 times the company's R&D wage and salary expenditure. Therefore the amount of losses available to cash out is limited to \$140.

Company C – The company's total tax loss (\$50) is less than 1.5 times the company's R&D wage and salary expenditure and also the company's total qualifying R&D expenditure. The size of the available cash out is therefore limited to \$50.

- 5.37 Companies would still be eligible to carry forward any losses in excess of the amount cashed out to future years. This means remaining losses would be accorded the same treatment as losses under the current rules.

Overall cap on eligible losses

- 5.38 We suggest an incremental increase in the amount of losses to be cashed out over time, with the initial overall cap on eligible losses to be set at \$500,000 (equivalent to a cashed-out loss of \$140,000¹⁰), and rising over time to a cap of \$2 million (equivalent to a cashed out loss of \$560,000).
- 5.39 Increasing the cap on eligible losses incrementally reduces its fiscal risk, especially in the early years of the new rules when there will be uncertainty over the response of R&D producers to the changes. Gradually increasing the cap will also 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 doing R&D rather than an increase in R&D.

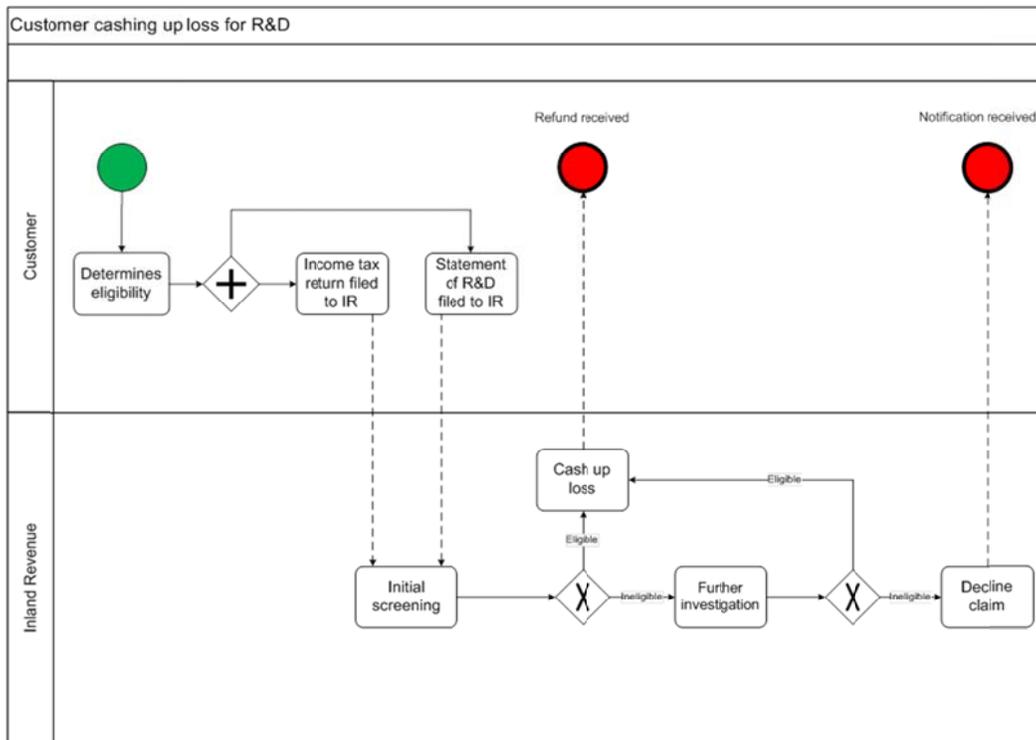
¹⁰ If the current company tax rate of 28% is maintained.

CHAPTER 6

Administrative process

- 6.1 The R&D tax losses proposal has similar administrative implications to the now repealed R&D tax credit. In particular, implementation would require changes to the IR 4 company income tax return and a new statement of R&D activity and expenditure. Changes to the IR 4J imputation return would also be required.
- 6.2 Under the proposed new rules, when a company files its income tax return, it would request its tax losses to be refunded. This will be done through additional key points added to the IR 4 income tax return to show the amount of loss being cashed out and the actual value of the cashed-out amount (once the loss is converted using the company tax rate).
- 6.3 To determine if a company is eligible for a loss to be cashed out, Inland Revenue would need to know the nature of the R&D activity and the amount of expenditure. This would likely be done by the company filing a statement which details their R&D activity and expenditure within 30 days of the income tax return being filed.
- 6.4 Once both the company income tax return and statement of R&D is received, both would be put through a comprehensive screening process. Once the initial screening process is complete, either a payment would be made, or the claim would be passed on for further investigation. Applications that are investigated further would either be approved and the appropriate payment made, or declined.
- 6.5 Inland Revenue would pay out these losses to the company, subject to the rules and criteria for the cashed out loss being met. Companies that do not meet eligibility would be notified and have the full loss carried forward. This process is shown in diagram 1.

Diagram 1



Screening returns

6.6 Companies wanting to cash out a loss will require a high level of scrutiny to discourage fraudulent claims. Practically, this requires an up-front screening process to counter the risk of cashing out ineligible tax losses (compared with carrying excess tax losses forward). Inland Revenue’s experience with the R&D tax credit proved that reclaiming money from taxpayers who had erroneously received R&D tax credits was very difficult. As accessing tax losses early may incentivise fraudulent activity, a cautious approach to screening applicants is favoured.

Statement of R&D activity and expenditure

6.7 The purpose of the statement of R&D is to establish eligibility by detailing the nature of R&D activity and the amount of qualifying expenditure. Companies will be required to provide information within the statement that confirms they are eligible for a cash-out. Information required will include:

- details of the R&D activity that show it meets the accounting definition of R&D;
- evidence that the R&D is being undertaken in New Zealand;
- salary and wage expenditure that relates to R&D activity; and
- details of the company grouping, ownership and shareholding.

- 6.8 Enough detail will need to be provided to allow checks to take place. The comprehensiveness of the screening process will need to be balanced against greater administration and compliance costs for companies.
- 6.9 In most instances, it will be possible to make a payment based on the information provided in the statement of R&D, along with other information already held by Inland Revenue (such as PAYE schedules). This will minimise the additional compliance burden placed on taxpayers. In some cases however, further screening and investigation may be needed.

Education

- 6.10 Given that the proposals set out in this paper are new, there is likely to be some uncertainty for taxpayers over how to apply some of the suggested rules above, particularly around the definition of R&D and eligible/excluded activities. Inland Revenue intends to produce guidance material for R&D companies and provide further education through community compliance officers. We want to hear from taxpayers how Inland Revenue can further help address possible uncertainties.

Changes to Financial Reporting Standards

- 6.11 Inland Revenue is aware that the simplification of financial reporting requirements for small and medium enterprises will mean that this policy proposal could impose an additional compliance burden on taxpayers. However, it is important that mechanisms that encourage compliance remain intact. It should be noted that this policy proposal is advantageous for taxpayers.

Imputation

- 6.12 New Zealand's imputation system creates a design complication if tax losses are cashed out (rather than carried forward). Generally, when companies pay corporate income tax they receive imputation credits and when they receive a refund they get an imputation debit. This means any taxpayer that accesses a cashed-out tax loss would incur an equivalent amount of "imputation debits" (or "negative imputation credits").
- 6.13 While imputation debits for refunds are a current feature of the imputation system, a company cannot have a net debit balance at the end of their income year without incurring a penalty. To provide for ongoing imputation debit balances arising from these proposals, Inland Revenue systems will be modified to allow for this.

Consultation questions for this section:

- What approaches would be helpful to reduce uncertainty about the application process for potential applicants?

CHAPTER 7

Neutrality and integrity measures

- 7.1 A cashed-out loss can be thought of as an interest-free loan from the Government to be repaid from the taxpayer's future taxable income; it is intended to provide a temporary cash-flow timing benefit when the company is in tax loss. However, if the R&D expenditure never results in a viable product, the interest-free loan effectively becomes a grant.
- 7.2 If the company or the shareholders make a return on their investment before they have repaid the value of the cashed-out loss, this will lead to an outcome that is concessionary to the taxpayer. In addition to the untaxed receipt, they also retain the benefit of the remaining cashed-out losses that have not yet been repaid. This also creates a fiscal risk.
- 7.3 R&D companies can make such a return on their investment through the sale of:¹¹
- intellectual property from R&D the company has performed;
 - all of the shares in the company carrying out the R&D; or
 - some of the shares in the company.
- 7.4 If an R&D company is able to sell intellectual property, sell shares in the company, or the company itself is sold, it is highly likely the R&D company will also no longer be constrained to the same degree by the market failures and cashflow constraints affecting small R&D-intensive start-up companies. In this situation, the original policy rationale will no longer apply, as the company will have funds available to pay back the value of the cashed-out loss. Rules are therefore required to recover the value of any remaining cashed-out loss to ensure the correct policy outcome. We therefore seek your views on suggested recovery rules set out below.

Sale of intellectual property

Third-party sales

- 7.5 One way of realising a return on an R&D investment is to sell the corresponding intellectual property to a third party. It is proposed that if an R&D company has remaining cashed-out losses that have not yet been repaid, loss recovery income will arise from the sale of intellectual property up to the balance of any remaining cashed-out loss. The amount of the loss recovery income will then be reinstated, to become a loss to be carried forward.¹² This preserves neutrality between companies that sell intellectual property before and after the cashed-out loss has been repaid.

¹¹ Sales include the redemption and buy back of shares.

¹² In this situation, even if a breach in shareholder continuity has taken place, the losses will be able to be reinstated.

- 7.6 If the R&D company has already derived sufficient taxable income to repay the balance of the cashed-out loss before it sells its intellectual property, this rule will no longer apply.¹³
- 7.7 This is analogous to the depreciation rules. Depreciation deductions are given for depreciating assets, but to the extent the final sale price is more than the adjusted book value of the asset there is depreciation recovery income. A similar approach is suggested here to ensure the tax treatment of profits and losses is neutral.

Sales within the group

- 7.8 There is also the scenario when the intellectual property is sold to another group company; for example, in advance of an initial public offering of the new company. Currently the value at which the intellectual property is transferred does not matter as there is no tax on its sale. However, when losses are cashed out, we may need to consider whether there needs to be a requirement that transfers must be made at market value. Transfers below market value would enable taxpayers to avoid paying the full extent of any loss recovery income. An alternative option could be to ignore the transfer for tax purposes but move the potential liability to loss recovery income to the new company.¹⁴

Sale of all company shares

- 7.9 The value of the intellectual property can also be realised through the sale of all shares in the company. As an integrity measure the “loss recovery income rule” will also be extended to the extent that:
- a profit is made on the sale of the shares; and
 - the company has remaining cashed-out losses that have not yet been repaid.
- 7.10 In such circumstances taxable income will arise to the shareholder, in proportion to their shareholding, and up to the value of the remaining cashed-out losses. It will be taxed at the shareholder’s marginal tax rate.¹⁵

¹³ Income from the sale of patents and supply of “know how” will remain taxable.

¹⁴ An equivalent approach could apply to amalgamating companies to ensure that the potential liability for loss recovery income was transferred to the amalgamated company.

¹⁵ Due to collection difficulties and the potential loss of taxing rights under a double tax agreement, this income may arise only to resident shareholders.

Example 1

A company that has cashed-out losses is sold to Purchaser A. The 1,000 shares in the company were held by Shareholder A (40% share), Shareholder B (40% share) and Shareholder C (20% share). The profit per share on sale is \$10. A total of \$300 of losses had previously been cashed out and there was also subsequent taxable income of \$200 to the company before the sale.

The profit made by the respective shareholders is \$4,000/\$4,000/\$2,000. The total loss recovery income, for the remaining cashed-out losses, is only \$100 (being \$300 less \$200). As the loss recovery income is in proportion to the shareholding, Shareholders A and B will each have \$40 taxable income and Shareholder C will have \$20. This is then taxed at each shareholder's marginal tax rate.

- 7.11 As a further integrity measure, all controlling shareholders of the immediate shareholder, whether direct or indirect, will be jointly and severally liable in the event the immediate shareholder does not pay the tax on this income. This is to prevent the company being stripped of assets before the tax falls due.

Sale of some company shares

- 7.12 The focus with the previous integrity measure involving the sale of all shares in the company was to the extent that any taxable income earned by the company was less than the losses cashed out and shareholders made a gain from the sale of their shares, the lesser of the two became loss recovery income. In other words, the appropriate time to claw back any residual timing benefit from the initial cashing out of losses is when a shareholder received a direct benefit from the company.
- 7.13 While the same principle should apply to partial sales, it becomes more difficult to apply in practice. The nature of R&D-intensive start-up companies is to seek additional capital throughout their life cycle, which means it can be unclear at what point the controlling shareholding actually changed.
- 7.14 The other difficulty is that to the extent that a part of any remaining cashed-out losses would be repaid as loss recovery income on sale, the total amount of the potential recoverable loss that is held in the company would need to be reduced.
- 7.15 For these reasons we suggest:
- The loss recovery income rule will also apply for the sale of part of the shares in the company, when the proportion of shares sold represents greater than 5 percent of the total shares in the company.
 - The amount of loss recovery income will be pro-rated for the proportion of shares sold.
 - The value of remaining cashed-out losses in the company is reduced by the amount of loss recovery income of the shareholders.

- 7.16 An anti-avoidance rule will also be needed to ensure the loss recovery income rule still applies when multiple shareholders separately sell less than 5 percent of their respective shareholdings, but the combined sale represents more than 5 percent of the total shares in the company.

Example 2

Shareholder A sells half of its shareholding in the company (equivalent to 20 percent of the total shares in the company). The loss recovery income rule is therefore triggered. As before, a total of \$300 of losses had previously been cashed out and there was also subsequent taxable income of \$200 to the company before the sale of shares. The total amount loss recovery income is therefore \$100, which is adjusted down to \$20 reflecting that only 20 percent of the shares in the company have been sold. Shareholder A therefore has taxable income of \$20 and the remaining cashed-out losses in the company is reduced by \$20.

Example 3

Shareholder B sells 10% of its shareholding in the company (equivalent to 4% of the total shares in the company). Given this is less than the 5% threshold to trigger the loss recovery income rule, there is no recovery on sale.

- 7.17 We recognise that there are practical limitations with this aspect of the suggested loss recovery rules. Claiming loss recovery income back from shareholders who are based overseas would pose collection challenges. Also, correctly assessing loss recovery income arising from the resale of shares (which, having been sold before, will not have the same amount of cashed out losses allocated) will be highly complex.
- 7.18 Given these difficulties, an alternative option is to keep the cashed-out loss within the company, with recovery income triggered by subsequent profits, a sale of intellectual property or a majority stake in the company itself.

Issue of new shares

- 7.19 The nature of small start-up R&D companies is that they will gain additional shareholders and additional equity funding through the firm's life cycle. Generally speaking, however, this will involve the company issuing more shares for additional capital. While this will have the effect of both diluting the value of holding of the existing shareholders it will also increase the value of the company as it will have a stronger capital base. Thus the effect of the additional capital on existing shareholders will be balanced.
- 7.20 It is therefore not proposed that the value of remaining cashed-out losses be clawed back on the issue of new shares by the company and the loss recovery income rule will not apply. The loss recovery income rule will only be

targeted at shareholders when the shareholders receive a direct benefit from the sale of their shares.

- 7.21 We may, however, need to consider whether this rule could be inadvertently or inappropriately used in an initial public offer situation to get around the rule relating to the sale of shares.

Submission points

- Are there possible unintended consequences that have not been captured above?
- What other measures may be needed to minimise risk to the tax base?
- Would the proposed loss recovery rules be significantly less complex if the proposed rules governing the sale of company shares were not included, and the loss stayed within the company? If yes, how else could a neutral tax outcome be achieved, with lower complexity, for situations where some of the shares of the company are sold?