



Research & Development in Ireland
March 2006

RESEARCH AND DEVELOPMENT IN IRELAND

This briefing describes the advantages and benefits of conducting research and development in Ireland. The undertaking of research and development finds, in the first instance, its basis in EU law, which is anxious to promote research and development generally in the European Union.

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1. The Framework Programme for Research and Development in the European Union

1.1 EU Framework Programme 6 (“FP6”)

The European Union is engaged in an ongoing project to create a European Research Area (“ERA”) which co-ordinates national research policies in much the same way as economic and monetary policy is already co-ordinated. It is the stated aim of the European Commission to increase investment in R&D to 3% of EU gross domestic product (“GDP”) by 2010. The FP6 represents the implementation of these R&D policies and involves expenditure of €4bn annually in support of transnational collaborative research projects between industry and academics. FP6 funding is specifically aimed at projects which cannot be better carried out at national or regional level and is available to consortia of partners from different Member States and associated countries. The Seventh Framework Programme (“FP7”), which will cover the period 2007-13, is currently being prepared and will be launched at the end of 2006. The European Commission had initially proposed doubling the FP6 budget, although this has been reduced to a proposed 75% increase in the budget in light of financial pressures across the Member States.

Private companies are one of the main targets of FP6, and SMEs are a particular priority, with 15% of the budget reserved for them. SMEs can also make proposals as an association or groupings of SMEs who wish to engage in collective research.

2. Research and Development Funding and State Aid Rules

2.1 Research and Development Funding and State Aid Rules

The EC Treaty prohibits Member States from granting aid which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods and where trade between Member States is affected. However, the Treaty also calls on the Community and the Member States to foster innovation and R&D and so many forms of research supports are considered not to constitute state aid. The EU actively encourages and supports the provision of such aid and communications from the Commission have clarified their position. The central consideration is the proximity of the R&D funded to the market – i.e. to commercialisation of a product.

The Commission has set out a table of eligible funding as a proportion of total costs and the funding available from Irish Government Agencies is designed in line with EU requirements. Any scheme which exceeds these requirements must be notified to the Commission and such notification should show that the funding encourages R&D in addition to the recipient’s day to day business activities and that the R&D would not have occurred without the funding. The Commission examines each case on an individual basis to take account of the nature of the project, the risk of distortion of competition and the effect on trade between Member States.

3. Research and Development and Competition Law with specific reference to academic bodies

3.1 Research and Development and Competition Law

Research and Development Agreements are viewed as being a form of co-operation between two parties. The European Commission has been always concerned that such Agreements could have anti-competitive effects, especially where the parties were or potentially could be competitors.

The European Commission has issued a number of notices on Co-operation Agreements and in the area of research and development, issued in 1985 a block exemption (Regulation No. 418/85) (“the 1985 Block Exemption”), which provided that if the parties came within its provisions, the Agreement was lawful.

However, the 1985 Block Exemption caused its own problems as it was not clear whether to go outside its terms meant that it was anti-competitive. Further, the wording of the 1985 Block Exemption created uncertainty and no distinction seemed to have been made in respect of the type of parties which entered into such Agreements.

One of the difficult areas was the exploitation of the fruits of the research and development. The 1985 Block Exemption basically required that there should be joint exploitation.

The issue of joint exploitation rights became a particular issue where an academic body was one of the parties. A commercial undertaking does from time to time have the need to engage an academic body to undertake research on its behalf. The benefit for the academic body is that there is a financial reward and it also enhances its reputation in the particular field. However, given the apparent requirement of joint exploitation of the fruits of that research, a problem arose as the commercial undertaking would naturally require to own all the fruits of the research. Accordingly, the 1985 Block Exemption gave rise to difficulties when it was intended to create certainty.

The 1985 Block Exemption expired on 31st December 2000. Prior to its expiration, the European Commission undertook a review of the area and introduced two measures, namely,

a new Block Exemption Regulation (No. 2659/2000) (“the 2000 Block Exemption”) which brings in more flexibility when dealing with academic bodies, and,

guidelines on horizontal agreements which would include research and development agreements.

3.2 The 2000 Block Exemption

The definition of research and development in the 2000 Block Exemption is quite detailed and provides:-

“Research and Development” means the acquisition of know-how relating to products or processes and the carrying out of theoretical analysis, systematic study or experimentation, including experimental production, technical testing of products or processes, the establishment of the necessary facilities and the obtaining of intellectual property rights for the results”

The European Commission takes the view that an agreement for joint research and development up to but not including the stage of industrial application generally does not give rise to anti-competitive effects. However, this does not necessarily suggest that exploitation should only be then undertaken by one party and the other party restricted. The issue in such a case is between joint exploitation by the parties or separate exploitation by each of them.

The Preamble to the 2000 Block Exemption indicates that in the case of academic bodies, research institutes and undertakings which supply research and development as a commercial service without normally being active in the exploitation of the results, are now able to agree to use (and contract to restrict themselves to such use) the results of the research and development solely for the purpose of further research.

Article 1 of the 2000 Block Exemption sets out three types of consequences of research and development, the one which is relevant being,

“Joint research and development of products and processes excluding joint exploitation of the results”.

This is given further expression in Article 3.2 of the 2000 Block Exemption which lays down the condition for this exemption and provides,

“All the parties must have access to the results of the joint research and development for the purposes of further research or exploitation. However, research institutes, academic bodies or undertakings which supply research and development as a commercial service without normally being active in the exploitation of results may agree to confine their use of the results for the purposes of further research.

Accordingly, academic bodies retain the right to use the results of the research and development for further research.

Where the parties are not competitors, the exemption applies for the duration of the research and development. In the case of joint exploitation, then a period of seven years is provided from the date the products are put on the market.

The seven year period applies if the parties are competitors but only if their combined market share does not exceed 25%.

After the seven year period, the exemption will continue so long as the combined market share of the parties does not exceed 25%.

The 2000 Block Exemption came into force on 1st January 2001, and will expire on 31st December 2010.

3.3 Guidelines on Horizontal Agreements

The purpose of the Guidelines is to provide an analytical framework for the most common types of horizontal co-operation. They are intended to assist the examination of the competitive effects of research and development agreements.

The Guidelines state in the case of an academic body in the area of research and development that,

“R&D co-operation by means of outsourcing of previously captive R&D is often carried out by specialised companies, research institutes or academic bodies which are not active in the exploitation of the results. Typically, such agreements are combined with a transfer of know-how and/or an exclusive supply clause concerning possible results. Due to the complementary nature of the cooperating parties in these scenarios, Article 81.(1) does not apply”.

“R&D co-operation which does not include the joint exploitation of possible results by means of licensing, production and/or marketing rarely falls under Article 81(1). Those “pure” R&D agreements can only cause a competition problem if effective competition with respect to innovation is significantly reduced.

These statements seem to be broader than what is contained in the 2000 Block Exemption. However, the Guidelines acknowledge the applicable provisions of the New Block Exemption when they state:

“...The [2000] Block Exemption provides for specific exception to this general rule in the case of academic bodies, research institutes or specialised companies which provide R&D as a service and which are not active in the industrial exploitation of the results of research and development”.

Thus, whilst research and development arrangements with an academic body are unlikely to give rise to any competition issue, it would appear that whilst it is possible to secure access rights to the fruits of the research and development, it is necessary in order to ensure that the agreement comes totally outside Article 81 of the EU Treaty that the results of the research and development can continue to be used by the academic body for further research. Nothing in the 2000 Block Regulation or the Guidelines explains what this further research entails or how it might be used. If a concern arises by the academic body using the fruits of the research and development for further research, separate provision might be made to deal with the fruits of this further research. The further point which may be appropriate to consider is the nature and quality of the research and if the fruits of that research are capable of being exploited without the further know-how that resides with one of the parties. However, it would not overcome the right to use the fruits of the research for further research. Accordingly, it seems that to restrict entirely to use the fruits of the research would not be possible.

4. Research and Development Funding Opportunities in Ireland

4.1 Research and Development Funding Opportunities in Ireland

Ireland is renowned as one of the highest ranking countries in the world for educational standards, and has the second highest ranking for the percentage of 25-34 year olds who have reached at least third level education. It has one of the highest proportions of science and engineering graduates in the world and maintains a stable macroeconomic environment, with competition controls and flexible labour markets – all of these factors making it an ideal location for R&D projects.

There are currently around 300 multinational companies engaged in R&D in Ireland, with 66% of R&D expenditure coming from industry sources. Two-thirds of industry R&D in Ireland is performed by foreign companies operating in Ireland. This level of R&D investment, and increasing collaborative projects between industry and third level institutions, has been fostered by various financial incentives and technical assistance available through a number of state and EU agencies. Recently, these agencies have been responsible for distributing R&D funding provided under the National Development Plan (“NDP”), under which the Government has committed €2.48bn for research, technological development and innovation. The Agencies range from the 35 City and County Enterprise Boards, which stimulate local economic activity at the micro-enterprise level, to specialist agencies like Science Foundation Ireland and IDA Ireland.

4.2 Science Foundation Ireland (“SFI”)

SFI aims to support globally competitive scientific and engineering research in strategic areas that advance the country’s technological and economic success and reputation. During the course of the NDP, SFI will invest €646 million in researchers most likely to generate new knowledge and technologies in the Biotechnology and Information and Communications Technology (“ICT”) fields.

Supports available include Centres for Science, Engineering and Technology (“CEST”) grants, which fund industry-academic collaborative efforts and range from €1 to €5 million per year for up to ten years. Grants are available for work to be done in Ireland, but Calls for Proposals are generally open to researchers from any country.

4.3 Enterprise Ireland

Enterprise Ireland focuses on promoting indigenous industry, partly by supporting R&D projects carried out in collaboration with third level institutions or with international partners. Enterprise Ireland offers comprehensive schemes covering all stages of development, from research to commercialisation. Funding schemes include:

4.3.1 Research Technology and Innovation (RTI) Scheme

Supporting commercially industry led projects in product and process development representing an advance in the level of technical innovation. Grants range from 25-45%, depending on eligibility, with a maximum funding cap of €650,000.

4.3.2 Innovation Management Initiative

Grants are available to cover between 50-70% of participation in R&D training.

4.3.3 Tailor Made Funding For Significant R & D projects

Funding in excess of €3m over three-years is available where the project represents a significant “step-up” in the development of R&D in the company.

4.3.4 Innovation Partnerships Initiative

Encouraging the collaboration of companies and third level institutions. The proposal is submitted by the third level institution after it has been jointly defined with the company.

4.3.5 Commercialisation Fund

Enterprise Ireland offers financial support to companies wishing to commercialise academic R&D by funding the main stages of product development, from Proof of Concept to Commercialisation (“CORD”).

4.4 IDA Ireland

IDA Ireland offers incentives and assistance to attract foreign investment projects, especially US projects, to locate in Ireland. The organisation has 11 national and 12 international offices, constituting different specialist divisions dealing with electronics, engineering, healthcare, life sciences, international services, financial services and consumer products.

IDA Ireland makes grants available as cash payments for many purposes, including training and R&D. These are often provided as part of a grants package, which could include capital and employment grants, and is usually calculated in proportion to the size of the project and the number of jobs to be created by the project.

5. Tax Benefits for Research and Development in Ireland

5.1 Tax Benefits for Research and Development in Ireland

Ireland is well known as a competitive location for doing business. Apart from commercial advantages such as Ireland's membership of the Euro currency zone and an English speaking, well educated workforce, the Irish tax regime is very favourably disposed towards companies carrying on Research and Development (R&D) activities. A brief summary of some of the tax incentives offered in respect of R&D and related activities is set out below.

Intellectual Property (IP) is often one of the most valuable assets of a business and so its location and exploitation can significantly influence the world-wide effective tax rate of a multi-national group. For companies that license their IP to third parties, Ireland is an ideal location, for tax purposes, from which to centralise the function. Provided certain conditions are satisfied, a company licensing IP out of Ireland should qualify for the relatively low 12.5% corporate tax rate.

5.2 Tax Incentives - General

Corporation tax deductions may be available in respect of expenditure incurred on IP depending on the nature of the rights involved. For example:

- 5.2.1** Capital expenditure on patents may be written off, over the life of the patent, or 17 years, whichever is the lesser period.
- 5.2.2** Capital expenditure on the purchase of know-how from unconnected third parties may be written off when incurred.
- 5.2.3** Expenditure on business software may be written off in the year in which it is incurred or straight line over eight years for corporation tax purposes, depending on the facts.
- 5.2.4** Expenditure on R&D may qualify for an additional tax credit (see below).

Income from patents in respect of inventions substantially researched and developed in Ireland may be exempt from tax. Subject to certain conditions, this exemption may also extend to dividends received by Irish residents from companies in receipt of such patent income.

Generally, Irish stamp duty (transfer tax) is payable, at a rate of up to 9%, on the transfer of commercial property. The rate applies to the market value of the property transferred. However, since 1 April 2004, a stamp duty exemption is available in respect of the transfer of certain IP rights, including trademarks, patents and copyrights.

5.3 Research and Development Tax Credit

The Irish tax system permits a corporation tax deduction for qualifying expenditure on R&D. In addition to this tax deduction, an R&D tax credit may also be available. The Finance Act 2004 introduced the tax credit for companies incurring expenditure on qualifying R&D activities. The credit is calculated as 20% of qualifying R&D expenditure. Guidelines have been issued outlining the type of expenditure that qualifies for the R&D tax credit. Both the legislation and the regulations became effective from 1 January 2004, after European Union approval was granted to the regime.

The tax credit is available to a company where the company incurs qualifying R&D expenditure. The amount of expenditure must be quantified in accordance with certain rules.

The tax credit is offset directly against the corporate tax payable by the company. Taken in conjunction with the 12.5% corporation tax deduction for qualifying R&D expenditure, mentioned above, this should result in a total net subsidy for R&D qualifying expenditure equal to 32.5%.

The Finance Act 2006 introduced a number of amendments to the R&D tax credit scheme in light of experience gained by the Revenue Commissioners since the scheme was introduced. For example, plant and machinery must be used “wholly and exclusively” for R&D to qualify for the credit. Adjustments to the apportionment of capital expenditure incurred on plant and machinery are also necessary where an earlier apportionment ceases to be “just and reasonable”. The amendments also provide Revenue with the power to consult an expert in the field of R&D to assist them in determining whether the R&D credit has been validly claimed.

The calculation and operation of the R&D tax credit is complex.

5.4 What Research and Development Activities Qualify

5.4.1 Qualifying Research and Development Activities

The first requirement is that the expenditure must be expenditure on qualifying R&D activities, as defined in the tax code. Broadly R&D activities for this purpose must consist of systematic, investigative, or experimental activities in a field of science or technology, being one of more of the following:

- Basic research, i.e. experimental or theoretical work undertaken primarily to acquire new scientific or technical knowledge without a specific practical application in view;
- Applied research, i.e. work undertaken in order to gain scientific or technical knowledge and directed towards a specific practical application; or
- Experimental development, i.e. work undertaken which draws on scientific or technical knowledge or practical experience for the purpose of achieving technological advancement which is directed at producing new, or improving existing materials, products, devices, processes, systems or services;
- Activities will not be R&D activities unless they:
 - Seek to achieve scientific or technological advancement; or
 - Involve the resolution of scientific or technological uncertainty.

The guidelines that have been issued provide further detail on the activities in each science or technology sector that should qualify. Expenditure on routine activities such as market research and quality control testing is unlikely to qualify.

5.4.2 Qualifying Company

The second requirement is that the qualifying R&D expenditure must be incurred by a “qualifying company”. A company should be a qualifying company where:

- The company carries on a trade in Ireland throughout the relevant period or is a subsidiary of a company which carried on such a trade in Ireland;
- It carries on R&D activities in the relevant period; and
- It maintains an appropriate record of the expenditure incurred by it in carrying on those R&D activities.

Expenditure incurred by trading companies under 51% common ultimate ownership is aggregated and the credit can be attributed between the trading members of the group in proportions nominated by the group. In the absence of an election, the R&D credit will be allocated to group companies pro rata, based on the total level of qualifying and non-qualifying R&D expenditure incurred by each company.

5.5 Grant Aided Expenditure

A tax credit is not available for any amount of R&D expenditure that is covered by grant aid or is deductible for tax purpose in any jurisdiction, other than Ireland.

5.6 Quantifying the Research and Development expenditure

A tax credit is available in relation to two separate and distinct categories of expenditure:

5.6.1 Qualifying R&D operating expenditure and expenditure on relevant plant & machinery assets, and

5.6.2 Qualifying R&D capital expenditure on buildings used for the purposes of an R&D activity.

In the case of paragraph 5.6.1 above, once the amount of total qualifying R&D expenditure has been calculated, a threshold amount is applied (based on R&D expenditure incurred in certain previous accounting periods). The R&D tax credit is calculated as 20% of the amount of qualifying R&D expenditure that exceeds this threshold amount. A credit is available only in respect of “incremental” qualifying R&D expenditure.

In the case of paragraph 5.6.2 above, a tax credit should be available equal to 20% of the qualifying R&D capital expenditure. This credit is claimed straight line, over four years.

The R&D tax credit is available for offset against the Irish corporation tax payable by the company that has incurred the expenditure and generated the credit. If the company has insufficient corporation tax liability to absorb the tax credit, in the accounting period in which the credit arises, the excess tax credit may be carried forward within the company, for future offset. The excess tax credit may, in certain circumstances, be surrendered to a related qualifying group company for offset against that group company's Irish corporation tax liability.

5.7. Complexity of Research and Development Tax Credit Rules

The R&D tax credit rules are complex, both in determining whether the activity qualifies in the first place for the credit and also how much credit is available. The above summary provides an overview of some of the principal features of the tax credit. It is advised that companies interested in claiming the credit should obtain detailed Irish taxation advice.



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