

**REVIEW OF THE R&D TAX CREDIT
SUBMISSION TO THE DEPARTMENT OF FINANCE**

12TH April 2013



INTRODUCTION

Page 3

WHAT R&D COMPANIES HAVE TO SAY

Page 5

TERMS OF REFERENCE 1 – ESTABLISH THE ECONOMIC RATIONALE FOR INCENTIVISING INVESTMENT IN R&D

Page 6

TERMS OF REFERENCE 2 - TO IDENTIFY THE EXCHEQUER COST AND LEVEL OF TAKE UP OF THE R&D TAX CREDIT.

Page 10

TERMS OF REFERENCE 3 – TO ASSESS THE IMPACTS OF THE R&D TAX CREDIT

Page 12

TERMS OF REFERENCE 4 – TO CONSIDER WHETHER THE DESIGN AND STRUCTURE OF THE R&D TAX CREDIT IS OPTIMUM

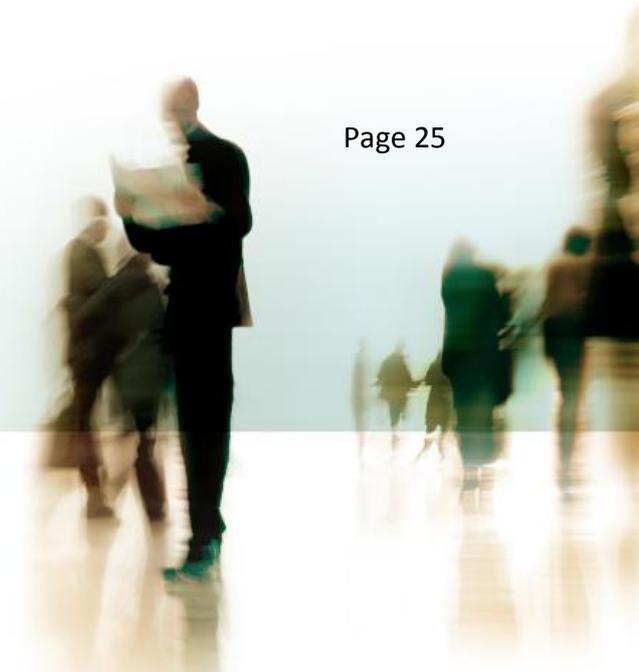
Page 16

TERMS OF REFERENCE 5 – INTERNATIONAL COMPETITIVENESS OF R&D OFFERING

Page 24

APPENDIX 1 – FURTHER R&D TAX CREDIT RECOMMENDATIONS

Page 25



It was announced as part of Budget 2013 that a comprehensive review of the Research and Development (“R&D”) Tax Credit was to be undertaken in 2013. According to statements from the Department of Finance “the Department”, the objective of the review is to ensure that the R&D Tax Credit remains “*best in class internationally and that it represents value for money for taxpayers*”. The Department subsequently issued an *Invitation for Submissions*, seeking the views of interested parties on specific Terms of Reference.

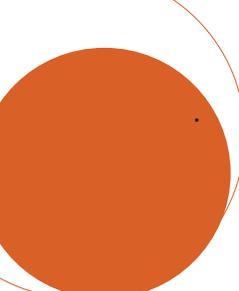
Leyton welcomes the undertaking of this review. As a consultancy firm specialising in the delivery of R&D Tax Credit services to many of Ireland’s most innovative companies, Leyton has extensive, first-hand experience of the significant benefits that the tax credit brings to R&D performing companies as well as the challenges faced by some companies in claiming under the scheme in its current form. By its very nature, innovation and activities such as R&D that underpin it are constantly evolving. In recent years it has started to become apparent that the legislation, guidance and administration of the scheme have at times struggled to keep pace with these developments.

Introduced in 2004, 2013 marks the 10th year in which the R&D Tax Credit will have been available in Ireland. Therefore, now is an opportune time for the Department to assess the benefits and impacts of the scheme. According to recent figures, the cost of the scheme increased from €82m to approximately €224m between 2004 and 2010. In the period 2008 to 2010 alone, the number of claimant companies doubled to reach almost 1,200 companies. In our view, the increase in take up of the R&D Tax Credit should in itself be looked upon as evidence of its success and has had a substantial, positive impact on the Irish economy. Innovation has been an important factor in the resilience shown by certain sectors during the current economic downturn and in the Irish export sector enjoying a further 5% growth in 2012 to reach a record €182 billion. Through its contribution to innovation, R&D has played a key role in these success stories.

Leyton is uniquely positioned to provide insight into the experience of companies claiming the R&D Tax Credit and to highlight changes that would both benefit R&D performing companies and provide the ‘value for money’ being sought for taxpayers by the Department.

Leyton – A Unique Perspective

- ▶ **Scientific Expertise** – Although a tax incentive, the R&D Tax Credit has science at its core. Recognising this, upon entering the Irish market, Leyton leveraged its international experience and implemented an approach to R&D Tax Credit consultancy services that was unique i.e. an Irish based, in-house team of scientists and engineers working alongside tax consultants and accountants in delivering bespoke R&D Tax Credit solutions. Since then, our dedicated team of scientists and engineers have amassed vast knowledge and understanding of the scheme from a scientific perspective.
- ▶ **SME Sector Experience** – Leyton has extensive exposure to R&D within both large companies and the SME sector. Our SME sector experience can be of particular use to the



Department in carrying out its review. When Leyton entered the Irish market, it soon became apparent that the SME sector was underrepresented in terms of the number of R&D Tax Credit claims being made. There were a number of reasons for this including information asymmetries as to what activities qualify for inclusion in a claim. Since then Leyton has established itself as a leading provider of R&D Tax Credit services to the SME sector and has in-depth knowledge of the experiences of SME companies under the current scheme.

- ▶ **Industry Wide Knowledge** –Leyton has worked with companies across all industry sectors where R&D is performed and therefore has detailed knowledge of sector specific issues relating to key matters such as the identification of qualifying R&D activities and the implementation of systems and structures to support the claim process.

At Leyton, we are fortunate to work with many of the country’s innovative companies and therefore have direct experience of the benefits of the R&D Tax Credit scheme. However, we are also fully aware of the tough economic times that the country continues to find itself in and the importance of ensuring that the value-add of the scheme is optimised from the exchequer’s perspective. Therefore maximising the gap between the cost and the benefits of the scheme is crucial. Reducing cost “leakages” is a key part of this analysis and as a result features highly in our submission and recommendations.

We believe our submission represents a well informed, practical and balanced view of the R&D Tax Credit scheme in Ireland and is representative of the feedback we receive from the most important stakeholders of all, the R&D performing companies in Ireland. We hope that it is of use to the Department in carrying out this very important review of the R&D Tax Credit.



Eoin Brennan, AITI, ACCA
Head of Tax



Gianmario Pala, CEng MIEI
Scientific Consultant Manager

WHAT R&D COMPANIES HAVE TO SAY

Any review of the R&D Tax Credit scheme must involve feedback from the most important stakeholders of all, the R&D performing companies. The comments and recommendations set out in our submission are based on our daily interaction with these companies. Below we have highlighted a sample of feedback received from our clients as to the benefits and impacts of the R&D Tax Credit:

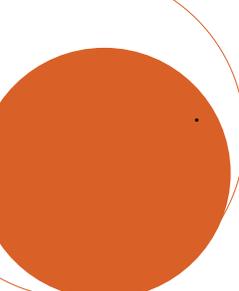
“Our projects are very high risk, both technically and financially. We are regularly being asked to push technological boundaries in providing solutions for our end customer. We only get paid if we are successful. The R&D Tax Credit is a key part of our project appraisal and contributes to us taking on projects that may otherwise be considered too high-risk. It is our success on these high-risk projects that has established us as a global leader in our field”

“Being a HPSU in the current climate is difficult no matter how good your idea or your capabilities. Access to funding is one of the main issues. The R&D Tax Credit and in particular, the cash refunds have been of major assistance to us in undertaking further R&D activities”

“The availability of the R&D Tax Credit has played a significant part in the group locating and maintaining R&D activities in Ireland. In addition to the obvious financial incentive, we see it as a clear statement of the country’s commitment to supporting high-tech activities”

“We became aware of the tax credit when we undertook a process of sourcing grant funding. At the time, conditions attaching to the grant prevented us from availing of it. As the tax credit was based on activities, once we fully understood the eligibility criteria it became something that we could factor in to investment decisions going forward”





1. *Establish the Economic Rationale for Incentivising Investment in R&D, including:*

- ▶ *The contribution of R&D to productivity and growth;*
- ▶ *The existence of market failures in R&D activity and expenditure;*
- ▶ *The rationale for State intervention to incentivise R&D; and,*
- ▶ *The role of direct expenditure and tax expenditures to correct for market failures.*

Innovation is a key driver of economic growth. As a result, optimising the quantum and quality of innovation taking place within a country is the objective of many governments around the world. Incentivising business investment in R&D is one of the main methods used by governments to stimulate innovation and the primary objective behind the introduction of the R&D Tax Credit in Ireland in 2004. Evidence of the economic impact of innovation is all around us. Many studies have been conducted internationally to quantify this impact and the contribution made by R&D. Some have sought to do so by identifying and measuring the effect of R&D on productivity and growth. These studies have all faced similar difficulties in isolating the direct output of R&D in relation to these measures. As a result, they have often relied upon indirect measures such as aggregate productivity growth, innovation counts and patent statistics.

While the studies we are aware of do not relate specifically to Ireland, **most are consistent in their findings that the contribution of R&D to productivity and growth is significant. In fact, a common concern shared by these studies is that the true contribution of R&D could be significantly underestimated by measuring its effects using standard productivity measures.**

The undertaking of a full economic analysis of the R&D Tax Credit falls outside our core expertise and therefore the scope of our submission. Instead, we selected a random sub-sample of our clients and assessed their performance over the period 2006 – 2011 based on two measures – Staff Numbers and Turnover. The period 2006 through to 2011 was used as it spans the economic downturn and therefore indicates how R&D performing companies have fared during this challenging period. Our client base at Leyton consists of companies of all sizes, from micro, high potential Start -Ups to large multinationals and across a wide range of industry sectors. Therefore we believe this sub-sample of our clients to be representative of R&D performing companies in Ireland that have claimed the tax credit.

The results as set out on page 7 make for positive reading, particularly when set against the economic backdrop of the period:

Figure 1 - Comparison of staff numbers in 2011 to 2006

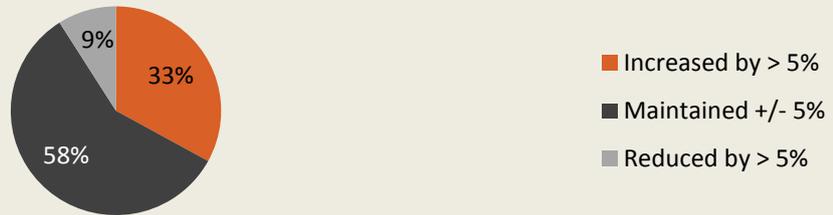
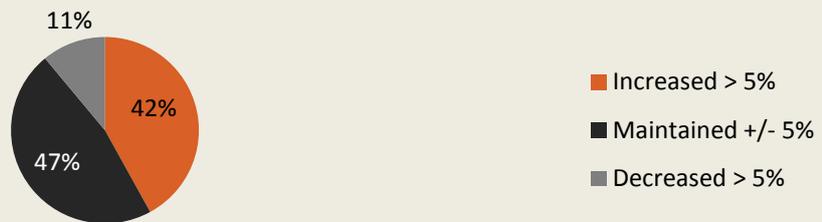


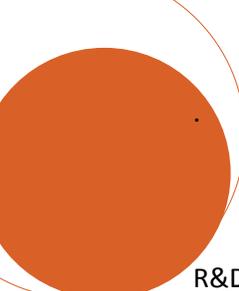
Figure 2: Turnover - Comparison of total turnover in 2011 to 2006



To have maintained turnover and staffing levels at 2006 levels is an achievement given the unparalleled economic upheaval that occurred during the period. Indeed, as highlighted above, 33% and 42% of the companies sampled have succeeded in growing staffing number and turnover respectively. Many factors have contributed to this success, including the R&D Tax Credit.

For the majority of these companies, export markets have provided the main opportunity for growth. Innovation has played a key role in enabling these companies to successfully exploit these opportunities. However, increased globalisation also brings more intense competition and pressure to anticipate and meet end user requirements that are more diverse and dynamic. The R&D Tax Credit has been an important factor in enabling companies to make the investments in R&D necessary to meet these challenges.

Despite the links between R&D investment and increased productivity and growth, economic theory predicts that in the absence of R&D incentives, markets will fail to provide levels of R&D investment that are socially desirable. One reason for this is the misappropriation of benefits caused by the “spillover effect”.



R&D contributes to new knowledge and innovation and companies are often unable to appropriate the full benefits of these for themselves. R&D investment by one company may lead to lower input costs for another company or that other company acquiring new knowledge that can be utilised in its business. Price competition may prevent the company from recouping the full benefit of its innovation and instead generate a consumer surplus. These and other externalities to other companies and consumers are collectively referred to as the “spillover effect” of R&D.

Market Failures in R&D Activity and Expenditure

Due to the spillover effect, the social return on R&D investment will in some instances exceed the private return enjoyed by the investing company. Based on economic theory, this misappropriation of the benefits of R&D investment will result in companies investing less in R&D than that required to provide an optimal social return. R&D Tax Credit incentives represent one means of bridging this gap between private and social return and correcting the market failures that might otherwise arise.

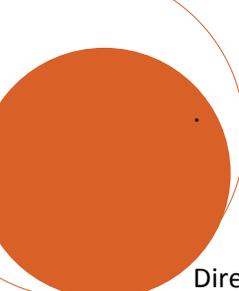
Many international studies have been conducted into the spillover effect. While the studies we have reviewed do not relate specifically to Ireland, **most are consistent in their finding that the spillover effect does exist and its contribution is significant, resulting in a social return that can be a multiple of the private return.** Therefore, when assessing the impact of R&D, it is important that these factors are taken into account as benefits of the R&D being incentivised.

In our experience, while the question of social versus private return may not feature directly when appraising R&D investment opportunities, indirectly it becomes a factor as companies carry out their own cost/benefit analysis. For example, by their nature, R&D activities are often high risk and therefore the associated cost can be higher than other, more routine activities or investment opportunities. Based on the feedback Leyton has received from clients, the R&D Tax Credit often helps to mitigate this risk by reducing the associated cost of investment. This contributes to companies being able to take on these high-risk R&D projects, which as highlighted in Figures 1 and 2 on page 7, can bring significant benefits to the investing companies and as a result of the spillover effects, benefit wider society.

One issue that a number of studies highlight is that tax incentives alone may not result in activities that yield the greatest social return being undertaken. Even factoring in tax incentives, companies will opt to carry out projects that yield the greatest private return. This is, in Leyton’s view, one reason why a balanced combination of direct R&D funding and tax incentives is the optimal approach.

The Role of Direct Expenditures and Tax Expenditures to Correct For Market Failures

R&D performing companies in Ireland have access to a wide range of grants and other direct funding. Some companies we deal with will also have availed of funding from bodies such as Enterprise Ireland, IDA and Science Foundation Ireland and this has contributed to the quantum and quality of R&D being undertaken.



Direct funding can be an effective policy tool for incentivising specific sectors, locations, companies and/or activities. The targeted nature of the funding also means that it can be directed towards projects which yield the greatest social return but that, based on economic theory, would otherwise be overlooked in favour of more profitable projects for the investing company. However, direct funding also has a number of drawbacks. Based on feedback we receive, information asymmetries are one of the main reasons for the lack of take-up of direct funding opportunities, both in relation to the eligibility criteria and the application process. In Leyton's experience, other factors include:

- ▶ Conditions attaching to funding that are inconsistent with business plans;
- ▶ Identifying suitable partners in the case of collaborative funding;
- ▶ Perceived arbitrary decision making ;
- ▶ The administrative burden placed on claimant companies.

Tax incentives on the other hand are a neutral form of incentivising R&D. Tax incentives are available to all firms that undertake qualifying R&D activities irrespective of their industry, size or the objective of the R&D. Therefore decisions relating to what activities are to be undertaken are left to the R&D performing companies themselves. We believe that this is preferable to the more direct government intervention in business that can sometimes arise with direct funding.

In our view, a system that utilises a combination of tax measures and direct funding to incentivise R&D and stimulate innovation is the correct approach.

- 2. To identify the exchequer cost and level of take up of the R&D tax credit. The level of take up should include a description of the types of business sectors and firms that benefited from the scheme as well as the characteristics of those firms*

The most recent data relating to exchequer costs and the level of take up the R&D Tax Credit is, we assume, available to the Department.

Based on Leyton's experience of the Irish market, there has been a significant increase in the level of awareness of the R&D Tax Credit scheme over the last 5 years, particularly within the SME sector. Upon entering the Irish market, it was obvious to Leyton that the SME sector was underrepresented in terms of the number of claims being made. This appears to be borne out in figures recently made available which show that in the period 2008 to 2010, a doubling in the number of companies claiming the R&D Tax Credit resulted in approximately only a 42% increase in the exchequer cost of the scheme. It is we believe a reasonable assumption that SME companies make up a large portion of these new claimants. This increased level of take up of the R&D Tax Credit by SME companies is a positive development given the quality of innovation that is happening and the high numbers employed (approximately 70% of total employment) within the sector. Also, the SME sector has been hit particularly hard by the impact of the financial crisis on access to funding. This is not exclusively an Irish experience with a recent OECD report highlighting that *"the creation, survival and growth of SMEs is often hampered by access to finance"* and that this has been *"exacerbated"* by the economic crisis. On the home front, a number of initiatives have been introduced to improve liquidity, however these have had mixed results. In the meantime, the R&D Tax Credit has provided much needed funding to many cash starved SME companies.

Another observation we made on entering the Irish market was the difference in the levels of awareness and understanding of the R&D Tax Credit that existed across certain industry sectors. Within sectors such as Pharmaceutical, Medical Devices and Software, there was in general good awareness of the scheme and this was reflected in the level of take up. However, within other sectors, such as the Food and Drink sector, this was not the case for reasons such as information asymmetries and insufficient supporting documentation being produced and maintained as part of normal operations. In the last 5 years there has been a notable increase in awareness of the scheme across all sectors and again this is to be welcomed. Innovation has been crucial in the success of the Irish Food and Drink sector that saw a further 2% rise in exports in 2012 to reach €9.02 billion and is responsible for approximately 8% of total employment in the country.

The current scheme is neutral in terms of who can benefit, i.e. it incentivises scientific and technological endeavour irrespective of size, sector or location. Ensuring all R&D performing companies within the prescribed fields of science and technology can avail of the tax credit is an important feature of the scheme that needs to be retained following this review. That said, in our experience, the diversity in companies claiming the tax credit can result in very different experiences under a one-size-fits-all scheme. For example, the resources available to companies to prepare and

support claims and the supporting documentation that is produced and retained as part of normal operations will often vary from sector to sector and even across companies within those sectors. For these reasons we have proposed some changes to the scheme that we believe could reduce the burden and cost for both claimant companies and the exchequer (See Terms of Reference 4 section and Appendix 1).

3. To Assess the Impacts of the R&D Tax Credit on the Following:

- ▶ *The amount of business expenditure on R&D;*
- ▶ *Indigenous and FDI investments in Ireland (both new and existing);*
- ▶ *Large company and SME activity;*
- ▶ *Mobile R&D investments (both new and existing);*
- ▶ *Levels of deadweight and additionality.*

Impacts of the R&D Tax Credit on the amount of business expenditure on R&D

Based on the most recent Business Expenditure on R&D (“BERD”) survey results released by the CSO/Forfas, the level of business investment on R&D in 2011 was consistent with 2010. Maintaining levels of BERD is a positive result taking into account the global economic climate. As one of the key policy tools incentivising BERD, the R&D Tax Credit has contributed to this performance.

Isolating and identifying the quantum of BERD that has been incurred as a direct result of the R&D Tax Credit is difficult. Investment appraisals are complex and need to take account of a wide range of financial and non-financial factors. Also, it is an exercise in the counterfactual whereby it is necessary to quantify what companies would have invested in R&D in the absence of the tax credit.

It is also possible to assess the impact of the tax credit on BERD through case studies. As can be seen from the sample feedback provided in our “What the R&D companies say” section (page 5) of our submission, the R&D Tax Credit has had a positive impact on BERD for different reasons. For some companies the R&D Tax Credit is used to mitigate the high risk associated with R&D projects. For others, the tax credit can be used to reduce the effective cost of carrying out R&D in Ireland and as a result, attract R&D investment. In other cases, the R&D Tax Credit is viewed primarily as a valuable source of funding which for many cash-starved companies has facilitated innovation.

In Leyton’s experience, the R&D Tax Credit has had a positive impact not just on how much R&D is being undertaken but also on **how** companies undertake R&D. In recent years, there has been major shift by companies towards integrating the R&D Tax Credit into their R&D processes. Rather than being a retrospective assessment of activities after year end, the tax credit has become a key component of the complete R&D process and is taken into account at all stages from initial feasibility through to resourcing and the eventual undertaking of activities on the project. Companies have invested time and money in training staff on the scheme and implementing systems and procedures to optimise the efficiency and robustness of their claims. Leyton often receive feedback from companies that claiming the tax credit made them add more structure to their R&D and this has had knock on benefits elsewhere in their business.

Indigenous and FDI investments in Ireland (both new and existing);

In its current form, the R&D Tax Credit is neutral in terms of its application to indigenous and FDI companies and we believe this should remain the case following this review. There has been a lot of welcome attention on the SME sector in recent times and in particular, the importance of providing the supports necessary for SME companies to overcome the challenges they face. However, it is very important that we also continue to recognise the contribution made by FDI companies to the economy. According to the latest CSO/Forfas figures, FDI investment accounted for approximately 71% of total BERD in Ireland in 2010. Therefore ensuring these companies also receive the necessary support is crucial.

As the same scheme applies to both FDI and indigenous companies, many of the experiences, challenges and impacts will be similar. That said, in our experience, there are factors that are of more relevance to FDI companies than indigenous companies and *vice versa*.

For example, for many FDI companies a key issue has always been the ability to take the tax credit above the line for accounting purposes. Many of these companies face intense competition within their groups for the allocation of R&D projects and resources. The relevant cost of undertaking R&D activities is obviously a major factor when considering where to locate R&D. By taking the tax credit above the line, the cost competitiveness of the Irish group company relative to other locations can be enhanced. Changes have been introduced in recent years, the aim of which was to facilitate companies in taking the tax credit above the line. However, in our experience, there is still some confusion on the issue which is further exacerbated by concerns over the certainty of the tax credit due in a claim environment where consistency, formal guidance and support is lacking. The base year issue (see page 16) is also of relevance to a number of FDI companies and given the mobile nature of this investment, needs to be addressed.

For indigenous companies, without access to group funding, it is the cash flow benefit of the R&D Tax Credit that can be most significant. This is particularly true nowadays where access to more traditional sources of funding have become severely restricted. As a result, delays in the processing and payment of R&D Tax Credits can impact these companies most severely.

Large company and SME activity

The R&D Tax Credit scheme does not distinguish between large and SME companies. The same rules, requirements and guidance apply to all companies. However, the experience of companies in claiming and supporting the tax credit can differ between large and SME companies. This is for a number of reasons including:

Resource Limitations (Staff) – all companies irrespective of their size are constrained by the resources available to them. However, for SME companies, these constraints can be even more severe. For example, allocating staff time to the R&D Tax Credit claim process (i.e. reviewing and collating supporting scientific documentation, gathering financial information and supporting

financial documentation, the preparation of R&D Tax Credit reports setting out the basis to the claim from a scientific and financial perspective) is onerous for all companies. For SMEs it will often mean reallocating staff from business critical activities. The investment of time can become hugely significant and sometimes prohibitive when the time spent responding to Revenue queries, preparation for a Revenue Audit, along with participation in same is factored in.

Resource Limitations (Financial) – Many companies have invested significant sums in implementing systems specifically for the capturing, maintaining and delivery of scientific and financial data relevant to their R&D Tax Credit claims. This is to be welcomed in that it leads to optimised claims that are more robust and better supported. However, SME companies are sometimes prevented from investing in such systems due to financial constraints.

R&D structure – R&D undertaken within a SME company can be different to that undertaken within a large company in terms of its structure. For example, many SME companies will not have a designated R&D department. As a result the task of capturing and supporting eligible R&D activities and related costs can be more onerous for these companies.

It is important that the process of claiming and supporting a tax credit does not place an unnecessary burden on the claimant company and impact their core business. For the reasons outlined above, the risk of this occurring in the case of a SME company can be high. Throughout our submission we have made a number of recommendations that would mitigate this risk for all companies including SMEs.

For large companies, the claim process can be further complicated by their size and the lack of regular interaction between the finance/tax and R&D departments. The R&D Tax Credit is unique in that it combines both a scientific test as well as an accounting test. The financial side of the claim only progresses if the science test is met and qualifying R&D activities have been undertaken. Often, the larger the firm the less familiar the finance/tax department will be with the nature of the activities being undertaken within the R&D department and *vice-versa*. Given the number of people involved, dissemination and effective communication of key information in relation to the scheme becomes more complex. This emphasises the importance of having up-to-date, practical guidance on areas such as eligible activities.

Deadweight and Additionality

For the purpose of this submission and given the complications referred to elsewhere in quantifying the direct benefits of the R&D Tax Credit, we have looked at deadweight as the R&D investment that would have occurred in the absence of the tax credit and additionality as the R&D investment made as a direct result of the tax credit. Minimising deadweight and optimising additionality is obviously a key objective of most administrations that utilise tax incentives including Ireland.

While the objective is understandable, i.e. why incentivise activities that would have been undertaken regardless of the tax credit?, quantifying the deadweight and additionality is difficult if not impossible. Again, it is necessary to deal with the counterfactual of what a company would have invested in R&D if the tax incentive had not been in place. A wide range of factors contribute to decisions regarding R&D investment. There is no doubt that some companies would invest in R&D regardless of the tax credit in order to achieve a competitive advantage or other business objective. However, to what extent it is difficult to quantify.

A scheme such as ours that operates on an incremental basis is in effect a blunt attempt at incentivising additionality only. However as highlighted below on page 16, this has caused practical difficulties for many companies and in some cases, impacted the overall effectiveness of the scheme. This is in part due to the additionality being measured against an arbitrarily selected year. However it also highlights the risk in introducing measures that seek to isolate and incentivise the additionality only.

Leyton believe that there are more indirect measures that can be introduced such as pre-registration and advanced notification that could be more effective in reducing deadweight while at the same time enhancing the robustness of claims and the integrity of the scheme. This proposal is explored in more detail in Appendix 1.

4. *To Consider Whether the Design and Structure of R&D Tax credit is Optimum by Analysing:*

- ▶ *The 'incremental' approach to eligible expenditure (i.e., the use of 2003 as a base year for the assessment of incremental expenditure);*
- ▶ *Possible overlaps with other tax provisions;*
- ▶ *The level of allowable expenditure that can be outsourced;*
- ▶ *Aspects of the eligibility criteria (is the regime too wide or too narrow in scope in respect of allowable activities);*
- ▶ *The interaction and alignment of the tax credit with R&D grants;*
- ▶ *The administrative burden of the regime.*

As highlighted throughout this submission, the R&D Tax Credit has had a substantial, positive impact on the quantum and quality of R&D being undertaken in the country. The Terms of Reference specify six areas under which the design and structure of the scheme should be analysed and we have covered each of these below. However, there are a number of additional areas that we believe should be evaluated as part of this review to ensure the scheme's design and effectiveness is optimal. We have taken the opportunity to also highlight these areas and propose further potential changes that would in our view benefit both claimant companies and those administering the scheme. These are set out in Appendix 1.

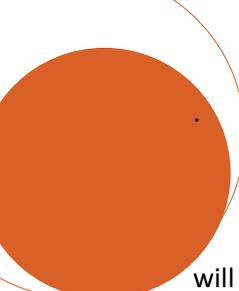
The 'incremental' approach to eligible expenditure (i.e. the use of 2003 as a base year for the assessment of incremental expenditure)

The purpose behind the incremental scheme is clear and not without merit, to incentivise companies to increase investment in R&D over and above the base year amount. Initially, it was intended that a rolling base year would apply. However, as part of the Finance Act 2008, the base year was fixed at 2003. The incremental approach is causing two main problems for the operation and effectiveness of the scheme and these are dealt with separately below.

Practical difficulties in identifying and supporting R&D activities/expenditure in 2003

2003 is an arbitrarily selected year on which all subsequent R&D investment is compared in assessing a company's entitlement to claim an R&D Tax Credit. One obvious complication of fixing the base year is that as time passes, it is more difficult to assess activities in the period. Staff may have moved on, internal systems may have changed and as companies move beyond the usual 6 year requirement for retaining records, relevant information may no longer be readily available.

On page 3 of the Invitation for Submissions it is stated that "*Setting 2003 as the permanent base year under the scheme meaning that over time the scheme will effectively become volume-based*". It is important to note that under current rules, companies claiming the R&D Tax Credit are still required to determine and to be able to support their base year spend. For companies that have been incorporated after 2003 it will obviously be relatively straightforward to support a "nil" base year i.e. the scheme is effectively a volume based scheme for these companies. However, companies incorporated during or before 2003 must be able to support their base year R&D expenditure and



will usually be required to do as part of any audit/enquiry into its claim. Therefore, this statement that the scheme effectively becomes volume-based is only true for some companies e.g. those coming within the charge to Irish corporation tax for the first time since 2003.

For those other companies that were within the charge to Irish corporation tax in 2003, the requirement to assess the base year remains. In our experience, this can be a source of concern and poses practical difficulties for first time claimant companies, becoming more of an issue the further from 2003 the first claim is made. For example, under current rules, a company that commences to carry out qualifying R&D activities in 2013 and submits a claim for that year will be required to assess and be able to support its base year spend. For the reasons already outlined, the time and cost involved in assessing the base year can become prohibitive and may actually deter companies from making a R&D Tax Credit claim. This matter is easily resolved by way of a statement from the Revenue Commissioners to the effect that, in the absence of clear evidence to the contrary, a “nil” base year will be accepted for first time claimant companies after a specified date.

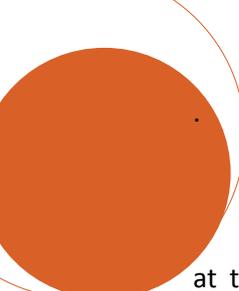
Penalisation of companies that have shown a long-term commitment to Ireland

We also have concerns over the impact of the incremental approach on companies that have made significant investment in R&D in Ireland over the longer term and often employ large numbers of highly skilled people in the country.

Rather than being rewarded and incentivised, these companies are effectively being penalised for having made a significant investment in the arbitrarily selected year of 2003. They can be placed at a competitive disadvantage in terms of the effective cost of carrying out R&D to companies that have come within the charge to Irish corporation tax since 2003 and therefore have no base year. It is our understanding that the number of companies in this position may not be large. This is even more reason to address the inconsistency, rather than ignore it as has been the case to date. Although small in number, these companies continue to make a significant contribution to this country and therefore need to be supported.

Some steps have been taken in recent years to address the base year issue and this is to be welcomed. Finance Act 2012 introduced new rules for accounting periods commencing on or after the 1 January 2012 whereby the R&D Tax Credit is calculated on the first €100,000 of qualifying R&D expenditure without reference to the base year R&D spend. Finance Bill 2013 has proposed to increase this to €200,000. While these changes have been positive and will benefit some companies, given the sums involved, they will be less relevant for some companies that have and continue to invest significant sums in R&D. It is important that changes take account of these companies also and that the scheme is effective in incentivising these companies to invest in R&D.

Moving to a full, volume based scheme would be the most effective way of ensuring this is achieved. Given the economic difficulties that the country continues to find itself in and the ongoing pressures to cut our budgetary deficit, there may not be an appetite for the outright removal of the base year



at this time. If this is the case, then it is crucial that all other options that can facilitate these companies in claiming their proper entitlement under the scheme are considered.

These options include moving the base year from 2003 or allowing companies to utilise an average R&D spend over a specified period as the base year. Another option that may be worth considering is to enable a company to reduce its base year amount where it commits to and delivers on a pre-agreed programme for job creation. Through consultation with the relevant stakeholders, milestones could be agreed that would, when satisfied, lead to a reduction in the company's base year. The reduction could vary proportionally with the levels of job creation committed to and delivered upon. Claw back mechanisms could be put in place to ensure jobs are retained beyond a minimum period. In addition to enabling these companies to benefit from the R&D Tax Credit, such an initiative could contribute towards addressing our chronic unemployment figures.

These are just a few suggestions that Leyton propose and there are many more. What is important is that further discussion is had and that these companies, some of whose R&D investment is internationally mobile, are incentivised to continue undertaking R&D in Ireland.

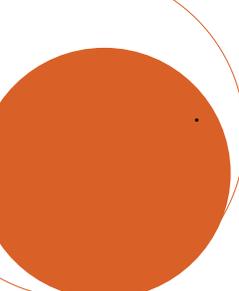
The level of allowable expenditure that can be outsourced

R&D projects can require input from a number of different disciplines or scientific/technological fields. Where the necessary expertise is not available internally, companies may need to subcontract out parts of the overall project to other parties. The specialist scientific/technological knowledge and capabilities may be available from another company or within academia. In other cases, the requirement to outsource may result from resource limitations within the company and the need to compliment the staff numbers available for a project.

The use of contractors to resource R&D projects can be more prevalent in certain industry sectors such as the ICT sector. Within these sectors, there has traditionally been widespread use of contractors to provide additional resources and expertise not available within the company. Based on feedback we receive from companies in these sectors, the requirement to engage the services of contractors is often borne out of necessity as it may not be possible to employ people with the required specialist skills, expertise and experience. It is also the case that the use of contractors provides companies with the required flexibility where involvement is only required at specific times or on certain projects and activities.

Whatever the reason, outsourcing is a crucial and legitimate part of many companies R&D activities and can be a substantial part of their R&D expenditure.

Finance Act 2012 introduced changes to the treatment of third party costs that increases the amount of expenditure that can be outsourced to the greater of a) €100,000 and b) 5%/10% of the in-house R&D spend in the case of universities and unconnected third parties, respectively. While this change was welcome, it should just be the first step in addressing this issue and ensuring that companies, for which the use of outside parties on their R&D projects is a necessity, are not placed at a disadvantage under the scheme relative to other companies and/or sectors.



One option worth considering is to remove the link to in-house R&D spend with respect to the amounts that can be included for activities outsourced to unconnected third parties and universities. Instead a discount could be applied to total third party payments to remove the profit element and the net amount included in full in the R&D Tax Credit claim. In the case of outsourcing to universities, such a move would also help foster collaboration between businesses and academia, a key objective in building and maintaining a true knowledge economy.

In Appendix 1, Recommendation 3, we highlight a number of other outsourcing issues that in our view need to be addressed.

Aspects of the eligibility criteria (is the regime too wide or too narrow in scope in respect of allowable activities)

The current criteria of eligibility are largely drawn from the OECD definitions of R&D activity which are internationally agreed as a *de facto* standard for the purpose of surveying R&D activity.

In our experience, it is the definition of “experimental development” that is of particular relevance to the Irish R&D Tax Credit scheme. While both basic and applied research is being undertaken, the majority of companies Leyton encounter are primarily involved in the experimental development of new products and/or processes. Relative to basic and applied research, experimental development is the part of the overall innovation process that is closest to the production/commercialisation phase. As a result, the borderline between qualifying R&D and other activities can be less defined.

That said, it is our opinion that the current eligibility criteria have served the scheme well. The application of the R&D Tax Credit requirements is relatively straightforward for companies that invest the time necessary to familiarise themselves with the scheme requirements (such as distinguishing between their own internal understanding of R&D and that required for the R&D Tax Credit claim). Having eligibility criteria that are flexible and applicable across all industry sectors is an important feature of the scheme.

Another advantage of utilising definitions based on international guidelines is the comparability of R&D activity across countries. In comparison to Ireland, the authorities in a number of other jurisdictions have been far more forthcoming with guidance on their respective schemes including eligibility criteria. Although not binding in an Irish context, given the similarities in definition, this information can be a useful reference for R&D performing companies in Ireland.

However, while in our opinion the current definitions and eligibility criteria are appropriate, it is our view that more up-to-date, practical guidance is required from the Irish authorities regarding their application in identifying qualifying R&D activities within modern innovation processes. The traditional linear model of innovation (see Figure 3 below), based on chronological steps and a clear distinction between the phases of design, development, production and commercialisation appears to have been the reference model on which guidance has been based to date. In our experience, the expectations placed on claimant companies with regards to crucial components of an R&D Tax Credit claim such as the start/end dates of qualifying activities, the treatment of testing and trial costs and

the capturing of supporting documentation are often based on these more traditional development methodologies.

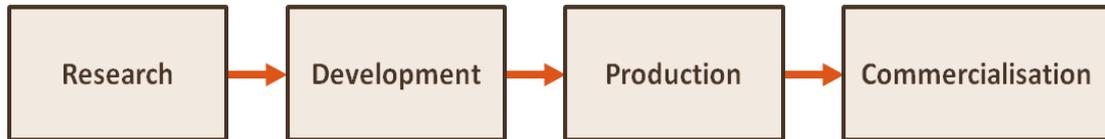


Figure 3. Linear model of innovation

However, in reality, the linear model does not fit well with more current innovation processes and the related development methodologies where R&D is undertaken as an ongoing cycle with “real time” feedback from testing phases and production into the R&D process. For other companies, in order to minimise risk and costs, R&D often relates to incremental improvements to existing products and processes. Non-linear models, such as the Kline’s Chain-Linked model of innovation, are often more relevant to companies undertaking R&D utilising these “agile” or “extreme” development methodologies (to use terminology from the software sector, where this issue is particularly relevant).

In such a model (See Figure 4 below), there is a constant feedback and continuous improvements. These are not merely cosmetic changes but instead are carried out to create new or improve existing products e.g. the addition of new modules or functionalities to a software product. The linear model of innovation on the other hand, is more relevant to the one-off development of new products or processes with long development life cycles or in the case of further development and production of “spill over” products from Universities or Institutes of Research that aim to revolutionise a particular market. These new development methodologies can complicate the R&D Tax Credit claim process particularly in areas such as the identification of R&D start/end dates and the capturing of supporting documentation.

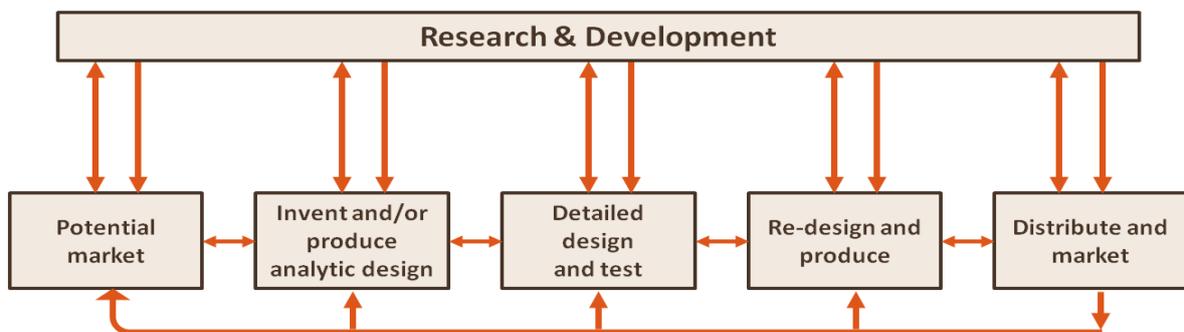


Figure 4. Chain-Linked model of innovation

In our experience, the failure of guidance to keep up-to-date with the evolution of R&D methodologies and practices within the innovation process has created confusion and difficulties both for claimant companies and those charged with assessing the eligibility of activities. We believe that this review represents an opportunity to begin the process of addressing the deficiencies that currently exist with regards to guidance on the scheme. It is important that all stakeholders, and most importantly R&D performing companies, are given an opportunity to provide feedback on this crucial area. The issuing of regular, up-to-date guidance is in our view crucial to ensuring the effectiveness and maintaining the integrity of the scheme.

The interaction and alignment of the tax credit with R&D grants

Currently, the primary interaction between the R&D Tax Credit and R&D grants is provided for in S766(1)(b)(v) TCA 1997 whereby the amount of expenditure included in a tax credit claim must be reduced by any grants receivable in relation to the expenditure. Barring some complications caused by timing issues, this is in our view a well understood principle of the scheme.

With regards to the alignment of the tax credit with R&D grants, in our view it is useful to consider the scientific and the financial aspects separately as the issues that arise and the potential benefits/pitfalls can be different.

Alignment of scientific aspects of R&D Tax Credit and grants

Attempts have previously been made to align the scientific aspects of the R&D Tax Credit with grants albeit in a limited manner. Tax Briefing 67 (December 2007) provided that where certain conditions were satisfied, Revenue would “*not as a rule, seek to independently/separately have a claim in respect of smaller projects examined by an expert*” where those projects had been approved for RTI funding.

Due to subsequent changes in the nature of grant funding available, the above provisions are no longer applicable to current claims. However, if the alignment of the tax credit with R&D grants is to be considered again, it is important that a number of key issues are taken into account and where relevant, lessons are learned from the previous attempt.

In our view, some key issues to be considered are as follows:

- ▶ **Consistency in eligibility criteria** – if the alignment of the R&D Tax Credits with grants is to be successful, it is crucial that the definitions used by the relevant bodies are consistent, particularly with regards to eligible activities. For example, R&D grants are typically based on innovation and technical risk as opposed to the scientific/technological advancements and resolution of scientific/technological uncertainties explicitly required for the tax credit. Although there are some similarities, they are not the same.

- ▶ **Differences in period of eligible activities within a project** – the activities that can be included in a grant claim in respect of a project can fall outside the period of activities for which a tax credit claim can be made.
- ▶ **Guidance** – Assuming complications caused by differences in timing and definitions can be overcome, it is important that clear and consistent guidance is issued as to when and how the provisions aligning the tax credit with grants can be applied.

One area where we believe there is potential to achieve efficiencies is through the alignment of the grant **claims** (as opposed to application) with the R&D Tax Credit. The claiming of grants is usually linked to the achievement of specific project milestones. This will typically involve the drafting and submission of documentation evidencing that the milestones have been met. If the eligibility criteria were consistent and the timing of grant claims were aligned with R&D Tax Credit claims, companies could leverage work undertaken on their grant claims in preparing their R&D Tax Credit claim and *vice versa*.

Alignment of financial aspects of R&D tax credit and grants

Complications caused by inconsistent definitions will also be relevant if attempting to align the financial aspects of the R&D Tax Credit with grants. However, that said, we believe there is scope to simplify the calculation of expenditure available for inclusion in an R&D Tax Credit to bring it more in line with that used for grants. Moving to a more streamlined proxy system whereby labour and other direct R&D costs are used as a basis for other costs will reduce the time and costs incurred in claiming, supporting and administering the scheme. This concept is explored further in Appendix 1.

Administration of scheme

In addition to the loss of taxation, administration costs represent a significant cost of the R&D Tax Credit scheme to the exchequer. The cost of administration should also be considered from the perspective of the claimant companies. Minimising these costs should be a key objective of this review and therefore features highly in our recommendations.

Creating a positive, collaborative and transparent claim environment is one way of reducing the burden of administration and related costs. Such an environment should possess the following characteristics:

- ▶ Up-to-date, practical guidance from Government on technical issues and risk areas;
- ▶ Proactive promotion of the scheme by Government;
- ▶ Timely response to queries from claimant companies/practitioners on tax and scientific aspects of the scheme;
- ▶ The speedy and efficient resolution of enquires and audits into claims and a 12 month timeframe for the initiation of audits/enquiries;
- ▶ Consistency in the treatment of claimant companies;

- ▶ Transparency in relation to the operation of the schemes and a “level playing field” for all claimant companies;
- ▶ Certainty on timeframes for payment of cash refunds and valid reasons for delaying payment.

Despite appearing to have been around for a long time and relative to many other jurisdictions, the Irish R&D Tax Credit scheme is still in its infancy. Lessons can be learned from the manner in which corresponding schemes in other countries have evolved. For example, the volume and quality of formal guidance issued to claimant companies in Ireland on both the scientific and tax aspects of the scheme is inferior to many other jurisdictions. Claimant companies should have access to up-to-date guidance, including where relevant, risk areas to be focused on to ensure full compliance with scheme rules. One need only look at the detailed information and guidance provided by the HMRC in the UK on their R&D Tax Relief scheme to see a clear contrast with the limited official guidance available in Ireland. We believe that this is one area that should be prioritised as part of this review.

Providing high levels of confidence and comfort to companies of their entitlement should be a key objective of the R&D Tax Credit scheme and addressing the points outlined above will facilitate this.

International competition to attract R&D performing companies is intense. Most OECD countries use R&D Tax incentives as part of their offering to foster innovation. R&D Tax incentives are also an important policy tool for a large number of non-OECD countries including Singapore, India and Brazil. Based on the most recently available data from the OECD's publication titled *Direct Government Funding of Business R&D (BERD) and Tax Incentives for R&D*, Ireland performed well among countries that offer R&D tax incentives and is ranked just behind France, Canada, Korea and Belgium.

A number of countries, most notably the UK, have made significant enhancement to their schemes and introduced other innovation friendly measures in recent times. Other countries, such as Germany are also considering the introduction of an R&D Tax Incentive scheme. The importance of Ireland's overall offering remaining competitive is obvious and this applies to both the scheme itself and the claim environment in which it operates.

The Netherlands is an example of another competitor country within Europe. Obviously a range of factors are taken into account in appraising locations for R&D investment such as the availability of a skilled workforce and the infrastructure necessary to facilitate the R&D activities. Just like Ireland, the Netherlands meets these requirements. In addition to an enhanced patent box regime, the Netherlands also operates a favourable R&D Tax Incentive scheme that can in some cases be offset against a company's payroll liabilities.

Another case that is worth mentioning is Canada. The Canadian Scientific Research and Experimental Development (SR&ED) program has been in operation since the early 1980's and, it is our understanding, was one the schemes reviewed as part of the introduction of R&D Tax Credit in Ireland.

The SR&ED scheme has recently undergone a comprehensive review by a panel of experts. The report that subsequently issued (referred to as the "Jenkins Report") included a number of proposed changes, some of which have already been implemented. A number of the changes are consistent with those we are recommending based on our experience of the Irish scheme. For example, in Canada they are also seeking to simplify the financial aspects of the claim process for SME companies by moving to a more labour cost based calculation. It is interesting to note that in Canada, they are also looking to move towards a more balanced approach to incentivising R&D, using both tax incentives and direct funding.

The above examples clearly illustrate how other countries are changing and enhancing their schemes in order to maintain the competitiveness of their offering. Much like the activities it seeks to incentivise, the R&D Tax Credit must also evolve if it is to remain effective. An effective and efficient R&D Tax Credit complemented by a positive, collaborative and transparent claim environment sends the right message to R&D performing companies.

In addition to the features of the R&D Tax Credit specified for analysis in the Terms of Reference of the *Invitation for Submissions*, we have set out below some further recommendations that we believe have the potential to further enhance the effectiveness of the scheme for claimant companies, the Government and taxpayers.

Recommendation 1 regarding the introduction of an alternative, opt-in scheme encompasses a number of different changes. This is to illustrate the holistic approach that we believe would optimise the benefit to all stakeholders. However, if such far-reaching changes are not on the agenda, any of the individual recommendations would in our view be a welcome addition to the current scheme.

Recommendation 1 - Introduction of an alternative, opt-in R&D Tax Credit scheme

As highlighted throughout our main submission, there is great diversity in the companies claiming the R&D Tax Credit. They can differ in their size, structure, sector, market as well as the resources available to them to prepare and support a claim. In our view, now is an opportune time to review the one-size-fits-all approach used to date and to investigate whether there is an alternative scheme that could be introduced that would benefit both claimant companies and those charged with administering the scheme. For example, an alternative scheme could be introduced that companies could opt into and would include the following features:

(a) Pre-registration of R&D Company and advanced notification of qualifying R&D projects

Companies that opt-in to the alternative scheme would be required to register with the Revenue Commissioners. In addition, within a specified period of commencing activities that have potential for inclusion in an R&D Tax Credit claim, the company would need to notify the Revenue Commissioners that such activities have commenced.

These pre-registration and advance notification requirements would be useful to the Government in measuring the levels of qualifying R&D activities being undertaken and forecasting the costs of the scheme. Such a measure would also indirectly assist in reducing the deadweight (see page 4) associated with the scheme as companies would no longer be in a position to claim on the basis of a retrospective analysis of activities undertaken.

While there may be concerns about an additional administrative burden being placed on companies, in our view this would reduce as companies became familiar with the process and would be more than offset by efficiencies achieved elsewhere in the claim process. For example, part of the advance notification requirements could be an assessment and documentation of the state of the art that existed at the outset of the project. This will form part of the subsequent preparation and supporting of the R&D Tax Credit claim and therefore will reduce the time inputs required at this stage of the process. Also, in recent years, there has been a move by R&D performing companies to “real-time” claim processes and therefore a lot of the information required should be readily available.

(b) Review and sign-off of claim process and systems by Revenue

Following registration, an on-site meeting with Revenue could be arranged during which the company would provide details on its activities and the systems they have in place for the capturing and recording of the scientific and financial information relative to their R&D activities. The Revenue Commissioners would then have an opportunity to flag any areas of risk they identify. Once any risk areas have been rectified, Revenue could allocate the company a “risk status” that reflects the quality of the claim process and control systems implemented. This could be used for selecting cases for audit/enquiry.

(c) Simplification of R&D Tax Credit calculation

The R&D tax credit is calculated based on eligible expenditure on R&D. For most expenditure items such as staffing costs and direct R&D material costs, the process of identifying and calculating the expenditure amounts to be included is relatively straightforward. For other expenditure items such as plant and machinery and overhead costs, apportionments and estimates are often necessary at the time of preparing the claim. These two expenditure items were recently highlighted by Revenue as risk areas in claims.

Companies that opt into this scheme would need to capture and be in a position to support the staffing costs and other costs directly incurred in relation to the qualifying R&D activities as under the current scheme. These amounts would then act as a proxy for all other eligible expenditure to be included in the claim and this would be calculated by applying a fixed percentage to the proxy amounts.

(d) Compulsory Submission of R&D Tax Credit report

An R&D Tax Credit report setting out the basis to the R&D Tax Credit from a scientific and financial perspective would need to be submitted with the claim. This would provide the Revenue Commissioners with the information necessary to carry out a preliminary assessment of the claim. It would also ensure that key issues are being given full and proper consideration by companies when preparing the claim.

(e) 12 month deadline for initiating an audit/enquiry into claims

If a company opts in to the scheme and meets all the conditions outlined above, there will be a 12 month time limit on the instigation of a Revenue audit and/or enquiry into the claim. In our view, this would be appropriate given the low risk status of such cases.

Recommendation 2 - Cash refund received in one instalment and restriction based on future liabilities

Under the current scheme, where a company has insufficient corporation tax liabilities against which to offset the R&D Tax Credit, the excess credit can be received by way of a cash refund. However,

the cash refund is received in 3 instalments over a 33 month period. Also, the amount of the tax credit that be received by way of a cash refund is restricted to historical corporation tax liabilities or payroll liabilities.

The companies being most impacted by these provisions are often those with an urgent need of access to funding e.g. SMEs and Start-Ups. We propose that the cash refund should be received in one instalment and restrictions based on the future corporation tax/payroll liabilities.

Recommendation 3 – Review of written notification requirements introduced in Finance Act 2012 for subcontractors and exclusion of certain subcontractor arrangements.

The new legislation introduced by Finance Act 2012 relating to outsourcing provides that companies intending to include payments to unconnected third parties in its R&D Tax Credit claim must notify “that person in writing that the payment is a payment to which this clause applies and that the person may not make a claim under this section in respect of such research and development activities”. The latest version of the corporation tax return form for accounting periods ending after 1 January 2012 contains a box that must be ticked to confirm that this notice has been given.

The purpose of this notification requirement is presumably to ensure that two companies do not claim the R&D Tax Credit in respect of the same R&D activities. However, in its current form, the legislation requires companies to serve written notice to all parties, payments to whom they wish to include in their claim as subcontractors. There has been little discussion or guidance in relation to the impacts of this change and in our view there are three main areas of concern:

1. **Entitlement to Claim** – prior to the Finance Act 2012 change, if a company (“PrimaryCo”) subcontracted R&D activities to another company (“SubCo”), then PrimaryCo could included the costs paid to Subco, subject to the relevant restrictions, **provided SubCo was not claiming in respect of the activities**. Under the new rules, PrimaryCo appears to be entitled to issue SubCo with a letter stating that it, i.e. PrimaryCo, is claiming for the activities and SubCo is not entitled to claim in respect of same. If this is the case, this represents a shift in initial entitlement to claim for R&D activities which, in our view, has not received sufficient attention or clarification. The 2012 year is the first for which the new rule will apply and in our view, its implications have not been fully considered, e.g SubCo submits its R&D Tax Credit claim in good faith only to receive a letter at a later date from PrimaryCo stating that it, i.e. PrimaryCo, intends claiming for the activities and SubCo is therefore prevented from doing so. This issue needs to be addressed immediately.
2. **Administrative Burden** - As highlighted elsewhere in this submission, in many sectors the outsourcing of activities on R&D projects is very commonplace. Recent reports have highlighted the difficulties that companies in a number of sectors, including the ICT sector, are experiencing in finding and recruiting employees with the required skills and expertise. As a result, these companies will often need to use large numbers of contractors in a given year to work alongside their own staff in undertaking R&D activities. Clearly the requirement

to issue written notification to each contractor places a significant administrative burden on the company.

3. **Costs Impact** - based on the feedback we have received from R&D companies, there is some concern that issuing such notice in writing to contractors will complicate the contract negotiation process. In many of these cases, the contractors in question are either individuals providing services through a limited company or agency workers. Therefore, in most cases, the contractors will not be in a position to claim an R&D Tax Credit under S766 TCA 1997 in their own right. However, as currently worded, they will still need to be issued with this written notification. Given the continued focus on cost competitiveness in Ireland, this matter needs to be addressed immediately and clear guidance issued as to when these written notification requirements can be disregarded.