

Black hole R&D expenditure

A government discussion document

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CHAPTER 1

Introduction

- 1.1 Budget 2013 announced proposed changes to six areas of “black hole” business expenditure. The proposals were part of the Government’s focus on providing an environment that supports business. This discussion document continues this focus on supporting business growth and innovation by suggesting changes to deal with the “black hole” tax treatment of some research and development (R&D) expenditure.
- 1.2 Black hole expenditure is business expenditure that is not immediately deductible for tax purposes and also does not form part of the cost of a depreciable asset for tax purposes, and therefore cannot be deducted over time as depreciation.
- 1.3 Providing tax deductibility, in appropriate circumstances, for capitalised development expenditure that is currently black hole expenditure has the potential to remove or mitigate economic distortions which may act as a disincentive to businesses undertaking R&D.
- 1.4 The proposals in this document differ from the black hole expenditure changes announced in Budget 2013. One of those proposals will improve the symmetry between the tax treatment of successful and unsuccessful projects by providing immediate deductibility for capital expenditure incurred for the purpose of applying for the grant of a patent or plant variety rights, when no depreciable asset was ultimately created. However, the scope of that proposed change was limited as the current interpretation of the depreciable costs of these assets (discussed in Chapter 2) meant the deductible expenditure was restricted to the legal and administrative costs of seeking to obtain the applicable intellectual property right.
- 1.5 The proposals in this document go beyond the Budget 2013 proposal announcement, and aim to address black hole R&D expenditure, when the R&D is successful and unsuccessful. Their impact on removing current disincentives to businesses investing in innovation is potentially much greater.

Proposals to address black hole expenditure on successful R&D

Patents and plant variety rights

- 1.6 The Government proposes allowing depreciation of capitalised development expenditure that relates to an invention that is the subject of a patent or a patent application, or a plant variety that is the subject of plant variety rights.

- 1.7 Under the Government’s favoured policy option, capitalised development expenditure (that relates to a patent, patent application or plant variety rights, as the case may be) incurred from the date of the release of this discussion document would be allowed to be depreciated over the legal life of the asset to which it relates.

Software development

- 1.8 The Government proposes that the legislation be amended to clarify that capitalised expenditure incurred by a person in the successful development of software for use in their own business is depreciable. This would clarify the law to be in line with the policy intent and the Government’s understanding of current taxpayer practice. To provide certainty for taxpayers, the Government proposes that this amendment be made retrospective to the statutory time-bar.

Proposal to address black hole expenditure on unsuccessful R&D

- 1.9 The Government proposes allowing a person an immediate tax deduction for capitalised development expenditure they have incurred from the date of the release of this discussion document if:
- (i) the intangible asset to which the expenditure relates has been *derecognised* under the accounting rules (other than due to its disposal) before it is used or available for use—
 - (a) in deriving income; or
 - (b) in carrying on a business for the purpose of deriving income;
 - (ii) the person intended that the expenditure would lead to an item of “depreciable intangible property” (that is, an asset listed in schedule 14 of the Income Tax Act 2007) of the person; and
 - (iii) no deduction has been allowed for the expenditure under any other provision.

How to make a submission

- 1.10 The Government invites submissions on the proposed reforms and points raised in this discussion document. Submissions should be addressed to:

Black hole R&D expenditure proposals
C/- Deputy Commissioner, Policy and Strategy
Policy and Strategy
Inland Revenue Department
PO Box 2198
Wellington 6140

Or email policy.webmaster@ird.govt.nz with “Black hole R&D expenditure proposals” in the subject line. Electronic submissions are encouraged. The closing date for submissions is 17 December 2013.

- 1.11 Submissions should include a brief summary of major points and recommendations. They should also indicate whether it would be acceptable for Inland Revenue and Treasury officials to contact those making the submission to discuss the points raised, if required.
- 1.12 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, or parts thereof, on the grounds of privacy, or commercial sensitivity, or for any other reason, will be determined in accordance with that Act. Those making a submission who consider that 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 building innovation to help grow New Zealand's economy. Innovation creates new sources of economic growth by delivering new products and processes, as well as generating improvements in the quality and cost of existing products and processes. "Encouraging business innovation" is one of the seven key initiatives of the Building Innovation work-stream, which recognises that enabling R&D is a key element in the innovation process.
- 2.2 The Government wishes to gauge the extent to which the potential for R&D expenditure to receive "black hole" tax treatment is discouraging businesses' R&D investment.

Black hole expenditure

- 2.3 "Black hole" expenditure is business expenditure that is not immediately deductible for tax purposes and also does not form part of the cost of a depreciable asset for tax purposes, and therefore cannot be deducted over time as depreciation.
- 2.4 When R&D expenditure that has been capitalised has given rise to an asset that is depreciable for tax purposes, the appropriate tax treatment is to allow that expenditure to be depreciated over the life of the asset. When R&D expenditure that has been capitalised fails to give rise to a valuable asset, the appropriate tax treatment, at least in some circumstances, is to allow tax deductions for that expenditure. However, the current tax treatment of capitalised development expenditure leaves the potential for this expenditure to be rendered neither deductible nor depreciable for tax purposes.
- 2.5 The potential for R&D expenditure to be treated as black hole expenditure results in economic distortions. It can cause a risk-neutral (or risk-averse) investor deciding between two alternative investments offering the same expected pre-tax rate of return, but when one of the investment options carries a risk of black hole expenditure occurring, to prefer the other investment option. Furthermore, businesses may be incentivised to complete projects that (ignoring tax) have been discovered to be inefficient, simply to avoid black hole treatment of sunk capital expenditure.

Current tax settings for R&D

- 2.6 As stated in the Government's Revenue Strategy, the Government supports a broad-base, low-rate tax system that minimises economic distortions. Under such a tax system, the tax treatment of alternative forms of income and expenditure is as even as possible. This ensures that overall tax rates can be kept low, while also minimising the biases that taxation can introduce into economic decisions. In line with this strategy, 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

- 2.7 Expenditure on R&D that is regarded as a revenue 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 when the expenditure is expensed under paragraph 68(a) of the New Zealand Equivalent to International Accounting Standard 38 (NZ IAS 38 *Intangible Assets*). For the purposes of paragraph 68(a), paragraphs 54 to 67 of NZ IAS 38 are applied.
- 2.8 A taxpayer who is allowed a deduction under section DB 34 of the Income Tax Act 2007 is entitled to the deduction in the income year in which they incurred the expenditure (that is, immediate deductibility). Alternatively, in certain circumstances, they may choose to allocate all or part of the deduction (for expenditure that is not interest) to later income years. Although a taxpayer may have a choice over the timing of the deduction, R&D expenditure that is deductible under section DB 34 of the Income Tax Act 2007 is generally referred to in this document as being immediately deductible.
- 2.9 Under NZ IAS 38, expenditure on an intangible item is expensed up until the asset recognition criteria are met. The intangible asset recognition criteria require an entity to demonstrate all of the following:
- (a) The technical feasibility of completing the intangible asset so that it will be available for use or sale.
 - (b) Its intention to complete the intangible asset and use or sell it.
 - (c) Its ability to use or sell the intangible asset.
 - (d) How the intangible asset will generate probable future economic benefits. Among other things, the entity can demonstrate the existence 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.
 - (e) The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset.
 - (f) Its ability to measure reliably the expenditure attributable to the intangible asset during its development.

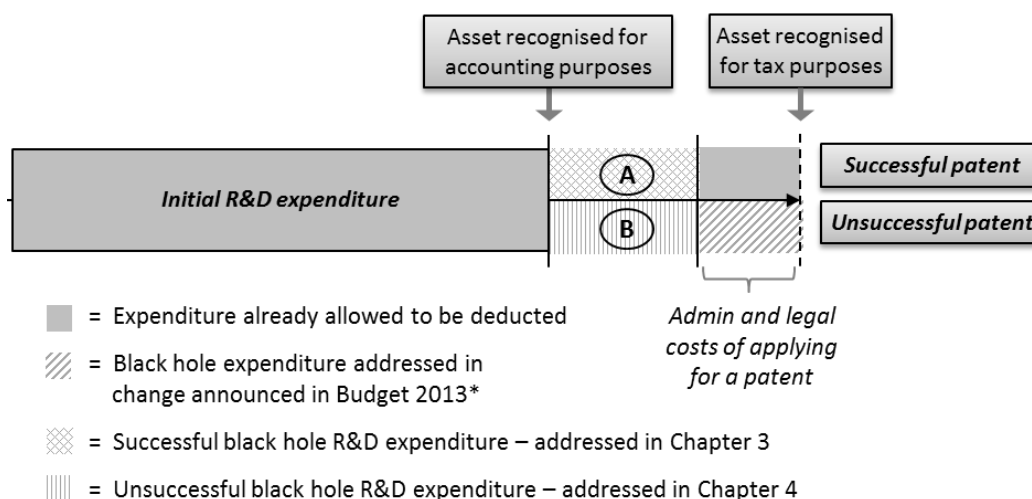
- 2.10 Once all of these asset recognition criteria are satisfied, the immediate deductibility of R&D expenditure ceases and all further development expenditure is capitalised.
- 2.11 This capitalised development expenditure can only be depreciated (that is, deducted over the life of an asset) for tax purposes once there is “depreciable property” under the Income Tax Act 2007. Expenditure on intangible property may only be depreciated if the intangible property is listed in schedule 14 of the Income Tax Act 2007, which lists items of “depreciable intangible property”. For an item of property to be listed in schedule 14, it must be intangible and have a finite useful life that can be estimated with a reasonable degree of certainty on the date of its creation or acquisition.
- 2.12 In the event that the project does not create a depreciable asset for tax purposes, the development expenditure that has been capitalised will be rendered non-deductible, either immediately or over a period of time.
- 2.13 Moreover, even if the project does create an asset that is listed in schedule 14, capitalised development expenditure incurred in creating the asset may still be rendered non-deductible, either immediately or over a period of time. As explained below, this may occur because, although the expenditure has given rise to an asset that is depreciable for tax purposes, the depreciable costs of the asset have been interpreted to exclude development expenditure.

Depreciable patent costs

- 2.14 An interpretation statement issued by the Commissioner of Inland Revenue takes the view that the depreciable patent costs (for a taxpayer who has lodged a patent application with a complete specification or had a patent for an invention granted) are limited to the administrative and legal fees incurred in the patent process.¹ According to the Commissioner’s view of the law, capitalised development expenditure relating to the invention that is the subject of the patent (or patent application) is potentially neither deductible nor depreciable for tax purposes.
- 2.15 Figure 1 illustrates the tax treatment of expenditure incurred both successfully and unsuccessfully in attempting to create a patent. The area marked “A” represents the capitalised development expenditure relating to a patented invention which is currently black hole expenditure. A proposal to make this expenditure depreciable is discussed in Chapter 3. The area marked “B” represents the capitalised development expenditure relating to an invention for which a patent is not obtained which is currently black hole expenditure. A proposal to make this expenditure deductible is discussed in Chapter 4.

¹ Interpretation statement “Income tax treatment of New Zealand patents”, *Tax Information Bulletin* Vol 18, No 7 (August 2006), p 51.

Figure 1: Patent



* This expenditure is currently deductible if the patent application has been lodged.

Depreciable plant variety rights costs

2.16 Although the Commissioner’s interpretation statement referred to previously is confined to patents, it is likely that the depreciable costs of plant variety rights would be interpreted in the same way, given that they are both types of intellectual property rights obtained by registration following an R&D process.

Depreciable costs of software development for use in own business

2.17 The Commissioner’s views on the income tax treatment of computer software are contained in a 1993 policy statement.² The statement applies to expenditure incurred on or after 1 July 1993.

2.18 In outlining the tax treatment of expenditure incurred on in-house software development, the statement says that “when the development is completed capitalised costs will be deductible under the depreciation regime”. This indicates that the policy intent was that capitalised expenditure incurred in the development of software by a business for its own use should be depreciable.

2.19 The Government’s understanding is that taxpayers who have developed software for use in their own business, based on the 1993 policy statement, have been depreciating all of the capitalised development costs. Although this is in accord with the policy intent, some doubt has been expressed about whether this approach is correct under current law.

² Appendix to *Tax Information Bulletin* Vol 4, No 10 (May 1993).

- 2.20 “The copyright in software, the right to use the copyright in software, or the right to use software” is listed as an item of “depreciable intangible property” in schedule 14 of the Income Tax Act 2007. The rights to use listed in schedule 14 relate to licensees.³ It is only “the copyright in software” that will be relevant to a taxpayer who has self-developed software.
- 2.21 A taxpayer who develops their own software will own the copyright for that software. The copyright arises by operation of law. It comes into existence automatically when an original work is created. There is no registration process and no fee to be paid to obtain the copyright.
- 2.22 The question then arises: what are the depreciable costs of “the copyright in software” for a taxpayer who has self-developed software? Arguably, when a business develops software for its own use, there will not be a cost associated with the copyright. There is support in case law for the view that “software” can exist independently from the depreciable software rights set out in schedule 14.⁴ Therefore, it is possible to have software that is not depreciable under schedule 14.

Other schedule 14 assets

- 2.23 Note that some of the assets listed in schedule 14 are not created from capitalised development expenditure and are therefore not relevant for the purposes of this discussion document, as it is concerned only with black hole R&D expenditure. This includes the various “rights to use” listed in schedule 14, which are only relevant to licensees. The depreciable cost of these assets for the licensee will be based on the price paid by the licensee to obtain the right to use.

Further comment

- 2.24 The Government is aware that the possibility of development expenditure being treated as black hole expenditure exists. However, the intangible asset recognition criteria seem quite a high bar to satisfy, which suggests that the vast majority of R&D expenditure is already immediately deductible. A taxpayer knows in advance that once they recognise an intangible asset for accounting purposes, concessionary tax treatment under section DB 34 will cease, and that any further development expenditure on the asset will be capitalised. On this basis, it is difficult to envisage that taxpayers would “prematurely” incur substantial capitalised R&D expenditure under current tax settings.
- 2.25 That said, the inability of a business to depreciate part of its development expenditure could act as a barrier to investment in innovation. The Government is therefore seeking greater understanding of the extent to which black hole development expenditure is a problem in practice by undertaking this consultation.

³ *Trustees of CB Simkin Trust v CIR* [2003] 2 NZLR 315 (CA).

⁴ *Erris Promotions Ltd v CIR* [2004] 1 NZLR 811 (HC).

Consultation questions

- What proportion of total R&D expenditure is typically capitalised?
- When an R&D project results in an application for the grant of a patent or plant variety rights, how long is the typical time-period spent between recognition of an intangible asset for accounting purposes and the application being made? How much is typically spent on development of the asset during this time?
- What types of development expenditure are typically incurred after the point of recognition of an intangible asset for accounting purposes?

Sale of successful output from R&D

- 2.26 Under current tax settings, profits from the sale of assets created from R&D are not always taxed. When the sale of outputs from R&D is untaxed, the seller is deriving black hole income (the opposite of black hole expenditure). Under current tax settings, a large part of the R&D cost of developing such assets is deductible. This, combined with the large scope for deriving untaxed income from the sale of the output from the R&D, means that there is:
- (i) an existing inconsistency between R&D outputs that are taxed upon sale and those that are not; and
 - (ii) an existing asymmetry when R&D expenditure is deductible but the sale of the resulting R&D outputs is not taxed.
- 2.27 Allowing even more R&D expenditure to be deductible will exacerbate these inconsistencies/asymmetries. This is perhaps the strongest argument against allowing additional deductions for R&D expenditure.
- 2.28 Tax does apply when income arises from royalties or from the sale of patent rights or patent applications.

CHAPTER 3

Black hole expenditure on successful R&D

- 3.1 This chapter discusses the situation when capitalised development expenditure has given rise to a valuable asset, but the expenditure is unable to be depreciated over time. There are two different scenarios when this might occur. The first scenario is when the expenditure has given rise to an asset that is depreciable for tax purposes, but the depreciable costs of the asset have been interpreted to exclude development expenditure (for example, a patent). The second scenario is when the expenditure has given rise to an asset that is not depreciable for tax purposes (for example, know-how).

Proposed solutions for first scenario

Patents and plant variety rights

- 3.2 The Government proposes making capitalised development expenditure that relates to an invention that is the subject of a patent or a patent application depreciable. This could be achieved by amending the Income Tax Act 2007 so the depreciable cost of a patent application and a patent expressly includes capitalised development expenditure incurred in connection with devising the invention, for taxpayers who have lodged a patent application or had a patent for an invention granted.
- 3.3 It is likely that under any proposal to address black hole R&D expenditure on successful assets, the capitalised development expenditure relating to the invention that is the subject of the patent would become part of the depreciable patent costs. This tax treatment is appropriate if the residual value of the know-how (created by the capitalised development expenditure) is nil at the end of the life of the patent. After 20 years, the taxpayer will still have the know-how, but the invention will have been publicly disclosed and the monopoly rights granted by the patent will have expired. The Government is interested in your view on whether ascribing a value of nil to the know-how at this point is a close approximation to commercial reality.
- 3.4 The Government also proposes making the capitalised development expenditure that relates to a plant variety that is the subject of plant variety rights depreciable.
- 3.5 Policy options for making capitalised development expenditure on these assets depreciable are discussed in detail on pages 11-12.

Policy options

- 3.6 Several policy options exist. Under the first two options described below, depreciation deductions for capitalised development expenditure would be restricted to new assets.
- 3.7 A third option would allow depreciation deductions for existing as well as new assets.

Option 1

- 3.8 The first option is to allow only capitalised development expenditure (that relates to a patent, patent application or plant variety rights, as the case may be) incurred from the date of the release of this discussion document to be eligible for depreciation deductions. This option targets new R&D expenditure.

Option 2

- 3.9 The second option is to allow depreciation deductions for assets created (that is, recognised for tax purposes) from the date of the release of this discussion document. This option would allow all of the capitalised development expenditure relating to the asset (whenever incurred) to be eligible for depreciation deductions. This option would reflect the view that the status quo is a poor outcome under tax policy frameworks. However, it would provide a windfall gain to those who have incurred sunk costs on the development of these assets, have a higher fiscal cost for the Crown, and create boundary issues (as the tax treatment of past expenditure would differ between assets recognised for tax purposes before and after the discussion document's release).

Option 3

- 3.10 A third option is to allow depreciation deductions for capitalised development expenditure that relates to existing as well as new assets. By targeting existing assets in addition to new innovation, this option would also reflect the view that the status quo is a poor outcome under tax policy frameworks. This option would have a significantly higher fiscal cost for the Crown. It does, however, offer an additional benefit in that it makes it more attractive for someone who currently holds one of these assets (which they have developed) to continue to hold it rather than sell it. This is because currently a purchaser of one of these assets can depreciate the entire purchase cost, which means that such assets are potentially more valuable to purchasers than to the person who has developed them. However, this option would provide a windfall gain to holders of existing self-developed assets who made an economic decision to proceed with developing the asset in the expectation that development expenditure incurred from the point of asset recognition for accounting purposes would be neither immediately deductible nor depreciable.

- 3.11 Under this option, a pro-rated amount of the capitalised development costs of an existing asset would be able to be depreciated over the asset's remaining legal life, as if the asset had been depreciated from the beginning of its legal life. For example, if the capitalised development costs of a patent were \$100,000 and there were five years remaining in the patent's legal life at the date the policy came into effect, the taxpayer would be able to claim a \$5,000 depreciation deduction in each of the five years ($\$100,000 \text{ capitalised development costs} / 20\text{-year legal life of a patent}$). This means that, of the \$100,000 that was previously black hole expenditure, \$25,000 would be deductible over time and \$75,000 would remain black hole expenditure.
- 3.12 Aside from the potentially significant fiscal cost, the reason why the amount of the capitalised development costs able to be depreciated over the asset's remaining legal life is pro-rated under the third option is because allowing all capitalised development costs of existing assets to be depreciated would create undesirable boundary issues. It would enable a taxpayer who holds a patent which has a year remaining in its legal life to deduct all of the capitalised development costs of the patent, whereas a taxpayer who held a recently expired patent would not be able to deduct any of the capitalised development costs. This does not seem to be an equitable outcome.
- 3.13 The Government considers that all three options discussed are an improvement upon the status quo. However, the Government favours option 1. It targets new R&D spending only and does not give windfall gains to those who have incurred sunk costs. Therefore, any fiscal cost incurred as a result of the policy change would be more closely aligned with the Government's objective of increasing new business R&D. The other options provide limited additional benefit in reducing the bias that those who have incurred sunk costs have towards selling the resulting asset over continuing to hold it.

Consultation questions

- At the end of a patent's legal life, is ascribing a residual value of nil to the know-how underlying the patent a close approximation to commercial reality?
- Do you agree with the Government's proposed solution to the problem of black hole development expenditure where a depreciable asset for tax purposes has been created? If not, can you provide your reasons and suggest a better alternative?

Software development

- 3.14 The Government proposes that the legislation be amended to clarify that capitalised expenditure incurred by a taxpayer in the successful development of software for use in their own business is depreciable. This would clarify the law to be in line with the policy intent and the Government's understanding of current taxpayer practice. To provide certainty for taxpayers, the Government proposes that this amendment be made retrospective to the statutory time-bar.

Second scenario

- 3.15 The second scenario where capitalised development expenditure that has given rise to a valuable asset is unable to be depreciated over time is when the asset created is not depreciable (for example, know-how).
- 3.16 Under tax depreciation policy frameworks, tax depreciation is meant to approximate true economic depreciation. When an asset does not decline in value over time, the appropriate tax treatment is not to allow depreciation deductions.
- 3.17 Intangible assets are only depreciable if they are listed in schedule 14 of the Income Tax Act 2007. For an item of property to be listed in schedule 14, it must be intangible and have a finite useful life that can be estimated with a reasonable degree of certainty on the date of its creation or acquisition. Although not an explicit requirement, the assets listed in schedule 14 tend to have finite legal lives that are determined under contract or statute. A finite legal life provides comfort that the requirement for the asset to have a finite useful life that can be estimated with a reasonable degree of certainty on the date of its creation or acquisition is met. When an intangible asset does not have a finite legal life (for example, know-how and trademarks) it is difficult to satisfy the finite useful life test. Therefore, the appropriate tax treatment for these assets is that they are not depreciable.
- 3.18 That a particular intangible asset is non-depreciable for tax purposes should not, however, be taken as an indication that the asset has an infinite useful life. Rather, the asset may have an indefinite useful life. It is this indefinite useful life that presents a problem for determining the basis upon which the capital costs of the asset should be deducted over the asset's useful life.
- 3.19 As a result, the Government considers it would not be appropriate to allow depreciation deductions for capitalised expenditure on intangible assets that are not currently listed in schedule 14, as it has not been established that these assets have finite useful lives that can be estimated with a reasonable degree of certainty. New intangible assets can, however, be considered for inclusion in schedule 14 on a case-by-case basis. In deciding whether a new intangible asset should be added to schedule 14, a further relevant consideration is whether there is a low risk of the asset being used in tax avoidance schemes if it is made depreciable.
- 3.20 At some point in time, the usefulness of a non-depreciable intangible asset may cease. Section EE 39 of the Income Tax Act 2007 allows a person to deduct the remaining undepreciated costs of an item of depreciable property that is no longer used. By contrast, when a non-depreciable asset is no longer used, there is no ability to deduct the capital cost of the asset.

- 3.21 However, giving a deduction for the capital cost of a non-depreciable asset when its usefulness ceases is akin to giving a deduction for a capital loss. Our tax system generally does not give deductions for capital losses on investments in other types of non-depreciable assets, such as land and shares. As our tax system does not comprehensively tax capital gains, not giving deductions for capital losses generally means that there is a consistent tax treatment. If capital gains were comprehensively taxed, giving deductions for capital losses may be appropriate as this would ensure a consistent tax treatment.
- 3.22 Additionally, if a deduction were to be given for the entire capital cost of an asset when its usefulness ceases, the deduction for the expenditure would not be matched with the income derived from the asset. This is undesirable from a policy perspective. It is true that in the year that a depreciable asset's usefulness ceases it is possible that the taxpayer will have derived little or no income from the asset, while being able to potentially deduct a large part of the asset's cost. However, with depreciable assets there will, at least, be some sort of matching of income derived with related expenditure while the asset is useful.
- 3.23 Given these arguments, the Government considers that it would not be appropriate to allow deductions for non-depreciable assets that are no longer useful.

Consultation questions

- How would you suggest that capitalised development expenditure that has given rise to an intangible asset with an indefinite useful life should be dealt with?
- Are there any other instances of black hole expenditure on successful R&D not covered in this discussion document?

CHAPTER 4

Black hole expenditure on unsuccessful R&D

- 4.1 This chapter discusses capitalised development expenditure that has not given rise to a valuable asset – either an asset that is depreciable for tax purposes, or an asset that is non-depreciable for tax purposes because it does not have a finite useful life that can be estimated with a reasonable degree of certainty (for example, know-how).
- 4.2 Conceptually, unsuccessful expenditure should be tax deductible when it would have led to a depreciable asset if the project had been successful.
- 4.3 Where the expenditure would have led to a non-depreciable asset if the project had been successful, allowing a tax deduction for unsuccessful capital expenditure would bias investment decisions in favour of these kinds of assets.
- 4.4 An alternative view is that all such expenditure should be deductible as the capital expenditure has not created any value or enduring benefit. However, this is akin to giving a deduction for a capital loss. As mentioned above, our tax system does not generally provide deductions for capital losses, which generally means that there is a consistent tax treatment, given that our tax system generally does not tax capital gains either.
- 4.5 As previously discussed, New Zealand's current R&D expenditure deductibility rules are linked to the accounting rules. Expenditure on R&D is generally deductible for tax purposes up until all the criteria for recognition of an intangible asset in the accounting rules have been met. Once an intangible asset has been recognised under the test in the accounting rules, all further development expenditure is capitalised. The tax rules follow this treatment.

Proposed solution

- 4.6 As well as a test for recognising an intangible asset, the accounting rules contain a derecognition test for an intangible asset. This test is found at paragraph 112 of NZ IAS 38, which provides that:
- An intangible asset shall be derecognised:
- (a) on disposal; or
 - (b) when no future economic benefits are expected from its use or disposal.

4.7 The Government proposes allowing a person a tax deduction for capitalised development expenditure they have incurred if the following three conditions are met:

- The intangible asset to which the expenditure relates has been *derecognised* under the accounting rules (other than due to its disposal) before it is used or available for use—
 - in deriving income; or
 - in carrying on a business for the purpose of deriving income.
- The person intended that the expenditure would lead to an item of “depreciable intangible property” (that is, an asset listed in schedule 14 of the Income Tax Act 2007) of the person.
- No deduction has been allowed for the expenditure under any other provision.

Timing of deductions

4.8 There are two main options for the timing of deductions for unsuccessful capitalised development expenditure:

- allow an immediate deduction for the unsuccessful capitalised development expenditure; or
- depreciate the unsuccessful capitalised development expenditure over the estimated useful life of the asset the development expenditure was aimed at creating.

4.9 Depreciating the unsuccessful capitalised development expenditure over the estimated useful life of the unsuccessful asset is, theoretically, an economically neutral treatment. By contrast, an immediate deduction (or spreading it over a shorter period than the asset’s estimated useful life) is non-neutral to the taxpayer’s advantage.

4.10 Depreciating the unsuccessful capitalised development expenditure over the estimated useful life of the asset the development expenditure was aimed at creating is therefore, in theory, preferable. However, in practice, there are a number of reasons why allowing an immediate deduction may be preferred, including the following:

- Allowing an immediate deduction is consistent with the current treatment for depreciable assets that are written off, where the remaining undepreciated costs are deducted on write off. If the proposed rules did not match this treatment, there would be an incentive to develop uneconomic assets to the depreciable asset stage in order to write them off and obtain the immediate deduction.
- Solutions implemented for other black hole expenditure problems have involved allowing an immediate deduction. There is a strong case for consistency of approach.

- 4.11 For these reasons, the Government proposes allowing an immediate deduction for unsuccessful capitalised development expenditure.
- 4.12 However, the case for allowing an immediate deduction for unsuccessful capitalised development expenditure becomes less compelling the longer the period that the asset would have been valuable, had it been successfully created.
- 4.13 In 2012, an amendment was made to the Income Tax Act 2007 allowing an immediate deduction for capitalised expenditure incurred in unsuccessful software development. The period that software is expected to be valuable generally ranges between one and four years, depending upon whether the software is designed for a single-year application or longer. It was considered that the relatively short life of software made allowing an immediate deduction for expenditure on unsuccessful software development the appropriate policy.
- 4.14 By comparison, patents have a legal life of 20 years, and plant variety rights have a legal life of 20 years in the case of non-woody plants and 23 years in the case of woody plants.⁵ The longer life of these assets means that allowing immediate deductibility for unsuccessful expenditure would create a greater bias in favour of investing in these types of assets, at the margin. This bias would be strongest in the case of allowing immediate deductibility for unsuccessful expenditure incurred in developing an asset that would not have declined in value over time had the development been successful.

Integrity measures

- 4.15 In the event that a failed asset from an abandoned R&D project (which has had capitalised development expenditure deducted) becomes useful, the Government proposes that the capitalised development expenditure previously allowed as a deduction should be clawed back as income. Where the useful asset is depreciable, the clawed-back amount should then be able to be depreciated over the estimated useful life of the asset.
- 4.16 In the event that a failed asset from an abandoned R&D project (which has had capitalised development expenditure deducted) is sold, the Government proposes that the capitalised development expenditure previously allowed as a deduction (or the sale proceeds, if this amount is lower) should also be clawed back. The exception would be when the sale of the failed asset would otherwise give rise to assessable income. In such instances, the Government proposes that the entire sales proceeds should continue to be treated as assessable income.

Policy options

- 4.17 The Government has considered two options for allowing deductions for black hole expenditure on unsuccessful R&D.

⁵ Technically, for tax purposes, the legal life of plant variety rights includes the number of whole calendar months during which the person owns the plant variety rights application in relation to which the rights are granted, in addition to the 20 or 23-year term for which the plant variety rights are granted.

Option 1

- 4.18 The first option is to allow deductions only for capitalised development expenditure incurred from the date of the release of this discussion document.

Option 2

- 4.19 The second option is to also allow deductions for capitalised development expenditure incurred before the date of the release of this discussion document, when the asset to which the expenditure relates is derecognised after the date of the release of this discussion document.
- 4.20 The Government proposes that the policy option chosen to address the issue of black hole expenditure on successful R&D should guide the choice of policy option for addressing the issue of black hole expenditure on unsuccessful R&D. If only capitalised development expenditure incurred from the date of the release of this discussion document is to be eligible for depreciation deductions in the case of successful R&D, then the Government considers that, for consistency reasons, it would make sense to allow deductions only for capitalised development expenditure incurred from the date of the release of this discussion document in the case of unsuccessful R&D.

Consultation questions

- Do you agree with the Government's proposed solution to the problem of black hole development expenditure when no valuable asset has been created? If not, can you provide your reasons and suggest a better alternative?
- Do you think that deductions for unsuccessful capitalised development expenditure should be immediate or spread over the estimated useful life of the asset the expenditure was aimed at creating? In particular, when we are talking of expenditure that, if successful, would have given rise to an asset with a 20 to 23-year life, do you think that giving immediate deductibility for unsuccessful expenditure is appropriate? Why or why not?

Issues and risks with allowing deductions for black hole expenditure on unsuccessful R&D

- 4.21 The Government is aware that there are various issues and risks with allowing deductions for unsuccessful capitalised development expenditure that do not arise in the case of successful capitalised development expenditure. These are outlined below.

Eligibility for the deduction

- 4.22 Allowing deductions for unsuccessful capitalised expenditure raises the question of how to test whether the expenditure would have led to an item of “depreciable intangible property” had the project been successful (given that no depreciable asset for tax purposes will have been created). The Government proposes that an intention test could be used, even though this may create practical difficulties as intention is often difficult to prove or disprove.
- 4.23 An alternative option would be not to limit the deduction to expenditure that would have led to an item of “depreciable intangible property” if the R&D project had been successful – in other words, allowing a deduction for all unsuccessful R&D expenditure. If the reason for giving a deduction for capitalised R&D expenditure that has not given rise to a valuable asset is that the taxpayer only incurred the capitalised R&D expenditure because they recognised an asset under the accounting rules “prematurely” (that is, they never got to the point where they had a valuable asset at all), then it is arguable that it should not matter whether the taxpayer intended that the expenditure would lead to an item of “depreciable intangible property” or not. To illustrate this argument, consider the counter-factual situation where the taxpayer had not prematurely recognised an asset under the accounting rules. In this situation the same R&D expenditure would not have been capitalised – it would have been expensed for accounting purposes and deductible for tax purposes, whether or not the taxpayer intended that the expenditure would lead to an item of “depreciable intangible property”.
- 4.24 On the other hand, as a general tax principle, the classification of a particular expense as being of a capital nature is not based on whether it actually produces an enduring benefit but, rather, on whether the expense was intended to produce an enduring benefit. Development expenditure that is intended to create an asset is capital in nature. Section DB 34 is concessionary in that it overrides the capital limitation, giving immediate tax deductions for R&D expenditure that is treated as a revenue expense for accounting purposes.
- 4.25 In reality, the risk of recognising an intangible asset prematurely may be small. R&D expenditure is only capitalised for tax purposes after the taxpayer has demonstrated that all of the intangible asset recognition criteria in the accounting rules are satisfied, as noted in Chapter 2. These criteria are rigorous, which implies that a conservative approach is taken to intangible asset recognition for accounting purposes. Having rigorous asset recognition criteria in the accounting rules makes sense because, generally speaking, the incentive is to recognise an asset as soon as possible. A taxpayer knows in advance that once they recognise an intangible asset for accounting purposes, concessionary tax treatment under section DB 34 will cease, and that any further development expenditure on the asset must be capitalised. This tax treatment is appropriate because the intent of any further development expenditure after the point of asset recognition will be to produce an enduring benefit.

Consultation questions

- Do you agree that allowable deductions for unsuccessful capitalised development expenditure should be confined to expenditure that would have led to an item of “depreciable intangible property” (that is, an asset listed on schedule 14 of the Income Tax Act 2007) if the R&D project had been successful?
- Do you agree with using an intention test to determine whether expenditure would have led to an item of “depreciable intangible property” if the R&D project had been successful? If not, can you provide your reasons and suggest a better alternative?

Residual know-how

- 4.26 When an R&D project is abandoned after the point of intangible asset recognition under the accounting rules but before an intangible asset that is depreciable for tax purposes is created, there is a question around how Inland Revenue would know that the taxpayer does not still have valuable know-how (and therefore conceptually should not be allowed a deduction). It would be unsatisfactory for the integrity of the tax system if taxpayers were able to receive deductions for capital expenditure that has created valuable know-how. It would also increase the fiscal cost for the Crown.

Consultation questions

- Is there a risk that taxpayers might derecognise a valuable intangible asset (bearing in mind that this would involve writing off the asset for accounting purposes too) in order to get an immediate tax deduction?
- If this is a material risk, how would Inland Revenue determine whether the taxpayer retained valuable know-how and should be denied the deduction, or whether it was a genuine failed asset and they should be allowed a deduction? If Inland Revenue would have no way of determining this, is this fatal to the policy proposal?

Perverse incentives for marginal projects

- 4.27 Allowing immediate deductibility of unsuccessful capitalised development expenditure would create a perverse incentive for taxpayers not to complete marginal projects because, when the value of exploitation is low or uncertain, immediate deductibility of unsuccessful capitalised development expenditure may be preferred by the taxpayer over depreciation of successful capitalised development expenditure.

Consultation question

Is this perverse incentive for taxpayers not to complete marginal projects something we should be willing to bear, or is this sufficient reason to prefer depreciating capitalised development expenditure over the estimated useful life of the asset that the development expenditure was aimed at creating?

Re-labelling incentives

4.28 Allowing deductions for unsuccessful capitalised development expenditure would increase incentives for taxpayers to re-label expenditure in order to obtain a deduction. The risk of taxpayers re-labelling non-R&D expenditure as R&D expenditure is one of the major concerns associated with providing tax incentives for R&D expenditure. However, there is reason to believe that re-labelling risks would be much lower in the case of providing immediate deductions for unsuccessful capitalised development expenditure compared with R&D tax incentives (such as an R&D tax credit). This is because the treatment that would be accorded to any expenditure re-labelled as unsuccessful capitalised development expenditure under this proposal (that is, immediate deductibility) would be no more favourable than that which is accorded to most other non-capital business expenditure. By contrast, in the case of say, an R&D tax credit, a taxpayer could benefit from re-labelling *any* non-R&D expenditure as R&D expenditure.

4.29 Therefore, under the Government's proposed solution to the problem of black hole expenditure on unsuccessful R&D, the only business expenditure that it would benefit a taxpayer to re-label as capitalised development expenditure would be expenditure that is not immediately deductible (such as expenditure that is of a capital nature).

Consultation question

How significant is the risk of taxpayers re-labelling expenditure as unsuccessful capitalised development expenditure?

Risk of breaking up R&D projects

4.30 If deductions for unsuccessful capitalised development expenditure are allowed, there may be a risk that taxpayers break up R&D projects to get immediate deductibility of capitalised development expenditure on failed aspects of what is really a single project.

Consultation questions

- Is the potential for taxpayers to break up R&D projects to get immediate deductibility of capitalised development expenditure on failed aspects of what is really a single project a material risk in practice?
- Even if this is a material risk in practice, is this an incorrect outcome from a policy perspective?
- Are there any other issues and risks with allowing deductions for unsuccessful capitalised development not covered in this discussion document?