Research & Development: New tax incentives for small and medium-sized companies

A Technical Note by the Inland Revenue

RESEARCH & DEVELOPMENT: NEW TAX INCENTIVES FOR SMALL AND MEDIUM-SIZED COMPANIES

A TECHNICAL NOTE BY THE INLAND REVENUE

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Abbreviations

The following abbreviation are used in this document.

CAA 1990	Capital Allowances Act 1990
DTI	Department of Trade and Industry
EU	European Union
ICTA 1988	Income and Corporation Taxes Act 1988
NICs	National Insurance Contributions
OECD	Organisation for Economic Co-operation and Development
pa	per annum
PAYE	Pay-as-you-earn
R&D	Research and development
SME	Small or medium-sized enterprise
SRA	Scientific research allowance
SSAP	Statement of Standard Accounting Practice

RESEARCH & DEVELOPMENT: NEW TAX INCENTIVES FOR SMALL AND MEDIUM-SIZED COMPANIES

A TECHNICAL NOTE BY THE INLAND REVENUE

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We would welcome comments on the discussion in this Technical Note. The deadline is 31 July 1999 but it would be very helpful to have views as soon as they are available.

We would prefer to have comments via e-mail because this makes it easier to circulate copies quickly. E-mail comments can be sent to Alan O'Brien at:

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However, we also welcome hard copy comments. Please send them to:

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If you send both e-mail and hard copy it would help if you could mention this so we can readily see which ones we have considered.

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CHAPTER 1 - INTRODUCTION

1.1. The Government recognises the important role which research and development (R&D) plays in a modern knowledge driven economy. It is keen to see the UK improving its place among the top rank of world R&D performers. On Budget Day last year, the Treasury and DTI issued a joint Consultation Document "Innovating for the Future: Investing in R&D" exploring how best to remove barriers to R&D investment.

1.2. Building on responses to that consultation, the Government has launched a wide range of new initiatives to support and encourage R&D in the UK. As part of that programme, this technical note presents detailed proposals for an innovative new tax relief for R&D.

1.3. This note takes forward the initiative announced in the Pre-Budget Statement of 3rd November 1998, when the Chancellor said:

> "More than ever innovation is the key to higher productivity. So we must see that inventions which are created in Britain are developed and manufactured in Britain.
>
> The first step is a higher quality and quantity of research and development. So the Government will consult small business on supplementing the current tax relief for R&D with a more effective tax credit for small business based on the volume of R&D investment."

1.4. The Pre-Budget Report published on the same day (see Appendix 1 for the full extract from the report) said:

> "The UK needs to enhance a first-rate science base, putting proper systems in place for exploiting the commercial value of research, and getting scientists and business to take a much closer interest in each other."

and explained that:

> "The Government believes the case for extra *(tax)* incentives is strongest in the SME sector. It will consult with business further during the pre-Budget period on the feasibility and effectiveness of a volume-based R&D tax credit for SMEs. This work will also look at ways of encouraging R&D spending by companies not yet in taxable profit.
>
> As a first step in working towards a potential new tax incentive, and also to assist the operation of the existing SRA scheme, the Inland Revenue and the DTI will review the definition of business research and development for fiscal use, and consult business further on proposed new clearer guidelines on the Government's interpretation of that definition."

Technical note on R&D Definition and Appeals

1.5. The Inland Revenue published a technical note on 14 January 1999 "Research and Development: Definition and Appeals" covering the first step of this initiative. The note examined how better guidance may be offered on what activities qualify as R&D for tax purposes, offering as possible approaches revised guidelines produced by the DTI and a new more detailed tax definition of R&D. It also examined the question of resolution of disputes over whether particular expenditure qualifies under the definition.

1.6. 1,200 copies of the technical note have been issued. Around 60 responses have been received so far from a wide range of interested parties including universities, representative bodies, companies and individuals.

1.7. The Government will consider carefully the responses to the first technical note, for which it is most grateful, and to this technical note before deciding whether to make changes to the definition of R&D and the appeals procedure for the purposes of the special tax reliefs for R&D including SRA (the existing special tax relief for R&D) and R&D tax credits (the new special tax relief for R&D proposed in this note).

This technical note

1.8. This Technical Note takes forward the other part of the initiative announced in the Pre-Budget Statement, to discuss with business a volume-based R&D tax credit for SMEs. It sets out detailed proposals for a possible scheme. The Government would welcome the views of business on these proposals.

1.9. The Government also plans to consult the European Commission, whose approval may be required before a final scheme can be introduced as parts of this measure may be a State Aid.

The proposed scheme

1.10. The proposed scheme would be open to small and medium sized companies spending more than £50,000 a year on R&D. In addition to the existing special relief for R&D, which gives 100% relief for expenditure on R&D, the company would be able to claim a further relief (a "tax credit") equal to 50% of the current spending on R&D, taking the total relief on current spending on R&D to 150% of cost.

1.11. With the additional benefit of this new relief, a company that is paying tax at 20% would receive a total saving in tax of 30% of the cost of qualifying R&D.

1.12. Recognising that an increasing number of companies undertake R&D before they have any sales or profits to offset against costs, the proposed scheme would also benefit companies that are not in taxable profit. It would allow these companies to surrender unused relief for current spending on R&D, from both the existing relief and the tax credit, to the Exchequer at a discount from its nominal tax value. The company would receive a total saving of 24% of the cost of qualifying R&D.

1.13. Chapter 2 of this technical note considers who would qualify for the tax credit.

1.14. Chapter 3 considers what expenditure would qualify for the tax credit.

1.15. Chapter 4 looks at how the tax credit would work.

1.16. Chapter 5 looks at the position of companies not in taxable profit.

1.17. Chapter 6 examines possible changes to SRA.

1.18. Chapter 7 brings together the issues raised in this Technical Note on which the views of business are sought.

1.19. Appendix 1 contains extracts from the Pre-budget report, Appendix 2 extracts from the report of the Williams Group "Financing of High Technology Businesses" and Appendix 3 details of other help proposed for firms not in taxable profit.

Technical note on taxation of intellectual property

1.20. As foreshadowed in the Pre-Budget Report, the Inland Revenue is also publishing today a technical note on "Reform of the taxation of intellectual property" which complements these proposals on R&D.

Planned implementation

1.21. The Government plans to introduce any changes arising out of these three technical notes in the 2000 Budget.

CHAPTER 2 - WHO WOULD QUALIFY FOR THE PROPOSED TAX CREDIT SCHEME?

2.1. The Government announced in the Pre-Budget Report that it:

- believes the case for extra incentives is strongest in the SME sector and
- plans to consult with business on the feasibility and effectiveness of a volume-based R&D tax credit for SMEs and at ways of encouraging R&D spending by companies not yet in taxable profit.

Companies

2.2. The proposed tax credit scheme would be limited to companies that are SMEs.

2.3. It would be difficult to devise rules which allowed the scheme to be extended simply and fairly to the self employed, consortia and other non-corporate bodies. The additional rules that would be needed are likely to make the scheme over complex and less fair in its coverage and application.

2.4. Limiting the scheme to companies should not stifle or discourage innovation. SMEs that carry out significant amounts of R&D are almost invariably incorporated. Moreover, any small business which wishes to bring itself within the scheme would be able to do so by incorporating.

2.5. Views are sought on whether there are any significant drawbacks from limiting the scheme to companies?

Companies Act definition of SMEs

2.6. The company would need to be small or medium-sized by reference to the qualifying criteria set out in Section 247 Companies Act 1985.

2.7. The same criteria were used for the temporary first year allowances introduced for SMEs in the Government's 1997 and 1998 Budgets. They are familiar to companies and their professional advisers. Companies will generally already know whether they meet the criteria as this affects their obligations under the Companies Act.

2.8. The criteria in Section 247 Companies Act 1985 are at present that the company must satisfy two of the following conditions for the current or preceding year:

- turnover not more than £11.2m,
- assets not more than £5.6m, and
- not more than 250 employees.

2.9. The company would need to be small or medium-sized for the accounting period in which the R&D expenditure was incurred. If the

company is a member of a group, which includes groups with foreign parents, the group would also need to be small or medium-sized.

European Commission definition of SMEs

2.10. If this measure is submitted to the European Commission for approval of any state aid elements, the definition of SME used will also need to satisfy the definition of SME adopted by the European Commission. This means that two further conditions have to be met.

2.11. First, the company (and any group of which it is the parent) must have fewer than 250 employees in the current or the preceding year.

2.12. Second, the company may not be owned as to 25% or more of the capital or the voting rights by one enterprise, or jointly by several enterprises, falling outside the definition of an SME. This threshold may be exceeded in the following two cases:

- if the enterprise is held by public investment corporations, venture capital companies or institutional investors, provided no control is exercised either individually or jointly,
- if the capital is spread in such a way that it is not possible to determine by whom it is held and the enterprise declares that it can legitimately presume that it is not owned as to 25% or more by one enterprise, or jointly by several enterprises, falling outside the definition of an SME.

2.13. Views are sought on whether it would be difficult in practice to determine whether the criteria in paragraph 2.12 were met and, if so, whether there are simpler criteria which could be used instead which would ensure that the EU criteria were met.

De-minimis limit

2.14. In order to avoid disproportionate compliance and administrative costs being incurred on small claims, it is proposed that the qualifying R&D expenditure for the accounting period, as defined in Chapter 3, must be more than £50,000.

2.15. Views are sought on whether a de-minimis limit of £50,000 is set at the right level.

Joint ventures

2.16. The proposals in this note only apply to R&D carried out by a single company for its own benefit. They do not cover joint ventures where two or more companies carry out R&D jointly and share the intellectual property rights in the results of the research.

2.17. It would be possible to extend the coverage to joint ventures between companies but could complicate the scheme. In view of the difficulties which might result if non-corporate members were included, it is likely that any such extension would need to be restricted to joint ventures in which each member was a corporate SME.

2.18. Views are sought on whether there is a pressing case for extending the scheme to joint ventures and if so how this should be done.

CHAPTER 3 - WHAT EXPENDITURE WOULD QUALIFY FOR THE PROPOSED TAX CREDIT SCHEME?

Definition of R&D

3.1. The existing special tax reliefs for R&D are in terms of “scientific research”. The Technical Note “Research and Development: Definition and Appeals” published on 14 January 1999 examined how better guidance may be offered on what activities qualify as scientific research for tax purposes, offering as possible approaches revised guidelines produced by the DTI and a new more detailed tax definition of R&D. It also examined the question of resolution of disputes over whether particular expenditure qualifies under the definition.

3.2. The Government will consider the responses to both technical notes before deciding whether to make changes to the definition of R&D and the appeals procedure for the purposes of the special tax reliefs for R&D including SRA and R&D tax credits.

3.3. It is intended to use the same definition of R&D for R&D tax credits as is used for SRA subject to the following further conditions.

Territorial limitation

3.4. Special tax reliefs for R&D given by other countries are commonly restricted to R&D carried on in the country.

3.5. There is no territorial limit for SRA. SRA provides a generous relief which supports and encourages investment by UK businesses in R&D wherever that is carried on in the world.

3.6. R&D tax credits will provide additional relief over and above SRA. It is proposed to restrict this valuable additional relief to R&D performed in the UK. This reflects the objective of the Government, as set out in the Pre-Budget Report, to enhance the UK science base.

Revenue expenditure

3.7. SRA covers both capital and revenue expenditure. It allows the whole of the expenditure to be written off straight away for tax.

3.8. SRA already provides a generous allowance for capital expenditure, particularly for costs written off over a longer period in the accounts such as the cost of buildings and some other fixed assets of enduring benefit.

3.9. It is proposed that R&D tax credits will be restricted to revenue expenditure.

Simple measure of R&D revenue expenditure

3.10. In order for the R&D tax credit to be equitable and to keep the compliance burdens it imposes on business to a minimum, the measure of expenditure used should be fair, easy to understand and to operate, and certain.

3.11. The accounting standard SSAP 13 "Accounting for R&D" does not provide a ready solution. A measure based on SSAP 13 would impose significant additional compliance costs as the accounting standard does not generally apply to SMEs. Moreover, the accounting standard does not provide precise and certain rules over the expenditure to be included, for instance with regard to apportionment of costs or hypothecation of indirect costs, financing costs and overheads. A measure based on SSAP 13 would lead to differences in the credit given to different claimants depending on the accounting treatment followed. It would also need to be adjusted to a tax basis by excluding depreciation and other disallowable items, which would add further complication.

3.12. In order to keep the measure simple, fair and transparent, it is proposed to define the qualifying R&D expenditure for the tax credit as the direct staff costs of people directly involved in R&D activity plus the cost of consumable stores used for R&D purposes. The same measure is used in the USA system of R&D tax credits. Consumable stores would have the same meaning as in the accounting standard SSAP 9 "Stocks and long-term contracts". Expenditure would be recognised for the R&D tax credit for the same period that it is allowed as a Case 1 deduction.

3.13. This measure would be relatively simple and certain to operate. It provides a sensible yardstick for investment in R&D as the value of R&D undertaken depends on the number and quality of personnel engaged in R&D. Moreover by encouraging investment in R&D personnel, the R&D tax credit would directly support the objective of the Government to help business fully to exploit the UK science base.

3.14. In the French R&D tax credit system, a fixed percentage is added to the qualifying cost to cover overhead costs. This would be a simple and transparent way to include overhead costs in the measure of R&D revenue spending. It would have a broadly neutral effect on the benefit offered however as it would fall to be taken into account in deciding the rate of relief to be given.

3.15. It is not proposed to make any adjustment for overheads as this would add an unnecessary complication to the computation.

What are direct staff costs?

3.16. In the case of employees directly engaged on qualifying R&D, direct staff costs would be the salary (including basic salary, overtime and pension contributions but excluding capital expenditure on benefits such as cars) plus employers' NICs. Expenditure on leasing capital assets for the use of employees as part of their remuneration package would not be included.

3.17. The costs of sick pay and maternity pay of staff normally working on R&D could also count, including these costs to the extent that the employee concerned would have been expected to work on R&D had they not been absent.

3.18. The direct staff costs of employees working part-time on R&D could be included in proportion to the amount of their total time that they spend on R&D.

3.19. The system could also contain de minimis rules to achieve simpler administration and compliance, for example by including in full the costs of staff spending more than 80% of their time on R&D and excluding the costs of staff spending less than 20% of their time on R&D. Between these two levels, claimants would bring in the costs of the employee according to the proportion of the employees' time spent on R&D.

R&D for own benefit

3.20. In order to qualify for SRA, the claimant must be carrying on a trade. The R&D must be related to the trade carried on by the claimant and directly undertaken by him or on his behalf. The same rules would apply for R&D tax credit.

3.21. For SRA, there is no requirement that the R&D is carried on for the benefit of the claimant. The trade may be one of carrying out R&D on behalf of others. Where R&D is contracted out, both the contractor and contractee can be entitled to SRA. But this does not result in a double relief as capital expenditure is incurred once only and any relief for revenue expenditure of the contractor is matched by a trading receipt of the contractee.

3.22. For R&D tax credits, there is no matching offset. In order to avoid double relief and limit the benefit of the relief to SMEs, it is proposed that R&D expenditure will only qualify if the person who incurs the expenditure is entitled to all the rights in the results of the R&D.

Sub-contract costs

3.23. Where R&D is contracted out, the contractee would therefore not qualify for R&D tax credits. The principal could qualify provided the R&D is carried on in the UK for the benefit of the principal.

3.24. In order to simplify the computations, it is proposed that where the principal and contractee are members of the same group, they could elect jointly for the sub-contractor to qualify for R&D tax credits instead of the principal.

3.25. This leaves us with the problem in other cases of how to measure the part of the expenditure of the principal that relates to staff costs and consumables.

3.26. There are two possible approaches:

- to look through the sub-contract arrangement and treat the expenditure of the sub-contractor on staff costs and consumables as qualifying expenditure of the principal or

- to allow a fixed proportion of the expenditure of the principal.

3.27. It is proposed that the first approach would apply where the parties are connected or acting other than at arm's length. In other cases, the second approach would apply unless the parties elect jointly for the first.

3.28. Where the second approach applies, it is proposed to treat 65% of the fees under the contract as qualifying expenditure. This figure is used for the equivalent rule in the USA system of R&D tax credits.

3.29. A rule to counter acceleration through prepayment of R&D would also need to be considered, for instance by allocating prepayments to the period during which the R&D was actually performed.

Grants and subsidies

3.30. It is proposed that expenditure funded directly or indirectly by a grant or subsidy would not qualify for the tax credit.

Payments to scientific research associations

3.31. The existing exemption from tax for scientific research associations and 100% tax relief for contributions to scientific research associations, universities, colleges and similar research institutions will continue to be available. Payments to these bodies would not also qualify for the tax credit.

3.32. We would welcome views on the proposals in this chapter on the definition and measure of qualifying expenditure for R&D tax credits.

Certification of expenditure

3.33. A common feature of special tax reliefs for R&D in some other countries is a requirement for the claim to be certified by a qualified tax auditor as qualifying for the relief.

3.34. ***We would welcome views on whether a certification procedure would be helpful for a UK R&D tax credit, for instance in reducing compliance and administrative costs by improving the quality and reliability of claims, and, if so, which professionals should be authorised to certify claims and how that would be regulated.***

CHAPTER 4 - THE PROPOSED TAX CREDIT SCHEME

How would the tax credit be given?

4.1. Although the incentive considered in this technical note is referred to throughout as a tax credit, it would be given as a deduction in arriving at the trading profits as this would be the simplest way of accommodating it within the present Corporation Tax system.

4.2. It is proposed that the tax credit would be set at 50% of the qualifying R&D expenditure.

4.3. This would mean that relief was given on qualifying R&D expenditure at 150% of cost. For a company liable at the small companies rate of tax, it would provide a further saving to the company equal to 10% of the cost of qualifying R&D expenditure, bringing the total saving to the company to 30% of the expenditure.

4.4. For example, suppose a company spends £100,000 on qualifying R&D in the year ended 31 March 2001 and its taxable profit before the R&D tax credit is £180,000. At the small companies' Corporation Tax rate of 20%, the company's tax liability before the tax credit would be £36,000. With the tax credit, the company would deduct a further £50,000 leaving a taxable profit of £130,000. Its tax bill would be £26,000, a further saving of £10,000 or 10% of the qualifying R&D.

4.5. The total saving to the company on its tax bill from the combined relief of £150,000 in respect of its R&D spending would be £30,000 or 30% of the qualifying R&D.

How would companies claim the tax credit?

4.6. The claim would form part of the company's self-assessment return. The tax credit would be deducted in the computation of the trading profit. The normal rules on taxing profits and relieving losses would apply to the resulting trading profit or loss. The deduction could create or increase a trading loss which can be carried forward or back, or surrendered as group relief, in the usual ways.

4.7. The Corporation Tax Self-Assessment system works on a process now, check later basis. The claim would be dealt with as part of this system and the checking of claims would form part of the normal Inland Revenue programme for checking tax returns.

4.8. The introduction of clear guidance on the meaning of R&D in the light of responses to the technical note on "R&D: Definition and appeals" will help to provide certainty to taxpayers over what can be claimed. It is not envisaged that there would also be any facility for advance clearance of claims to R&D tax credits beyond the existing provision for post-transaction

rulings, as set out in Inland Revenue Code of Practice 10 “Information and advice”.

4.9. Where a claim was subject to a detailed check, it is likely that the company would be required to provide full information about the nature of the activities undertaken and the calculation of the expenditure claimed as qualifying for the tax credit.

4.10. In some cases it may be difficult for the inspector to determine whether the activities carried on by a company qualify as R&D. The inspector may need to seek expert guidance from suitably qualified independent experts or officials in the DTI.

4.11. Where the inspector is unable to agree with the company the amount of the claim or the activities which qualify, the dispute will fall to be resolved through the same appeal procedures as apply for SRA purposes. It is intended that any changes made to these procedures in the light of responses to the technical note on “Research and Development: Definition and Appeals” would be introduced at the same time as R&D tax credits.

4.12. We would welcome your views on the proposals in this chapter for the claim to be made and handled as part of the Corporation Tax Return subject to the same appeal procedure as SRA.

CHAPTER 5 - COMPANIES NOT IN TAXABLE PROFIT

5.1. The tax credit system described in Chapter 4 would be available to all qualifying companies. Companies that would otherwise have a corporation tax liability for the accounting period would benefit directly from both the existing 100% relief on qualifying R&D expenditure and the additional 50% tax credit. The combined relief for 150% of the qualifying expenditure would reduce both the taxable profits and the tax liability. At a small companies rate of 20%, this would give the company a total saving equal to 30% of the qualifying expenditure.

5.2. As the existing 100% relief on qualifying R&D expenditure and the additional 50% tax credit would be given as deductions in arriving at the trading profits, they may create or increase a trading loss which can be carried forward or back, or surrendered as group relief, in the usual ways. Trading losses which cannot be relieved directly can be carried forward and used when the company comes into profit. These various routes provide further ways in which the company can benefit through reductions in tax liabilities or repayments of tax.

5.3. There are circumstances in which the benefit from special tax reliefs for R&D may not be realised for some years however, for instance in start-ups where the company or group is not likely to come into profit for some years. The position of such companies was considered by the Williams Group.

The Emerging Growth Rebate

5.4. The Working Group on the Financing of High Technology Companies under the chairmanship of Sir Peter Williams ("the Williams Group") identified a number of financing barriers facing UK high technology companies and made proposals to help overcome these barriers.

5.5. The Group drew attention to the problems faced by start-up or early stage firms whose long lead times for converting R&D into marketable products mean that they have little or no income from which to meet various payments, including payments to the State. To facilitate the cash flow of research and development expenditure the group proposed that such firms should receive an "emerging growth rebate" (see Appendix 2 for a full extract from their report). This would allow the company to retain PAYE and NICs deducted from employees salaries in exchange for cancelling carried forward R&D tax losses at a discounted rate. The scheme would be available to the firm for a limited period, say five years.

5.6. This proposal has been examined carefully by the Inland Revenue and the DTI. The interaction between the arrangements for the collection of PAYE and NIC, the determination of the rebate and the impact on the corporation tax liability of the company would give rise to major administrative complications making the scheme complex and expensive to

run. It would benefit only a narrow group of companies which were small, high-tech, start-ups with no expectation of realising taxable profit for some years.

5.7. An alternative would be to simplify the proposal for the emerging growth rebate by removing the link to PAYE and NIC and to extend it more generally to corporate SMEs. This chapter looks at proposals for this wider measure.

A payment scheme based on the R&D tax credit

5.8. The proposal is for a payment scheme in respect of unrelieved R&D expenditure of small or medium-sized companies. This would give an immediate benefit to companies not yet in profit and hence not paying Corporation Tax. The building blocks of such a scheme would be the same as described in the previous chapters. The scheme would use the same definitions of qualifying person and activities and the same rules for measuring qualifying expenditure.

5.9. A payment scheme in respect of unrelieved R&D expenditure would involve a higher level of risk to the Exchequer than one confined to reliefs given against the tax liability, including an increased risk of fraud. Safeguards would need to be built in to limit the risk. These might for instance include the provision of additional detailed information with payment claims, pre- and post-checks and additional powers of enquiry and recovery of over-payments. While every attempt would be made to keep the scheme as simple as possible, it is inevitable that this would result in additional compliance and administrative burdens.

5.10. As the company would need to know its tax results before making the surrender application, it would be appropriate to require the application for the surrender of unrelieved R&D expenditure to be made at the same time as the completed Corporation Tax Self-Assessment for the accounting period.

5.11. The proposal for a payment scheme would depart from the basic principle of the UK tax system that losses can only be relieved by set-off against profits. The Government is firmly of the view that this principle should continue to apply to all other unrelieved losses.

Surrender of enhanced R&D component of taxable loss

5.12. The scheme would apply to companies that qualify for R&D tax credits. The criteria described in Chapter 2, including the requirement that the company incurs qualifying R&D expenditure, as defined in Chapter 3, of more than £50,000 in the accounting period, would need to be satisfied. The company would also need to be liable to tax on its profits.

5.13. The amount that could be surrendered would be a sum not exceeding the lower of 150% of the qualifying R&D expenditure (ie the sum of the existing 100% deduction and the additional 50% tax credit) and the unrelieved trading loss for that accounting period.

5.14. The unrelieved trading loss would be reduced by the amount surrendered.

5.15. In order to keep running costs to a minimum and concentrate assistance where it would be most beneficial, it is proposed that the amount surrendered would need to be not less than £50,000.

Discount

5.16. The Williams Group proposed that the surrender of losses or tax credits should be made at a discount to their nominal tax value. Money now is worth more than money later, particularly if the later sum is subject to some uncertainty. The discount could take account of typical (equity or debt) financing costs for SMEs not in taxable profit and the average time between R&D expenditures and setting those expenditures against taxable profits, particularly for start-up companies.

5.17. The value of a surrender of losses or tax credits at a discount will vary from firm to firm, depending on when that firm foresees itself coming into profit. It would not be practical to tailor the level of discount to suit the estimated circumstances of each company.

5.18. It is proposed that the nominal tax value of the loss would be computed using the small companies rate of corporation tax and then discounted. It is proposed to have a single discount factor of 20% say (i.e. the company would receive 80% of the nominal tax value of the loss surrendered). A company not in taxable profit would be able to choose between surrendering the loss now in return for a payment and carrying the loss forward to set against future profits. The Government would effectively be offering the company an alternative source of funding for R&D. The cost of funding implied by a 20% discount factor compares favourably with the financing costs of small companies. With typical costs of external finance of 10% to 15% pa, the equivalent discount factor would be 25% for a company expecting to come into taxable profit within 2 to 3 years and 50% for a company coming into profit in 5 to 7 years.

5.19. The company would receive 80% of the nominal tax value of the surrendered loss, computed by applying the small companies rate to the loss. At the current small companies rate of 20%, the company would receive a payment equal to 16% of the surrendered loss.

5.20. The full benefit available under these proposals to a company not in taxable profit would be a saving of 24% of the cost of qualifying R&D expenditure (i.e. the existing relief of 100% plus 50% tax credit on qualifying

R&D expenditure, converted to tax at the current small companies rate of 20%, and discounted to 80%).

Companies that are not trading

5.21. The proposals in this note build on the existing systems for taxing companies and giving relief for R&D and losses. In common with the existing systems, the proposals for the tax credit and the payment scheme would apply only to companies that are carrying on a trade.

5.22. There may be circumstances in which a company carries on R&D without carrying on a trade, for instance where the only activity of the company is R&D into new products which the company plans to exploit commercially when they have been developed. In these circumstances, the company is not entitled to relief on R&D expenditure during the pre-trading period. But the relief is not lost. When it starts to trade, it is entitled to relief on any capital expenditure on R&D during the pre-trading period (section 137(1)(b) CAA 1990) and on revenue expenditure during the preceding 7 years (section 401 ICTA 1988). Revenue expenditure on R&D in the preceding 7 years would then also qualify for the tax credit and payment scheme.

5.23. It would be complex, costly and inefficient to provide additional support for pre-trading R&D through the corporation tax system. This would require fundamental changes to existing systems and additional safeguards against fraud. The number of companies that might benefit would be very small.

5.24. Support for pre-trading R&D can be provided more efficiently and effectively in other ways. The EIS and VCT schemes encourage and support pre-trading R&D by including it as a qualifying activity. Assistance is also provided through non-fiscal measures (see Appendix 3 for details of other Government initiatives).

5.25. We would welcome views on the proposals in this chapter for a payment scheme based on the R&D tax credit.

CHAPTER 6 - SCIENTIFIC RESEARCH ALLOWANCE

6.1. This chapter looks at possible changes to the existing scheme for SRA in Part VII CAA 1990.

6.2. SRA provides a 100% relief for revenue and capital expenditure on R&D. Some respondents to the consultation document “Innovating for the Future” suggested that this can be over generous, for instance on buildings used for scientific research, and that tightening the scope of SRA could help partly to fund a tax credit scheme.

Exclude remote purposes

6.3. SRA covers “all expenditure incurred for the prosecution of, or the provision of facilities for the prosecution of, scientific research” (section 139(1)(c) CAA 1990). This very broad definition can lead to uncertainty and disputes and in some cases can cover assets whose connection with the carrying out of R&D is tenuous or remote.

6.4. It is proposed that for capital expenditure, SRA should be limited to expenditure incurred on the provision of assets for use in carrying out R&D. Thus, for example, premises in which scientific research was actually carried on and equipment directly used to pursue scientific research would qualify for the allowance. So would accommodation and equipment for support technicians and project managers directly involved with overseeing the research. However, accommodation and equipment used by staff in more remote activities, for example personnel and financial administration and site maintenance, would not qualify for SRA. Similarly, assets provided to employees engaged in scientific research as part of their remuneration package, for example company cars, would not qualify for SRA.

Buildings

6.5. SRA is available on buildings other than dwelling houses. Where only part of the building is a dwelling house, the whole building may qualify if the cost of the excluded part is not more than 25% of the cost of the whole (section 137(3) CAA 1990).

6.6. While this is a generous relief for an enduring asset like a building, it can be justified for a specialised facility such as a research laboratory which contributes directly to the objective of the Government to enhance the UK science base.

6.7. It is questionable whether it can be justified however for a non-specialised facility such as an office. It is proposed that the exclusion from SRA for dwelling houses should be widened to exclude offices, subject to the same rule as before allowing the whole building to qualify if the cost of the excluded part was not more than 25% of the cost of the whole. This

would bring the rules for SRA into parallel with those for industrial buildings allowances.

6.8. ***Your comments on these suggestions are invited.***

CHAPTER 7 - SUMMARY OF ISSUES ON WHICH BUSINESS MAY WISH TO COMMENT

7.1 We would welcome your views on the following issues raised in this note. They should be sent to:

Cheryl Scott
Business Tax Division, Inland Revenue
Room 305
22 Kingsway
LONDON WC2B 6NR

by *31 July 1999*.

7.2 This document is available on the Internet at:
www.inlandrevenue.gov.uk

Chapter 2: Who would qualify for the proposed tax credit scheme?

2.5 *Views are sought on whether there are any significant drawbacks from limiting the scheme to companies?*

2.13 *Views are sought on whether it would be difficult in practice to determine whether the criteria in paragraph 2.12 were met and, if so, whether there are simpler criteria which could be used instead which would ensure that the EU criteria were met.*

2.15 *Views are sought on whether a de-minimis limit of £50,000 is set at the right level.*

2.18 *Views are sought on whether there is a pressing case for extending the scheme to joint ventures and if so how this should be done.*

Chapter 3: What expenditure would qualify for the proposed tax credit scheme?

3.32 *We would welcome views on the proposals in this chapter on the definition and measure of qualifying expenditure for R&D tax credits.*

3.34 *We would welcome views on whether a certification procedure would be helpful for a UK R&D tax credit, for instance in reducing compliance and administrative costs by improving the quality and reliability of claims, and, if so, which professionals should be authorised to certify claims and how that would be regulated.*

Chapter 4: The proposed tax credit scheme

4.12 *We would welcome your views on the proposals in this chapter for the claim to be made and handled as part of the Corporation Tax Return subject to the same appeal procedure as SRA.*

Chapter 5: Companies not in taxable profit

5.25 *We would welcome views on the proposals in this chapter for a payment scheme based on the R&D tax credit.*

Chapter 6: Scientific research allowance

6.8 *Your comments on these suggestions are invited.*

Further issues on which views are sought: Feasibility and Effectiveness

7.3. The Pre-budget report said:

> The Government believes the case for extra *(tax)* incentives is strongest in the SME sector. It will consult with business further during the pre-Budget period on the feasibility and effectiveness of a volume-based R&D tax credit for SMEs. This work will also look at ways of encouraging R&D spending by companies not yet in taxable profit.

7.4. The questions brought together above are concerned with the detail of the two schemes proposed in this note: viz:

(i) R&D tax credits giving 50% extra relief on R&D for SMEs,

(ii) payment of combined 150% relief on R&D to SMEs not in taxable profit.

7.5. The Government would also welcome views on the general feasibility of each scheme including in particular:

(a) ***the compliance costs on business and***

(b) ***the risk to the Exchequer through fraud and other abuse.***

7.6. It is estimated that the cost to the Exchequer, and benefit to small and medium-sized businesses, of these schemes is about £150 million a year. The Government would also welcome views on the cost effectiveness of each scheme including in particular:

(a) ***the contribution it will make to improving the R&D performance of innovative SMEs and***

(b) ***whether this will be a cost effective use of Government resources or whether the cost to the Exchequer could be***

deployed to improve R&D performance more effectively in different ways.

Appendix 1

Extract from the Chancellor's Pre-Budget Report published on 3rd November 1998

Innovation and Science

3.22 The UK needs to enhance a first-rate science base, putting proper systems in place for exploiting the commercial value of research, and getting scientists and business to take a much closer interest in each other.

3.23 The Government has begun by taking vital first steps to enhance the science base and maximise the economic value derived from it:

- the Comprehensive Spending Review set out an additional £1.4 billion injection of funds to ensure that the UK continues to be world-beating at generating research knowledge. At the centre of the DTI's programme is a £600 million infrastructure fund, endowed equally by Government and the Wellcome Trust, for new equipment and buildings. Bids for the first round were invited in October, with an initial deadline of 4 December, they will be considered by an expert committee shortly after. There has been a high level of interest from universities.
- the University Challenge scheme, also jointly funded by the Wellcome and Gatsby Trusts, to help pull ideas with commercial potential out of the laboratory. This scheme will provide £50 million in early-stage seed funding to help exploit the commercial potential of university research. By the deadline of 15 October, 44 bids had been received by the DTI, involving a total of 73 universities.

3.24 The Government will begin by ensuring that the substantial capital renewal provided by the joint Government/Wellcome infrastructure fund is used to underpin research in leading research areas - particularly those, like biosciences, that offer the opportunity for levering in further private funding and for commercial exploitation.

3.25 The Government also proposes to build on the potential of University Challenge to further strengthen exploitation of the science base by creating a £25 million Science Enterprise Challenge that will invite universities to compete for funds to endow up to eight new Institutes for Enterprise. These Institutes will bring the teaching of entrepreneurship and business skills into the science curriculum, helping to inspire and equip scientists and engineers to commercialise their knowledge. They will also be centres of excellence for the technology transfer process, bringing together specialist teams to organise science commercialisation effectively. The Institutes will be expected to draw on best international practice, and to match world-class standards. Details of the competition for Science Enterprise Challenge will be announced at the time of the DTI's forthcoming White Paper. Universities

will be expected to bring forward proposals that involve significant funding from other sources.

3.26 The Government is also determined to ensure that the Government's own research institutes and other public sector research establishments are fully engaged in efforts to commercialise their research, where possible in collaboration with universities.

3.27 To complement this drive to push research into the market, the Government is examining proposals aimed at enhancing the incentives for businesses to draw on these ideas, as well as investing in their own home-grown R&D.

3.28 The Government published, in this year's Budget, a joint DTI and Treasury consultation paper - 'Innovating for the Future' - exploring how best to remove barriers to R&D investment.

3.29 The Government has looked at a number of ideas for incentives to encourage R&D investment. These included:

- a research and development corporation tax credit open to all firms based on the incremental increase in R&D spending;
- a tax credit based on the volume of R&D spending for small and medium enterprises (SMEs). One method of ensuring that firms not yet in profit, and hence not paying corporation tax, would still be able to gain immediate benefit from this type of incentive would be to make the credit payable directly to these companies.

3.30 The Government believes the case for extra incentives is strongest in the SME sector so it will consult with business further during the pre-Budget period on the feasibility and effectiveness of a volume-based R&D tax credit for SMEs. This work will also look at ways of encouraging R&D spending by companies not yet in taxable profit.

3.31 As a first step in working towards a potential new tax incentive, and also to assist the operation of the existing Scientific Research Allowance scheme, the Inland Revenue and the DTI will review the definition of business research and development for fiscal use, and consult business further on proposed new clearer guidelines on the Government's interpretation of that definition.

3.32 Establishing a rational and less complex system for the taxation of intellectual property (IP) was the second central conclusion to emerge from the 'Innovating for the Future' consultation exercise. Intellectual property is one of the key outputs of firms' innovation and R&D investment.

3.33 The Government will consult by the next Budget on two possible measures to reduce tax compliance costs and distortions on business decisions affecting intellectual property transactions:

- moving towards a simpler system of IP taxation, essentially following the accounting treatment for relieving expenditure on IP purchases and taxing proceeds; and
- simplifying the taxation of royalty payments which accrue to the owners of intellectual property rights. In place of the variable treatment at present, the aim would be to allow as many payments as possible to flowgross, consistent with maintaining effective UK taxing rights. In addition, if the definition of 'royalty' income for tax purposes were to be aligned with the simpler and more rational OECD model, the remaining deduction of tax at source rules would be more recognisably tied to the terms of a relevant double-taxation treaty - thus simplifying their application by business.

3.34 These potential tax measures for intellectual property reform are complex and need further work and consultation. But the Government hopes that a broadly revenue-neutral package, based on the ideas set out in paragraph 3.33, can be found which brings worthwhile simplification for consideration by the 2000 Budget.

3.35 As well as these tax issues, the consultation exercise has also highlighted the importance of measuring and reporting the value of innovation if firms are to manage their R&D activities effectively. The Government encourages companies to use the framework provided by current accounting standards as a means to inform their own R&D investment decisions and to disseminate information about their R&D activities to the market as a whole. The DTI's forthcoming White Paper will set out an initiative to be carried forward with the Accounting Standards Board and others on intangible assets more generally.

3.36 Finally, the review confirmed the importance of a balanced IP rights system, with sufficient protection to encourage investment, and efficient means of disseminating information to widen the process of innovation. The consultation highlighted the need to ensure that the IP system is kept up to date and readily accessible to smaller enterprises. Again, the DTI will be addressing this aspect of the environment for innovation in its forthcoming White Paper.

APPENDIX 2

Extract from the report of the Williams Group "Financing of High Technology Businesses"

(v) Boosting the high tech startup

77. To help remove the disadvantages suffered by the high tech startup, with little or no income and steadily (and at times unsteadily) rising losses at a time when various payments have to be made to the state, we propose a new scheme, the Emerging Growth Rebate. It has been proposed, in different forms in recent years, by the CBI and the BioIndustry Association, among others. Following our Interim Report we are pleased that the DTI are leading a Whitehall analysis of our proposal, in the context of the Government's Comprehensive Spending Review.

78. The basic idea is that firms receive a rebate from various tax payments, in exchange for cancelling their carried forward R&D tax losses, to help them over these early years of expensive technology investment, before income then profits start to flow. The tax payments which we believe are most appropriate in this context are PAYE and National Insurance Contributions, because they are employment-related. Since the scheme's rationale is to promote output and jobs in the high technology sector, these payments seem appropriate limits. The scheme would help finance a firm for a limited number of years, say five.

79. There can clearly be no question of employees' income tax not being collected and paid, nor of employees not making their National Insurance Contributions (NICs). The firm would receive a rebate up to a ceiling determined by the firm's payment of those two taxes, and its carried forward tax losses for the year, which it would absorb at a discounted tax rate. The loss of the latter would encourage the firm to focus on the rebate, and whether it was an appropriate form of financing, in the short and longer term. But tax and NICs would continue to be collected and recorded in the usual way, without any change to employers' obligations and employees' access to benefits financed by NICs.

80. We understand from Treasury experts that this scheme would probably be classified as public expenditure, despite the fact that the financing would take the form of relief from paying taxes.

81. From an economic and industrial perspective the classification seems to us irrelevant. We understand that as spending it would have to be the responsibility of a Minister with a spending programme. We see that as a

matter for the Government. The same is true of how the scheme is administered, though we would like that to be as light and unbureaucratic as is consistent with the rules governing the proper use of public funds. We confine ourselves to the substance of the case.

82. Once again we would wish the scheme to be open only to Emerging Growth high technology companies. The definition would also draw on the discussion in Annex B, probably with size limits, for example on turnover, as well as a definition of high technology. We understand that the definition would be contained in administrative guidance, if it were implemented by the Department of Trade and Industry, rather than primary legislation. To limit the costs, at least until the scheme's value could be evaluated, it would be worth focusing the scheme on the smaller end of the firms that we are discussing, firms in the very early stage of development.

83. The scheme has the following advantages:

- it meets a real need among a well defined category of high technology ventures, to reduce cash outflows and to enable employment while extending the periods between financing and therefore improving overall success rates;

- it redresses a situation partly created (unintentionally) by government, via the tax system, which results in unequal treatment between early stage technology companies which are unable to offset R&D expenditure against revenues for tax purposes and established companies who can, and it does so by a correcting mechanism run by Government;

- the scale of the scheme could be modest, at least initially: say annual expenditure of £50 million a year (with a budget ceiling fixed in advance, allocated via a queue if necessary), while its effectiveness is monitored and evaluated; we are very conscious of the need to respect the wider pressures on the Government's fiscal policy;

- it is market driven. The firm has to make a commercial judgement on giving up its carried forward tax losses for the discounted benefit of the rebate and the desirability, if the scheme goes down that road, of going into partnership with the public sector;

- it can be ring fenced from the other firms which make losses for quite separate reasons.

APPENDIX 3

Other help proposed for firms not in taxable profit

7.3. As announced in the Competitiveness White Paper, the Government will be creating an Enterprise Fund worth £150 million over three years with the following elements.

- Support for a national venture capital fund to support early stage high-technology businesses. This is currently under discussion with Lloyds Bank, NatWest, the Bank of Scotland, the Royal Bank of Scotland, the European Investment Bank and the European Investment Fund.
- Support for regional venture capital funds, which will specialise in providing equity to smaller businesses with growth potential in small amounts and use local expertise.
- A more cost effective Small Firms Loan Guarantee Scheme.
- Support for innovative ideas developed by the finance industry to assist growth businesses.

7.4. In addition the Government will act to improve information about the supply and demand for capital. In partnership with the banks and others, the Government will develop networks of venture capitalists to improve the exchange of information between businesses in need of finance and those seeking investment opportunities.

7.5. The Government will incentivise risk capital in the following ways. It will

- consult on ways to make it more attractive for large businesses to invest in small growth businesses (corporate venturing)
- review how to make it easier for venture capitalists to withdraw their capital from one business to invest in another without incurring a Capital Gains Tax penalty
- review how to make it easier for small businesses to make an initial public offering of equity, to allow their early venture capital investors to realise their investment for reinvestment elsewhere. In the USA, NASDAQ provides a vibrant, liquid market for such business. The European equivalent, EASDAQ, is much smaller. The Government will review with the financial community what is required to develop a stronger secondary market in Europe.

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