



# TAX TREATMENT OF RESEARCH & DEVELOPMENT EXPENSES

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## Executive Summary

### Definition of research & development expenditure

While tax legislation of many countries examined for the purposes of this report provide a definition of ‘research and development expenditure’, the tax laws of Cyprus, Czech Republic, Finland, Hungary, Italy, Latvia, Lithuania, Luxembourg and Malta do not contain such a definition.

### Treatment of research & development expenditure

In Austria, Cyprus, France, Germany, Greece, Malta, Poland, Slovak Republic, Slovenia and the United States, research and development expenditure is deductible if it is in the nature of revenue expenditure but subject to amortization if it is in the nature of capital expenditure.

In Denmark, Finland, Italy and Luxembourg, the taxpayer has the option to either deduct or amortize the research and development expenditure. In Belgium, Latvia,<sup>1</sup> Lithuania,<sup>2</sup> the Netherlands, Portugal and Sweden, the taxpayer has the option to either deduct or amortize the research and development expenditure (other than expenditure on acquisition of fixed assets). The acquisition cost of the fixed assets used in research and development activities must be amortized.

In Czech Republic, expenditure on research and development is deductible unless the research result constitutes an intangible property. If the research result constitutes an intangible property, than the expenditure must be amortized.

In Hungary, under the corporate income tax law, expenditure on research and development is deductible. However, if the expenditure is for experimental development, then the taxpayer has the option to either deduct it or to amortize it. Under the personal income tax law, research and development expenditure incurred by an individual entrepreneur is deductible but expenditure on experimental development may also be capitalised and depreciated.

In Ireland, and the United Kingdom, the taxpayer has an option to either deduct or claim 100% tax depreciation in respect of research and development expenditure.

In Japan, under the corporate income tax law, expenditure on research and development may be either deducted or amortized, but the acquisition cost of certain assets used in

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<sup>1</sup> In Latvia, it appears that the fixed assets used in research activities must be depreciated.

<sup>2</sup> In Lithuania, the personal income tax legislation does not include a concept of research and development expenditure.

research and development can only be amortized. Under the personal income tax law, the experiment and research expenses and development expenses constitute deferred assets which may be depreciated over a five-year period (straight-line method).

In Estonia, deductibility of research and development expenditure is irrelevant in case of companies, since only distributed income is taxed by way of a dividend distribution tax. Under the personal income tax law, the expenditure on research and development activities is deductible.

### **Territorialization issue**

As regards the tax treatment (of research and development expenditure) under the general (non-incentive) scheme of taxation, the tax laws of most jurisdictions examined for the purposes of this report do not differentiate whether the expenditure was incurred within the country or outside the country. Accordingly, the territorialization issue does not arise as regards the tax treatment under the general scheme of taxation.

However, we have observed territorialization issues in respect of incentives granted under the tax laws of Belgium, France, Japan, the Netherlands, Spain and the United States. In respect of incentives available in Ireland, there is no territorialization issue if the expenditure is incurred in a foreign country forming part of the European Economic Area, but such an issue arises if the expenditure is incurred outside the European Economic Area.

### **Incentives under wage tax legislation**

Income tax laws of Austria, Belgium, Denmark, Finland, France, Greece, Hungary, Ireland, Italy, Japan, Malta, Portugal, Slovenia, Spain, the United Kingdom, and the United States provide specific tax incentives for research and development expenses.

### **Incentives under wage tax legislation**

Incentives under wage tax legislation are available in Belgium, France, and the Netherlands.

### **Treatment for subcontracted research**

In most countries expenditure on subcontracted research is treated in the same manner as the expenditure on research carried out in-house, except in case of Belgium, France, Ireland, Japan, and the United Kingdom.

## **1 Introduction**

‘Research and development’ being an important area for the growth of the developed economies, the European Union has recognized that the spending in that area must increase. Many countries offer attractive incentives with a view to encourage taxpayers to incur expenditure on research and development activities. In the European Union, the corporate and personal income tax laws of various Member States provide for diverse incentive schemes.

The European Commission (hereafter referred as ‘the Commission’) has requested the International Bureau of Fiscal Documentation to carry out an information survey in respect of tax treatment of research and development expenditure under the existing direct tax legislation in all 25 Member States and in the United States and Japan.

## **2 Objective of the Survey**

The underlying objective of the survey is to provide relevant information to the Commission on the tax treatment of research and development expenditure under the existing direct tax legislation in the EU Member States and the United States and Japan. The said information is of significant use to the Commission for the following two reasons:

- The said information would enable the Commission to have a constructive discussion with the Member States regarding ‘best practices’ and a constructive solution which would allow the Member States have attractive incentive schemes without causing problems for the EU internal market and without conflicting with the EC Treaty; and
- The said information would enable the Commission to try and find a solution that will provide an incentive to increase the R & D spending within the Member States with a view to be competitive with other countries such as the United States and Japan.

## **3 Scope of the Survey**

This report contains relevant information regarding tax treatment of the R & D expenditure in all the EU Member States and the United States and Japan. The report was drafted on the basis of a general outline (which was generally adhered to, except in case of some countries where specific information warranted a deviation), and it deals with the following aspects for the countries covered:

- (i) Relevant general tax provisions under corporate/ personal income tax legislation :

- Definition, if any, of research and development expenditure
  - Tax treatment of research and development expenditure, including subcontracted research and development
  - Whether there is a difference between the treatment of the costs for accounting purposes and for tax purposes
  - Territorialization issue (i.e. whether costs incurred abroad are allowed as deductions)
  - Whether the tax law distinguishes between pure research costs and development costs
  - Relief, if any, in respect of land, buildings and equipment used to carry out the research
  - Possibilities of carry-forward, carry back and cash refunds in case of tax losses
- (ii) Incentives for R & D expenditure:
- Incentives under corporate/ personal income tax legislation:
  - Eligibility criteria for the incentive (i.e. qualifying expenditure and specific requirements)
  - How is the incentive granted and calculated (e.g. weighted deduction, accelerated depreciation or tax credit)
  - Territorialization issue (i.e. whether costs incurred abroad are allowed as deductions)
  - Whether the incentive scheme is volume-based or incremental. If yes, brief description of such features.
  - Whether the incentive is available to all types of companies, or whether it is restricted only to some types of companies such as SMEs.
  - Whether there is a ceiling for the incentive
  - Distinction between the tax benefit available by virtue of the incentive vis-à-vis the tax treatment under the general tax rules. Possibility of cumulation of incentives
  - How do the tax authorities verify that the beneficiary of the tax incentive complied with the statutory requirements for grant of the incentives.
- (iii) Incentives, if any, available to an employer under wage tax legislation,.

#### **4 Draft Country Chapters**

The draft chapters for all the 25 EC Member States and the United States and Japan are attached herewith.

## **Austria**

### **Survey on Tax Treatment of Research and Development Expenditure**

#### **1 Relevant General Tax Provisions under Corporate / Personal Income Tax Legislation**

##### ***1.1 Definition of R & D costs/ expenditure***

R & D costs are defined as all expenses incurred for the development of inventions, for instance direct labor expenses, cost of materials, energy costs, related interest expenses and depreciation in respect of fixed assets used for the purposes of R & D, but excluding administration and distribution costs. For this purpose, research and development also includes subcontracted research, and approval of tax office is not required.

It is also relevant to note that the Austrian tax law contains three definitions in relation with R & D expenses, i.e. basic research, applied research and experimental development, which are as follows:

‘Basic research’ is the experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.

‘Applied research’ is also the original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical goal.

‘Experimental development’ is a systematic work, drawing on the knowledge gained from research and practical experience, that is directed to producing new materials, products and devices, or to installing new processes, systems and services, or to substantially improving those already produced or installed.”

##### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

R & D expenditures are deductible if they are in the nature of revenue expenditure and they are related to the business of the taxpayer. If the expenses are incurred for developing an asset, then the asset must be depreciated over its economic useful life. For tax purposes, only use of the straight-line method of depreciation is permissible. The cost of the asset is depreciated in equal amounts over the useful life in the taxpayer’s hands. For accounting purposes, other methods may be used if economically justified. Basically,



there is no difference in Austrian tax law between capital expenditures for R & D and other capital expenditures.

### ***1.3 Territorialization Issue***

Deductibility of R & D costs is not affected by whether incurred in Austria or abroad.

### ***1.4 Pure research costs v. development costs***

According to the Austrian tax laws, there is no distinction in the criterion applicable to determine the tax treatment of the cost (see 1.2) between “pure” research costs and development costs.

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

Subject to comments in 1.2, there is no specific relief available in respect of land, buildings and equipment used to carry out the research, and the general rule discussed in 1.2 applies.

### ***1.6 Cash refund, carry forward and carry back possibilities***

Losses incurred as from 1991 may be carried forward indefinitely. With effect from tax periods starting 2001, losses incurred in the current or a previous tax year can only be set off against 75% of the income of the current year (this limitation does not, however, apply in the case of a reorganization surplus or gains from the sale of a business or an independent division). Any excess amounts may be carried forward indefinitely. No carry-back of losses or cash refunds is allowed.

## **2 Incentives for R & D expenditure**

In Austria, the incentives discussed below are equally applicable to companies as well as individuals. Also, the said incentives are applicable for all types and sizes of companies.

### ***2.1 Incentives under corporate/ personal income tax legislation***

#### ***2.1.1. R & D Allowance / R & D Premium***

All tax relieves relating to inventions, R & D Allowance I and II and the invention premium, do not have any limit or ceiling as regards the deduction. They can neither be carried forward nor back, but have to be set off in the same fiscal year. Besides, they do not have to be shown on the balance sheet because they are only relevant for tax purposes.

The research and development must be performed within the enterprise. The purchase of foreign inventions does not create R & D expenses. The incentive is also available in case of sub-contracted research regardless of whether the subcontracting company retains the ownership of the knowledge.

The R & D expenses do not have to be incurred in Austria. The allowances are granted regardless of the place of employment of the so-developed inventions.

### *2.1.2. R & D Allowance I (Sec. 4(4)4 of the Income Tax Law)*

#### *Qualifying R & D expenditure*

For the R & D Allowance I, the expenditure must lead to a new invention, which must create value for the economy and be protected by the Austrian Patent Act. Expenditure on buildings, real estate and machines are not regarded as R & D expenses for R & D Allowance I.

The research and development may be performed either within the enterprise, or sub-contracted. It is irrelevant whether or not the sub-contracting company retains the ownership of the knowledge gained through the research.

#### *Nature of the incentive*

As a general rule, the amount of the allowance equals 25% of the research and development expenses. The allowance is increased to 35% in respect of the portion of expenses on research and development that exceeds the arithmetic average of such expenses incurred in the last three fiscal years.

#### *Restrictions*

It is irrelevant whether the research activity was carried out inside or outside Austria.

#### *Cash refund, carry forward and carry back possibilities*

The allowance cannot be carried forward or carried back; also, cash refund is not possible.

#### *Compliance verification*

The economic value of the invention must be confirmed by a certificate of the Federal Minister for Economic Affairs.

### *2.1.3. R & D Allowance II (Sec. 4(4)4a Income Tax Law)*

### *Qualifying R & D expenditure*

R & D Allowance II is available in respect of the cost related to certain research and experimental development activities.

R & D Allowance II is not available in respect of expenses for which R & D Allowance I has been granted.

### *Nature of incentive*

An allowance of 25% is granted in respect of costs related to the qualifying R & D activities.

For this purpose, the costs for research and experimental activities include expenses such as salaries (including employer's contribution to the social security), capital expenditure, administration cost, interest expenses, energy costs, and material costs incurred for enhancing knowledge or generating new applications of know-how. Actual materialization of an invention or development is not a necessity. The assets must be used for R & D for more than half of their economic lifetime if they are subject to attrition. Buildings, land and other asset, which are usable for more than 10 years, must be used for R & D for at least 10 years.

### *Territorialization issue*

It is irrelevant whether the research activity was carried out inside or outside Austria.

### *Cash refund, carry forward and carry back possibilities*

The allowance cannot be carried forward or carried back; also, cash refund is not possible.

### *Compliance Verification*

No specific requirements.

## *2.1.4. R & D Premium (Sec. 108c Income Tax Law, alternative to R & D Allowance II)*

### *Qualifying R & D expenditure*

Same as qualifying R & D expenditure for R & D allowance I

### *Nature of incentive*

In tax years with losses, a taxpayer does not derive any benefit from an R & D allowance since it cannot be carried forward or carried back. Therefore, as an alternative to R & D Allowance II, an invention premium of 8% of the expenses for the qualifying research and experimental activities can be claimed. The invention premium is considered a tax refund, which is credited to the taxpayer tax account.

#### *Restrictions*

It is irrelevant whether the research activity was carried out inside or outside Austria.

#### *Cash refund, carry forward and carry back possibilities*

The R & D premium is refunded to the taxpayer; it cannot be carried forward or carried back.

#### *Compliance Verification*

No specific requirements.

### **2.2 Incentives under wage tax legislation**

None.

[Note: Education allowance/ education premium/ apprentice allowance/ apprentice premium does not specifically relate to R & D activities, hence not considered relevant for the purposes of this report.]

### **2.3 Donations to R & D institutions**

Under Sec. 4(4)(5) and (6) Income Tax Code, donations in cash or in kind from a business enterprise for R & D purposes that are made to a number of listed organizations and institutions can be deducted from the income tax base. These institutions include universities, national museums, the Austrian federal states and communities, the Austrian academy of science, societies operating on a non-profit basis under certain circumstances etc. The deductible donations are limited to 10% of the profit of the preceding fiscal year of the donor.

## **Belgium**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

R & D activities are defined as activities to further the research and development of new products and innovative technologies which do not negatively affect the environment or which restrict the negative effects on environment.<sup>3</sup> With respect to research personnel, the activities are defined as creative work systematically undertaken to improve knowledge and the use of this knowledge to invent new applications, such as the development of new products and new processes. Furthermore it includes the construction, development and testing of a prototype including the development of software in as far as it includes a scientific and technological progress.<sup>4</sup>

##### *1.1.2 Position under personal income tax legislation*

The position under the personal income tax is the same as under the corporate income tax.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

Research and development costs other than expenses on acquisition of land, buildings and equipment are deductible expenses for the taxable period in which the costs have been incurred. However, the taxpayer may elect to capitalize the R & D costs to the extent that the cost price does not exceed a careful estimation of the utility value or the future yield of this asset.<sup>5</sup>

As from 1 January 1990, R & D investments can be depreciated over a period of 3 years or more; only straight-line method of depreciation is permissible.<sup>6</sup> The same method is used for other intangible fixed assets (other than R&D investments), which are depreciated at a rate of 33.33%.

According to accounting law, capitalized research and development costs must, in principle, be depreciated over 5 years.<sup>7</sup>

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<sup>3</sup> Art. 69 (1)(2°) (b) Income Tax Code (ITC).

<sup>4</sup> Art. 44 (2) Royal Decree Income Tax Code (R.D. ITC).

<sup>5</sup> Art. 25 Royal Decree of 1976 on accounting regulations.

<sup>6</sup> Art. 63 ITC.

<sup>7</sup> Art. 28(2) ITC.

### *1.2.2 Position under personal income tax legislation*

The position under the personal income tax is the same as under the corporate income tax.

## **1.1 Territorialization Issue**

### *1.3.1 Position under corporate income tax legislation*

For companies, all costs incurred for generation of income are deductible so long as they contribute to the purpose of the company as mentioned in the articles of association.<sup>8</sup> Due to the fact that Belgium applies a worldwide income tax system, domestic as well as foreign R & D costs are deductible.

### *1.3.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

Subject to comments in 1.2.1, there is no difference in tax treatment for pure research costs vis-à-vis development costs.

### *1.4.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax.

## **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

### *1.5.1 Position under corporate income tax legislation*

Plant and machinery used for scientific research may be depreciated using the straight-line method over a 3-year period, i.e. at the rate of 33,1/3% per year.<sup>9</sup> Land is not depreciable. Office buildings and trade buildings qualify for depreciation at the rate of 3%, whereas industrial buildings qualify for depreciation at the rate of 5%.

### *1.5.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax.

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<sup>8</sup> Art. 49 ITC.

<sup>9</sup> Circular Belgian Ministry of Finance 10 October 1964, *Bulletin der Belastingen* nr. 414, 2384.

## **1.6 Cash refund, carry forward and carry back possibilities**

### **1.6.1 Position under corporate income tax legislation**

Losses can be carried forward for an indefinite period, carry back of losses is not allowed. A taxpayer who does not make a profit cannot obtain cash refund.<sup>10</sup>

### **1.6.2 Position under personal income tax legislation**

The position is the same as under the corporate income tax.

## **2 Incentives for R & D expenditure**

### **2.1 Incentives under corporate/ personal income tax legislation**

#### **2.1.1 Investment deduction**

##### **2.1.1.1 Qualifying R & D expenditure**

The investment deduction facility is applicable, *inter alia*, to costs incurred for investments promoting research on, and the development of, new products that have no detrimental effect on the environment. No distinction is made between research and development costs. The facility applies in respect of expenses such as labour costs, material costs, etc. but it does not apply to expenditure incurred on land, buildings and equipment used to carry out the research, unless the said assets fall under the following categories of assets deemed as used for R & D activities:<sup>11</sup>

- 1) tangible fixed assets used in a research centre constituting a separate line of business activity and for which separate accounts are maintained, provided that the assets are necessary for a proper functioning of the research centre;<sup>12</sup>
- 2) other tangible fixed assets for which an incentive was granted by Belgium under various laws to further the economic expansion and establishment of new industries;
- 3) assets used (i) to realize or develop new production techniques, new equipment, new production processes, new products or raw materials; (ii) to improve existing techniques, equipment and production processes; and (iii) to extend discoveries resulting from research or theories of scientific or technical nature to practical applications by experimenting with new equipment, materials and procedures.<sup>13</sup>  
The said assets particularly include:
  - (a) equipment used to measure physical sizes;

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<sup>10</sup> Art. 206(1) ITC.

<sup>11</sup> Art. 48 Royal Decree to the Income Tax Code.

<sup>12</sup> Art. 48(1)(1°) R.D. ITC.

<sup>13</sup> Art. 48 (1)(A)(2°)(b) R.D. ITC.

- (b) trial equipment of which production capacity is not sufficient to provide normal output;
  - (c) prototypes; and
  - (d) trial samples to test and finalize the research product prior to commercialization
- 4) fixed assets recognised as such by the Minister of Economic Affairs or the Minister competent for the self-employed and the Minister competent for research policy include:<sup>14</sup>
- a) real estate to accommodate the assets concerned and the research personnel;<sup>15</sup>
  - b) with respect to intangible fixed assets, the R & D costs, licences and know-how, including pre-payments in respect of the said assets

### *2.1.1.2 Nature of the incentive*

Investments promoting research in, and the development of new products that have no detrimental effect on the environment benefit for the assessment year 2004 from an investment deduction of 13.5% of the value of the qualifying R & D expenditure.

A company may elect to amortize the investment deduction over a period of 3 years, if the company does not employ more than 20 employees.<sup>16</sup> For such qualifying investments made in the tax year 2004 (the assessment year 2005), the maximum allowance is restricted to 20.5% of amount of depreciation on these investments.

### *2.1.1.3 Restrictions*

The deduction only applies to investments promoting research in, and the development of new products that have no detrimental effect on the environment. The investment deduction does not apply to:

- (1) taxpayers whose taxable profits are determined on a forfaitary basis, where arbitrary depreciation charges are taken in the calculation of these profits<sup>17</sup>; and
- (2) certain assets, which include assets
  - a) not destined to be used wholly for business purpose
  - b) acquired or constructed for leasing to third parties where the lessee has an option to buy (and where the lessee would therefore have the right to the investment deduction; under normal leasing contracts where the lessor retains the ownership of the property leased, it is the lessor who has the right to the deduction); and
  - (c) placed at the disposal of third parties (where the assets are not leased), unless they are placed at the disposal of enterprises which use the assets for the purposes of their business carried on in Belgium, without placing them at the disposal of other parties. For assets acquired on or after 1 January 1992, there is

<sup>14</sup> Art. 48(1)(A)(2°)(c) R.D. ITC.

<sup>15</sup> Art. 48(1)(A)(3°)R.D. ITC.

<sup>16</sup> Art. 70 ITC.

<sup>17</sup> Art. 74 ITC.



an exemption from the exclusion if the assets are placed at the disposal of an individual who uses the assets to generate profits or gains in Belgium, without placing them at the disposal of other parties;

All tangible and intangible fixed assets for which an investment deduction for R & D activities was granted must be used for R & D activities for a period of 3-years.<sup>18</sup> If during that period an asset is no longer used for R & D activities, a part of the deduction will be recaptured.

The incentive is not available in case of subcontracted research.

#### *2.1.1.4 Cash refund, carry forward and carry back possibilities*

In the absence of taxable profit in a year, the investment deduction can be carried forward for an unlimited period. A carry back possibility does not exist in Belgium. The annual deduction of the carry-forward is limited to EUR 620,000 or 25% of the remaining amount of the investment deduction at the end of the previous taxable period if this remaining amount exceeds EUR 2,480,000. The higher of these two amounts must be deducted.

#### *2.1.1.5 Compliance verification*

With respect to the investment deduction, no prior authorization is required. It is sufficient if documents are provided, post facto, evidencing that the assets concerned meet the necessary requirements for the R & D investment deduction. For an asset mentioned in Art. 48(1)(A)(1°), (2°)(a) or (b) and (3°) R.D. ITC (see 2.1.2), the purposes of the research for which the asset is used must be described in the following manner:<sup>19</sup>

- a) the purpose of the activities for which the asset is used;
- b) the principles or hypotheses on which the activities are based;
- a) the technical difficulties which the activities must overcome;
- b) the innovative character of the activities for the company;
- c) the technical and economic advantages which the company believes to realize with the said activities; and
- d) the characteristics of the asset.

If assets are purchased from a third party, the company must provide:<sup>20</sup>

- a) proof of the potential capacity of the assets to further the research and development of new products or innovative technologies (a joint declaration from the Minister of Economic Affairs or the Minister of Industry and the Minister for Research may be required);
- b) a copy of the purchase contract; and

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<sup>18</sup> Art. 48(2) R.D. ITC.

<sup>19</sup> Art. 48(4)(1°)(a)-(f) R.D. ITC.

<sup>20</sup> Art. 48(4)(2°)(a)-(c) R.D. ITC.

- c) proof that fixed assets were not used earlier for the exercise of a profession in Belgium.

If the asset was produced by the company in a research centre, the company must provide:<sup>21</sup>

- a) separate accounts to determine the costs made by the research centre;
- b) an explanation as to why the research costs are treated as intangible fixed assets; and
- c) an overview of the part of the intangible fixed assets which do not qualify for the investment deduction.

If the intangible fixed assets are produced outside a research centre, the company must provide:<sup>22</sup>

- a) a proof that an authorization was granted to avail the R & D investment deduction;
- b) a proof that a request for such authorization was made and the arguments advanced in the request;
- c) separate accounts to determine the amount of the costs; and
- d) an overview of the part of the intangible fixed assets which do not qualify for the investment deduction.

Finally, with respect to all intangible fixed assets, a declaration of the competent regional office to the effect that the new products and innovative technologies resulting from R & D activities have no negative effect on the environment, or they try to restrict the negative effect on the environment as much as possible, must be submitted.

### *2.1.2 Profit exemption for supplementary staff hired for R & D activities*

#### *2.1.2.1 Qualifying R & D expenditure*

The profit exemption applies to each such staff member if the criteria described in 2.1.1.1. with respect to qualifying R & D expenditure are met.

The incentive is not available in case of subcontracted research.

#### *2.1.2.2 Nature of the incentive*

Profits are exempt up to an amount of EUR 12,180 (tax year 2004, assessment year 2005) per supplementary staff member hired for scientific research.<sup>23</sup> For highly qualified employees appointed to carry out scientific research, the exemption is raised to EUR

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<sup>21</sup> Art. 48(4)(3°)(a)-(c) R.D. ITC.

<sup>22</sup> Art. 48(4)(4°)(a)-(d) R.D. ITC.

<sup>23</sup> Arts 67 ITC and 44 R.D. ITC.

24,360 (tax year 2004, assessment year 2005). A highly qualified employee is defined as an individual who took a PHD and has at least 10 years of working experience.<sup>24</sup>

The exemption also applies if an existing employee is appointed to one of the above qualifying functions and if the company, within 30 days, employs a new employee who takes over the job of the existing employee.

The incentive does not apply to administrative personnel, personnel not directly involved in research activities, supervisory and maintenance personnel, and kitchen personnel.<sup>25</sup>

The law no longer provides for an average method for computing the number of supplementary employees.<sup>26</sup> However, the number of supplementary employees is determined by a comparison with the average number of employees in the preceding year.<sup>27</sup> If the number of supplementary employees is reduced, the deduction is recaptured in the year in which the number of supplementary employees is reduced.<sup>28</sup>

Personnel taken over under a merger is not taken into account for the determination of the average number of supplementary employee. The incentive is not available in case of subcontracted research.

#### *2.1.2.3 Restrictions*

The profit exemption for hired supplementary employees carrying out research activities applies only to employees who work full time in Belgium.

#### *2.1.2.4 Cash refund, carry forward and carry back possibilities*

If the profit exemption for supplementary staff cannot be utilised in a tax year due to lack of taxable profits, it is neither possible to obtain cash refund nor to carry forward the exemption to future years.

#### *2.1.2.5 Compliance verification*

A taxpayer claiming deduction for supplementary staff carrying out research activities must provide the following documentary evidence:<sup>29</sup>

- 1) a list of names of employees involved in R & D activities in the current and previous year including a per-employee overview per of the number of days spent on R & D activities;

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<sup>24</sup> Art. 44(1) R.D. ITC.

<sup>25</sup> Art. 45(1) R.D. ITC.

<sup>26</sup> Art. 67 (4) ITC.

<sup>27</sup> Arts. 44-46 of the R.D. ITC.

<sup>28</sup> Art. 45(1) R.D. ITC.

<sup>29</sup> Art. 46 (1) R.D. ITC.

- 2) with respect to the employees concerned, a dated, signed and verified summary of the quarterly assessments filed with the General Social Security Office;
- 3) with respect to the number of employees carrying out research activities, a certified declaration from the Minister competent for Research of the information for determining the research and technological potential for the current and previous years.

The same information must be provided for each subsequent year during which the company performs R & D activities.

### *2.1.3 Coordination Centres*

#### *2.1.3.1 Eligible R & D expenditure*

Coordination centres engaged in technical research benefit from the specific tax base and tax credit described hereafter. The facility is not specifically linked to R & D expenditure as such, but to the activities performed.

#### *2.1.3.2 Nature of the incentive*

Coordination centres are subject to a special regime enacted in 1982.<sup>30</sup> This regime was substantially modified by the law to amend the corporate income tax code and to introduce an advance ruling system passed as part of the Programme Law of 24 December 2002.<sup>31</sup> The taxable base of a coordination centre is determined on the basis of cost plus 8% method taking into account all expenses and operating costs. Due to an agreement with the European Commission on 6 May 2004, those costs include financial and personnel costs. Moreover, the taxable base may not be lower than the total sum of (i) disallowed expenses and (ii) abnormal or gratuitous advantages granted to the coordination centre.

Coordination centres do not benefit from the lower corporate tax rates. They are entitled to a tax credit against corporate income tax, which is calculated as EUR 10,000 per full-time employee, subject to a maximum credit of EUR 100,00.

#### *2.1.3.3 Restrictions*

Subject to the fulfilment of certain conditions, a coordination centre may be established as a Belgian company or as a branch of a foreign company which renders certain listed services for group members, incl. Scientific research. Hence, this leads to a territorialization issue.

#### *2.1.3.4 Cash refund, carry forward and carry back possibilities*

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<sup>30</sup> Royal Decree 187 of 30 November (December) 1982.

<sup>31</sup> Official Gazette of 31 December 2002.

There are no special provisions (in addition to the general tax rules) concerning carry forward of losses incurred by coordination centres.

#### *2.1.3.5 Compliance verification*

By means of the registered statutes and accounts, it is verified whether a coordination centre meets the activity, capital and personnel requirements. Furthermore, it may be mentioned that a Coordination centre is recognized in principle by Royal decree for a period of 10 years. Such recognition involves a check concerning the activities carried out. Upon request, renewal for another period of 10 years may be granted if the relevant requirements are complied with.

#### *2.1.4 Service centre (Dienstencentrum)*

##### *2.1.4.1 Qualifying R & D expenditure*

Service centres engaged in research and development services benefit from a special profit calculation.<sup>32</sup> The facility is not specifically linked to R & D expenditure as such but to the activities performed.

##### *2.1.4.2 Nature of the incentive*

The taxable profits of a service centre are equal to the higher of (i) actual profits computed under the normal corporate income tax rules and (ii) minimum profits computed under the cost-plus method or resale-minus method. Where the minimum profits are higher than actual profits the service centre is, however, only taxed on the higher minimum profits to the extent the difference is due to transactions with non-resident group companies. To prevent profit shifting from a Belgian group member to a non-resident group member, minimum prices of the service centre must be computed separately for each group member.

Under the cost-plus method, prices are deemed to be 't arm's length if the turnover is not lower than the operational expenses increased by 5% to 15%, depending on the type of activity. Personnel costs and expenses of a disbursement character may, however, be re-invoiced without a profit mark-up.

Under the resale-minus method, prices charged by a service centre are deemed to be 't arm's length if they:

- (1) equal to at least a certain percentage of the turnover realized by group members through the participation of the service centre. The percentage is determined by the tax authorities taking into account the activity of the service centre and the risk borne by the centre, but the percentage may not exceed 5%; and

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<sup>32</sup> Circular of 26 July 1996, published in *Bulleting der Belastingen*, nr. 763, p. 1480-1486.

- (2) not lower than the operational expenses

#### *2.1.4.3 Restrictions*

A service centre may be set up anywhere in Belgium and may be organized as a Belgian company or as a branch of a non-resident company. The service centre must be part of a group. The service centre must for at least 50% be under common control of the other group members, but there is no minimum employment requirement. Permission must be obtained to set up a service centre. It is granted for a renewable 5-year period.

A service centre may not bear any commercial risk and may only render services, which are to the sole benefit of group members. A service centre may perform only specific types of activities, including research activities, of preparatory or auxiliary nature.

#### *2.1.4.4 Compliance verification*

Compliance verification is ensured by means of inspection of registered statutes

#### *2.1.5 Withholding tax exemption in the Walloon Region*

The incentives currently available in the Walloon Region provide for an exemption from immovable withholding tax and registration duties with respect to research and development activities.<sup>33</sup>

## **2.2 Incentives under wage tax legislation**

### *2.2.1 Qualifying R & D expenditure*

The incentive applies in respect of salaries relating to research activities.

### *2.2.2 Nature of the incentive*

As from 1 October 2003 only 50% of the wage withholding tax (*bedrijfsvoorheffing*) for scientific researchers is required to be paid, to the tax authorities, by the research institutes, i.e. a university or a college of higher education; the said research institutes may retain with themselves the balance 50% of the wage withholding tax. The incentive also applies to post-graduate researchers paid by the National and the Flemish fund for scientific research.<sup>34</sup> As from 1 July 2004, the facility is extended to assistant researchers and post-graduate researchers paid by recognized public scientific institutes functioning

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<sup>33</sup> The regional incentives are based on the law of 30 December 1970, published in the Official Gazette of 1 January 1971. The incentives for the Walloon Region are based on the Decree of 25 June 1992, as amended, published in the Official Gazette of 25 August 1992.

<sup>34</sup> Arts. 385 and 386 of the Programme Law I of 24 December 2002, published in the Official Gazette of 31 December 2002, as amended by the Programme Law of 8 April 2003, published in the Official Gazette of 17 April 2003.

under the federal government, the communities and the regions, and collective and international research institutes established in Belgium.<sup>35</sup>

Based on a decision of the Council of Ministers of 4 June 2004, the facility as from 1 January 2005 would also extend to partnerships between enterprises and universities, colleges of higher education or scientific institutes. The extension concerns private enterprises employing researchers in the context of research agreements with universities, colleges of higher education and/or scientific institutes. Amendments of the law would be included in the draft law 2004.

### *2.2.3 Restrictions based on eligibility criteria*

The facility only applies to universities and colleges of higher education recognized by the federal services, for scientific, technical and cultural affairs and the national and regional institute for scientific research.

### *2.2.4 Compliance verification*

As from 1 January 2005 the number of declarations would be reduced to 2. As an attachment to the assessment the following details must be provided:

- 1) the identity of the employer and his tax reference number; and
- 2) for each assistant-researcher or post-graduate:
  - a) his/her identity and the national tax reference number;
  - b) proof that the employee concerned is employed as an assistant-researcher or post-graduate;
  - c) the start and termination date of the employment;
  - d) the employment contract; and
  - e) the tax withheld and a detailed calculation of the tax due.

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<sup>35</sup> Royal Decree of 4 May 2004, published in the Official Gazette of 24 May 2004, as amended by decision of the Council Of Ministers of 4 June 2004.

## **Cyprus**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

There is no definition of R&D costs and/or other associated terms in the Cyprus tax legislation.

##### *1.1.2 Position under personal income tax legislation*

There is no definition of R&D costs in the Cyprus Tax Legislation.

### **1.2 Treatment of R & D expenditure as per general (non-incentive) provisions**

#### ***1.2.1 Position under corporate income tax legislation***

Article 9(1)(d), law 2002, 118 (I/2002) as amended, provides that:

- The expenses for R&D incurred by a person carrying on a business activity are deductible provided that the Commissioner is satisfied that the expenses were incurred for the use and for the benefit of the business. Article 9(1) (d) specifically refers to expenses for scientific research. These expenses do cover R&D expenses.
- No deduction is granted for expenses incurred for the acquisition of machinery, installations or buildings, including employees' shelters, since capital allowances may be claimed on such costs in accordance with the provisions of Article 10.
- Any expenses of a capital nature, which are not eligible for capital allowances in accordance with the provisions of Article 10, may be amortized equally over six years.

#### ***1.2.2 Position under personal income tax legislation***

Tax treatment is the same as in 1.2.1 above.

### ***1.3 Territorialization I***



### *1.3.1 Position under corporate income tax legislation*

All costs, whether incurred in the territory of Cyprus or abroad, are allowed as eligible costs, provided that they are deductible in accordance with art. 9(1).

### *1.3.2 Position under personal income tax legislation*

As in 1.3.1 above.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

No distinction in the Cyprus Tax Legislation

### *1.4.2 Position under personal income tax legislation*

As in 1.4.1 above.

## **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

### *1.5.1 Position under corporate income tax legislation*

Article 10 of the Income Tax Law provides that:

- Fixed assets are defined as installations, machinery or buildings, including employees' shelters, that belong to a person (individual or corporate) carrying out a business activity or providing salaried services and who uses these assets for business purposes, or for scientific research in respect of which the Commissioner is satisfied that it is carried out for the purposes of the business activities or for the provision of salaried services (only in the case of individuals).
- For the purposes of determining the taxable income of a person that carries on a business activity or provides salaried services, a reasonable allowance (the article refers to reasonable allowance which in effect is depreciation) is granted for the diminution of the value and the wear and tear of the fixed assets due to their use in the business activity or for the provision of salaried services, during a tax year.
- If a fixed asset is used partly for business and partly for private purposes, the Commissioner can determine the proportion of the capital expense incurred for the acquisition of this fixed asset that corresponds to the private use and the allowances (the article refers to reasonable allowance

which in effect is depreciation) will be granted only on the proportion of the capital expense which corresponds to the business use or salaried services.

- The useful life of a building is 33 years, except for industrial or hotel buildings for which the useful life is 25 years. For installations and machinery the useful lives are 4 years for forklifts, excavators, loading vehicles, bulldozers and oil barrels and 10 years for any other. Depreciation will take place on the basis of the straight-line method.
- A balancing addition or deduction is added or deducted, respectively, in case the asset is sold.

### *1.5.2 Position under personal income tax legislation*

Same as in 1.5.1 above. Additionally, a person who provides salaried services is not entitled to an allowance for a fixed asset belonging to him / her if this person is not obliged, as per a specific clause of the employment contract, to use the fixed asset for the carrying out of his / her duties or if a compensation or any other benefit is granted to this person for the use of the fixed asset.

## **1.6 Cash refund, carry forward and carry back possibilities**

### *1.6.1 Position under corporate income tax legislation*

Article 13 of the Income Tax Law provides that:

- If any amount of loss, which if it was a profit or a benefit would have been taxable, exceeds the amount which can be set off against income from other sources in the same tax year, the excess amount of the loss may be carried forward indefinitely and off set against the future income of the same person (either individual or company).
- In the case of any<sup>36</sup> change of ownership in the shares of a company and a substantial change in the business of the company within any 3-year period, the right to carry forward losses is lost. The same applies, when a company's activities have diminished and, before any substantial reactivation, there is a change in the ownership of shares.
- As from 1 January 2003, following the Cyprus tax reform, group relief was introduced for the offset of losses between companies of the same group (i.e. one is 75% subsidiary of the other or both are 75% subsidiaries of a third company). Therefore, any losses, which are not used in a tax year can be surrendered to other group companies.

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<sup>36</sup> There must be significant change, being one person acquiring more than 50% of the shares or two or more persons acquiring at least 5% each so that all together acquire more than 50% of the shares.

No carry back of losses is allowed.

There is no cash refund of R&D expenses.

#### *1.6.2 Position under personal income tax legislation*

As in 1.6.1 above (however, the restrictions for the change of ownership in the shares of a company and the change of the business activities and the group relief provisions are not applicable in the case of individuals).

## **2 Incentives for R & D expenditure**

Generally, there are no tax incentives relating to R&D but rather a deduction of the expenses.

## **Czech Republic**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

The Act No 586/1992 Coll., Income Taxes Act, as amended, (**ITA**) deals with the terms 'research' and 'development' in Section 32a (1), however, no definitions of these terms for the purposes of ITA are provided.

##### *1.1.2 Position under personal income tax legislation*

See 1.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

For R & D expenditure incurred as of 1 January 2004 onwards the provisions of Section 32a Fixed Intangible Assets of ITA apply:

An intangible result of research and development shall be depreciated provided that:

- a) any such intangible result was acquired for a consideration, or as a contribution in-kind, or through a merger, or by a donation or inheritance, or was created by own activity for the purpose of trading in such results of R & D.
- b) its input price is higher than CZK 60,000 and
- c) its useful lifespan exceeds one year.

The intangible result of R & D may be depreciated by an owner or other person who has acquired the right to use the results for a consideration.

Annual depreciation in respect of a specific intangible result of R & D to which a taxpayer has the right of use for a definite period of time equals the input price divided by the period agreed in the relevant purchase contract. Where no contract for a definite period of time occurs, the input price shall be depreciated linearly (using a straight-line method) over a period of 72 months.

The above described depreciation method, except for a depreciation period, applies to other fixed intangible assets ((non R & D) expenses) such as incorporation (setting-up) expenses, software, valuable rights etc. too.

If an intangible result of R & D does not qualify as an intangible fixed asset according to Section 32a ITA, accounting depreciation rates may be deducted from corporate income basis pursuant to Section 24 (2) (v) (2) provided that any such intangible result of R & D was acquired for a consideration, or as a contribution in-kind, or through a merger, or by a donation or inheritance, or was created by own activity for the purposes of trading in it.

According to Section 6 of Decree on double-entry accounting for entrepreneurs. No 500/2002 Coll., as amended, the tax payer may determine the input price for determining the results of R & D as a fixed intangible asset for accounting purposes differently. Furthermore, it may depreciate it over a period of time which is different from that one for tax purposes. Thus, the tax depreciation may differ from accounting depreciation.

#### *1.2.2 Position under personal income tax legislation*

See 1.2.1.

### **1.3 Territorialization Issue**

#### *1.3.1 Position under corporate income tax legislation*

Section 32a ITA relates only to entities which file the Czech corporate income tax return (i.e. Czech tax resident legal persons and Czech permanent establishments of persons which are not considered to be resident for Czech tax purposes). The provisions of Section 32a ITA do not make any distinction between costs incurred in the Czech Republic or abroad.

#### *1.3.2 Position under personal income tax legislation*

What is stated in 1.3.1 is equally applicable for personal income-tax.

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

There is no difference in the tax treatment of 'pure' research costs and development costs.

#### *1.4.2 Position under personal income tax legislation*

There is no difference in the tax treatment of 'pure' research costs and development costs.

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

*1.5.1 Position under corporate income tax legislation*

Except for depreciation, no other relief is available.

*1.5.2 Position under personal income tax legislation*

Except for depreciation, no other relief is available.

**1.6 Cash refund, carry forward and carry back possibilities**

*1.6.1 Position under corporate income tax legislation*

Neither cash refund nor carry-back is available under ITA. As from 1 January 2004, tax losses may be carried forward for five years.

*1.6.2 Position under personal income tax legislation*

Please see Par 1.6.1 above.

**2 Incentives for R & D expenditure**

***2.1 Incentives under corporate/ personal income tax legislation***

No incentives are granted under the corporate/ personal income tax legislation exist in the Czech Republic (please see Section 2.3).

***2.2 Incentives under wage tax legislation***

No incentives are granted under the wage tax legislation exist in the Czech Republic.

## **Denmark**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

The deductibility of research and development costs depends on whether the research is ordinary or fundamental.

Ordinary research and development is defined as the application of scientific or technical knowledge to develop new or significantly improved materials, products, processes, systems or services. The term also includes applied research, i.e. research carried out in order to acquire new knowledge for the purpose of applying it in practice (Para. 14.4, CIR 72, 17.04.96). Fundamental research is defined as research to acquire new knowledge, which is not carried out with a view to a specific practical application of the knowledge (Para. 14.4, CIR 72, 17.04.96).

##### *1.1.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

The deductibility of research and development costs depends on whether the research is ordinary or fundamental and whether the company's business is to carry out research.

Under the Assessment Law (Sec. 8 B (1)), ordinary research and development expenses may be either deducted in the year they were incurred or amortized in equal amounts over 5 years, starting in the year in which the expenses were incurred. The research and development must relate to the taxpayer's current or future business. If research and development costs are incurred before a business is commenced, the costs may be deducted only, or amortization may begin only, in the tax year the business is set up. The cost base for ordinary research and development includes wages, rents and the costs of raw materials, of intangibles and of experiments or research carried out by a third party (Para. 14.4, CIR 72, 17.04.96).

As regards fundamental research, the expenses may be either deducted in the year they were incurred or written off in equal amounts over 5 years (straight-line). The costs of fundamental research may, however, only be deducted or written off if the costs are

incurred by a taxpayer with an ongoing business and if the research and development relate to the taxpayer's business (Sec. 8 B (1) LL).

If the company's business is to carry out research and sell the results, research and development costs are always deductible in the tax year in which they are incurred (Sec. 6 A National Income Tax Law).

Under Sec. 40 (1) and (2) Depreciation Law, other (non R&D) capital expenditure in respect of intangible assets, e.g. the acquisition cost of know-how, patents, copyrights, designs or models, trademarks and similar rights and goodwill may be depreciated over 7 years using the straight-line method. The acquisition cost of patents and acquired know-how may, as an alternative to depreciation, be deducted in the year of acquisition (Sec. 41 (1) Depreciation Law).

There are some differences between the accounting depreciation and tax depreciation with respect to R&D. The Company Accounts Act (årsregnskabsloven) distinguishes between research and development. According to section 83, development costs must be capitalized and then depreciated, whereas research costs must be expensed continuously.

The term development cost is not defined in the Danish Company Accounts Act, but according to Accounting Standard 7 development means the use of research results or other knowledge to produce new or considerable improved products or processes prior to the commercialisation. The development costs must be capitalized only when it is likely that the company will receive future economic benefits that specifically relate to the asset, and when the cost price can be reliably assessed. Capitalization of development costs must be based on cost price, including direct and indirect expenses. The capitalized development costs must be depreciated over the product's expected useful life, commencing in the year in which the development is complete. The depreciation period can, at maximum, be 20 years. No specific depreciation method is prescribed, but the method must be systematic. Under section 43, straight-line depreciation, progressive depreciation and diminishing depreciation are considered systematic methods. The mere fact that certain depreciation methods are prescribed in Danish tax law cannot, in itself, justify use of the said methods for accounting depreciation.

For accounting purposes, research costs are defined as costs in respect of basic investigations initiated by a company to achieve new scientific or technical knowledge and insight. These costs may not be capitalized irrespective of whether or not the costs relate to basic research or applied research. These costs must be continuously expensed.

### *1.2.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

## **1.3 Territorialization Issue**



### *1.3.1 Position under corporate income tax legislation*

Also costs incurred abroad are treated as eligible costs.

### *1.3.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

As mentioned in 1.1.1 and 1.2.1, a distinction is made between ordinary research and development costs and fundamental research. The costs of fundamental research may only be deducted or written off, if the costs are incurred by a taxpayer with an ongoing business to which the research is related, whereas ordinary research and development costs must relate to the taxpayers ongoing business or future business in a specific year to be deductible in that year (Sec. 8 B LL).

### *1.4.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

## **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

### *1.5.1 Position under corporate income tax legislation*

Under Sec. 8B (3) LL, the costs of acquiring machinery, equipment and other assets used for research and development, ships and real estate, may not be deducted or depreciated under Sec. 8 B of the Assessment Law, but under the Depreciation Law (AL). Under Sec. 51 AL, depreciable assets acquired for purposes of research and development activities, may be depreciated before the commencement of the business activity to which the research and development activities relate. If the taxpayer is an entity other than a public or private company, permission is required, however.

### *1.5.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

## **1.6 Cash refund, carry forward and carry back possibilities**

### *1.6.1 Position under corporate income tax legislation*

Losses may be carried forward indefinitely. They must, however, be deducted from profits as soon as a profit is available (Sec. 15 (1) LL). There is no possibility to get a cash refund or to carry back losses.

### *1.6.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

## **2 Incentives for R & D expenditure**

For certain research projects approved by the end of 1995, an additional 25% of the costs may be deducted (Sec. 8 F LL). Moreover, an additional 25% of the costs may be deducted for costs in connection with the European research projects Eureka, Esprit, Brite or Race approved by the end of 1989 (Sec. 8 G (1) LL). Finally, certain companies may deduct or write off an additional 25% of the costs in connection with certain other research projects approved by the National Agency for Enterprise and Housing (*Erhvervsfremmestyrelsen*) or the European Commission by the end of 1995, e.g. the research project Eureka or the EU-program Thermie (Sec. 8 G (2) LL). These rules are not discussed further.

### **2.1 Incentives under corporate/ personal income tax legislation**

#### *2.1.1 150% fradrag for forskningsudgifter*

##### *2.1.1.1 Qualifying R & D expenditure*

Eligible costs for these incentives are the costs that are:

- (i) deductible or may be amortized under the general tax rules; and
- (ii) incurred in connection with a jointly financed research project between the taxpayer and a public R&D institution.

In addition, in case of small and medium sized companies, the salary costs incurred in connection with the jointly financed research project also qualify for the incentive (Sec. 8 Q (1) LL).

The incentive does not apply to expenditure incurred on land, buildings and equipment used to carry out the research. Only amounts paid directly to a public R&D institution qualify for the incentive. (Sec. 8 Q (1) LL).

##### *2.1.1.2 Nature of the incentive*

The incentive is granted by way of a deduction equal to 150% (as compared to 100% under the general tax rules) of the qualifying R & D expenditure (Sec. 8Q (1) LL). The incentive was originally introduced for contracts of jointly financed research projects in the years 2002 and 2003 but has been extended to the years 2004, 2005 and 2006.

The incentive is not volume based.

However, the deductible costs paid to a public R&D institution are subject to a minimum of DKK 500,000 and a maximum of DKK 5 million per year (Sec. 8Q (1) LL).

#### *2.1.1.3 Restrictions (based on eligibility criteria)*

- (i) Amounts paid to a public R&D institution are eligible for the 150% deduction. Within Denmark, public R&D institutions are defined as (Sec. 3 (2) BEK nr 339 of 10/05/2004):
  - a. institutions under the University Law;
  - b. sector research institutions;
  - c. certain hospitals carrying out research;
  - d. Danish institutions the main object of which is to carry out research if they are owned by the public or at least half of the operating costs are borne by public means.Foreign public research institutions eligible for the incentive are:
  - e. institutions that are members of the International Association of Universities (IAU); and
  - f. foreign institutions within the EU or the EEA which are under public administration.
- (ii) The 150% deduction is available to companies despite the companies' size. Small and medium-sized companies (SMEs) may, however, also deduct 150% of the salary costs relating to research projects that are financed jointly with a public research institution (Sec. 8Q (1) LL).
- (iii) Only amounts paid directly to the public R&D institution are eligible for the incentive (Sec. 8Q (1) LL).
- (iv) The deduction is not available if the business has received a public contribution for the research project, including a contribution from the European Union. Moreover, the 150% deduction is not available if any other additional deductions are allowed under Sec. 8F (1) or 8G (1) or (2).

#### *2.1.1.4 Cash refund, carry forward and carry back possibilities*

Losses may be carried forward indefinitely. They must, however, be deducted from profits as soon as a profit is available (Sec. 15 (1) LL). There is no possibility to get a cash refund or to carry back losses caused by the incentive.

#### *2.1.1.5 Compliance verification*

The taxpayer must apply to the Danish Research Agency (Forskningsstyrelsen), for approval to be able to benefit from the tax incentive.

## ***2.2 Incentives under wage tax legislation***

There are no incentives under the wage tax legislation.

## **Estonia**

### **1 Relevant General Tax Provisions under Corporate/Personal Income Tax Legislation**

In Estonia the income taxes for both companies and natural persons are covered by the Law on Income Tax. As the Estonian income tax system is different compared to tax systems commonly followed in most other countries (no corporate profits are taxed in Estonia unless they are distributed), the format of this chapter differs from that for other countries.

#### **COMPANIES**

Corporate taxpayers are not subject to corporate income tax. Instead, they are subject to a distribution tax on distributed profits (dividends), including transactions that are considered hidden profit distributions (e.g. fringe benefits, non-business expenses, gifts and donations). The distribution tax is levied at a rate of 26/74 of the net amount of the distribution.

Unless the expenditure is not related to business (in which case it is subjected to distribution tax) it has no significance in taxing the profits. There are no tax incentives available in Estonia, including for R&D expenditure.

Since there is no tax on retained earnings, no reserves and provisions are applicable. For the same reason, it is not possible to make any deductions for tax purposes. Losses have also no significance. Profit distributions are subject to distribution tax even if the company has an accounting loss.

As there is no annual net taxation of corporate profits, the legal entities are also not subject to tax depreciation and amortization rules.

#### **INDIVIDUALS**

Taxable income of a sole proprietor is determined under the cash basis accounting method. In computing taxable business income, individuals engaged in business may deduct all documented expenses relating to it, including R&D expenses. In the case of expenses only partly incurred for the business, only that part is deductible. All expenses may be deducted immediately; no depreciation is available.

If the total amount of the taxpayer's deductible business expenses exceeds his business income derived during the tax year, the excess may be carried forward for 7 tax years. This loss carry-forward is allowed only with respect to business income.

## **2 Incentives for R&D expenditure**

There are no tax incentives in Estonia with respect to R&D expenditure.

## **Finland**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

*Note:* The main income tax statute of Finland is the Income Tax Law (*Tuloverolaki*, TVL), which applies to income taxes for both individuals and companies. Net business income of all types of taxpayer is determined under the Business Income Tax Law (*Laki elinkeinotulon verottamisesta*, EVL).

#### **1.1 Definition of R & D costs/ expenditure**

##### *1.1.1 Position under corporate income tax legislation*

The legislation does not contain a definition for R & D expenses.

In light of case law and jurisprudence, deductible R & D expenditure includes expenses incurred on surveys, planning or marketing aimed at the development of production or marketing, and planning for development of products. Examples of research activity expenditure are payroll costs, acquisition cost of material and equipment used in the research activity, as well as acquisition costs of buildings, machinery, furniture, equipment, etc., acquired for the purposes of the research activity. For the deductibility it is not required that the project to which the expenditure relates must be successful (Tikka-Nykänen, *Yritysverotus I-II*, 8:37).

Deductible R & D expenditure may be incurred directly by the taxpayer or indirectly through a research company or institution. In the latter case, payments to research institutions have been excepted as deductible even where the payment is not a consideration for specific research results received by the taxpayer; in this case the research must be closely related to the field of business of the taxpayer (Tikka-Nykänen, *Yritysverotus I-II*, 8:38).

##### *1.1.2 Position under personal income tax legislation*

See 1.1.1.

#### **1.2 Treatment of R & D expenditure as per general (non-incentive) provisions**

##### *1.2.1 Position under corporate income tax legislation*

Expenses incurred for the purpose of acquiring or maintaining income are deductible (Sec. 7 EVL). Expenses explicitly listed as deductible include research and development expenses (Sec. 8(1)(6) EVL).

According to the general rule of Sec. 22(1) EVL, expenditure is deductible in the year during which the obligation to make the payment arises. Sec. 25 EVL repeats the same general rule specifically for R & D expenditure (other than expenditure for the acquisition of a building or construction, see 2.1.). The latter provision, however, also allows upon a taxpayer's request such expenditure to be deducted through depreciation allowances, in which case the taxpayer may freely determine the number of years and the amount of allowances taken per year.

The total deduction for R & D expenditure (whether deducted currently or through depreciation) may not exceed the amount recorded in the taxpayer's accounts during the taxable year and earlier years (Sec. 54(2) EVL).

#### *1.2.2 Position under personal income tax legislation*

See 1.2.1.

### **1.3 Territorialization Issue**

#### *1.3.1 Position under corporate income tax legislation*

Payments for expenditure incurred abroad are treated the same way as expenditure incurred domestically. In the case of payments abroad within a group of companies, the provisions on hidden profit distribution should be observed.

#### *1.3.2 Position under personal income tax legislation*

See 1.3.1.

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

No such distinction is made in Finland.

#### *1.4.2 Position under personal income tax legislation*

See 1.4.1.

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1 Position under corporate income tax legislation*

Under Sec. 34(2)(5) EVL, expenditure for the acquisition of a building or construction (or part of a building or construction) used exclusively for research aimed at promoting a



business is deductible at a rate of 20% (declining balance method). The general depreciation rate for buildings and constructions is 4% or 7% (Sec. 34(2)(1) and (2) EVL).

#### *1.5.2 Position under personal income tax legislation*

See 1.5.1.

### **1.6 Cash refund, carry forward and carry back possibilities**

#### *1.6.1 Position under corporate income tax legislation*

There are no specific rules for R & D expenditure. If the combined business operations of a company yield a net loss, this loss may be carried forward for up to 10 years (Secs. 120-123a TVL).

#### *1.6.2 Position under personal income tax legislation*

See 1.6.1.

## **2 Incentives for R & D expenditure**

### **2.1 Incentives under corporate/personal income tax legislation**

There are no tax incentives in Finland aimed at promoting R & D activities. See, however, 1.5.

### **2.2. Incentives under wage tax legislation**

There are no relevant incentives in Finland.

## France

### 1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation

#### 1.1 Definition of R & D costs/expenditure

##### 1.1.1 Position under corporate income tax legislation

The definition of R&D expenses is provided in Art. 49 septies F, annex II of the General Tax Code (CGI). As per the said article, R&D expenses mean<sup>37</sup>:

- Expenses on activities having the character of fundamental research. These are the activities that contribute theoretically or experimentally towards solutions for technical problems, work towards the analysis of properties, structures, physical and natural phenomena in view or organize the facts obtained from that analysis by means of explicative schemes and interpretative theories;
- expenses on activities having the character of applied research. These are activities, the purpose of which is to discern the possible applications derived from the results of a fundamental research or to find new solutions to enable the company reach a pre-determined goal; and
- expenses on activities having the character of experimental development operations. These activities aimed at combining all the necessary information, by means of prototypes or pilot installations, to provide all the technical elements necessary for decision-making in view of producing new materials, devices, products, process, systems, services or in view of improving them substantially.

##### 1.1.2 Position under personal income tax legislation

The same definition as described in 1.1.1. applies in respect to personal income tax legislation.

#### 1.2 Treatment of R & D expenditure as per general (non-incentive) provisions

##### 1.2.1 Position under corporate income tax legislation

The French tax law distinguishes between operational expenses and expenses on immovable assets (A), and provides for the tax treatment applicable in each case (B).

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<sup>37</sup> BOI 4C-7-84 of 12 October 1984, Doc. Adm. 4 C 232, no 3 and DB 4 A 4112

#### A. Distinction between operational expenses and expenses on immovable assets

As a general rule, R&D expenses are treated as either basic expenses, operational expenses, or expenses relating to immovable assets.

Under Art. 236 (I) of the CGI, operational expenses are defined as labour costs (salaries, compensation and social taxes), administrative costs and general costs (Doc, adm, 4C 232, no 6). The latter must be incurred for the purpose of scientific and technical research operations<sup>38</sup>.

As regards the accounting treatment, tax accounting follows commercial accounting. The tax treatment of R&D expenses depends on the accounting treatment chosen thereof by the company. According to the tax administration, the accounting regime chosen for each project determines the tax treatment of the research expenses (D.Adm. 4 C-232 no 7, 30 October 1997).

However, this is limited in practice, as according to accounting rules:

- Expenses on applied and development research are allowed to be capitalized only if (i) the R&D project and related costs can be individualised and (ii) there are good reasons to expect that the project will generate profits over a (sufficient) period of time; and
- Fundamental research expenses must always be deducted as costs. Further, basic research costs may not be depreciated.

Therefore, the combination of accounting rules with Art. 236 (I) of the CGI implies in practice that (i) applied and development research costs related to projects which are not individualized or that have no reasonable chance to be commerciality profitable, (ii) fundamental research expenses and (iii) basic research costs are immediately deductible as costs.

#### *Valuation of R&D expenses*

The tax administration has not yet published any guideline on the valuation of R&D expenses. The valuation therefore follows the accounting principles, except that financial costs are excluded for tax purpose<sup>39</sup>. The R&D costs are valued for tax purpose as follows:

- Self developed R&D activities are valued at production costs excluding interest expenses; and
- Acquired R&D is valued at purchase price.

#### B. Tax treatment of R&D expenses

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<sup>38</sup> Guideline BOI 4-7-84 of 12 October 1984, D.adm. 4 C-232 no 2, 30 October 1997

<sup>39</sup> Guideline BOI 4 C-7-84 of 12 October 1984

The tax treatment of R&D expenses depends on the nature of the expenses: operational expenses or costs of assets and equipment related to the R&D project.

### 1- Operational expenses

Under Art. 236 (i) of the CGI, the company may opt either to deduct the operational expenses immediately or to depreciate them if certain requirements are met.

#### *Direct deduction*

The election made by the company determines the tax treatment of the operational expenses related to R&D projects. The company is bound by the election, which is considered as a management decision. All expenses related to the same project must follow the same accounting and tax treatment.

#### *Depreciation*

As mentioned above, the company may choose to depreciate qualifying operational R&D expenses under Art. 236 (I) of the CGI.

Under tax rules, depreciation commences as soon as operational R&D expenses are capitalized. Under the commercial accounting rules, the company may postpone the starting depreciation date until the beginning of the asset use. In cases where the research expenses are capitalized, the following rules apply:

- The amount to be capitalized must include all expenses related to the research project (except financial costs); and
- Barring exceptional circumstances, R & D operational expenses, excluding financial costs, must be depreciated under the straight-line depreciation method (see par. 2 below) over a maximum period of five years.

Exceptionally, the depreciation period may be longer than 5 years for a specific research project provided the depreciation period does not exceed the useful life of the equipment<sup>40</sup>.

### 2. Assets and equipment related to R&D project

Assets and equipment related to R&D projects must be depreciated under the following methods.

#### Straight-line depreciation

Straight-line depreciation method is the standard method. It must be statutorily applied to all assets that are excluded from the benefit of other methods and is optional for other

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<sup>40</sup> Decree 83-1020 of 19 November 1983, art. 19

assets. Straight-line depreciation rates are computed by dividing the cost by the estimated useful life as determined in accordance with accepted business practice. Various useful life estimations can be found in lists published by the tax authorities as well as in the general accounting standards of a number of professions. Taxpayers may choose a varying depreciation rate based on different useful life estimation but this would be accepted only if the difference is within 20% of customary practice or is justified by the specific circumstances of the taxpayer (e.g. intensive use). The estimated useful life and resulting depreciation rate must be fixed on the date of acquisition. However, their modification in the future is possible if justified by subsequent events.

Losses related to depreciation can be carried forward indefinitely in loss years<sup>41</sup>. In situation where the research project is a failure, the related expenses must be fully deducted immediately.

As regards equipment used for R&D activities, the declining-balance depreciation (DBD) is also allowed.

#### Declining-balance depreciation method (DBD)

The DBD applies to equipment used for fundamental research, applied research and operations of development. (CGI, Art. 244 quarter B II-a). This method is optional and is not only applicable to equipment used for R&D activities (Listed in Art. 39A and Ann. II, Art. 22 CGI), but also to equipment used by industrial and commercial enterprises (DB 4 D 2211, no 1).

The declining-balance method applies only to assets that are (i) new or renovated, (ii) have an estimated useful life of at least 3 years, and (iii) are not expressly excluded from application of the method. Renovated assets qualify for depreciation by this method if their price does not substantially differ from that of new assets. Assets repatriated to France by construction companies after having been initially used in construction sites abroad are considered new, provided they were acquired new and have a remaining useful life of at least 3 years on the date of repatriation. Finally, assets acquired within the framework of a merger or similar restructuring operation qualifying for rollover relief under Art. 210A of the CGI are considered new for the purposes of applying the declining-balance method.

The equipment must be acquired for the R&D research operations within the meaning of Art. 49 septies F, annex II of the CGI (see 1.1).

The eligible equipment are those principally allocated to the following purposes<sup>42</sup>:

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<sup>41</sup> Guideline BOI 4 C-7-84 of 12 October 1984, D.adm 4 C-232 no 9 of 30 October 1997

<sup>42</sup> Guideline BOI 4 D-1-04 of 9 March 2004

- The discovery of new production techniques, new processes and manufacturing device, as well as the improvement of devices and manufacturing processes already in use.
- The discovery or improvement of new processes and devices for the control of the manufacturing processes;
- The discovery of new products for new or already known applications;
- Obtaining new vegetal varieties or animal pedigrees;
- The discovery and the use of raw materials;
- The improvement of production factors and cost-effectiveness factors;
- The improvement of equipment and techniques in the medical and veterinary sectors; and
- The improvement of human working and life conditions.

A concept of “principal allocation” is applied in cases where the equipment may not be regarded as specific to R&D activities at the time of acquisition.

Under the DBD method, the straight-line rate is multiplied by a coefficient depending on the expected useful life of the immovable asset. For equipment used for R&D activities, built or purchased on or after 1 January 2004, the factors applicable are the following<sup>43</sup>:

- 1.5 if the normal life of the equipment is 3 or 4 years.
- 2 if the normal life of the equipment is 5 or 6 years.
- 2.5 if the normal life of the equipment exceeds 6 years.

For equipment built or purchased prior to 1 January 2004, the applicable factors are the same as above, minus 0.25.

#### *Accelerated depreciation Method: case of software*

A special accounting regime applies to software. For the research and development expenses incurred to create software for own use, a company may either deduct the amount incurred or capitalize it and amortize the expense over a maximum period of 5 years, at its choice. As an exception to the general rule for fixed assets, a company purchasing software from third parties may depreciate the cost over 12 months on a pro rata basis, which is shorter than a normal useful life (i.e. accelerated depreciation method). The depreciation allowances are calculated pro rata for the year in which the company purchased the software and for the remaining period in the following year.

Accelerated depreciation at the rate of 100% over a 12-month period is allowed with respect to high-speed internet access terminals purchased between 1 January 2004 and 31 December 2006 and to medical equipment and laboratory buildings, acquired prior to 1 January 2005, which are used for carrying out research for the treatment of certain infectious diseases

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<sup>43</sup> Guideline BOI 4 D-1-04 of 9 March 2004

### *1.2.2 Position under personal income tax legislation*

The same rules as described above apply to R&D expenses born by individuals subject to individual income tax with respect to the definition and tax treatment of operational expenses (Art. 236 (I) of the CGI) and equipment (see 1.2.1).

## **1.3 Territorialization Issue**

### *1.3.1 Position under corporate income tax legislation*

Costs incurred in a foreign country may be deducted or amortized if the research project is located in France and relates to the French company's activities that generate income taxable in France.

For the sake of completeness, it may be stated that under the French territoriality tax system, subject to certain exceptions (e.g. Art. 209 B) and the provisions of tax treaties, business income or losses derived by a French company from foreign operations are not assessable to French tax if the foreign activities constitute a permanent establishment. The tax administration considers that only expenses related to taxable income are deductible. Expenses related to exempt income in France are not deductible<sup>44</sup>. As a result, expenses related to a research project carried out in a foreign country are not deductible from the French company taxable base (nor depreciable) if the income derived from such research is not taxable in France.

### *1.3.2 Position under personal income tax legislation*

If the individual, including a partner in a partnership, is a French resident, then he is taxable in France on his worldwide business income. Foreign income is however exempt in France if the activity is located in a country with which France has concluded a tax treaty reserving the taxing right exclusively for the source country. In other cases, foreign business income must be declared separately (no. 2047) (CGI, Art. 158 (1)). The taxable income must be a net income, so that the expenses incurred in acquiring or maintaining the income must be deducted there from (CGI, Art. 13). In case the foreign income is exempt from French tax by virtue of a tax treaty, the costs incurred abroad are not deductible.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

Fundamental research expenses must always be deducted as costs, whereas applied and development research costs may be depreciated under certain conditions.

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<sup>44</sup> D. adm. 4-H-1322, no 9, 30 April 1988

#### *1.4.2 Position under personal income tax legislation*

The same rules as described above for the corporate income tax legislation apply to individuals subject to individual income tax.

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

#### *1.5.1 Position under corporate income tax legislation*

There is no particular relief in respect to land and buildings used to carry out the research. The general straight-line depreciation applies in this case. With respect to equipment, the straight-line method or the accelerated depreciation may apply (see 1.2).

#### *1.5.2 Position under personal income tax legislation*

The same rules as described above about corporate income tax legislation apply to individuals subject to individual income tax.

### ***1.6 Cash refund, carry forward and carry back possibilities***

#### *1.6.1 Position under corporate income tax legislation*

##### *Direct deduction*

As from 1 January 2004, losses in general, including those related to R&D projects, may be carried forward indefinitely; previously a 5-year limitation existed. This also applies to pre-existing losses. Corporate taxpayers have the option, subject to certain limitations, to carry losses back for 3 years, in which case they are entitled to a tax credit and not a refund (except companies in hardship). The tax credit may be used during the following 5 years and will be refundable in the sixth year.

##### Depreciation

Before 1 January 2004, the law provided for two methods of deferring depreciation:

- (1) Actually deferred depreciation, i.e. unrecorded depreciation that is in accordance with the minimum depreciation rules; and
- (2) Depreciation deemed deferred (ARD), i.e. depreciation effectively recorded in a loss year.

The depreciation deemed deferred was abolished with effect from 1 January 2004<sup>45</sup>, so now depreciation which cannot be set-off against profits, is treated as a loss.

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<sup>45</sup> Law no 2003-1311 of 30 December 2003, Art. 89; published in Official Journal No. 302 of 31 December 2003.



### *1.6.2 Position under personal income tax legislation*

A loss in one category may normally be set off against income of another category. Excess loss that cannot be set off against the income of a given year may be carried forward for 6 years<sup>46</sup>.

## **2 Incentives for R & D expenditure**

### ***2.1 Incentives under corporate/ personal income tax legislation***

There are two different incentives for R&D expenditure. The first one is the Research Tax Credit (*crédit d'impôt recherche* (CIR)), which is in place since 1992 but has been severely amended by the Finance Law for 2004<sup>47</sup>. From 1 January 2004, a special regime applies for New Innovative enterprises<sup>48</sup>.

#### *2.1.1 Research tax credit (CIR)*

The CIR is an optional incentive available to all industrial, commercial and agricultural enterprises, subject to individual income tax or CIT, whatever their legal form, which engage in R&D activities. Civil companies are excluded from this incentive.

##### *2.1.1.1 Qualifying R & D expenditure*

The qualifying R&D activities cover the three domains (CGI, Annex III, Art. 49 septies F) (see 1.1.) viz.:

- Fundamental research;
- Applied research;
- Experimental development

The qualifying R&D expenses are listed under Art. 244 quarter B, II, which include:

- Depreciation allowance (if deductible for tax purposes) on assets created or (newly) purchased or financed by way of lease with a purchase option, provided the assets are directly and specifically allocated to the performance of scientific and technical research carried out in France, including prototypes. In case of mixed use of the asset, only the part allocated to the research must be taken into

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<sup>46</sup> Law no 2003-1312 of 30 December 2003, Art. 54; published in Official Journal No. 302 of 31 December 2003.

<sup>47</sup> Law no 2003-1311 of 30 December 2003, Art. 87; published in Official Journal No. 302 of 31 December 2003

<sup>48</sup> Law no 2003-1311 of 30 December 2003, Art. 13; published in Official Journal No. 302 of 31 December 2003.

- account. Depreciation allowance on immovable property acquired or constructed after 1 January 1991 qualify for the credit. In case the equipment is subject to a lease agreement, the enterprise can take into account the depreciation claimed by the lessor in respect the equipment (D.adm. 4 A-4121, no 9 to 12).
- Employee expenses relating to inventors or research technicians directly linked to the research (this excludes maintenance and staff employees who are not directly involved in the research project (Guideline BOI 4 A-1-00 of 21 January 2000)) as well as those seconded by another company provided that their services are invoiced to the company implementing research. The labour expenses include salaries, compensation in kind, allowances, social security contributions (CGI, ann. III, art 49 septies I,b);
  - Operational expenses (*dépenses de fonctionnement*) incurred for the qualifying operation and determined notionally at 75% of the employee expenses mentioned above;
  - Expenses incurred to perform qualifying operations subcontracted to public research enterprises or private companies approved by the government. From 1 January 2004, these expenses are taken into account at 200% of the amount. This new measure does not apply when there is a relationship of dependency between the company and the research enterprises within the meaning of art. 39 (12) of the CGI<sup>49</sup>.
  - Depreciation allowances which are deductible for tax purposes, relating to patents purchased in order to undertake further R&D activities;
  - Software expenses are computed in the credit base if they are engaged for the creation of software's that represent a real innovation or brings a substantial improvement to existing products (D.adm. 4 A-4112 no 30).

Yes, expenses on development are not eligible for the credit unless, the company can prove the innovative character of the research.

Experimental development covers<sup>50</sup>:

- The improvement of a process already elaborated by another company but that is not available to the company;
- The acquisition of patents in view of (i) its adaptation to a specific application or (ii) to succeed in creating a substantial new product; and

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<sup>49</sup> Art. 39 (12) provides that a dependency links exists when:

- One company owns directly or indirectly the majority of the equity capital of the other company or exercises in fact decision making;
- Both companies are both placed under the control of a third company.

<sup>50</sup> Guideline BOI 4 A-1-00 of 21 January 2000

- Development operations of a product in view of its adaptation to the norms of the sector and entails real innovations in the conception of the product.

Activities of simple standardization cannot be considered as experimental development and are therefore excluded from the scope of the tax credit<sup>51</sup>. Further, a project the purpose of which is to improve significantly the reliability and the profitability of computer techniques cannot be considered as a substantial improvement with an innovative character<sup>52</sup>.

Set-up or production operations are excluded from the scope of the research tax credit<sup>53</sup>. To demonstrate the innovative character of the research, it is recommended to add all the details of the technical difficulties encountered, the originality and the innovation of the solution to the tax declaration. The tax administration has provided some examples of operations that do (or do not) fall within the scope of the tax credit in Guideline BOI 4 A-1-00 of 21 January 2000, no 15 to 20.

With respect to the specific case of software, the tax administration considers that the software must be new or must constitute a substantial improvement to basic software. Accordingly, work that aims at improving efficiency, reliability or the adaptability of the software, without any addition of original process does not constitute research operations<sup>54</sup>.

Land, buildings and equipment used to carry research are included in the tax credit incentive, by computing the depreciation allowance in the tax credit base.

#### *2.1.1.2 Nature of the incentive*

France adopts two different approaches as regards the research tax credit:

- The volume-based approach. The volume of R & D expenses made in the current year is one component of the credit; and
- The incremental R & D expenses; by computing the current year's increase in RD expenses against the average RD expenses over a defined period of time. The difference between both constitutes the basis of the credit.

As from 1 January 2004, the tax credit for research and development expenditure is available to companies that have opted for the application of the credit<sup>55</sup>. This option must be elected each year, except for partnerships, that opt for five years<sup>56</sup>. In case of

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<sup>51</sup> Guideline BOI 4 A-6-88 of 22 April 1988

<sup>52</sup> CE, 25 April. 2003, no 236066 Ste Ceicom.

<sup>53</sup> Guideline BOI 4 A-1-00 of 21 January 2000, no 13 and 14

<sup>54</sup> Guideline BOI 4 A-1-00 of 21 January 2000, no 36

<sup>55</sup> CGI, Art. 244 quarter B

<sup>56</sup> Law no 2003-1311 of 30 December 2003, Art. 87; published in Official Journal No. 302 of 31 December 2003

partnerships, the tax credit is transferred to the partners, with the exception of partners that do not exercise any professional activity in the partnership. The option must be exercised by the filing of a specific form (form No 2069 A) to the tax administration.

The credit is calculated on 2 components:

- A first component, which takes into account the volume of expenditure, amounts to 5% of all the expenses related to the R & D; and
- A second component, which takes into account the annual increase in the expenditure, equals to 45% of the difference between (a) R&D expenditure during the year and (b) the average of R&D expenditure during the preceding 2 years as adjusted by a coefficient based on the consumer index.

### Limits

The total credit of the two components may not exceed EUR 8 million (previously, EUR 6.1 million). In cases where the credit exceeds EUR 8 million, no carry-forward is granted for the following years.

Negative tax credits in one year may be carried forward for a maximum of 5 years. Negative credit occurs when the research expenses decrease, so that the part represented by the difference between the current research expenses and the average of research expenses incurred during the 2 preceding years become negative. The negative credit to be carried forward is limited to the positive credit obtained previously with respect to an increase in the research expenditure. After the 5-year period, the negative credit is cancelled.

Furthermore, public aids and subsidies received for the financing of the research project must be deducted from the computation for the year at hand.

#### *2.1.1.3 Restrictions (based on eligibility criteria)*

The CIR is granted only for expenses that correspond to R&D activities conducted in France (Art. 244 quarter B.II a)). This excludes all the costs incurred abroad except for litigation costs related to the protection of patents (see 2.1.1).

The CIR is optional and available to all industrial, commercial and agricultural enterprises, subject to individual income tax or CIT, whatever their legal form. However, civil companies are excluded from this incentive. As from 1 January 2004, the CIR is also available to the following types of companies that are exempt from CIT<sup>57</sup>:

- New innovative enterprises (CGI, Art. 44 sexies A);

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<sup>57</sup> Law no 2003-1311 of 30 December 2003, Art. 87; published in Official Journal No. 302 of 31 December 2003

- Enterprises whose activities are located in the Urban Free Zones (Zones Franches Urbaines); and
- Enterprises exercising their activities in Corsica (CGI, Art. 44 decies).

As regards sub-contracted research, the credit is available only if the research is subcontracted to public research enterprises or private companies approved by the government.

A special regime applies to enterprises whose activity relates to the elaboration of new collections. The latter may include for the computation of the credit sub-contracted research costs provided that the said enterprises retain the ownership of the raw materials and bear the production and commercial risks<sup>58</sup>.

#### *2.1.1.4 .Cash refund, carry forward and carry back possibilities*

Excess credit may be used to pay corporate income tax during the following 3 years, the balance being refunded during the fourth year. It may also be refunded immediately, subject to certain conditions. This claim may not be transferred, unless the transfer occurs within the framework of a merger or other restructuring operations.

As from 1 January 1999, newly created companies may benefit for the immediate refund of the credit provided they meet the criteria set out in Art. 44 sexies of the CGI. The same applies to companies in hardship as defined by Art L 620-1 of the Code of Commerce.

#### *2.1.1.5. Compliance verification*

There is no requirement regarding prior approval by the Ministry of Finances to benefit from the CIR. An option must be exercised each year for companies subject to CIT or every 5 years for partnerships and enterprises subject to individual income tax.

The grant of research tax credit may be verified by two administrations:

- The ministry of research and technology (optional intervention) whose agents may verify the reality of the allocation of the expenses to R&D projects<sup>59</sup> (LPF, Arts. L 45 B and R 45 B-1); or
- The tax administration, which is competent for the application of reassessment procedures. The tax administration considers that it can reassess a company until the end of the third year following the one in which the tax credit is imputed or refunded<sup>60</sup>.

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<sup>58</sup> Guideline BOI 4 A-1-01 of 6 February 2001

<sup>59</sup> Guideline BOI 4-1-00 of 21 January 2000, no 217.

<sup>60</sup> Guideline BOI 4-1-00 of 21 January 2000, no 220 and D. adm. 4 A-4142 no 2.

### 2.1.2 Innovative new companies

As from 1 January 2004, a special regime for innovative new companies is applicable to small and medium-sized companies (Art. 44 sexies-0A CGI). To qualify for the regime, a company must have existed for less than 8 years,<sup>61</sup> and must carry out innovative activities each year with a value of at least 15% of its total expenditure. The research expenses are those relevant for the research tax credit, listed in Art. 244 quarter B, II of the CGI. This special regime grants a special corporate tax incentive, provided that a certain volume-based R&D expenditure (in percentage terms) is incurred each year by the enterprise.

#### 2.1.2.2 Qualifying R & D expenditure

Qualifying expenditures for the new innovative enterprises regime are those listed in Art. 244 quarter B of the CGI in relation to the Research tax credit (see 2.1.1), excluding expenses linked to the elaboration of new collections realized by industrial enterprises in the field of textile-fabrics (to determine the tax credit as from 1992) and expenses on technological watch (*veille technologique*) related to the research project.

Eligible activities include:

- Industrial, commercial and handicraft activities within the meaning of Art. 34 CGI, provided they are not expressly excluded (e.g. banking, financial, insurance activities);
- Renting activities related to industrial and commercial buildings within the meaning of Art. 35,I-5 CGI located in ZRR (see footnote 2); and
- Professional non-commercial activities within the meaning of Art. 92 of the CGI, provided the activity is performed through a company subject to corporate tax, which employs more than 3 employees.

The rules described for the CIR in 2.1.1 also apply to the regime of new innovative companies.

Land, buildings and equipment used to carry research are included in the 15% threshold of R&D expenditures, by virtue of inclusion of the depreciation allowance in the ratio.

#### 2.1.2.3 Nature of the incentive

This regime grants a complete corporate income tax exemption on profits and capital gains in the initial 3 profitable years of the innovative activity, reduced to 50% in the succeeding 2 profitable years. It also grants exemptions from various other taxes, e.g. business tax, social security contributions and the annual minimum lump-sum tax based on turnover (IFA).

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<sup>61</sup> The enterprise loses the benefit of the regime in the year corresponding to its 8<sup>th</sup> year of creation.

The following income categories are excluded from the exemption and remain subject to CIT or individual income tax<sup>62</sup>:

- Income derived from shares, as well as profits received from partnerships or entities not subject to corporate income tax (CGI, art. 8);
- Income from subsidies, donations and debt waivers; and
- Income from claims and financial operations if that exceed the costs of same nature incurred in the same tax year.

The scheme is volume-based as it is conditional upon a percentage of expenditure related to R&D activities. The percentage is set at 15% of the total expenditure. To assess the 15% threshold, it is necessary to establish a ratio between the expenses falling within the scope of the research tax credit (see 2.1.1) and the amount of total expenditures engaged by the enterprise during the taxable year. Payments made to the other new innovative companies realizing research projects remains excluded from the computation.

The law provides that the total tax exemption may not exceed the limits provided by the EU regulation related to the ‘de minimis’ aids, i.e. EUR 100,000 in a period of 3 years. This regime may be combined with the tax credit for research and development (R&D) expenditure. Nevertheless, this regime may not be combined with the one on newly created companies; so that existing companies must opt for one of the two regimes until 30 September 2004, or within the first 9 months of activity for companies formed on or after 1 January 2004.

#### *2.1.2.4 Restrictions (based on eligibility criteria)*

Article 13 of the Finance Law for 2004 does not seem to exclude, for the estimation of the 15% threshold, qualifying research expenses incurred outside France. However, the tax administrative has not yet published any guideline on that issue.

The special regime for innovative new companies applies only to small and medium-sized companies the capital of which is owned directly or indirectly for at least 50% by individuals, by certain venture capital funds or by public institutions specialized in research and development activities (Art. 44 sexies-0A CGI). Small and medium size companies are those whose turnover does not exceed EUR 40 million and which employ less than 250 persons. This regime is limited to ‘real’ newly created companies within the meaning of Art. 44 sexies CGI.

The exemption is reserved to enterprises that meet the conditions set out in Art. 44 sexies 0 A of the CGI. In other cases, the benefit of the exemption is definitively lost. However,

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<sup>62</sup> Law no 2003-1311 of 30 December 2003, Art. 13; published in Official Journal No. 302 of 31 December 2003

the profits realized during the year in which the exemption is lost is subject to CIT or individual income tax for 50% of the amount.

This regime only applies to companies that are newly created, and it excludes those created within the framework of restructuring activities or by extension of activity. Article 44 sexies, III provides that newly created companies may not be dependant economically, so that those contracting distribution agreements (franchise or concession) with existing companies and benefiting from their name, brand, know-how (thereby mainly constituting an extension of pre-existing activities), are excluded from the benefit of the regime. Further, newly created companies must be legally independent, so that their capital (voting rights or rights to dividends) may not be held directly or indirectly for more than 50% by other companies

#### *2.1.2.5. Cash refund, carry forward and carry back possibilities*

The incentive applies when the company starts to make profits, but in case of loss years, there is no advantage for the enterprises in respect to CIT. Exempt profits by virtue of Art. 44 sexies A of the CGI may not benefit from the carry back regime provided in Art. 220 quinquies of the CGI. However, the exemption with respect to other taxes that are not profit-based (local business tax, social security contributions and IFA) alleviates the tax burden of the enterprise.

#### *2.1.2.6 Compliance verification*

The enterprise, which seeks to ensure that it is eligible for the research tax credit, may send the details of its research project to the tax administration. The tax administration is deemed to approve of the project if it does not respond within 4 months<sup>63</sup>.

## **2.2 Incentives under wage tax legislation**

There is no general exemption under wage tax legislation in respect to R&D activities. However, there is a special exemption provided for enterprises qualifying for the New Innovative Enterprise regime<sup>64</sup>.

### *2.2.1 Nature of the incentive*

New innovative companies that realize R&D projects benefit from a total exemption on social security contributions paid by employers with respect to compensation and other benefits within the of Art. L 242-1 of the Social Security Code paid to eligible employees participating to the research project. Details of the exemption were given in Decree no 2004- 581 of 21 June 2004 published in the Official Journal no 143 of 22 June 2005. The exemption applies in principle to compensation paid from 1 January 2004.

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<sup>63</sup> LPF, art. L.80 B modified by the Finance Law for 2004, art. 13

<sup>64</sup> Law 2003-1311 of 30 December 2003, Art 131



### 2.2.2 *Qualifying R & D expenditure*

The exemption on social contributions paid by employers with respect to compensation and other benefits does not apply to all staff, but only to the following categories of employees:

- Researchers, executives or managerial employees (i.e. scientists or engineers working on the conception or the creation of knowledge, products, process, methods or new systems);
- Technicians (i.e. staff working in close collaboration with researchers to ensure the technical support for the R&D project);
- R&D project managers and executives which tasks are dedicated to the organizations, the coordination and the planning with respect to the administrative, financial and technological aspects of the R&D projects;
- Lawyers in charge of the industrial protection and technological agreements related to the R&D project, executives in charge of the elaboration, the registration of copyright, the management of the industrial property rights, legal agreements related to the R&D projects, and amongst other transfers of technology; and
- Legal representatives of the company, who are directly involved in the project.

### 2.2.3 *Restrictions based on eligibility criteria*

To benefit from the exemption, the enterprise must, at the end of the accounting year, meet the conditions set out in the General Tax Code.

#### Numbers of employees

The enterprise may benefit from the exemption if it employs less than 250 employees. This threshold is determined under the rules mentioned in the French Labour Code.

In practice, this includes:

- Full-time employees working under an indefinite contracts;
- Employees working under a definite contract;
- Part-time employees, whatever the terms of their employment contracts. The latter are taken into account for the computation on a pro rata basis.

#### Fulfilment of social obligations

The enterprise must have fulfilled all its social obligations in respect to the Urssaf<sup>65</sup>.

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<sup>65</sup> The Urssaf represents all the private associations, which ensure the management of a public service, which task is, amongst others, the recovery of social security contributions and family allowances.

#### *2.2.4 Compliance verification*

The enterprise must, at the end of the tax year, meet the conditions set out in art. 44 sexies-O A of the CGI. The enterprise can ask the tax administration to confirm whether or not it qualifies for the regime. A positive answer binds the tax administration as well as the Urssaf.

## Germany

### 1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation

#### 1.1 Definition of R & D costs/ expenditure

##### 1.1.1 Position under corporate income tax legislation

Sec. 51(1) No. 2 lit. u) of the Income Tax Law (*Einkommensteuergesetz*, or EStG) defines assets as serving research and development activities if they are used for

- gaining new scientific or technical knowledge or experiences of a general character (basic research – *Grundlagenforschung*);
- developing new products or new production processes; or
- advancement of products or production processes, to the extent that essential changes to these products or processes are developed.

However, this provision just contains an authorization for the Federal government to enact an ordinance allowing for a special depreciation for fixed assets serving research and development. This special depreciation rule was contained in Sec. 82d of the Income Tax Regulation (*Einkommensteuer-Durchführungsverordnung*), which the Federal government enacted on the basis of this authorization. This special depreciation however, is only applied to assets acquired before 1 January 1990.

Apart from this provision, there is no legal provision under German (corporate) income tax legislation defining research and development (R&D) or R&D expenditure.

##### 1.1.2 Position under personal income tax legislation

The situation described under 1.1.1. also applies for personal income tax purposes.

#### 1.2 Treatment of R & D expenditure as per general (non-incentive) provisions

##### 1.2.1 Position under corporate income tax legislation

R&D costs constitute deductible business expenses (Sec. 4(4) of the EStG in conjunction with Sec. 8(1) of the Corporate Income Tax Law (*Körperschaftsteuergesetz*, or KStG).

For purposes of commercial accounting law as well as for purposes of tax accounting law, certain R&D costs fall within the scope of intangible assets. As such, they may only be booked as an asset (and subsequently depreciated) if they have been acquired in return for payment (Sec. 248(2) of the Commercial Code (*Handelsgesetzbuch*), Sec. 5(2) of the EStG). Accordingly, the following differentiations must be made:

- The expenditure for a taxpayer's own R&D activities carried out in the field of basic research (as defined above under 1.1.1.) may not be capitalized as an asset.
- The expenditure for a taxpayer's own R&D activities carried out for purposes of new product development or the new development of production processes must be capitalized as an asset if the R&D activities must be regarded as the commencement of the production of a certain product.
- The expenditure for a taxpayer's own R&D activities carried out for purposes of the advancement of products or production processes, to the extent that essential changes of these products or processes are developed may not be capitalized as an asset.
- The results of the R&D activities of a third party, which have been acquired in return for a payment, must be capitalized as an asset and must be valued at their acquisition costs.
- The expenditure for a taxpayer's R&D activities carried out by order of a third party must be capitalized as an asset and valued at the amount of the expenditure (maximum at the agreed consideration).

If the R&D expenditure must be capitalized as an asset, it must be depreciated over the period during which the asset will be used in the business of the taxpayer.

For commercial accounting purposes as well as for tax accounting purposes, generally, the straight-line depreciation method or the declining-balance depreciation method can be applied.

The tax treatment described above equally applies in respect of subcontracted research, and no approval is necessary in case of subcontracted research.

### *1.2.2 Position under personal income tax legislation*

The rules described under 1.2.1. also apply for personal income tax purposes.

## **1.3 Territorialization Issue**

### *1.3.1 Position under corporate income tax legislation*

Generally, the costs incurred abroad by a resident taxpayer subject to worldwide income tax liability in Germany are eligible as deductible business expenses to the same extent as costs incurred within Germany. However, business expenses are not deductible to the extent that they are directly connected with income that is exempt from German corporate income tax (Sec. 3c(1) of the EStG); however, there is debate among German tax scholars as to the question to which extent this rule applies to income that is exempt from German corporate income tax under a tax treaty.

Furthermore, a taxpayer claiming the deduction of business expenses incurred abroad is subject to increased cooperation requirements with the tax authorities (Sec. 90(2) of the General Tax Code (*Abgabenordnung*)). The taxpayer is obliged to inform the tax authorities about the underlying circumstances and has to furnish proof. Non-compliance with these increased cooperation requirements may lead to the rejection of the deduction of the business expenses.

### *1.3.2 Position under personal income tax legislation*

What is described under 1.3.1. also applies for personal income tax purposes.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

No such distinction is made.

### *1.4.2 Position under personal income tax legislation*

No such distinction is made.

## **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

### *1.5.1 Position under corporate income tax legislation*

Generally the normal depreciation rules apply:

- Land is not depreciable;
- For buildings, the straight-line method applies generally, but the declining-balance method may be used under certain circumstances (Sec. 7(1), (2) of the EStG). The depreciation base is the acquisition or manufacturing cost, including accessory costs such as notary fees and the real estate transfer tax. The annual straight-line depreciation rate for buildings belonging to a business and not used for living accommodation is 4% provided the application for the construction permit was made after 31 March 1985. The 4% rate is reduced to 3% from 2001 (Sec. 7(4) of the EStG). Application of the declining-balance method presupposes that the taxpayer purchased the building at the latest in the year of completion or that the taxpayer constructed the building himself. For buildings that constitute a business asset and are not used for living accommodation, the declining-balance method is no longer available if the application for the construction permit was made after 31 December 1993. If the application for the construction permit was made after 31 March 1985 and before 1 January 1994, the declining-balance rates are 10% for the first 4

- years, 5% for the following 3 years and 2.5% for the remaining 18 years (Sec. 7(5) of the EStG).
- For plant, machinery and equipment, both the straight-line and declining-balance methods apply if the plant does not constitute immovable property (Sec. 7(1) and (2) of the EStG}). For assets acquired or manufactured after 31 December 2000, the declining-balance rate is limited to the double of the allowable straight-line rate, with a maximum of 20%. The rates for movable fixed assets are set out in the official recommended tables (AfA-Tabellen; edited in *Steuertabellen* (C.H. Beck-Verlag)) published by the Federal Ministry of Finance. Inter alia, the following straight-line rates are applicable from 1 January 2001: 6% to 10% for machinery, 12.5% for office equipment, 8% to 10% for office furniture, 33.3% for computers and 11% to 16% for cars, trucks, etc.

In addition to regular depreciation, accelerated depreciation of the cost of movable fixed assets is allowed if the net assets of the business do not exceed EUR 204,517 (Sec. 7g of the EStG). The rate of accelerated depreciation is 20% and may be claimed during the first 5 years in addition to regular depreciation. As an exception to the general rule, this accelerated depreciation can also be combined with the declining-balance method. This accelerated depreciation was established mainly for small and medium-sized businesses, but it also benefits larger companies if their net worth decreased to EUR 204,517 or less, for example, due to losses.

Businesses with a net worth of EUR 204,517 or less may set up a tax-free reserve of a maximum of EUR 154,000 (EUR 307,000 for new businesses) for the future acquisition of new movable fixed assets (Sec. 7g(3) of the EStG).

The tax-free reserve may not exceed 40% of the qualifying asset, which the taxpayer must acquire within 2 years (5 years for new businesses). If a qualifying asset is not purchased within the 2 or 5-year period, the reserve must be dissolved. In addition, the company's income is increased by 6% of the dissolved amount for each year for which the tax-free reserve existed.

The reserve may only be created by new businesses which do not belong to a sensitive sector of industry (steel, automobile, ship construction, synthetic fibre, agricultural, fishing, traffic or coal industry) (Sec. 7g(8) of the EStG).

#### *1.5.2 Position under personal income tax legislation*

The situation described under 1.5.1. also applies for personal income tax purposes.

### **1.6 Cash refund, carry forward and carry back possibilities**

#### *1.6.1 Position under corporate income tax legislation*

Net operating losses of up to EUR 511,500 may be carried back for 1 year prior to the year in which the losses were incurred. From tax year 2004 (i.e. for income arising in tax year 2004 for purposes of a loss carry-forward existing on 31 December 2003), the loss carry-forward is limited to EUR 1 million of net income in a given year without restriction. Any remaining loss can only be set off against up to 60% of the net income exceeding this limit (Sec. 10d of the EStG in conjunction with Sec. 8(1) of the KStG). A tax allowance or a tax credit may not be carried forward or carried back under German corporate income tax legislation.

#### *1.6.2 Position under personal income tax legislation*

The situation described under 1.6.1. also applies for personal income tax purposes.

## **2 Incentives for R & D expenditure**

### *2.1 Incentives under corporate/ personal income tax legislation*

There are no relevant incentives under the German corporate/ personal income tax legislation.

### *2.2 Incentives under wage tax legislation*

There are no R&D incentives under the German wage tax legislation.

## Greece

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

The definition of expenses incurred for scientific and technological research mentioned in art. 31(1) 10α of the Income Tax Code (Law 2238/1994 hereafter referred as ITC) is laid down in a Decision of the Ministry of Industry, Technology and Energy No. 12962 of 3 November 1987. This decision states that within the definition of expenses for scientific and technological research the expenses incurred for the following activities are included:

- study and elaboration of processing prototypes with the purpose of advancing scientific knowledge, according to the generally acknowledged scientific theories, or with the purpose of perfecting new theories, which are able to be accepted by the scientific community (scientific research);
- studies and elaboration of systematic prototypes which are based on existing knowledge (of both the research and the practical experience) with the purpose of processing the production of new materials, products or dispositions (of devices, machines, packaging etc.), the preparation of new proceedings for machines or services, or the substantial improvement of existing ones for specific applications (technologic research).

The above activities for scientific and technological research entail also the activities for:

- submission of applications for obtaining patents in Greece and abroad, request for similar inventions, protection of the novel and inventive character of the invention;
- performance of engineering studies for the final product and the final creation of a product, in order to render it marketable, sample production of small series of prototypes;
- performance of industrial designs;
- drawing up of technical projects for spare parts, materials, prototypes and of methods for testing those products;
- final creation of a new equipment, tool and projects for testing their quality and production;
- carrying out demonstration projects, if they are connected to a sample creation of a new product or a method of production;
- performance of marketing studies of new products of an entrepreneurial unit.

In the definition of scientific and technical research also the following expenses are included:

- a) equipment of a workshop infrastructure and installation for semi industrial trials;



- b) salaries for employees of any level (specialized researchers, postgraduate students, technicians, administrative etc.) who are involved with the execution of the task;
- c) expenses incurred in Greece or abroad for the collaboration with workshops for gathering information, communication of results concerning the research task performed, which has been performed or is planned to be performed, participation in seminars, scientific meetings etc.;
- d) chemical reagents, micro- spare parts and tools for a one-time use or for a limited use;
- e) expenses for the license for the exploitation of patents, which are connected with the performance of a research;
- f) assignment, by means of an agreement, to a research workshop of the State of a research (or part of it);
- g) expenses, which relate to obligations of the enterprise from the participation to researches or programs which are co-financed by the State, by the European Union or international organizations.

#### *1.1.2 Position under personal income tax legislation*

Same as 1.1.1 if business income is derived by a natural person.

### **1.2 Treatment of R & D expenditure as per general (non-incentive) provisions**

#### *1.2.1 Position under corporate income tax legislation*

Article 31(1) of the Greek ITC provides for the basic rules for the determination of the net business income of enterprises, which keep accurate and adequate books and records. The net taxable income of an enterprise is determined by a deduction, from the gross taxable income, of a number of expenses including:

- a) expenses incurred for scientific and technological research (art. 31(1) ια);
  - b) remunerations or compensations paid to enterprises or organizations for the use of technical support, inventions, projects, secret methods or formulas, intellectual property and other similar rights (art. 31(1) ι);
  - c) expenses incurred for the improvement and innovation of fixed assets.
- a) Although expenditure incurred in developing a new product may affect the business for more than a year, in the absence of any special provision, it is generally deductible in the year in which it was incurred (outright deduction). However, research and development expenses that relate to purchases of fixed assets should be capitalized and amortized in equal annual instalments over a period of 3 years. With regard to subcontracted research, i.e. research performed upon contractual agreement by a taxable person other than the taxpayer, the law does not provide any special rule. Deductibility of such expenses applies in practice and derives from the fact that the Decision 12962/ 1987 of the Ministry of Industry and Energy defines in paragraph 3

as research and development expenses “all those expenses incurred for the purpose of performing the activities above mentioned regardless of their nature.”

In general, for the deductibility of R & D expenses, no prior approval or authorisation is required.

- b) Royalties paid for business purposes are deductible, although certain limitations have been introduced by Law 2459/1997. If a lump sum is paid in return for the use of a right, the payment is not deductible but is capitalized and depreciated over a period of years, depending on the useful life of the right. Law 2873/2000 slightly changed the rules introduced by Law 2459/1997 on the deductibility of royalties, other than intellectual property rights (copyrights), applicable for financial years ending after 31 December 2000. The deductibility of copyrights is not restricted as long as they are paid to third parties.

Under the new rules given by means of Law 2873/2000, for the deduction of royalties it is sufficient to credit the owner’s account by the deadline for drawing up the financial statements. When the beneficiary of the remunerations and compensations is a non resident individual or a non resident legal person it is necessary to prove to the Tax Authorities the payment of the withholding tax levied by Greece in accordance with the applicable tax treaty from time to time.

The audit and control related to these items of deductions, with the exception of those paid on behalf of a third person, is performed by a special Auditing Committee when these expenses exceed the amounts provided for by the law (see below) and when they are paid:

- by an enterprise and they relate to remunerations for projects, methods of marketing or distribution and other similar rights;
- by multi-purpose companies (providing supply of services and supply of goods), regardless of their amount and to the extent that such payments are connected with their trading activities;
- by a subsidiary to its parent company regardless of whether the parent company is located in Greece or abroad;
- by a permanent establishment of a non resident company to its head office;
- to a domestic or non resident enterprise which belongs to the same group<sup>66</sup>, if they exceed 4% of the gross taxable income derived by the use of the right concerned or if they exceed the amount of 300.000 euros, regardless of the amount paid with respect to the gross taxable income (no restrictions applies to royalties paid by non-trading companies to recipients outside the group).

The composition of the Committee and its functioning, the auditing procedure adopted, and other details will be set up by a decision of the Ministry of Finance, to be issued.

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<sup>66</sup> The notion of associated enterprises is similar to the one given by art. 9(1) of the OECD Model Convention. Two companies are deemed to belong to the same group if one of them participates directly or indirectly in the management, control or capital of the other enterprise or if the same persons participate directly or indirectly in the management, control or capital of both the enterprises.

- c) Expenses incurred for the improvement and innovation of fixed assets increase the value of the assets concerned, therefore they do not enjoy an outright deduction, but benefit of the depreciation over several years (Decision of the Supreme Administrative Court, No. 3775/1972) which is compulsory for financial years ending after 30 December 1997 (Law 2556/1997 and PD 100/1998).

If a company does not claim depreciation in a financial year or if it applies depreciation rates lower than those provided by legislation, it waives the right to do so in future (either for the entire amount or for the remaining balance). Depreciation is not disallowed in loss years. New businesses are entitled for the first 3 years following the commencement of operation not to depreciate their assets or to depreciate them at 50% of the ordinary rates, provided that the chosen rate does not alter in the first 3 years.

Depreciation is computed according to the straight-line method on the acquisition value increased by any additions and improvements (industrial and mining companies are entitled to apply either the straight-line or the declining-balance method for new machinery and other technical production equipment acquired after 1 January 1998, the application of either of the methods must be consistent).

The depreciation of an asset is based on the acquisition cost of the asset and limited by it, increased only by the amounts of additions and improvements. However, in the case of buildings, the revaluation, which is recognized for tax purposes, may increase the depreciable base.

The rates of depreciation (including those applicable in case of the declining-balance method) currently in force have been set by Presidential Decree (hereinafter PD No. 299/2003). They are classified according to the nature of the depreciable assets. Group depreciation is allowed, but the valuation of each asset is made separately. The rates are compulsory and they may not be altered by the taxpayer. A high and low rate of depreciation per asset apply. The company may use either rate, insofar as the chosen rate is not changed in subsequent financial years.

With regard to the declining-balance method, the rates are those, which apply to the straight-line method multiplied by three. The resulting rates are applied to the net book value of the asset. If in a financial year the net book value of an asset after depreciation is less than 10% of the acquisition cost, it can be fully depreciated in that year.

The depreciation of an asset is calculated from the date the asset has been used for business purposes. If a financial year consists of less or more than 12 months, the deduction is computed according to the number of months.

Assets the acquisition cost of which does not exceed EUR 600 may be expensed in the year in which they were purchased or first used.

The amount of depreciation taken on assets purchased from offshore companies is not tax deductible.

Land is not depreciable. Depreciation for buildings is calculated according to the straight-line method. The most important basic depreciation rates for immovable property are (PD 299/2003):

- 5% or 8% for factory buildings and annexes, including warehouses, as well as buildings used by clinics and schools;
- 3% or 6% for hotels; and
- 3% or 5% for other buildings (8% or 12% for temporary constructions).

The amount calculated by application of these rates is reduced by the amount of depreciation provided by Law 2238/1994 (5% of gross income from buildings; 10% of gross income from shops).

Plant, machinery and equipment are depreciated by applying the straight-line method. The right to adopt the declining-balance method is offered for new machinery and other technical production equipment acquired by industrial or mining companies or quarries from 1 January 1998. The declining-balance method was introduced by PD 100/1998 and was repeated in PD 299/2003. The most important depreciation rates (varying according to the kind of the business) of this category are:

Asset	Rate (%)
machinery and installations of electricity generating companies	2-10/12
telecommunication installations and works	3/5-15/20
air conditioning and central heating apparatus	8/12
computers in general	24/30
computers used for education	34/40
computer programmes (see also below)	24/30
equipment (e.g. furniture) of hotels, restaurants, hospitals, schools	24/30
equipment of other businesses	15/20
office equipment (e.g. photocopy machines, calculators) in general	15/20
office equipment of educational institutions	29/35
machinery installations of manufacturing enterprises, depending on sector of industry	7/10-15/20
vehicles, ships and aircraft	3/5-19/25
spare parts and tools	100

### *1.2.1 Position under personal income tax legislation*

Same as 1.2.1.

## **1.3 Territorialization Issue**

### *1.3.1 Position under corporate income tax legislation*

In the absence of any specific provision, also costs incurred abroad should be considered as eligible costs.

*1.3.2 Position under personal income tax legislation*

Same as 1.3.1

**1.4 Pure research costs v. development costs**

*1.4.1 Position under corporate income tax legislation*

There is no distinction between pure research costs and development costs.

*1.4.2 Position under personal income tax legislation*

Same as 1.4.1.

**1.5 Relief in respect of land, buildings and equipment used to carry out the research**

*1.5.1 Position under corporate income tax legislation*

The general rules regarding depreciation apply (see above 1.2.1)

*1.5.2 Position under personal income tax legislation*

Same as 1.5.1.

**1.6 Cash refund, carry forward and carry back possibilities**

*1.6.1 Position under corporate income tax legislation*

Losses incurred by all types of company from commercial, industrial, farming, mining, hotel and handicraft business may be carried forward for 5 years. Loss carry-back is not permitted. Cash refund is not permitted.

*1.6.2 Position under personal income tax legislation*

Same as 1.6.1.

**2 Incentives for R & D expenditure**

**2.1 Incentives under corporate/ personal income tax legislation**

“State grants for private investments with the purpose of the economic and peripheral development of the country and other provisions” provided for by Law 2601/1998 and subsequent amendments.

### 2.1.1 Qualifying R & D expenditure

For the purpose of granting the incentives, art. 3(1) of the Law 2601/1998 gives an extensive list the types of eligible business activities (performed either by companies or individuals) and eligible expenses<sup>67</sup>.

Among these latter are included the expenses incurred for “*the study with the purpose of the creation, development and implementation of modern technology, technical knowledge, modern methods and industrial design for the creation of products*”.

The business activities benefiting of the above mentioned eligible expense are the following:

- Transformation ( including those expenses incurred for the creation of research prototypes and the protection of intellectual property related thereto);
- production of energy in the form of warm water, steam, solid biological burning material, electricity, non polluting energy such as eolic, sun, idroelectric, geotermic;
- industrial, metallurgical, agricultural, animal feeding, forestry and fishing-breeding research and those performing the development of technological and industrial projects;
- supplying services in the field of advanced technology, as long as such services can fall under the informatics sector, of tourism, research and technologic preservation of manufacturing and industrial activities;
- development of long-term programs of an economic character;
- supplying services concerning quality;
- metallurgic;
- mining;
- greenhouses, animal-breeding, biological farming;
- construction renovation and reparation of boats and renovation of wooden hulls of historical character only with respect of investments for modernization;
- installment of tanneries in Industrial and Business Areas, located within the zone of Thessaloniki and Hania, where there are already existing infrastructures.

Art. 3(1) o, viii, considers as eligible expenses those incurred by Centres of “common business action”<sup>68</sup> (providing services to enterprises such as the creation of databases,

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<sup>67</sup> The long and detailed list of expenses included in art. 3(1) entail also expenses incurred for the purchase of fixed assets and installations and for the extension, creation and renovation of structures, but they do not pertain to the object of the present report.

<sup>68</sup> This kind of association of companies, which can have the form of a limited or non-for-profit company, has the aim of providing services to the associated enterprises. It must be formed with a minimum of 3 companies part of the transformation sector (with a minimum number of 120 employees each) and one company belonging to the commercial sector. Research centres can also be part to this form of association.

organizational and marketing plans) for the studies performed for the purpose of marketing researches.

### *2.1.2 Nature of the incentive*

The grant of the incentive and the amount of it depend on two factors:

- a. the place where the eligible company or individual enterprise is located;
- b. the type of beneficiary.

### **1) Location of the eligible company or enterprise.**

Art 3(4) sets the basic rule under which the Greek Republic is divided into four territorial areas.

#### *Area A*

The prefectures of Attica and Thessaloniki, except the parts included in the other areas.

#### *Area B*

The industrial zone of ETBA, the province of Langadas and the part west of the Axios river which belongs to the prefecture of Thessaloniki, as well as the prefectures and areas not belonging to areas A, C or D.

#### *Area C*

The prefectures and areas where the working population is declining or unemployment increases, including until 31 December 2005 the Lavreotiki zone and the island of Kythira from the prefecture of Athens but excluding the prefectures of Attica and Thessaloniki and the prefectures or part of prefectures belonging to area D. These areas are specified by a ministerial decision which is issued every 2 years and cannot be amended prior to the expiry of the 2-year period.

#### *Area D*

The prefectures of Xanthi, Rodopi, Evros, Serres, Drama and Kavala (including the island of Thassos), the industrial zones of ETBA in the geographical and administrative area of Epirus, the islands with a population less than 3,100 inhabitants according to the 1991 registration, the islands belonging to the geographical and administrative area of the Northern Aegean Sea (prefectures of Lesbos, Chios, Samos), the prefectures of Dodecanese (except the area of the town of Rhodes) and the border areas of the various prefectures of the mainland up to a distance of 20 km from the state border and the municipalities or communities whose local boundaries are intersected by the zone of 20 km.

## **2) Types of beneficiaries**

Companies and individual entrepreneurs are classified into two main categories: new beneficiaries and old beneficiaries.

New beneficiaries are companies or individual enterprises newly incorporated or those that file an application (where such application is provided by Law 2601/1998) within 5 years following the incorporation. In the case of a merger or absorption or a contribution of a business sector, all the companies involved must comply with this requirement. Companies that do not meet the above requirement are deemed to be old companies.

Old beneficiaries are companies and individual enterprises, which file an application after five years from their incorporation or their start-up (for individual enterprises).

## **3) Incentive granted**

Art. 1 of the Law provides for 4 types of incentives: a credit consisting in a percentage of the expense incurred, a subsidy of the interest paid on short-term loans, a subsidy of the lease payments of operating leases and an exemption from the taxable income of a percentage of the incurred expense. For the purpose of this report only the credit and exemption from the taxable income will be dealt with.

The exemption from the taxable income enjoyed by qualifying companies when making qualifying investments is equal to a percentage of the expense of the investment. In particular, an amount of net profits equal to the above percentage is deducted from the total net profits (after deducting the statutory reserve and the dividends distributed to the partners of EPEs, both grossed up by the corresponding income tax) of the financial year in which the investment was effected and it is entered into a special tax-free reserve account.

In the cases of investment projects concerning equipment the duration of which extends to more than 1 financial (accounting) year, the tax exemption and the formation of the relevant reserve may be effected gradually on the basis of the expenses incurred each year, provided that the project or the lease is completed in a 5-year period following the date of commencement.

The tax-free reserve (or part of it, respectively) will be added to the profits of the company of the year in which (Art. 11 Law 2601/1998) the reserve, into which the exempt profits were entered, is distributed or used in another way (for the respective amount which was distributed or otherwise used).

The tax-free reserve is taxed in the hands of the respective partner if a share part is transferred in an limited liability company by a partner and for the amount of the reserve that corresponds to the transferred part.



### **Incentives granted to new beneficiaries.**

New beneficiaries are granted a credit in the form of a percentage of the incurred expense in the following way:

Area D – 40%  
Area C – 30%  
Area B 15%

New beneficiaries are granted an income exemption in the following way:

Area D – 100%  
Area C – 70%  
Area B – 40%

### **Incentives granted to old beneficiaries**

Old beneficiaries are granted an income exemption in the following way:

Area D – 100%  
Area C – 70%  
Area B – 40%

Art. 5(3) of the Law provides for a detailed set of exceptions and differentiated rates applying to certain types of activities.

### **General exception**

Art. 5(3) ε, vii, provides an exception to the above mentioned systems by stating that expenses incurred for the setting up, enlargement and modernisation of workshops for industrial, energy, metallurgic, agricultural, animal or fish breeding research are subject to the following rules:

Credit:  
Area D – 40%  
Area C – 40%  
Area B – 30%  
Area A - 25%

Exemption form taxable income:

Area D – 100%  
Area C – 100%  
Area B – 70%  
Area A – 60%

## Limits/ceilings

Art. 6 provides for an extensive list of ceilings and of the minimum amounts of investments of which the following can be mentioned:

- investments for the setting up or extension of industrial units<sup>69</sup> of small and middle sized companies operating in the transformation sector, must exceed 135.000 euros. The minimum amount of the investment for modernisation of the industrial units must exceed 30.000 euros;
- investments for the setting up, enlargement of research workshops and industrial projects of the metallurgic industry and high technology the minimum amount of the expense must respectively exceed 45.000 and 15.000 euros if the expenses are incurred for the purpose of modernisation;
- for investments of tanneries in Industrial and Business Areas, located within the zone of Thessaloniki and Hania, 75.000 euros.

Research expenses, concerning the development of modern technology in the field of general long-term programs of an economic character, must not exceed 20% of the entire cost of the investment.

The expenses incurred for certain studies, performed by Centres of “common business action” for the purpose of marketing researches, cannot exceed the 10% of the overall amount of the investment.

### *2.1.3 Restrictions (based on eligibility criteria)*

Eligible expenses are also those incurred abroad.

Under art. 6(34) Incentives are granted to companies carrying a transformation activity or providing quality services only under the condition that they qualify as Small and Medium size companies according to Directive 96/280/EC.

Art. 3(4) forbids the application of the incentive provisions to publicly owned companies or organizations with the exception of their subsidiaries and art. 3(5) for civil law companies and joint ventures. In addition to this, the incentive provision applies only to companies keeping Books and Records of B and C category.

### *2.1.4 Cash refund, carry forward and carry back possibilities*

For the purpose of the application of the incentive consisting in the exemption from the taxable income, if the amount of net profits in the financial year in which the investment was made is not enough to cover the amount of exemption, the balance is settled through

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<sup>69</sup> Which, according to the Ministry of Finance entail also expenses incurred for research and development.

the net profits of the 10 financial years following the year of investment. There is no possibility for cash refund.

#### *2.1.5 Compliance verification*

The beneficiaries of the incentive consisting in a credit must submit a request and accompanying justification documents to the Ministry of Finance. Different rules apply depending on the amount of the investment and on the location of the company. As a rule, the Administration has 3 months for considering the request and 30 days for the issue of the decision. The application has to be submitted between 1 January and 15 September of each year. The credit is paid after the beneficiary has completed the investment within a time period which is generally 2 years, but it can be subject to an extension upon request of the concerned company or entrepreneur. The credit is granted in instalments and carry forward is possible. Control procedure are provided for the completion of the investment.

The tax exemption incentive is not subject to a specific request but only to *a postetiori* control of the performed investment. Companies enjoying the tax exemption must maintain additional accounting (investment) books specified by a ministerial decision. Upon completion of the investment, they should file with the relevant tax office an application for the audit of the investment. Certain documents concerning the investment (e.g. list of expenses, details of the records issued for them) must be filed within the deadlines applying to the filing of annual income tax returns. (The above wording on the deadlines for the filing of the application and of the supporting documentation is rather contradictory; in the absence of any circular, the law being only recently enacted, it appears that the application can be filed together with the documents within the deadline for the filing of the annual income tax return.)

#### *2.2 Incentives under wage tax legislation*

No wage-tax incentives are available.

## **Hungary**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### **1.1 Definition of R & D costs/ expenditure**

##### *1.1.1 Position under corporate income tax legislation*

The Corporate Income Tax and Dividend Tax Law does not include a definition of R&D expenses; the accounting rules apply. The Accounting Law defines:

- *basic research* as experimental or theoretical work, the primary aim of which is to acquire new knowledge about the basic essence of a phenomenon and the observable environment, without any purpose of actual application or use (Art.3. point 2.);
- *applied research* as an original examination for the acquisition of new knowledge, that is primarily carried out with an actual practical goal (Art. 3. point 4.); and
- *experimental development* as regular work based on existing knowledge, gained from research or practical experience, the aim of which is the creation of new materials, products and structures, the introduction of new procedures, systems and services, or the substantial improvement of existing ones (Art. 3. point 5.).

##### *1.1.2 Position under personal income tax legislation*

Under the personal income tax legislation, research and development expenses have actual relevance only for business/professional income, more precisely for entrepreneurial income. Generally, business/professional income is treated as income from independent personal services and aggregated with dependent personal services income and other aggregate income, unless it falls under the entrepreneurial income category, which is taxed separately.

For the purposes of entrepreneurial income taxation, the Individual Income Tax Law defines basic research (Art. 3. point 66.), applied research (Art. 3. point 67.) and experimental development (Art.3. point 67.) the same way as it is defined in the Accounting Law (see above under 1.1.1.).

#### **1.2 Treatment of R & D expenditure as per general (non-incentive) provisions**

##### *1.2.1 Position under corporate income tax legislation*

In general, all expenses related to the operation of a business are deductible, including R&D expenses.

The expenses of experimental development can also be capitalized as intangible assets, in which case they must be depreciated.

Depreciation is generally governed by the Accounting Law and specifically by the Corporate Income Tax and Dividend Tax Law (hereafter: CITL). When calculating taxable income, accounting depreciation must be added back and only depreciation recognized for tax purposes may be deducted.

Accounting depreciation is based on the acquisition or production cost of the asset reduced by the expected residual value at the end of the useful life of the asset. The residual value is the asset's estimated value that can be realized at the end of the asset's useful economic life. The depreciable value of intangible or tangible assets must be depreciated over the years in which such assets are expected to be used. The applicable methods for accounting depreciation are the straight-line, the declining-balance, production proportionate and depletion methods.

For tax purposes, the depreciable base is generally the total acquisition or production cost, i.e. no residual value is taken into consideration. Tangible and intangible assets are depreciated according to a linear rate (straight-line method) specified by the CITL from the date on which they are put into use until the date of their withdrawal from the record of assets. Depreciation of these assets is compulsory. In certain limited cases (see below), accounting depreciation may be applied for tax purposes.

Intangible assets may be depreciated according to the accounting rules. The Accounting Law does not contain an exact period of depreciation for trademarks, patents and similar rights. Therefore, the period of depreciation depends on the useful life of these assets, which is also recognized for tax purposes. Based on the accounting rules, the capitalized costs of a completed experimental development must be depreciated over a maximum of 5 years. This is also recognized for tax purposes.

Alternatively, under the tax legislation, a 50% depreciation rate may be applied to intellectual property or the capitalized value of experimental development acquired or created in 2003 or 2004.

Further, under the accounting rules, assets (both tangibles and intangibles) must be written down to their fair market value (i.e. devaluation/accelerated depreciation) if:

- the book value of tangible and intangible assets (other than constructions) is substantially and permanently higher than their fair market value;
- the value of intellectual property or tangible assets (including constructions) drops permanently because such assets have become redundant due to a change in business activity, or cannot be used for their original purpose as a result of damage or destruction, or cannot be used at all;
- rights with monetary value can only be exercised to a limited extent or cannot be exercised at all due to the amendment of the underlying contract; and

- the activity created as a result of a completed development project is limited or terminated, or produces no result.

This devaluation is only partially recognized for tax purposes. Under the CITL, the accounting devaluation is recognized for:

- rights with monetary value if they can only be exercised to a limited extent or cannot be exercised at all due to the amendment of the underlying contract;
- capitalized value of experimental development if the activity created as a result of the completed development project is limited or terminated, or produces no result;
- assets (other than investment) that may or cannot be depreciated under the accounting rules;
- any intellectual property, tangible asset (including investment), if the damage of the asset incurred due to an unavoidable external reason.

Revaluation (i.e. write-back) is also obligatory, if the value of these assets subsequently increases. The write-back cannot exceed the original cost value less accumulated depreciation. If the devaluation was recognized for tax purposes, the write-back is also subject to tax.

### *1.2.2 Position under personal income tax legislation*

Income from independent personal services is calculated as the difference between revenue and deductible expenses. Expenses are deductible if incurred directly for the generation of revenue. The taxpayer may choose to deduct either actual expenses incurred or a notional lump-sum amount. Where he chooses to deduct the expenses actually incurred, he may only deduct expenses incurred in the tax year in order to carry on the activity. Expenses generally cannot exceed the revenue derived from the activity. If the notional deduction is chosen, the taxpayer may deduct 10% of the revenue derived from the independent personal activity. In addition, a tax credit is available. An individual carrying on an intellectual activity may reduce his tax due on aggregate income by 25% of the income which is derived from such activity, up to a maximum of HUF 50,000. For this purpose, an intellectual activity means as an activity which is not carried on as an employee or entrepreneur and the result of which is protected under the Law on Patents and the Law on Copyrights.

Sole entrepreneurs are subject to special entrepreneurial individual income tax (under certain conditions, however, an entrepreneur may opt for presumptive taxation or lump-sum taxation). Alternatively, from 1 January 2003, entrepreneurs may opt to be taxed under a simplified entrepreneurial tax regime, subject to conditions. Under the regime, tax is levied at a flat rate of 15% on the taxpayer's turnover, increased by VAT and adjusted in respect of certain items as specified by law.

The entrepreneurial individual income tax is levied on entrepreneurial income, which is calculated as the difference between revenue and expenses, adjusted for tax purposes. For tax purposes, expenses include the costs incurred in earning entrepreneurial income. Expenses of experimental development can also be recorded as intangible assets, in

which case they must be depreciated. For individual income tax purposes, depreciation must be applied according to the provisions of the Individual Income Tax Law (IITL). Under the IITL, for entrepreneurs, the depreciation base is generally the cost value of the asset. Tangible and intangible assets are depreciated according to a linear rate (straight-line method) specified by the IITL from the date on which they are put into use until the date of their withdrawal from the record of assets. The acquisition or production costs of intellectual property and tangible assets used exclusively for basic research, applied research or experimental development, must be depreciated over the period in which the asset probably will be used. This period and the annual amount of depreciation must be determined at the time the asset is put into use. Alternatively, a 50% depreciation rate may be applied to intellectual property or the capitalized value of experimental development acquired or created in 2003 or 2004.

### ***1.3 Territorialization Issue***

#### *1.3.1 Position under corporate income tax legislation*

Generally, no distinction is made between expenses incurred in Hungary and outside of Hungary.

#### *1.3.2 Position under personal income tax legislation*

No distinction is made between expenses incurred in Hungary and outside of Hungary.

### ***1.4 Pure research costs v. development costs***

#### *1.4.1 Position under corporate income tax legislation*

No distinction is made between ‘pure’ research costs and development costs.

#### *1.4.2 Position under personal income tax legislation*

No distinction is made between ‘pure’ research costs and development costs.

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

#### *1.5.1 Position under corporate income tax legislation*

In general, there are no specific provisions for land, buildings and equipment that are used to carry out research; the general rules apply.

Land is generally not depreciable. As an exception, however, land may be written down to the fair market value if it has permanently fallen below the acquisition cost. For

buildings used in a business, the tax depreciation rate depends on the type of the building's structure as follows:

- 2% for long-duration structures (concrete, brick, stone and steel structures);
- 3% for medium-duration structures (light steel and other metal structures, woodwork, etc.); and
- 6% for short-duration structures (rig timber and plank partitions, temporary brick masonry).

For industrial buildings, the tax depreciation rate is 2%. Special rates apply to agricultural structures (3%, 5% and 10%), railway structures (4% and 7%), bridges (4%), power lines, oil and water pipelines (4%, 6% and 8%) and waste storage (20%). For leased buildings accounted for as the lessor's assets, the accelerated tax depreciation rate is 5%. Machinery and equipment may generally be depreciated at a rate of 14.5%.

The following assets may be depreciated according to accounting rules or, optionally, at a rate of 33%:

- control engineering (automation) and general purpose computer technology products and equipment;
- industrial robots;
- solar panels;
- protective devices against noise;
- office equipment;
- machinery used for environmental protection; and
- programme-controlled machines in general, gauging and testing equipment, and other machinery and equipment listed in the law.

Alternatively, a 50% depreciation rate may be applied to:

- general computer technology equipment;
- tangible assets newly acquired or produced in 2003 or 2004 and normally subject to depreciation at 14.5% or 33%;
- intellectual property or the capitalized value of experimental development acquired or created in 2003 or 2004; and
- machines and equipment used exclusively for film or video production.

### *1.5.2 Position under personal income tax legislation*

Under the individual income tax legislation for entrepreneurs, the acquisition or production costs of intellectual property and tangible assets used exclusively for basic research, applied research or experimental development, must be depreciated over the period the asset probably will be used. This period and the annual amount of depreciation must be determined at the time the asset is put into use. Further, there are no specific provisions for land, buildings and equipment that are used to carry out research; the



general rules apply. The general rules on depreciation under the IITL are generally the same as those described for corporate income tax purposes (see 1.5.1.).

## ***1.6 Cash refund, carry forward and carry back possibilities***

### *1.6.1 Position under corporate income tax legislation*

There is no cash refund available in Hungary.

There are no rules for the carry forward or carry back of a tax allowance. If however a tax allowance would result in a loss, the general rules on loss carry forward apply.

Losses incurred in 2004 or in subsequent tax years may be carried forward indefinitely at the taxpayer's election. However, losses incurred in the fourth tax year following the year of commencement of tax liability and in subsequent tax years may only be carried forward with the permission of the tax authority if:

- in the year in question, the taxpayer has not generated revenue equal to at least 50% of the total expenses accounted for; or
- the tax base was negative in the previous 2 tax years.

The tax authorities only give permission for the utilization of losses carried forward if (i) there is evidence that these losses have been incurred due to unavoidable external reasons, or (ii) all measures have been taken to avoid or mitigate the losses.

When accrued losses are deducted, losses carried forward from earlier years must be written off first. Carried forward losses are deductible up to the amount of taxable income.

In general, no loss carry-back is available; however, companies engaged in the agricultural sector may carry losses back 2 years.

A tax credit may never be utilized in excess of the tax due. Accordingly, no carry forward or carry back of a tax credit is applicable.

### *1.6.2 Position under personal income tax legislation*

There is no cash refund available in Hungary.

Entrepreneurs are only entitled to utilize tax allowances up to the amount of entrepreneurial revenue. Accordingly, no rules apply on carry forward/back of tax allowances.

A tax credit may never be utilized in excess of the tax due. Accordingly, no carry forward or carry back of a tax credit is applicable.

## **2 Incentives for R & D expenditure**

### **2.1 Incentives under corporate income tax legislation**

#### *2.1.1 Tax credit for the promotion of development*

##### General summary of the incentive

Under the corporate income tax legislation (Art.22/B of the Corporate Income Tax and Dividend Tax Law), investments made from 1 January 2003 may qualify for tax credit incentives for a 10-year period. From 1 January 2004, qualifying investments include investments for the purpose of basic research, applied research or experimental development in the premises of a research institution of the Hungarian Scientific Academy or an institute of higher education, with a present value of at least HUF 1 billion. Such investments must also satisfy one of the following requirements for 4 years after the first year of benefiting from the incentive:

- the annual average number of the employees has increased by at least 100, compared with the year before the investment (by 50 in the case of an investment in the territory of a local government);
- the annual average costs exceed 600 times the minimum wage effective on the first day of the tax year (300 times in the case of investment in the territory of a local government); and
- at least 30% of the value of the supplies received are made by small and medium-sized enterprises.

Additionally, a qualifying investment must result in the creation of new facilities or the extension of existing facilities, or substantially changed products or production processes that are operated for at least 5 years. At least 30% of the investment must constitute a new investment and a maximum of 20% may be used for improvements.

##### *2.1.1.1 Qualifying R & D expenditure*

This tax incentive is available with respect to investments made for the purpose of basic research, applied research or experimental development. For the purposes of the incentive, the investment value, costs and expenses mean the cost value of tangible assets and, generally, the cost value of inventions, patents, licences and know-how (i.e. intangible assets subject to the incentive). Hereby, the cost value of intangible assets subject to the incentive may not exceed 25% of the cost value of tangible assets.

##### *2.1.1.2 Nature of the incentive*

The incentive is granted for a 10-year period in the form of a tax credit. The tax credit is to be utilized in the tax year following the putting into use of the investment made under the development program – or, upon the taxpayer's request, in the tax year of the putting into use – and in the following 9 years. In this respect, the take over of a land, plot and

rights with monetary value attached to such immovable property, do not qualify as the start of the investment.

The amount of the tax credit and other state subsidies (as specified by government ordinance) received for the development program may not exceed the amount specified in the decision that granted the tax credit. In any case, it may also not exceed the proportional value (as calculated according to the government ordinance) of the actually incurred present value of the investment value, costs, expenses.

The tax credit for the promotion of development may not exceed 80% of the tax due that remains after the deduction of the tax credits of the old incentive regimes. The tax credit available on the basis of the old incentive regimes may be utilized up to the amount of tax due.

#### *2.1.1.3. Restrictions (based on eligibility criteria)*

This tax incentive is only available with respect to qualifying investments made in the premises of a research institution of the Hungarian Scientific Academy or an institute of higher education in Hungary. Generally, for non-residents, the tax incentive is available with respect to investments made, employees engaged at their Hungarian permanent establishments and the turnover of such establishments.

No restrictions apply with respect of the size of the taxpayer. For other conditions as regard the investment, see under the general summary above.

Off-shore companies are not entitled to the tax incentive.

#### *2.1.1.4. Cash refund, carry forward and carry back possibilities*

No such possibilities apply.

#### *2.1.1.5 Compliance verification*

The incentive is granted by the Ministry of Finance by a decision, taking into account also the opinion of the competent ministry, provided that the development program and the request fulfills all the criteria specified by the Corporate Income Tax and Dividend Tax Law and the relevant government ordinance. The Minister of Finance publishes the name of those taxpayers that were granted the development tax incentive, in the Finance Official Journal by the 31 January of the year following the relevant calendar year.

The taxpayer is required to declare in its tax return for each development program, especially, the applied tax benefit and the accounted investment value, costs and expenses. Based on the information so received, the tax authority informs the Hungarian State Treasury about all information available per taxpayer and per development program. The Hungarian State Treasury provides data on the basis of the information to

the Hungarian Ministry of Finance upon its request (in order to fulfill Hungary's obligation under international agreement to provide information). The rules on tax secrecy apply with respect to such information.

### *2.1.2 Tax incentives for research and development*

#### *General summary of the incentive*

A corporate taxpayer may deduct from its before-tax result the direct costs of basic research, applied research and experimental development that are accounted for as expenses, or optionally, the depreciation costs of the asset capitalized on the basis of experimental development expenses, provided that the costs were not deducted from revenue derived from a subsidy received.

In addition, the above amount is deductible once more from the before-tax result if the taxpayer is engaged in basic research, applied research or experimental development performed on premises managed by a research institution (research facility) founded by an institution of higher education or the Hungarian Scientific Academy. This amount may, however, not exceed HUF 50 million per year. The tax effect of this incentive is considered as de minimis state aid for the purposes of the EU regulations. Taxpayers engaged in certain types of businesses (e.g. agriculture) cannot apply this incentive.

#### *2.1.2.1 Qualifying R & D expenditure*

This incentive is available with respect to the direct costs of basic research, applied research and experimental development that are accounted for as expenses, or optionally, the depreciation costs of the asset capitalized on the basis of the experimental development expenses. Costs incurred by paying for research and development services received from resident corporate taxpayers, permanent establishments of non-resident taxpayers or sole entrepreneur individuals under the Individual Income Tax Act are excluded from the incentive.

#### *2.1.2.2 Nature of the incentive*

This incentive is available in the form of a tax allowance from the taxpayer's before-tax result. The tax allowance is to be utilized in the tax year when the expenses incurred or, upon the taxpayer's option, if the expenses are capitalized as intangible asset, in the tax year of depreciation up to the amount of deducted depreciation. Costs that were covered by subsidies must not be included in the tax allowance.

#### *2.1.2.3. Restrictions (based on eligibility criteria)*

This incentive is available to taxpayers who declare taxable income/loss in Hungary, i.e. Hungarian resident companies and permanent establishments of non-resident companies.

#### *2.1.2.4. Cash refund, carry forward and carry back possibilities*

There is no cash refund. The general rules on loss carry forward (back) apply, see 1.6.1.

#### *2.1.2.5 Compliance verification*

This incentive is provided by the Corporate Income Tax and Dividend Tax Law and is directly applicable by the taxpayer, i.e. by self-assessment. For compliance verification the general rules of the Tax Procedure Law apply.

### **2.2 Incentives under wage tax legislation**

There is no separate wage tax legislation in Hungary.

### **2.3 Incentives under personal income tax legislation**

#### General summary of the incentive

Sole entrepreneurs may reduce their entrepreneurial individual income tax base by the costs of basic research, applied research and experimental development that are accounted for as expenses in the tax year, or optionally (if the taxpayer accounted the costs as investment expenses), by the annual depreciation costs of the intangible asset recorded on the basis of such expenses, provided that the costs were not deducted from a revenue derived from a subsidy received.

In addition, the above amount is deductible once more from the before-tax result if the taxpayer is engaged in basic research, applied research or experimental development performed on premises managed by a research institution (research facility) founded by an institution of higher education or the Hungarian Scientific Academy. This amount may, however, not exceed HUF 50 million per year. The tax effect of this incentive is considered as de minimis state aid for the purposes of the EU regulations. Taxpayers engaged in certain types of businesses (e.g. agriculture) cannot apply this incentive.

#### *2.3.1 Qualifying R & D expenditure*

This incentive is available with respect to the costs of basic research, applied research and experimental development that are accounted for as expenses in the tax year, or optionally, the depreciation costs of the intangible asset recorded on the basis of such expenses, in the tax year. Costs incurred by paying for research and development services received from resident corporate taxpayers, permanent establishments of non-resident taxpayers or sole entrepreneur individuals under the Individual Income Tax Act are excluded from the incentive, i.e. may not be included in the amount of tax allowance.

#### *2.3.2 Nature of the incentive*

This incentive is available in the form of a tax allowance from the sole entrepreneur's entrepreneurial individual income tax base. The tax allowance is to be utilized in the tax year when the expenses incurred or, upon the taxpayer's option, if the expenses are capitalized as intangible asset, in the tax year of depreciation in an amount of deducted depreciation. Costs that were covered by subsidies must not be included in the tax allowance.

#### *2.3.3. Restrictions (based on eligibility criteria)*

This incentive is available to sole entrepreneurs who declare taxable income in Hungary.

#### *2.3.4. Cash refund, carry forward and carry back possibilities*

There are no such possibilities, see 1.6.2.

#### *2.3.5. Compliance verification*

This incentive is provided by the Individual Income Tax Law and is directly applicable by the taxpayer, i.e. by self-assessment. For compliance verification the general rules of the Tax Procedure Law apply.

## **Ireland**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

Scientific research is defined as meaning "any activities in the field of natural or applied science for the extension of knowledge". Expenditure on exploring for specified minerals or oil or on extracting oil is excluded (Sec. 763 Taxes Consolidation Act 1997).

##### *1.1.2 Position under personal income tax legislation*

For definition, see 1.1.1. R&D allowances can also be claimed for personal income tax purposes by individuals carrying on a trade, but not by those carrying on a profession.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

A company carrying on a trade is entitled to deduct revenue expenditure on scientific research whether or not the research is related to its trade. In addition, it may deduct sums paid to an approved body or an Irish university to carry out such research (s 764 TCA). An approved body is defined to mean certain specified technical or vocational colleges in Ireland (s 767 TCA 1997).

Capital expenditure on qualifying scientific research (as defined above), whether or not related to a company's trade, attracts 100% tax depreciation in computing the taxable profits of the trade (Sec. 765 TCA 1997). Expenditure on acquiring rights in or arising out of scientific research is not qualifying expenditure.

##### *1.2.2 Position under personal income tax legislation*

See 1.2.1.

#### ***1.3 Territorialisation Issue***

##### *1.3.1 Position under corporate income tax legislation*

Payments for capital or revenue expenditure are deductible whether they relate to trading activities in Ireland or elsewhere.

Payments for subcontracted research qualify for relief only if they are made to approved bodies, which are restricted to bodies in Ireland (see 1.2.1.).

#### *1.3.2 Position under personal income tax legislation*

See 1.3.1.

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

There is a distinction for accounting purposes between pure research and development, but this is not stated in the tax law. However, development costs will not qualify for R&D if they do not advance knowledge.

#### *1.4.2 Position under personal income tax legislation*

See 1.4.1.

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1 Position under corporate income tax legislation*

Capital expenditure on plant, equipment and laboratories (excluding the cost of land) qualifies for tax depreciation (Revenue Commissioners Tax Briefing 18).

#### *1.5.2 Position under personal income tax legislation*

See 1.5.1.

### **1.6 Cash refund, carry forward and carry back possibilities**

R&D expenditure is not eligible for cash refunds. Eligible capital and revenue expenditure is taken into account in computing the profit or loss of the trade. The rules for utilizing trading losses of companies differ from those for individuals (see below).

#### *1.6.1 Position under corporate income tax legislation*

Relief for trading losses (as computed for tax purposes) is available as follows:

- (1) up to 5 March 2001 a loss sustained in an accounting period could be set off against income and capital gains liable to corporation tax, i.e. total taxable profits (but before deduction of charges) of the same accounting period or, to the extent



- that it was not so used, against the total taxable profits (again before deduction of charges) of an immediately preceding period of the same length, so long as the same trade was then being carried on; in the latter case, losses arising in the current period had to be offset in priority to the loss which is being carried back. From 6 March 2001 this relief is only available for losses incurred in excepted trades (i.e. whose profits would be liable to tax at a rate of 25%); transitional provisions apply where an accounting period straddles the 5 March 2001 cut-off date (Sec. 396(2) TCA 1997);
- (2) from 6 March 2001 a loss sustained in an accounting period in respect of a non-excepted trade (see (1)) may only be offset against profits from non-excepted trades. The loss may be set off against such profits of the same accounting period or, to the extent that it is not so used, against such profits of an immediately preceding period of the same length, so long as the same trade was then also being carried on (Sec. 396(A) TCA 1997). However, to the extent that a loss is not set off, a credit may be claimed against the corporation tax due for the period in which the loss was incurred; the credit is calculated by applying the rate of tax appropriate to the loss-making activity to the amount of the loss (Sec. 243B TCA 1997, introduced retrospectively by Sec. 54 FA 2002);
  - (3) losses incurred in trading activities eligible for the 10% rate of tax (see {2.12.1.}) may only be offset against the profits from such activities of the same period or previous period of the same length or may be carried forward against future income of the same trade, including income liable to the full rate of corporation tax (Sec. 455(2) TCA 1997). However, from 6 March 2001, to the extent that a loss is not set off, a credit may be claimed against the corporation tax due for the period in which the loss was incurred; the credit is calculated by applying the rate of tax appropriate to the loss-making activity to the amount of the loss (Sec. 243B TCA 1997, introduced retrospectively by Sec. 54 FA 2002);
  - (4) a loss may be carried forward without time limit against the earliest available future profits of the same trade; in the case of financial trades, the loss may be carried forward against trade-related investment income; the taxpayer has the choice of firstly claiming loss relief in (1) above if there are total taxable profits available to do so (Sec. 396(1) and (6) TCA 1997) or under (2) or (3) above, if appropriate; and
  - (5) if a trade is permanently discontinued, or is treated as such, the loss for the last 12 months may be carried back for set off against the profits of the same trade for the 3 immediately preceding years (net of trade-related charges); in the case of financial trades, the loss may be carried back against trade-related investment income (Sec. 397 TCA 1997).

Trading losses can also be used to offset profits of other 75% group companies in the same year (s 420 TCA 1997).

### *1.6.2 Position under personal income tax legislation*

Trading losses can be used to:

- offset other income of the individual in the same year (s 381 TCA 1997);
- offset profits of the individual from the same trade in future years without any time limit for their use (s 382 TCA 1997).

## **2 Incentives for R & D expenditure**

### ***2.1 Incentives under corporate/ personal income tax legislation***

#### *2.1.1 R & D tax credit*

This incentive, which is only available to companies, was introduced in 2004 (s 33 Finance Act 2004 inserting new Secs. 766 and 767 TCA 1997).

#### *2.1.2 Qualifying R & D expenditure*

These provisions were subject to clearance from the European Commission under the state aid rules. In July 2004 the Minister of Finance signed a Commencement Order to bring into force with effect from 1 January 2004 the new R&D tax credit introduced by section 33 FA 2004. At the same time the Minister for Enterprise, Trade and Employment announced the making of regulations, which also took effect from 1 January 2004, for the purpose of providing guidance on which activities constitute R&D activities for the purposes of the tax credit.

A core definition of R&D activities is contained in the legislation. The relevant activities must seek to achieve scientific or technological advancement and involve the resolution of scientific or technological uncertainty. Further details regarding the qualifying activities are summarised below based on the regulations issued by the Minister of Enterprise, Trade and Employment.

R&D activities include systematic, investigative or experimental activities in a field of science or technology that falls within any of the following categories:

- basic research to acquire new scientific or technical knowledge without a specific practical application in mind;
- applied research to acquire scientific or technical knowledge and directed towards a specific practical application;
- experimental work which draws on scientific or technical knowledge or practical experience for the purpose of achieving technological advancement and which is directed towards producing new or improving existing materials, products, processes, systems or services.

Companies are required to display a systematic approach to the activity for it to be considered R&D in nature.

R&D activity is generally considered to cease (and activity associated with commercial exploitation to begin) when the scientific or technological uncertainty which the R&D activity sought to resolve has been resolved.

The tax authorities are prepared to provide advance opinions as to whether a proposed activity qualifies for the relief.

Qualifying R&D expenditure comprises:

- capital and revenue expenditure on scientific research;
- buildings eligible for capital allowances;
- plant and machinery (including software) eligible for capital allowances;
- allowable trading expenditure including royalties other than royalties exempt from tax and royalties not on arm's length terms.

The following activities are not R&D activities:

- research in the social sciences, arts or humanities;
- quality control routine testing and analysis;
- cosmetic or stylistic alterations to existing products;
- operational research such as management or efficiency studies;
- corrective action regarding breakdowns in commercial production;
- legal and administrative work concerning patent applications, and the protection, sale or licensing of patents;
- the construction, relocation or rearrangement of facilities or equipment which is not to be used wholly and exclusively for R&D activities;
- market research, testing or development, or sales promotion;
- exploring or drilling for minerals, oil or gas;
- the commercial and financial steps necessary for the marketing, production or distribution of new or improved products or services;
- administration and support services which are not undertaken wholly and exclusively in connection with R&D activities.

The R&D activity must be carried on by the company itself using in-house employees. A limited exception is made for small amounts of subcontracted research (see 2.1.3 below).

### *2.1.3 Nature of the incentive*

There are two forms of tax credit:

- a non-incremental credit spread over 4 years where capital expenditure is incurred on the construction or refurbishment of buildings (no credit is available for expenditure relating to the cost of land); and
- an incremental credit for qualifying R&D expenditure that does not relate to buildings.

No relief is available to the extent that the relevant expenditure is grant-aided.

The rules governing the incremental credit provide for a tax credit equal to 20% of qualifying expenditure on R&D in excess of baseline expenditure. Both revenue expenses and capital expenses on plant and machinery are covered by this system. There is a fixed baseline figure set by reference to expenditure incurred in 2003 for R&D expenditure incurred in the first 3 years of the scheme, i.e. the years 2004 to 2006, inclusive. Thereafter, there is a rolling 1-year baseline, e.g. for 2007 the baseline will be 2004 and for 2008 the base will be 2005, and so on. The baseline will be calculated and apportioned on a group basis where appropriate.

The tax credit is allowed against a company's corporation tax liability for the current year with the unused balance available for carry-forward indefinitely against future corporation tax liabilities of the company. In the case of a group of companies, the credit is calculated on a group basis and the group can elect how to share the credit between the group companies. A group consists broadly of a company and its 51% subsidiaries.

#### *2.1.4 Restrictions (based on eligibility criteria)*

The tax credit will be available to all companies within the charge to Irish tax that are engaged in in-house qualifying R&D undertaken within the European Economic Area (EEA). In the case of Irish resident companies, the relief will only be available if such expenditure is not otherwise eligible for fiscal benefit (including tax depreciation) in any other territory.

The incentive is equally available to all types (sizes) of companies.

Where a company pays a third level academic institution within the EEA to carry out R&D on its behalf, an amount up to 5% of the total spent on R&D is eligible for the credit.

No relief will be given in respect of royalty payments if these are exempt from Irish tax in the hands of the recipient.

#### *2.1.5 Cash refund, carry forward and carry back possibilities*

Cash refunds are not available. An unused balance is available for carry-forward indefinitely against future corporation tax liabilities of the company.

#### *2.1.6 compliance verification*

The company must retain documentary evidence to support claims for the relief. This includes details of the technical aspects of the project, the skills of the R&D team, as well as the basis for the actual costs and time incurred on the project.

## **2.2 Incentives under wage tax legislation**

There are no R&D incentives under wage tax legislation.

## **Italy**

The information contained below apply with reference to companies for corporate income tax purposes and to individuals carrying on a business activity for individual income tax purposes.

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

The Italian domestic tax legislation does not contain an express definition of Research & Development (R&D) costs/expenditures. The Italian Supreme Court has clarified that also expenses incurred to train employees and/or the entrepreneur fall within this category (Supreme Court decisions no. 5193 of 19 April 2000 and no. 3871 of 15 March 2002).

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

As a general rule, costs and expenses may be deducted only if they are incurred for the production of income.

Under Art. 108 (1) of the Italian Income Tax Law (ITA), R&D costs/expenditures are deductible in the financial year in which they are incurred or, at the taxpayers' option, in equal portions in that year and the following years up to the fourth. In the latter case, the choice made in the first year is binding on the taxpayer. Therefore, the taxpayer is free to choose whether to deduct R&D costs/expenditures upfront or to spread the deduction over a number a tax periods.

Depreciation allowances for assets acquired as a result of study and research are calculated on their cost less the amount already deducted.

When costs/expenditures referred to in this paragraph are incurred by newly created businesses, they are deductible in the first tax year in which revenue is received (Art. 108(4) ITA).

As regards the accounting treatment of R&D costs/expenditures, the Italian Civil Code states that they must be treated as intangible assets and depreciated in a period not exceeding five years.

Accounting Principle no. 24 distinguishes between:

- (i) basic research,
- (ii) research on a specific product or process, and
- (iii) development.

Basic research consists of studies, enquiries, experiments and researches that do not have a defined goal and generally benefit the enterprise. On the other hand, research on a specific product or process directly refers to the possibility of realizing a given project, and development refers to the application of the results of a specific research.

The difference affects the accounting treatment of the costs/expenditures so incurred. In fact, in case of basic research, costs so incurred are deducted in the period in which they are incurred and cannot be capitalized. On the other hand, in case of research on a specific product or process or in case of development, those costs/expenditures may be capitalized.

In order to be capitalized, those expenditures must meet the following conditions:

- (i) they must relate to a defined and identifiable product or process,
- (ii) they must refer to a technically possible project, and
- (iii) they must be recoverable through future revenues.

Once these conditions are met, those costs/expenditures may be capitalized. Account Principle no. 24 highlights that, in accordance with the principle of prudence, this is an option and not an obligation.

### ***1.3 Territorialization Issue***

In general terms, the rules described above apply notwithstanding the fact that the cost/expenditure has been incurred abroad.

### ***1.4 Pure research costs v. development costs***

No distinction is made in this respect for tax purposes. The rules described above apply to both types of costs/expenditures. A distinction is however made for accounting purposes between basic research and development (See para.1.2 above).

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

No special rules exist in this respect.

### ***1.6 Cash refund, carry forward and carry back possibilities***

The cost/expenditure is deducted from the taxpayer's taxable income. If this results in an overall loss, the ordinary rules apply. Under those rules, losses may be carried forward for 5 years insofar as they cannot be set off against the net taxable profits of the current year. However, if a loss is derived in the first 3 tax years from the beginning of the company's business activity, it may be carried forward indefinitely. Losses may not be carried back. As mentioned in para. 1.2. above, when those costs/expenditures are incurred by newly created businesses, they are deductible in the first tax year in which revenue is received (Art. 108(4) ITA).

## **2 Incentives for R & D expenditure**

Art. 1 of Decree-Law no. 269 of 30 September 2003, converted into law by Law no. 326 of 26 November 2003 has introduced a special tax incentive for R&D costs/expenditures. The incentive applies only to the tax period following the one current at 2 October 2003.

This is probably due to the fact that a permanent incentive will be introduced in the future. In this respect, Art. 4 (1) (c) of Law no. 80 of 2003, that empowers the Government to redesign the corporate income tax system, provides for the introduction of a permanent tax incentive for companies that incur expenses for technological innovation, research and development.

### ***2.1 Incentives under corporate/ personal income tax legislation***

#### ***2.1.1 The so-called "Tecno-Tremonti"***



#### *2.1.1.1 Qualifying R & D expenditure*

The incentive applies to research & development costs/expenditures that can be treated as intangible assets for accounting purposes, i.e. that can be capitalized. As a consequence, costs/expenditures for basic research (as defined in Accounting Principle no. 24) do not fall within the scope of the incentive. It should be noted that Art. 1 (1) of Decree-Law no. 269 of 2003 requires that the costs/expenditures may be accounted as an intangible assets and not that they are effectively so accounted.

#### *2.1.1.2 Nature of the incentive*

In addition to the ordinary deduction (see para. 1.2. above), enterprises operating on the date of the approval of the Decree-Law are allowed to deduct from the taxable income of the tax period following that current on the date of the approval of the Law-Decree (i.e. generally 2004) 10% of research and development costs/expenditures, that may be treated as intangible assets for accounting purposes. Furthermore, a deduction of 30% of the increase in those costs/expenditures as compared to the same costs/expenditures of the 3 preceding tax periods will also be available.

The incentive cannot, however, exceed 20% of the average taxable income of the 3 preceding tax periods. Eventual tax periods of loss are not taken into account.

#### *2.1.1.3 Restrictions (based on eligibility criteria)*

The incentive is equally available in respect of costs/expenditures incurred outside Italy.

It is available to all types of enterprises that operate at the date of approval of the Decree (i.e. 2 October 2003).<sup>70</sup>

No particular restrictions apply. Also, no specific restrictions apply in case of sub-contracted research.

#### *2.1.1.4 Cash refund, carry forward and carry back possibilities*

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<sup>70</sup> It should be noted that the same incentive (i.e. the additional deduction) is granted also to SMEs (as defined by the European Union) that, within industrial districts, set up consortia or other forms of co-operation of at least ten of them, in order to foster technological innovation.

The incentive consists of an additional deduction and therefore no issue of cash refund arises. If the result is an overall loss, the ordinary rules apply. Under those rules, losses may be carried forward for 5 years insofar as they cannot be set off against the net taxable profits of the current year. However, if a loss is derived in the first 3 tax years from the beginning of the company's business activity, it may be carried forward indefinitely. Losses may not be carried back.

#### *2.1.1.5 Compliance verification*

Under Art. 1 (2) *bis* of Decree-Law No. 269 of 2003, enterprises that plan and incur costs/expenditures that qualify for the additional deduction, must progressively account for those expenses in a separate section of their accounting books, that must be signed by its legal representative.

The tax authorities are expected to issue guidelines on further informative requirements.

Under Art. 1 (3) of Decree-Law No. 269 of 2003, the effectiveness of the expenses indicated in the separate section must be certified by the president of the board of internal auditors, or in case there are no internal auditors, by an external auditor or any other eligible professional.

No authorization or prior approval is required.

## **2.2 *Incentives under wage tax legislation***

To our knowledge, there is no incentive for Research & Development costs/expenditures that affects wage tax.

## **Japan**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

Experiment and research expense: the expense outlaid on the experiment and research concerning manufacturing new product, or inventing new technology.

(Art 286-3 of Commercial Law)

(Art 14 Para1 iv of Corporation Tax Law Enforcement Orders)

(Art 7 Para1 ii of Income Tax Law Enforcement Orders)

Development expense: the expense outlaid on adopting new technology or new management organization, tapping of resources, market exploitation, or starting a new enterprise.

(Art 286-3 of Commercial Law)

(Art 14 Para1 v of Corporation Tax Law Enforcement Orders)

(Reg7 Para1 iii of Income Tax Law Enforcement Orders)

##### *1.1.2 Position under personal income tax legislation*

(Definition)

Experiment and research expense: Same as in corporate income tax legislation.

(Art 7 Para1 ii of Income Tax Law Enforcement Orders)

Development expense:

Same as in corporate income tax legislation (Reg7 Para1 iii of Income Tax Law Enforcement Orders).

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

The experiment and research expense and development expense constitute deferred assets, as they are the expenses of which the effect relate to the future. Therefore, they are required to be depreciated over the period for which the expense would provide a benefit.. However, a corporation may depreciate these expenses arbitrarily (to the extent of the amount of the deferred assets; Art 64 Para1 of Corporation Tax Law Enforcement Orders). Therefore, direct deduction may be claimed in the year in which such expense is incurred. However, the costs of depreciable assets such as buildings, equipments, instruments and fixtures can be deducted only by way of depreciation.

The manner of depreciation of capital-expenditure, whether or not used for research and development expense, can be chosen from straight-line method, declining balance method, etc., and an arbitrary depreciation method is not accepted. (Art 53 of Corporation Tax Law Enforcement Orders)

Treating research and development expenditures as deferred assets is not accepted for accounting purpose, but must be entirely deducted as expense when incurred. (Art 3 of Accounting Standards Concerning Research and Development Expense, etc.)

### *1.2.2 Position under personal income tax legislation*

The experiment and research expense and development expense constitute deferred assets, as they are the expenses of which the effect relates to the future. Therefore, they are required to be depreciated over the period for which the expense would provide a benefit. However, an individual may depreciate these expenses using straight-line method over five years or may depreciates arbitrarily within the limit of the amount of the deferred assets. (Art 137 Para 3 of Income Tax Law Enforcement Orders) Therefore, a direct deduction may be claimed in the year in which such expenses are incurred. However, the costs of depreciable assets such as buildings, equipment, instruments and fixtures can be deducted only by way of depreciation.

The manner of depreciation of capital-expenditure, whether or not used for research and development expense, can be chosen from straight-line method, declining balance method, etc. Arbitrary depreciation method is not accepted. (Art 125 of Income Tax Law Enforcement Orders)

## **1.3 Territorialisation Issue**

### *1.3.1 Position under corporate income tax legislation*

Expenses incurred abroad are also treated as eligible expenses.

### *1.3.2 Position under personal income tax legislation*

Expenses incurred abroad are also treated as eligible expenses.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

There is no difference as regards tax treatment of 'pure' research costs vis-à-vis development costs.

#### *1.4.2 Position under personal income tax legislation*

Same as in 1.4.1.

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

#### *1.5.1 Position under corporate income tax legislation*

The special useful life is specified for certain assets among the depreciable assets used for development research (e.g., a building and building attached structure used for a low-temperature room, anechoic chamber, electromagnet-defilade room (five years), and a structure such as wind tunnel (five years)).

(Art 2 of Ministerial ordinance about the useful life of depreciable asset, etc.)

#### *1.5.2 Position under personal income tax legislation*

Same as under Corporation Tax Law.

### ***1.6 Cash refund, carry forward and carry back possibilities***

#### *1.6.1 Position under corporate income tax legislation*

There is no such system. However, withholding tax is refunded in absence of taxable income.

As a general tax credit, withholding-income-tax-amount credit (Art 68 of Corporation tax Law) and foreign tax credit (Art 69 of Corporation tax Law) are specified. As for foreign tax credit, the excess amount over the amount of creditable limit may be carried forward for three years.

#### *1.6.2 Position under personal income tax legislation*

There is no such system. However, withholding tax is refunded in absence of taxable income.

As a general tax credit, withholding-income-tax-amount credit (Art 120 of Income Tax Law), dividend credit (Art 92 of Income Tax Law) and foreign tax credit (Art 95 of Income Tax Law) are specified. As for foreign tax credit, the excess amount over the amount of creditable limit may be carried forward for three years.

## **2 Incentives for R & D expenditure**

### ***2.1 Incentives under corporate/ personal income tax legislation***

*2.1.1 Special depreciation on equipment used for development research (for companies: Art. 44-3 of Special Taxation Measures Law; for individuals: Art. 11-3 of Special Taxation Measures Law)*

*2.1.1.2 Qualifying R & D expenditure*

This incentive applies to the acquisition cost or manufacturing cost of certain machines, equipment, instruments or fixtures which are mainly used for development research in Japan by a corporation and has not been used for business since it was manufactured, and the acquisition price of which is at least Japanese Yens 2,800,000.

For this purpose, the term ‘development research’ means experiment and research particularly carried out for the manufacture of new products or the invention of new technologies, or the significant improvement of technologies which have been already put into commercial use (Art 28-6 of Special Taxation Measures Law Enforcement Orders)

The eligible assets include instruments for experiment or measurement, computing machines, cameras, microscopes, general-purpose pumps, motors, metal working machine tools, metal processing machine tools, or other similar assets.

The incentive applies to development research activities, and not just development activities.

*2.1.1.3 Nature of the incentive*

In addition to the amount calculated by ordinary depreciation method, the special depreciation of 50% of the acquisition cost of the certain machines, etc. for the said development research is allowed.

The special depreciation of 50% of the acquisition cost is available at the year in which the certain machines, etc. for the said development research is acquired.

The maximum permissible amount of special depreciation is 50% of the acquisition cost.

*2.1.1.4 Restrictions (based on eligibility criteria)*

This incentive is not available unless the certain machines, etc. are used for the said development research in Japan.  
(Art 44-3 of Special Taxation Measures Law)

This incentive is available to all sizes of companies. However, for this purpose, the taxpayer must be a corporation performing development research and it must submit a blue return of a final return form to a tax office (Art 121 of Corporation Tax Law).

Note: The corporation which submits a blue return shall maintain books and record the transactions, and further preserve the books and records. (Art 126 of Corporation Tax Law).

#### *2.1.1.5 Cash refund, carry forward and carry back possibilities*

The taxpayer is not allowed cash refund. However, if the unabsorbed depreciation occurred in the first year in which the certain machine, etc. was acquired and used, the amount may be carried forward to the second year. (Art 52-2 of Special Taxation Measures Law Enforcement Orders)

#### *2.1.1.6 compliance verification*

The benefit applies only to the details recorded on the computation of depreciation attached to a final return. (Art 44-3 Para 6 of Special Taxation Measures Law)

*2.1.2 Special tax credit for increase in experiment and research expenses (for companies: Art. 42-4 paragraph 1 of Special Taxation Measures Law; for individuals: Art. 10 paragraph 1 of Special Taxation Measures Law)*

#### *2.1.2.1 Qualifying R & D expenditure*

The incentive applies to the stipulated expenditures including those mentioned below, which are required to carry out experiment and research concerning manufacture or improvements of products devices or invention of technologies. (Art 27-4 of Special Taxation Measures Law Enforcement Orders):

- (1) Expenses on raw materials, labour costs (limited to the expenditures concerning the personnel who devote themselves exclusively to the said experiment and research with the expert knowledge) and other expenses required to conduct the said experiment and research.
- (2) Expenses incurred by a company who conducts experiment and research through consignment to the consignee for the purpose of the said experiment and research.
- (3) Expenses incurred in accordance with the prescriptions of the Mining and Manufacturing Technology Research Association Law., etc.

The amount relating to amortization of deferred assets and depreciation of depreciable assets used for the said experiment and research, which is included by a corporation in gross expense in computing taxable income constitutes ‘other expenditures’ for the purposes of point (1) above.

For the purposes of this incentive, there is no distinction between ‘pure’ research costs and development costs.

#### *2.1.2.2 Nature of the incentive*

The incentive is based on incremental amount of experiment and research expenses. Where an amount of experiment and research expense to be included by a corporation in gross expense in computing taxable income for each accounting period exceeds both the amount of comparative experiment and research expenses and that of its standard experiment and research expenses, an amount equivalent to 15 percent of the excess over the amount of the said comparative experiment and research expenses is deductible from an amount of the corporation tax on income in the said application year. (Art 42-4 Para 1 of Special Taxation Measures Law)

The ‘amount of comparative experiment and research expense’ means amount computed by adding the 3 greatest amounts of experiment and research expense out of the amounts for experiment and research expenses for each accounting period commencing during 5 years before the starting day of the relevant tax year, and then by dividing the sum by three.

Amount of standard experiment and research expense means the largest among the amounts of experiment and research expense included in gross expense in computing taxable income for each accounting period commencing within 2 years before the first day of the relevant tax year.

- (ii) Limit/ ceiling for deduction – for instance, whether a taxpayer is not allowed to deduct more than a certain percentage of the corporate tax liability or more than a fixed amount per year.

Maximum creditable amount under this incentive scheme is restricted to 12 percent of the amount of corporation tax corresponding to the companies’ income for the relevant tax year.

#### *2.1.2.3 Restrictions (based on eligibility criteria)*

The incentive is available even in case of subcontracted research, and no approval is needed in respect of the subcontracted research.

This incentive is available to all sizes of companies. However, the taxpayer must be a company which submits a blue return of a final return form to a tax office (Art 121 of Corporation Tax Law).

Note: The corporation which submits a blue return is required to maintain and preserve books and record the transactions. (Art 126 of Corporation Tax Law)

#### *2.1.2.4 Cash refund, carry forward and carry back possibilities*

The taxpayer cannot get a cash refund if it is not making a profit and no corporation tax is calculated because maximum creditable amount by this incentive is limited to the amount equivalent to 12 percent of the amount of corporation tax.



The carry forward and carry back of the tax credit is not possible.

#### *2.1.2.5 compliance verification*

This incentive is available only when the amount to be deducted is stated in the final return and the written details on the computation of the said amount are attached. (Art 42-4 Para 14 of Special Taxation Measures Law)

2.1.3 Special tax credit concerning total amount of experiment and research expenses  
*(For companies: Art. 42-4, paragraph 2, of Special Taxation Measures Law; for individuals, Art. 10, Paragraph 2, of Special Taxation Measures Law)*

#### *2.1.3.1 Qualifying R & D expenditure*

This incentive applies to the stipulated expenses including those mentioned below, which are incurred to conduct experiment and research concerning manufacture of products or improvement, device or invention of technologies. (Art 27-4 of Special Taxation Measures Law Enforcement Orders):

- (1) expenditures on raw materials, labour costs (limited to the expenditures concerning the personnel who devote themselves exclusively to the said experiment and research with the expert knowledge) and other expenditures required to conduct the said experiment and research;
- (2) expenditures incurred by a corporation conducting experiment and research through consignment to the consignee for the purpose of the said experiment and research;
- (3) expenses incurred in accordance with the prescriptions of the Mining and Manufacturing Technology Research Association Law., etc.

The amount relating to amortization of deferred assets and depreciation on depreciable assets used for the said experiment and research, which is included by a corporation in gross expense in computing taxable income constitutes the 'other expenditures' in (1) above.

For the purposes of this incentive, the relevant legislation does not distinguish between 'pure' research costs and development costs.

#### *2.1.3.2 Nature of the incentive*

10% to 12% of the total amount of the said experiment and research expenses is deductible from an amount of the corporation tax on income in the relevant tax year. (Art. 42-4 Para 2 of Special Taxation Measures Law). The amount of credit would be reduced to 8% to 10% from the accounting year stating on or after April 1, 2006.

This incentive is proportionally allowed based on the total amount of the said research and development expenses, but it is independent of the amount of the R&D expenses in prior years.

Maximum creditable amount under this incentive scheme is restricted to 20 percent of the amount of corporation tax corresponding to the income of the company for the relevant tax year.

This incentive is available also in respect of expenses incurred outside Japan.

The incentive is available even in case of subcontracted research, and no approval is needed in respect of the subcontracted research.

This incentive is available to all sizes of companies. However, the taxpayer must be a company that submits a blue return of a final return form to a tax office (Art 121 of Corporation Tax Law).

Note: This incentive does not apply to the accounting periods to which Art 42-4 Para 1 applies (i.e. special tax credit in case of increase in experiment and research expense)

#### *2.1.3.4 Cash refund, carry forward and carry back possibilities*

A taxpayer cannot get a cash refund if it is not making a profit and no corporation tax is calculated because maximum creditable amount by this incentive is limited to the amount equivalent to 20 percent of the amount of corporation tax.

The carry forward of the tax credit is possible for one year only if the total amount of the said experiment and research expenses for an accounting period exceeds that for one year prior. For this calculation, the amount of expenses from ‘special depreciation of equipment for development research’ (Art 44-3 of Special Taxation Measures Law) are excluded from the total amount of the said experiment and research expenses. (Art 42-4 Para 4 of Special Taxation Measures Law)

#### *2.1.3.5 Compliance verification*

This incentive is available only when the amount to be deducted is stated in the final return and the written details on the computation of the said amount are attached. (Art 42-4 Para 14 of Special Taxation Measures Law)

*2.1.4. Special tax credit concerning industry-government-academia joint or contract research (For companies, Art. 42-4, para 3 of Special Taxation Measures Law; for individuals: Art. 10, paragraph 3 of Special Taxation Measures Law)*

#### *2.1.4.1 Qualifying R & D expenditure*

This incentive applies to the experiment and research expenses concerning experiment and research, jointly carried out with, or contracted to experimental and research institutes of the country or universities, etc. (Art 42-4 Para 12 of Special Taxation Measures Law)

For the purposes of this incentive, there is no distinction between ‘pure’ research costs and development costs.

For this purpose, the experiment and research expenses include the amount of depreciation on depreciable assets such as buildings and equipments used for the said experiment and research.

#### *2.1.4.2 Nature of the incentive*

3% to 5% of the said special experiment and research expenses is deductible from an amount of the corporation tax on income in the relevant tax year. The rate of credit will be reduced to 2% to 4% from the accounting year starting on or after April 1, 2006. (Art 42-4 Para 3 of Special Taxation Measures Law)

This incentive is proportionally allowed based on the total amount of the said special research and development expenses. By virtue of this special tax credit, in addition to ‘Special tax credit concerning total amount of experiment and research expense’ (Art 42-4 Para 2 of Special Taxation Measures Law), a company may enjoy greater amount of tax credit whenever it has an R&D expense, regardless of the amount of the R&D expenses in prior years.

The amount of tax credit under this incentive provision is restricted to the remainder, calculated by deducting the amount of ‘Special tax credit concerning total amount of experiment and research expense’ (Art 42-4 Para 2 of Special Taxation Measures Law) from 20% of the amount of corporation tax relating to the income of the company for the relevant tax year.

#### *2.1.4.3 Restrictions (based on eligibility criteria)*

This incentive is not available in respect of expenses incurred outside of Japan because the said experimental and research institutions and universities, etc. must be in Japan.

This incentive is available to all sizes of companies. However, the taxpayer must be a company submitting a blue return of a final return form to a tax office (Art 121 of Corporation Tax Law).

This incentive is available in case of subcontracted research only if the research is subcontracted to certain institutions such as universities or experimental and research institutions prescribed in Art 27-4 of Special Taxation Measures Law Enforcement

Orders and if the research is approved by Minister who has jurisdiction over the business concerning technologies targeted by the research.

This incentive does not apply to the accounting periods to which provisions of Art 42-4 Para1 apply (Special tax credit in case of increase in experiment and research expense).

#### *2.1.4.4 Cash refund, carry forward and carry back possibilities*

A taxpayer cannot get a cash refund if it is not making a profit and no corporation tax is calculated because maximum creditable amount by this incentive is limited to the amount equivalent to 20 percent of the amount of corporation tax.

The carry forward of the tax credit is possible for one year only if the total amount of the said experiment and research expenses for an application year exceeds that for one year prior. For this calculation, the amount of expenses from 'special depreciation of equipment for development research' (Art 44-3 of Special Taxation Measures Law) are excluded from the total amount of the said experiment and research expenses. (Art 42-4 Para 4 of Special Taxation Measures Law)

#### *2.1.4.5 compliance verification*

This incentive is available only when the amount to be deducted is stated in the final return and the written details on the computation of the said amount are attached. (Art 42-4 Para 14 of Special Taxation Measures Law)

*2.1.5 Special tax credit to small and medium-sized businesses for strengthening the technology base* (For companies: Art. 42-4 paragraph 7 of Special Taxation Measures Law; for individuals: Art. 10 paragraph 5 of Special Taxation Measures Law).

#### *2.1.5.1 Qualifying R & D expenditure*

This incentive applies to the stipulated expenditures including those mentioned below, incurred to conduct experiment and research concerning manufacture of products or improvement, device or invention of technologies:

- (1) expenditures for raw materials, labour costs (limited to the expenditures concerning the personnel who devote themselves exclusively to the said experiment and research with the expert knowledge) and other expenditures required to conduct the said experiment and research;
- (2) expenditures incurred by a company conducting experiment and research through consignment to the consignee for the purpose of the said experiment and research.
- (3) expenditures incurred in accordance with the prescriptions of the Mining and Manufacturing Technology Research Association Law, etc.

The amount relating to amortization of deferred assets and depreciation of depreciable assets used for the said experiment and research, which is included by a corporation in

gross expense in computing taxable income constitutes the ‘other expenditures’ in (1) above.

For the purposes of this incentive, the relevant legislation does not distinguish between ‘pure’ research costs and development costs.

#### *2.1.5.2 Nature of the incentive*

15% of the total amount of the eligible experiment and research expenses is deductible from an amount of the corporation tax on income in the said application year.

The rate of credit will be reduced to 12% from the accounting year starting on or after April 1, 2006 (Art 42-4 Para 7 of Special Taxation Measures Law).

This incentive is proportionally allowed based on the total amount of the eligible research and development expenses.

Under this incentive, a corporation can enjoy the tax credit whenever it has an R&D expense, regardless of the amount of the R&D expenses in prior years.

Maximum creditable amount in respect of this incentive is restricted to 20 percent of the amount of corporation tax corresponding to the income of the corporation for the relevant tax year.

#### *2.1.5.3 Restrictions (based on eligibility criteria)*

This incentive is available also in respect of expenses incurred outside of Japan.

This incentive is limited to the corporations falling under small and medium-sized businesses filing the blue returns (Art 121 of Corporation Tax Law).

For this purpose, ‘small and medium-sized businesses’ mean a company with a capital of 100,000,000 yen or less, or a company without capital and with not exceeding 1,000 full-time employees (excluding a subsidiary of a large-scale corporation), an agricultural cooperative association and the like. (Art 27-4 Para 4 of Special Taxation Measures Law Enforcement Orders)

This incentive does not apply to the accounting periods to which the provisions of Art 42-4 Para 1 (Special tax credit in case of increase in experiment and research expense), Art 42-4 Para 2 (Special tax credit concerning total amount of experiment and research expense), or Art 42-4 Para 3 (Special tax credit concerning industry-government-academia joint or contract research) apply.

#### *2.1.5.4 Cash refund, carry forward and carry back possibilities*

A taxpayer cannot get a cash refund if it is not making a profit and no corporation tax is calculated because maximum creditable amount by this incentive is limited to the amount equivalent to 20 percent of the amount of corporation tax.

The carry forward of the tax credit is possible for one year only if the total amount of the said experiment and research expenses for an accounting period exceeds that for one year prior. For this calculation, the amount of expenses from 'special depreciation of equipment for development research' (Art 44-3 of Special Taxation Measures Law) are excluded from the total amount of the said experiment and research expenses. (Art 42-4 Para 8 of Special Taxation Measures Law)

#### *2.1.5.5 Compliance verification*

This incentive is available only when the amount to be deducted is stated in the final return and the written details on the computation of the said amount are attached. (Art 42-4 Para 14 of Special Taxation Measures Law)

## Latvia

### Survey on Tax Treatment of Research And Development Expenditure – Latvia

#### **1. Relevant General Tax Provisions under Corporate/Personal Income Tax Legislation**

##### ***1.1 Definition of R&D costs/expenditure***

There is no definition of R&D expenditure in the tax legislation.

##### ***1.2 Treatment of R&D expenditure as per general (non-incentive) provisions***

###### *1.2.1 Position under corporate income tax legislation*

Expenditure on R&D is allowed as an outright deduction in the year in which the expenditure is incurred, provided it is incurred for the purposes of the business. For this purpose, R&D expenditure specifically includes expenditure on technical documentation for abortive projects, provided that this has not been capitalised, and excludes expenditure on the discovery and qualitative and quantitative appraisal of mineral resources (Business Income Tax Act 1995, s 13(5)).

###### *1.2.2 Position under personal income tax legislation*

Where a business is subject to personal income tax, the taxpayer may compute tax depreciation on fixed assets as provided under section 13 of the Business Income Tax Act (Personal Income Tax Act 1993, s 11(3)(4)). The provision on R&D expenditure is contained in section 13 (see 1.2.1), but unless the R&D expenditure relates to a fixed asset, it would not appear to be covered by this rule. However, the general rule for computing taxable profits from a business provides that they are computed as the difference between the income from the business activity and the expenditure incurred on deriving that income

(PITA 1993, s 11(1)). The subsection detailing expenditure is inclusive and not exclusive (“Expenditure, where incurred for deriving income in the taxable year, includes ... – PITA 1993, s 11(3)) and there is a ‘sweeping-up’ provision at the end of s 11(3): “(15) other expenditure incurred for and essential to the purposes of the business, as provided by Regulations” (PITA 1993, s 11(3)(15)). It must be mentioned, however, that there are no such Regulations referring to R&D expenditure. The position is therefore at best unclear.

### ***1.3 Territorialisation issue***

#### *1.3.1 Position under corporate income tax legislation*

There is no provision limiting the place of the R&D expenditure.

#### *1.3.2 Position under personal income tax legislation*

Not Restriction.

### ***1.4 Pure research costs v development costs***

No distinction is made.

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

#### *1.5.1 Position under corporate income tax legislation*

Capital expenditure on long-term investments (which includes fixed assets) is a  
non



deductible expense (BITA 1995, s 6(3)). However, if the fixed asset is used for the purposes of the business, tax depreciation is available (BITA 1995, s 13(1)).

#### *1.5.2 Position under personal income tax legislation*

The same applies to income tax (see 1.2.2 above).

### ***1.6 Cash refund, carry-forward and carry-back possibilities***

#### *1.6.1 Position under corporate income tax legislation*

There is no possibility of a cash refund. R&D expenditure as an expense can give rise to a tax loss. Losses may be carried forward for a maximum of five years (BITA 1995, s 14(1)). If the company or other enterprise is based in a special development area and its activities have received ministerial approval, the loss carry-forward period is ten years (BITA 1995, s 14(6)). Carry-back of losses is not permitted.

#### *1.6.2 Position under personal income tax legislation*

No possibility of a cash refund. Losses arising from a business may be carried forward for a maximum of three years (PITA 1993, s 11(9)).

## **2 Incentives for R&D expenditure**

There are no tax incentives for R&D expenditure as such.

## **Lithuania**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

The Lithuanian Profit Tax law<sup>71</sup> and the Law on Income tax of Individuals<sup>72</sup> do not provide for any particular definition or concept relating to R & D.

##### *1.1.1 Position under corporate income tax legislation*

In principle, the treatment of R&D expenditure under Lithuanian corporate income tax legislation does not differ extensively from treatment of any other expenditure that is deductible for corporate tax purposes. Under article 17 of the Profit Tax Law, all expenses that are necessarily incurred in order to generate income of the company are deductible for corporate tax purposes. The law distinguishes between two groups of possible deductions: deductions of limited size and those of unlimited size. Deductions of limited size, e. g. depreciation of long term material assets, bad debts, losses and the like are dealt in greater detail in the law. However, virtually none of these provisions provides for a concept of R&D. The only provision that directly deals with R&D expenditure is Article 18 (1) of the Law on Profit Tax (see section 1.2.1 for more details), which besides mentioning the concept itself, fails to determine the contents of the concept. Neither the commentary to the Law on Profit Tax published by the state Tax Inspectorate<sup>73</sup> contains any explanation of the term. Therefore, the true meaning of the concept of R&D is determined case by case. In the case of doubt whether any particular R&D expenditure is deductible, businesses are often advised to request an official opinion of the tax authorities.

##### *1.1.2 Position under personal income tax legislation*

Lithuanian personal income tax system does not foresee any tax incentives or deductions regarding R&D expenditure. Consequently, personal income tax legislation does not contain any concepts of such expenditure.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

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<sup>71</sup> Lietuvos Respublikos pelno mokesčio įstatymas (Žin., 2001, Nr. 110-3992), with subsequent amendments.

<sup>72</sup> Lietuvos Respublikos gyventojų pajamų mokesčio įstatymas (Žin., 2002, Nr. 73-3085), with subsequent amendments.

<sup>73</sup> The commentary is available in Lithuanian only via the web-site of the State Tax Inspectorate.

Under Art. 18 (1) of the Law on Profit Tax R&D expenditure is allowed as an outright deduction in the year in which it has incurred. Accumulation of such expenditure and depreciation over several years is expressly prohibited. No practical differences as to accounting deduction and tax deduction exist.

It should be noted, however, that prior to the entry into force of the new Law on Profit Tax (applicable from the tax year 2002), R&D expenditure relating to long term assets was allowed to be deducted over several years: the maximum term for depreciation as foreseen in the Government Decision No. 955 of July 30, 1998<sup>74</sup> was 20 years and only the straight-line method was allowed. The shortest possible period for depreciation of R&D expenditure was two years, as foreseen in the Order of the Minister of Finance No. 428/301 of December 24, 1999<sup>75</sup>. Therefore after entry into force of the new law on Profit Tax, the tax payers that have used the old method of depreciation applicable to R & D expenditure, may continue to apply it to expenditure that has been incurred by the end of 2001.

### *1.2.2 Position under personal income tax legislation*

Lithuanian personal income tax legislation does not contain any rules on the deduction or depreciation of R&D expenditure.

## **1.3 Territorialisation Issue**

### *1.3.1 Position under corporate income tax legislation*

The Law on Profit Tax and the Law on Income Tax of Residents do not contain any provisions that would influence the tax treatment of R&D expenditure on the basis of territoriality.

### *1.3.2 Position under personal income tax legislation*

Same principle as explained under 1.3.1. There are, however, as previously mentioned, no R&D deductions foreseen for income tax purposes.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

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<sup>74</sup> Lietuvos Respublikos Vyriausybės 1998 m. liepos 30 d. nutarimas Nr. 955 "Dėl ilgalaikio turto nusidėvėjimo (amortizacijos) skaičiavimo ir jo remonto darbų apskaitos tvarkos patvirtinimo" (Žin., 1998, Nr. 69-2011).

<sup>75</sup> Lietuvos Respublikos finansų ministro 1999 m. gruodžio 24 d. įsakymas "Dėl ilgalaikio materialiojo ir nematerialiojo turto nusidėvėjimo (amortizacijos) ekonominių normatyvų patvirtinimo" (Žin., 2000, Nr. 1-17)

Lithuanian corporate income tax legislation does not foresee any particular differences between research costs and development costs. The question whether the expenditure falls under the concept of R&D expenditure must be determined case by case.

#### *1.4.2 Position under personal income tax legislation*

There are no research and development deductions foreseen for personal income tax purposes.

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

No specific reliefs are foreseen in respect of land, buildings and equipment used to carry out the research. Moreover, businesses, wishing to depreciate such assets should be able to prove that such assets are used to generate income.

#### *1.5.1 Position under corporate income tax legislation*

There are no specific corporate income tax benefits that are applicable to land, buildings and equipment used to carry out the research. General rules of depreciation are applicable in these cases.

#### *1.5.2 Position under personal income tax legislation*

There are no specific personal income tax benefits in this case.

### ***1.6 Cash refund, carry forward and carry back possibilities***

#### *1.6.1 Position under corporate income tax legislation*

Cash refund is not permitted under the corporate income tax legislation. Loss carry forward in case of R&D activities does not differ from general rules applicable.

#### *1.6.2 Position under personal income tax legislation*

There are no provisions of personal income tax legislation that would allow cash refund, carry forward or carry back of losses in case of any expenditure related to R&D activities.

## **2 Incentives for R & D expenditure**

### ***2.1 Incentives under corporate/ personal income tax legislation***

No corporate or personal income tax incentives exist in Lithuanian regarding R&D expenditure.

## ***2.1 Incentives under wage tax legislation***

There are no wage tax incentives in the field of R&D expenditure.

## **Luxembourg**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

There is no definition of R&D expenses as such for income tax purposes. The tax treatment of R&D costs is largely based on Art. 40, which provides that the tax accounting should follow the commercial accounting, unless explicitly provided otherwise in the tax law.

The relevant provisions of the Commercial Code are Arts. 213 and 214, which provide for an option to capitalize R&D expenses, without, however, giving a definition in the law of what exactly is supposed to be covered by this position. Arts. 242 (1) and 237 (1) and (2) contain the basis for amortization of such capitalized R&D expenses. Art. 46 (7) contains an explicit reference to Arts. 213 and 214.

##### *1.1.2 Position under personal income tax legislation*

Art. 40 is only applicable to taxpayers that are required to keep books in conformity with the Commercial Code. This would be the case, e.g., for an entrepreneur that fulfills certain criteria of the Commercial Code. As a result, the same tax treatment as outlined above for companies would be applicable.

If no liability to keep books in conformity with the Commercial Code exists, there may still be a requirement to keep books of account for tax purposes. Such requirement is contingent upon the taxpayer fulfilling certain conditions (relating to the total turnover etc.), which, in practice, is almost always the case. In that case, only the rules of the tax law are applicable.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

The Luxembourg corporate income tax and municipal business tax treatment is determined on basis of the statutory accounts unless otherwise provided by tax law. In the absence of specific tax provisions, the same treatment would apply for tax purposes. Consequently, capitalized costs are, in principle, not tax-deductible and only reduce the tax base as and when amortized.

##### *1.2.1 Position under corporate income tax legislation*

Based on Arts. 213 and 214 of the Commercial Code, R&D expenses may be capitalized. The law provides for an option, which, generally would also be relevant for tax purposes. However, Art. 46 (7) Income Tax Code provides for an option to deduct such expenses in full in the year in which they were incurred, even if they were capitalized in the commercial accounts.

When the taxpayer decides to capitalize the R&D costs, based on the provisions of the Commercial Code and Art. 23 (2) and (3) Income Tax Code, the expenses are to be valued at “production cost”. When determining what costs are to be included in the production cost of an asset, the following distinction must be made:

- Costs that must be capitalized:
  - Acquisition cost (or production cost) of material or machinery utilized directly for purposes of the R&D;
  - Salary related to the R&D;
  - Any other costs directly related to the R&D;
  - A proportion of the general production cost including depreciation of assets used in R&D.
- Costs that may not be capitalized:
  - Costs that do not fulfill the conditions of Art. 45 Income Tax Code, i.e. the definition of “business expenses” (see below)
- Costs that may be capitalized (at the option of the taxpayer):
  - General administrative expenses, where an appropriate portion may be included in production cost;
  - Interest on loans directly related to financing the R&D activity.

If the expenses are capitalized, Arts. 242 (1) and 237 (1) and (2) Commercial Code provide that they must be amortized over 5 years. A longer period is possible if the result of the R&D can be utilized for a longer period.

In the absence of specific tax rules in this respect, the general amortization period is also 5 years for tax purposes. However, while the Commentaries to Art. 242 (1) Commercial Code can be interpreted in a broad sense as to require only that the R&D expenses have to be fully amortized after the 5-year period, Art. 32 Income Tax Code requires an equal allocation over the amortization period. Therefore, in case a taxpayer were to amortize the R&D expenses in its commercial accounts in full in the fifth year only, the tax accounts would have to deviate from such treatment by amortizing 20% of such expenses each year.

If during the 5-year amortization period it becomes apparent that the R&D expenses are no longer useful for the company, a full write-off of the expenses may be claimed for tax purposes. If such write-off is made for commercial accounting purposes, the tax accounts would have to follow and would also show such write-down.

If the taxpayer decides not to capitalize the costs, they are deductible in full in the year during which they were incurred. However, in order to be deductible, the costs need to



fulfill the definition of “business expenses” of Art. 18 Income Tax Code, which defines business expenses as “expenses incurred exclusively for purposes of the business”. Expenses must fulfill this requirement in order to be deductible as well as to be capitalized (depending on which option the taxpayer decides to take).

### *1.2.2 Position under personal income tax legislation*

For individual taxpayers that carry on a business for which they need to keep books of account according to the Commercial Code the same analysis applies as for corporate taxpayers outlined in 1.2.1 above. For taxpayers that carry on a business but are not required to keep books according to the Commercial Code, only the tax provisions are relevant. Art. 46 (7) Income Tax Code provides for an option to capitalize R&D expenses for tax purposes. If such option is taken, the amortization period is by default considered to be 5 years. A different amortization period would have to be supported by a difference in expected economic useful life of the R&D expenses. See 1.2.1 above.

## **1.3 Territorialisation Issue**

### *1.3.1 Position under corporate income tax legislation*

Neither the Commercial Code nor the Income Tax Law provide for a restriction of the treatment described above to costs incurred within Luxembourg. However, it is clear that where such costs are attributable to a PE in a country with which Luxembourg has a tax treaty, such costs would not be allowed to be deducted from the Luxembourg tax base.

### *1.3.2 Position under personal income tax legislation*

The same analysis applies as for corporate taxpayers.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

No distinction is being made under corporate income tax legislation.

### *1.4.2 Position under personal income tax legislation*

No distinction is being made under personal income tax legislation.

## **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

### *1.5.1 Position under corporate income tax legislation*

See above for expenses related to such assets involved in R&D. Furthermore, these assets may qualify for the investment tax credit. This credit is granted for items of additional qualifying assets as well as with respect to the total increase in qualifying assets. A higher percentage may apply if the investment fulfills certain purposes (e.g. environmental protection etc.)

#### *1.5.2 Position under personal income tax legislation*

See above.

### **1.6 Cash refund, carry forward and carry back possibilities**

#### *1.6.1 Position under corporate income tax legislation*

A loss created by R&D expenses will be treated like any other operating loss incurred by the taxpayer and can be carried forward indefinitely. No cash refund or loss carry-back is available. An investment tax credit (see 1.5.1) can be carried forward.

#### *1.6.2 Position under personal income tax legislation*

See 1.6.1. above.

## **2 Incentives for R & D expenditure**

### **2.1 Incentives under corporate/ personal income tax legislation**

Currently no specific incentive exists for R&D expenses. A proposal for the introduction of such an incentive has been made by one party represented in the Parliament but is unlikely to be voted.

A general incentive exists to promote investments in the form of a tax credit. The rate of this credit is higher for investments related to certain purposes, e.g. environmental protection.

### **2.2 Incentives under wage tax legislation**

There are no relevant incentives under the wage-tax legislation.

## **Malta**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

There is no definition of ‘research and development’ in Malta’s general tax provisions (the Income Tax Act, Chapter 123 of the Laws of Malta). Reference is, however, made in Article 14(h) of the Income Tax Act to “scientific research” which is defined to include (i) basic research comprising activities undertaken for the advancement of scientific or technological knowledge; (ii) applied research where a specific application is in view; and (iii) development work involving the use of the results of basic and applied research as aforesaid for the purpose of creating new or improving existing materials, devices, products or processes.

##### *1.1.1 Position under corporate income tax legislation*

See 1.1

##### *1.1.2 Position under personal income tax legislation*

See 1.1

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

- (a) When ascertaining a tax payer’s total income for tax purposes all outgoings and expenses incurred by the tax payer during the preceding year of assessment which are wholly and exclusively incurred in the production of the income shall be deducted including, inter alia, expenditure on scientific research incurred by a person engaged in any trade, business, profession or vocation incurred for the use and benefit of that trade, business, profession or vocation [Article 14(h)].
- (b) Where, however, the expenditure is of a capital nature, it shall be spread over the year in which it has been incurred and the five subsequent years. This amortization over 6 years does not apply to expenditure which qualifies for the exemption applicable in respect of plant and machinery [in terms of articles 14(f) and 14(j) of the Income Tax Act] in which case no deduction would be allowable in terms of article 14(h) [Proviso to Article 14(h)].
- (c) If the scientific research is carried out in Malta, the taxpayer may opt to claim an increased deduction of 150% of the actual amount of the

expenditure incurred. However, when this option is exercised, the total increased deduction for any year of assessment cannot exceed 5% of that taxpayer's turnover for that year. In the event that the increased deduction does exceed 5% of turnover, any amount which accordingly cannot be deducted in that year may be carried forward to subsequent years.

The straightline method of appreciation is adopted. This method is used for other non-R&D capital expenditure deductions however the rate varies in terms of the 'Deduction (Wear and Tear of Plant and Machinery) Rules which categorizes assets for depreciation purposes into 18 categories.

Insofar as the provisions of article 14 of the Income Tax Act and the Wear and Tear rules are utilized for the purposes of drawing up of financial statements, there would be no difference between accounting depreciation and tax depreciation.

In addition, a taxpayer may also claim a deduction in respect of:

- (i) expenditure on patents or patent rights incurred for the use and benefit of the trade, business, profession or vocation. Such expenditure shall be spread over the life of the patent or patent rights in a reasonable manner.
- (ii) expenditure of a capital nature on intellectual property rights incurred for the use and benefit of the trade, business, profession or vocation such expenditure shall be spread equally over the year in which it is been incurred and the two succeeding years.

#### *1.2.1 Position under corporate income tax legislation*

See 1.2

#### *1.2.1 Position under personal income tax legislation*

See 1.2. Individual claiming a deduction must be engaged in a trade, business, profession or vocation and the expenditure must be incurred for the use and benefit of that trade, business, profession or vocation.

### **1.3 Territorialisation Issue**

The deduction referred to at 1.2 (a) and (b) above applies irrespective of where the costs are incurred or where the scientific research is carried out. The increased deduction referred to at 1.2(c) applies irrespective of where the costs are incurred but applies solely to scientific research carried out in Malta.

#### *1.3.1 Position under corporate income tax legislation*

See 1.3

*1.3.2 Position under personal income tax legislation*

See 1.3

**1.4 Pure research costs v. development costs**

*1.4.1 Position under corporate income tax legislation*

No Distinction

*1.4.2 Position under personal income tax legislation*

No Distinction

**1.5 Relief in respect of land, buildings and equipment used to carry out the research**

- (a) A taxpayer is entitled to claim a deduction in respect of the wear and tear of any plant and machinery, and any premises being an industrial building or structure, arising out of the use or employment of such property in the production of the income. The amount to be deducted in respect of an industrial building or structure cannot exceed 2% of the cost thereof (not including the cost of the land on which the building or structure is erected). Any unabsorbed amount can be carried forward to subsequent years.
- (b) A taxpayer is also entitled to claim an initial deduction of one-fifth of the capital expenditure in respect of plant and machinery first used and employed in the year immediately preceding the year of assessment and an initial deduction of one-tenth of the capital expenditure in respect of premises being an industrial building or structure first used and employed in the year immediately preceding the year of assessment.

The aggregate of the deductions made under (a) and (b) above may not exceed the original cost, or such part of it as may be appropriate, of the plant, machinery or premises, having regard to the extent to which they were wholly and exclusively used in the production of the income.

*1.5.1 Position under corporate income tax legislation*

See 1.5

*1.5.2 Position under personal income tax legislation*

See 1.5

## **1.6 Cash refund, carry forward and carry back possibilities**

In so far as expenditure is incurred in connection with a trading activity, in the event that trading income is not sufficient to cover the amount allowable as a deduction in a given year, such amount may be carried forward to be set off against trading income of subsequent years.

Carry back and cash refunds are not permitted.

### *1.6.1 Position under corporate income tax legislation*

See 1.6

### *1.6.2 Position under personal income tax legislation*

See 1.6

## **2 Incentives for R & D expenditure**

### *General Incentives (including for companies undertaking R & D activities)*

Incentives are available under the Business Promotion Act (BPA) to ‘qualifying companies’ and to companies which carry out certain target sector activities in Malta (target sector companies).

‘Qualifying companies’ are companies which carry on, or intend to carry on in Malta, a trade or business consisting solely of any of the activities referred to in article 3(1)(a) to (k) of the BPA, namely:

- a) the production, manufacture, improvement, assembly, processing, repair, preservation or maintenance of any goods, materials, commodities (including computer software), equipment, plant or machinery; or
- b) the rendering of services of an industrial nature analogous to the activities referred to in paragraph (a), including the repair, maintenance, commissioning, installation, inspection or testing of plant, machinery or equipment and the recycling or treatment of waste material; or
- c) fisheries or large scale aquaculture; or
- d) agriculture, stock farming large scale horticulture; or
- e) the rendering of a service by a company to non-resident persons or to a company which satisfies the provisions of article 4(1)(b), whether the service is performed or rendered in Malta or from Malta, provided such service is prescribed by the Minister to be a qualifying export service; or
- f) the rendering of a qualifying support service as may be prescribed by the Minister; or

- f) the export of goods or services produced or provided, as the case may be, by other qualifying companies; or
- g) **research and development programmes;** or
- h) the activities set out in article 11 of the Malta Freeports Act and carried on mainly in a freeport as defined by that Act, by a company licensed under that Act;
- i) the operation of catering establishments, guesthouses, hostels, hotels and holiday premises as defined in the Malta Travel and Tourism Services Act, and falling within such categories as may be prescribed; or
- j) the undertaking of any project beneficial to the tourism industry as may be prescribed;
- k) the production of feature films, television films, advertising programs or commercials, and documentaries

"Research and development programme" in (h) above means a programme for systematic investigation or research carried out in any field of science or technology through experiment or analysis, and includes:

- (a) basic research comprising activities undertaken for the advancement of scientific or technological knowledge;
- (b) applied research where a final specific application is in view;
- (c) development involving the use of the results of basic or applied research as aforesaid for the purpose of creating new or of improving existing material, devices, products or processes, but excludes routine or periodic design, testing and analysis of equipment or products for the purposes of quality or quantity control, and routine or periodic alterations to existing products or processes.

Under the BPA, certain incentives apply specifically to qualifying companies which are target sector companies whereas others apply to all qualifying companies. The tax incentives include:

Incentives applicable to qualifying companies which are target sector companies -

- (1) Reduced tax rates up to the end of 2008:
  - (a) newly formed companies will be taxable at a reduced rate of 5% on profits up to MTL 25,000 per employee; and
  - (b) existing companies will be taxable at a reduced rate of 10% on profits up to MTL 28,000 per employee;
- (2) Investment tax credits computed at rates not exceeding 65% of the expenditure for small and medium-sized enterprises (SMEs) and 50% for other companies, which credits are deducted from the tax due computed at the above reduced rates or at the normal applicable rate of tax after 2008. After 2008, the tax credits will be deducted from the tax due computed either at reduced rates of tax under tax treaties or at the standard rate of corporate income tax, as the case may be;

Incentives applicable to all qualifying companies

- (1) Investment allowances of 50% over and above the cost of the plant and machinery, and of 20% over and above the cost of industrial buildings and structures;
- (2) Reduced rate of tax for reinvested profits in respect of qualifying expenditure. The reduction is equivalent to 19.25%; and
- (3) Value added incentive scheme: a manufacturing company that increases its value added will qualify for a tax benefit whereby its profit, or part thereof, may be subject to income tax at reduced rates as mentioned in (1) above (this incentive is available to companies not engaged in target activities). This incentive does not apply to qualifying companies which are target sector companies.

Incentives previously provided under the Industrial Development Act remain largely applicable to companies that existed prior to 1 November 2000 and companies undertaking projects approved prior to that date. Thus, for example, SMEs qualifying for the 10-year tax holiday will continue to be eligible for that incentive until its expiration or 2011, whichever is earlier. Large companies will instead be eligible to various investment and other tax credits intended to cover the remaining period of their former tax exemptions and reductions.

Furthermore, a number of Malta's Double Tax Treaties, amongst which, Treaties with EU Member States, provide, through the operation of a tax sparing provision, that companies benefiting from any advantages under Malta's Aids to Industry legislation (which includes the BPA), Malta tax shall be imputed/deemed to have been paid at the rate which would have, without the existence of the said legislation, been due. Furthermore, a number of Treaties provide that the tax on the underlying income of such companies must not exceed 15%.



## **Poland**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

The Corporate Income Tax Law (hereinafter: CITL) defines research and development expenditures that are deemed to be intangible assets as follows: the costs of the research and development works concluded with a positive result that may be used for business purposes of the taxpayer, provided that (i) a new product or technology are precisely specified, and the cost involved are indicated, (ii) the technical utility of the product or technology is properly documented, and based on this the taxpayer decided to manufacture the product or apply the technology, and (iii) the documentation indicates that the costs involved will be compensated by the expected income from the sale of the product or the application of the technology (Art. 16b(3) CITL). There are no further definitions for tax purposes. The Accounting Law provides the same three conditions for the recognition of a research and development expense as an intangible asset (Art. 33).

##### *1.1.2 Position under personal income tax legislation*

The Personal Income Tax Law (hereinafter: PITL) provides for the same definition of research and development expenditures as CITL (Art. 22b(2) PITL).

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

Research and development expenditures that qualify as intangible assets (see definition in 1.1.1) are subject to depreciation. The expenditures are depreciated under the straight-line method over a period of at least 36 months (Art. 16m(1) CITL). The straight-line method applies to the most of the depreciable assets, but the declining-balance method may be used for certain categories of fixed assets. In addition, accelerated depreciation in respect of certain new fixed assets is allowed.

Research and development expenditures that do not qualify as intangible assets (e.g. they did not lead to a new product or technology) are deductible, provided that they were incurred in order to obtain taxable income (even if no income has been actually derived).

The same depreciation rules for the research and development expenditures apply under the Accounting Law. The depreciation period, however, may not be longer than 5 years (Art. 33.3).

### *1.2.2 Position under personal income tax legislation*

The same rules as for corporate taxpayers apply under PITL (Art. 22m PITL).

## **1.3 Territorialisation Issue**

### *1.3.1 Position under corporate income tax legislation*

Domestic tax law does not distinguish between research and development expenditures incurred in Poland and abroad. The same tax treatment applies irrespective of the place where the expenditures were incurred.

### *1.3.2 Position under personal income tax legislation*

See 1.3.1.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

Domestic tax law does not distinguish between ‘pure’ research costs and development costs.

### *1.4.2 Position under personal income tax legislation*

See 1.4.1.

## **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

### *1.5.1 Position under corporate income tax legislation*

Domestic tax law does not provide for any specific relief with respect to land, buildings or equipment used to carry out the research.

### *1.5.2 Position under personal income tax legislation*

See 1.5.2.

## **1.6 Cash refund, carry forward and carry back possibilities**

### *1.6.1 Position under corporate income tax legislation*

Domestic tax law does not allow for a cash refund. There are no provisions allowing for carry forward/ carry back a tax allowance or a tax credit when a taxpayer incurs a loss. Losses may be carried forward for 5 years; up to 50% of the loss may be set off in each year (Art. 7.5 CITL; Art. 9.3 PITL). Loss carry-back is not allowed.

*1.6.2 Position under personal income tax legislation*

See 1.6.1.

**2 Incentives for R & D expenditure**

Poland does not grant any tax incentives for research and development costs.

## Portugal

### 1. Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation

#### 1.1. Definition of R & D costs/ expenditure

##### 1.1.1. Position under corporate income tax legislation

In Portugal, R&D expenses (*despesas de investigação e desenvolvimento*) are defined in the Corporate Income Tax Code (CIRC)<sup>1</sup>, as follows:

Research expenses (*despesas de investigação*) are those made by the enterprise with a view to the acquisition of new scientific or technical knowledge.

Development expenses (*despesas de desenvolvimento*) are those made by the enterprise through exploration of results of research work or other scientific or technical knowledge with a view to the discovery or a substantial improvement of raw material, products, services or manufacturing processes.

No other associated terms are foreseen.

##### 1.1.2. Position under personal income tax legislation.

The Portuguese Individual Income Tax Code (CIRS)<sup>2</sup> separates taxable income into 6 categories and one of these is Category B, business income (including income from a business or an independent profession or vocation). Business income is basically computed under two different methods, i.e. (1) the direct method, based on the taxpayer's organized accounts, and (2) the simplified method, under which a taxpayer may elect to be taxed on deemed income<sup>3</sup>. In principle, the simplified method applies to taxpayers who in the previous year had a maximum of EUR 149,739.37 of business turnover or EUR 99,759.58 of gross income from the provision of independent personal services. Businessmen and independent professionals with organized accounts may generally deduct Category B income-generating expenses (thus including R&D expenditure) under the rules applicable to corporate taxpayers<sup>4</sup>.

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<sup>1</sup> Código do Imposto sobre o Rendimento das Pessoas Colectivas (generally known by its acronym CIRC), implemented by Decree-Law 442-A/88 of 30 November 1988, as amended: Art. 31.2(a) and (b).

<sup>2</sup> Código do Imposto sobre o Rendimento das Pessoas Singulares (generally known by its acronym CIRS), implemented by Decree-Law 442-B/88 of 30 November 1988, as amended.

<sup>3</sup> The amount of deemed taxable income is (i) for businessmen, 20% of their turnover from sales of goods; for independent personal service providers, 65% of their gross income.

<sup>4</sup> Arts. 1.1.; 28.1. and 32 CIRC.

Accordingly, the definition of R&D expenditure under CIRC is equally valid under CIRS.

## ***1.2. Treatment of R & D expenditure as per general (non-incentive) provisions***

### *1.2.1. Position under corporate income tax legislation*

Expenditure incurred by an enterprise in qualifying R&D projects may be treated as deductible costs in the same tax year in which they are incurred<sup>5</sup>, provided that:

- it qualifies under the definition in 1.1.1.; and
- it is made in the direct interest of the enterprise.

Accordingly, expenses attaching to contractual R&D work carried out by the enterprise for a third party do not qualify as deductible R&D costs for that enterprise, because such work-related expenses do not pertain to the enterprise's fixed assets; they are instead treated as operational costs, as the enterprise will derive profits from the contractual work concerned<sup>6</sup>.

Instead of outright deducting the R&D costs, the enterprise may elect to capitalize them as an intangible fixed asset and depreciate it, under the straight-line method, over a maximum period of 5 years; the maximum rate of depreciation is 33.33%<sup>7</sup>.

As a general rule, fixed assets (e.g. buildings, industrial equipment) are depreciated under the straight-line method. Nevertheless, the declining-balance method may be elected for new tangible fixed assets other than buildings, light passenger cars and vans, furniture and social equipment.<sup>8</sup>

There is no difference between the accounting depreciation and tax depreciation. According to the accounting rules on R&D expenditure, capitalized R&D costs must, in principle, be depreciated over a maximum period of 5 years<sup>9</sup>.

### *1.2.2. Position under personal income tax legislation*

What is said in 1.1.2. and 1.2.1. is equally applicable here.

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<sup>5</sup> Art. 31.1. *CIRC*.

<sup>6</sup> Art. 31.3. *CIRC*.

<sup>7</sup> Arts. 3.3. and 17.2.(b) and Table II, Division II of Regulatory Decree 2/90 of 12 January 1990, as amended.

<sup>8</sup> Art. 4.1 and 4.2.(a), (b) and (c) of Regulatory Decree 2/90 of 12 January 1990, as amended.

<sup>9</sup> Accounting Guiding Rule 7/92, published in the Official Gazette of 30 March 1993.

### **1.3. Territorialization issue**

#### *1.3.1. Position under corporate income tax legislation*

There is no specific answer in the CIRC. However, under the general CIRC rules, a resident company is taxable on its worldwide income (thus including foreign-source income) and expenses incurred are treated as deductible costs to the extent that they are proven to be indispensable for the purpose of gaining or producing taxable income or for the maintenance of its source<sup>10</sup>. On those grounds, it may be concluded that expenses made by a resident enterprise in undertaking qualifying R&D projects abroad are treated as eligible costs.

#### *1.3.2. Position under personal income tax legislation*

Under the general CIRS rules, resident businessmen and independent professionals are taxable on their worldwide income (thus including foreign-source income) and businessmen with organized accounts may generally deduct Category B income-generating expenses (thus including R&D expenditure) under the rules applicable to corporate taxpayers<sup>11</sup>. On those grounds, it may be concluded that expenses incurred by a resident businessman/independent professional in qualifying R&D projects abroad are treated as eligible costs, as stated in 1.3.1.

### **1.4. Pure research costs v. development costs**

#### *1.4.1. Position under corporate income tax legislation*

As stated in 1.1.1., although research expenditure and development expenditure are defined separately, no distinction is made, however, between "pure" research costs and development costs for the purpose of their deductibility.

#### *1.4.2. Position under personal income tax legislation*

What is said in 1.4.1. is equally applicable here.

### **1.5. Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1. Position under corporate income tax legislation*

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<sup>10</sup> Arts. 4.1. and 23.1.CIRC

<sup>11</sup> Arts. 15.1. and 32. CIRS

The CIRC and its supplementary regulations do not provide for any specific relief in respect of the land, buildings and equipment used to carry out the research (see, however, 2.1.1.1.(i)a).

#### *1.5.2. Position under personal income tax legislation*

What it is said in 1.5.1. is equally applicable here.

### **1.6. Cash refund, carry forward and carry back possibilities**

#### *1.6.1 Position under corporate income tax legislation*

According to CIRC general rules, taxpayer may carry forward tax losses for a maximum period of 6 years.

However, no cash refund is available under CIRC if the taxpayer is not making a profit in the tax year concerned and it is no longer possible for a taxpayer to carry forward or carry back a tax allowance or a tax credit specifically in respect of R&D expenditure (although it is possible to carry forward any tax losses incurred, as indicated above). Nevertheless, under the investment tax credit for R&D expenditure, which was available last for tax year 2003, any unused credit in that year could be carried forward for 6 years<sup>12</sup>.

#### *1.6.2 Position under personal income tax legislation*

What it is said in 1.6.1. is equally applicable here, except as regards the former tax credit which is available only to Portuguese-based corporate taxpayers.

## **2. Incentives for R & D expenditure**

### **2.1. Incentives under corporate/ personal income tax legislation**

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<sup>12</sup> An investment tax credit for R&D expenditure (*crédito fiscal por investimento em investigação e desenvolvimento, I&D*) applied in Portugal for tax years 1997 through 2003 under Decree-Law 292/97 of 22 October 1997, as amended. It was granted to Portuguese-based IRC taxpayers whose taxable base was not determined under indirect methods. The creditable amount was the sum of:

- a basic investment tax credit equal to 20% of the qualifying R&D expenditure incurred in the relevant year, and
- an additional credit equal to 50% of the amount by which such expenses exceeded the average R&D expenditure incurred in the 2 preceding years with a ceiling of EUR 498,797.90. Any unused credit could be carried forward for 6 years.

However, due to some lobbying, it is possible that the Central Government will extend the investment tax credit regime for R&D expenditure.

2.1.1. *Tax reserve for investment regime (regime da reserva fiscal para investimento)*<sup>13</sup>

2.1.1.1. *Qualifying R & D expenditure*

- (i) Qualifying investments for the purpose of materializing the tax reserve are those relating to eligible R&D expenditure (see (ii) below) made by the enterprise in respect of the following items:
- acquisition of new tangible fixed assets - other than land and urban buildings - exclusively and permanently used in R&D activities;
  - costs incurred with personnel exclusively involved in R&D activities;
  - operational costs attaching to R&D activities with a limit of 55% of the booked salaries and wages of personnel exclusively involved in R&D activities;
  - hiring of R&D services from public and other reputable research entities (see 2.1.1.3.(iii));
  - acquisition of patents and know-how licenses exclusively destined to R&D activities;
  - registration and maintenance of patents and know-how licenses associated to new products and processes resulting from R&D activities carried out by SMEs, as defined by Commission's Recommendation 96/280/EC of 3 April 1996; and
  - audits relating to R&D.

For enterprises other than SMEs, qualifying investment costs are reduced to the amount of supplementary R&D expenditure which relates to the net increase of that expenditure in the relevant year as compared to the average expenditure in the previous 3 years.<sup>14</sup>

(ii) Eligible R&D expenditure is restricted to those expenses which are made in respect of:

- a planned research or critical investigation to acquire new knowledge that is useful to develop new products, processes or services or which can lead to a significant improvement of the existing processes or services industrial research; or
- a materialization of the results of industrial research in a plan, scheme or project for creating, altering or improving products, processes or services to be sold or used or a formulation or conception of alternative products,

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<sup>13</sup> This regime was implemented, under the authorization given in Article 38.7. of the State Budget for 2003 (Law 32-B/2002 of 30 December 2002), by Decree-Law 23/2004 of 23 January 2004. As required by Arts. 88.3. of the EC Treaty and 2 of Council Regulation EC/659/1999 of 22 March 1999, the European Commission was duly informed by Portugal on the implementation of this incentive.

<sup>14</sup> Art. 5.



processes or services and of sample or pilot projects, as long as such projects are not convertible in or usable for industrial applications or commercial exploitation purposes ("pre-competitive development/research").

(iii) The incentive does not apply to expenditure incurred on land and urban buildings and it is restricted to those expenses incurred in respect of acquisition of R&D-related equipment (see (i) above).

#### 2.1.1.2. *Nature of the incentive*

Allocation to a special reserve of the funds from a credit against the IRC liability is available as an incentive to qualifying investors in respect of tax years 2003 and 2004.

Under the incentive, qualifying investors (see 2.1.1.3.(ii) below) may credit up to 20% of their IRC liability to a special reserve account to be used for financing purchases of tangible fixed assets or research and development (R&D) projects in the following 2 tax years; thus for tax year 2003 (assessment year 2004), taxpayers should invest this reserve in 2004 and/or 2005; for tax year 2004 (assessment year 2005), taxpayers should invest this reserve in 2005 and/or 2006<sup>15</sup>.

The amount of the IRC credit is limited to the maximum rates of State Aid established by the European Commission for Portugal in the period 2003 through 2006, concerning the maximum percentages of regional aid and industrial and pre-competitive research aid<sup>16</sup> indicated below:

The maximum percentages of regional aid range:

- in the Northern Region, between 32% and 40% (increased to between 47% and 55% for qualifying SMEs);
- in the Central Region, between 43% and 50% (increased to between 58% and 65% for qualifying SMEs);
- in Lisbon and the Tagus Valley Region (in the period 2004 - 2006), between 10% and 20% (increased to between 20% and 30% for qualifying SMEs); and
- in the Regions of Alentejo, Algarve, Madeira and the Azores, between 40% and 62% (increased to between 55% and 77% for qualifying SMEs).

The maximum aid percentages for industrial research and pre-competitive research are set at 50% and 25% (increased to 60% and 35% for qualifying SMEs), respectively.

The maximum aid rate, reflected in gross equivalent subvention (*ESB*), only applies to a base that is equivalent to 75% of the eligible investment<sup>17</sup>.

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<sup>15</sup> Art. 2.

<sup>16</sup> Appendix I to Decree-Law 23/2004.

<sup>17</sup> Art. 6.

The tax investment reserve may not be accumulated with any other contractual or legal IRC investment incentives. Additionally, the accumulation of this incentive with other types of incentives is limited to the compliance with the maximum state aid rates allowed by the European Commission for Portugal<sup>18</sup>.

#### *2.1.1.3 .Restrictions (based on eligibility criteria)*

(i) As regards the territorialization issue, the answer in *1.3.1.* is equally applicable here.

(ii) Qualifying investors for the purpose of the incentive are Portugal-based large-sized enterprises, and small and medium-sized enterprises (SMEs) as defined by EC law, that are engaged in mining, manufacturing and tourism activities (other than those involved in the processing and marketing of agricultural products and coal and steel production, and fisheries and aquiculture), which satisfy the following requirements:

- they may not be classified as companies in financial difficulties under the meaning of the EU rules on State Aid;
- their taxable profit may not be determined by indirect methods (i.e. on the basis of circumstantial evidence available to the tax authorities);
- all their taxes and social security contributions must have been paid or guaranteed;
- the assets acquired with the special reserve funds must be kept in the taxpayer's business establishment for a minimum period of 5 years. This is not required if the assets are transferred to another enterprise under a qualifying merger, division or transfer of assets; and
- the taxpayer must self-finance at least 25% of the total investment<sup>19</sup>.

(iii) As regards, sub-contracted research, the incentive is available if the R&D activities are contracted by the enterprise with a qualifying institution, namely, a public entity, a public utility body or an entity whose competence in the R&D field has been recognized by a joint dispatch of the Ministers of Economy and Science and Higher Education<sup>20</sup>.

#### *2.1.1.4 .Cash refund, carry forward and carry back possibilities*

The credit against the qualifying investor's IRC liability must be taken in the year in which the special reserve was created. There are no cash refund, carry forward or carry back possibilities.

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<sup>18</sup> Art. 7.

<sup>19</sup> Arts. 3 and 4.

<sup>20</sup> Art. 5.3.(d).

#### 2.1.1.5. *Compliance verification*

First, a detailed statement concerning the special reserve and proof of being up-to-date in the payment of taxes and social security contributions must be included in the tax documentation file (*dossier fiscal*) to be submitted to the tax authorities on an annual basis. Second, the qualifying investor must also include in the *dossier fiscal* a compliance statement, which is issued by a verification body appointed by a dispatch of the Minister of Science and Higher Education, concerning the qualifying R&D expenditure effectively incurred (to this purpose, the Innovation Agency (*Agência da Inovação*) will be created). Third, the reserve must be shown on the balance sheet and the taxpayer should evidence the amount of tax spared by virtue of the application of the incentive, in the appendix to the balance sheet and the profit and loss account of the year in which the tax credit applies. And, finally, the reserve may not be used for distribution to the company's shareholders, quotaholders or partners within the first 5 years following the one in which the reserve was created<sup>21</sup>.

#### 2.1.2. *Contractual investment tax incentives (benefícios fiscais ao investimento de natureza contratual)*

In addition to the tax incentive regime discussed in 2.1.1., the Tax Incentives Statute (*EBF*)<sup>22</sup> provides for tax incentives which are available under a contractual regime for qualifying industrial investment projects carried out by 31 December 2010.

Qualifying investment projects are those that involve at least EUR 4,987,978.97 and are deemed to:

- be of a strategic interest to the domestic economy;
- contribute to reducing regional discrepancies; and
- encourage job creation and/or technological innovation and domestic scientific research.

The contractual incentives, granted by the central government on a case-by-case basis for a maximum period of 10 years, include a 5% to 20% investment tax credit and an exemption from, or reduction of, local real estate tax, transfer tax and stamp duty.<sup>23</sup>

## 2.2. *Incentives under wage tax legislation*

Portugal does not have any employment income tax-related incentive for R&D activities under the wage tax legislation (i.e. *CIRS* and supplementing regulations).

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<sup>21</sup> Arts. 8 and 9.

<sup>22</sup>

Estatuto dos Benefícios Fiscais (known by its acronym EBF), implemented by Decree-Law 215/89 of 1 July 1989, as amended.

<sup>23</sup> Art. 39 of EBF, as redrafted by Decree-Law 409/99 of 15 October 1999.

## **Slovak Republic**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/expenditure***

Costs are defined as a decrease of economic benefits of an accounting unit in the relevant accounting period (section 2e of the Accounting Act No. 431/2002 Coll. as amended).

Research is defined in section 37 paragraph 7 of the Measure of the Ministry of Finance 23 054/2002-92 concerning accounting procedures and the frame accounting schedule for entrepreneurs keeping double entry accounting books of 16 December 2002, published in the Financial Bulletin 1/2003, as initial and planned finding performed with the goal to achieve new scientific or technical knowledge. Costs for research are treated as direct costs in the accounting period in which they incurred. Research costs are mainly costs for:

- activities aimed at gaining new knowledge;
- investigation, construction and final selection of applications from research results or other knowledge;
- investigation of alternative materials, equipment, products, processes, systems or services;
- formulation of design, valuation and final selection of possible alternatives of new or improved materials, equipments, products, processes, systems or services.

Development is defined under section 37 paragraph 4, 5 and 6 of the Measure of the Ministry of Finance 23 054/2002-92 concerning accounting procedures and the accounting schedule for entrepreneurs keeping double entry accounting books of 16 December 2002, published in the Financial Bulletin 1/2003, mainly as design/ construction of:

- prototypes and models;
- tools, templates, forms and chips using new technology;
- field tests which are not in the stage of economic feasibility of production;
- chosen alternative for new or improved materials, equipment, products, processes, systems or services.

Development costs are not booked directly into costs but on the account 012 – Activated (capitalized) costs for development if the relevant development is the application of findings from research or other knowledge for planning or proposal of production of new or significantly improved materials, equipment, products, processes, systems or services before their production or put in use. Results of performed development activities are booked as development costs if:

- they were acquired independently and do not belong to the delivery of other long-term assets and their price;
- they were created by own activities for the purpose of trading, but not belonging to the delivery of long-term assets;
- they were created by own activities for the needs of the accounting unit.

Development costs can be activated if their amount does not exceed the amount which is likely to be achieved from future economic benefits after deducting other costs for development, sale and administration costs directly related to marketing of products or processes. If these costs cannot be activated, development costs are booked into direct costs in the accounting period in which they incurred.

According to section 37 paragraph 3 of the same measure, long-term assets created by in-house development are activated on the account 012 – Activated costs for development if the following can be documented:

- possibility of technical development in the way that the assets can be used or sold;
- the aim of their development, use or sale;
- the ability of the accounting unit to use or sell the assets;
- the concept of generating future economic benefits and existence of market for the outputs of long-term intangible assets or for the long-term intangible assets, or if the assets will be used by the accounting unit its usefulness;
- availability of the relevant technical inputs, financial sources and other sources for finishing of their development, use or sale;
- certain valuation of costs related to their acquisition in course of development.

#### *1.1.1 Position under corporate income tax legislation*

Technical appreciation is defined as costs for finished superstructures, additional buildings and construction works, reconstruction and modernization exceeding, in the case of individual assets, SKK 30,000 per taxable period. Such costs not exceeding SKK 30,000 per taxable period are considered technical appreciation if the taxable person decides to treat these costs as technical appreciation rather than direct costs (section 29 paragraph 1 and 2 of the Slovak Income Tax Act).

Reconstruction is defined under section 29 paragraph 3 of the Slovak Income Tax Act No. 595/2003 Coll. as an alternation of tangible and intangible assets resulting in a change of the purpose of their use, qualitative change of their performance or technical parameters.

Modernization under section 29 paragraph 4 of the Slovak Income Tax Act No. 595/2003 Coll. as amended is an enlargement of facilities or usability of tangible and intangible assets by parts previously not included in the assets and these parts are inseparable from

the property. Inseparable parts are individual items which are destined for joint use with the key item and create with it one unit.

#### *1.1.2 Position under personal income tax legislation*

Same as the position under corporate income tax legislation.

### **1.2 Treatment of R & D expenditure as per general (non-incentive) provisions**

#### *1.2.1 Position under corporate income tax legislation*

Research costs are deductible as direct costs under the general rules set out by the Slovak Income Tax Act, i.e. these costs must relate to taxable income and be sufficiently documented (section 21 of the Income Tax Act).

Costs for acquiring new assets cannot be directly deducted from the taxable base (section 21 paragraph 1a of the Income Tax Act). Development costs relating to creation of new assets are to be activated as set out by the accounting legislation and depreciated over the relevant depreciation period during the useful life of the asset. Depreciation is considered as an allowable cost for tax purposes (section 19 paragraph 3a of the Income Tax Act). Technical appreciation cannot be taken as direct costs but can be depreciated with the key asset (section 21 paragraph 1g and section 19 paragraph 3a of the Income Tax Act).

Depreciation is deductible for tangible and intangible property that is used for business purposes and recorded in the accounting books of the business. Stock-in-trade is not depreciable.

#### *Rules for depreciation*

Under the Slovak Income Tax Act depreciation deductions can be claimed in respect of the property recorded in the books of the business as at the last day of the relevant taxable period. The property must be used to generate income. As a consequence, in the year of acquisition, taxpayers are entitled to the depreciation allowance for the entire year. When the property is sold or otherwise alienated during the taxable period, the owner cannot deduct the annual depreciation deduction. If tangible or intangible property is only partially used for business purposes, the amount of deductible depreciation is reduced to a proportionate amount based on the actual extent of the business use.

Depreciation deductions cannot be accumulated, carried back or carried forward.

The permitted depreciation methods are:

- the straight-line method; or
- the accelerated method.

A taxpayer may choose the depreciation method separately for each item, but may not change it during the life of the asset. For both methods, all depreciable assets must be classified into depreciation categories specified in the Slovak Income Tax Act, which are broadly based on the expected life of the asset. The categories are as follows:

Category 1 includes (depreciation period of 4 years):

- passenger cars, delivery vans and buses, bicycles;
- computers and printing machines;
- telecommunication equipment; and
- control systems for manufacturing processes.

Category 2 includes (depreciation period of 6 years):

- furniture;
- trucks, coaches, carts, tractors, cranes and aeroplanes;
- equipment for television and radio broadcasting; and
- assets not allocated to any specific category.

Category 3 includes (depreciation period of 12 years):

- buildings from prefabricated concrete;
- industrial machines and equipment used in specified industrial processes, e.g. steel tanks and furnaces;
- air conditioning;
- engines, boats and trains; and
- television and cable system lines.

Category 4 (depreciation period of 20 years):

- buildings and constructions not included in category 3.

Assets which do not fall into any of the above categories (a full list is included in Enclosure to the Slovak Income Tax Act) are treated as category 2 assets.

Intangible assets are depreciated in line with accounting depreciation over a period not exceeding 5 years. Assets leased under financial lease agreement are fully depreciated by the lessee using an equal portion of depreciation per each month of the lease arrangement.

The rates for both straight-line and accelerated depreciation depend on the classification of the assets. The owner chooses the method for each item, but may not change it over the life of the asset.

### **Straight-line depreciation method**

Under the straight-line method, the depreciation for every taxable year is determined by the following formula:

Amount of depreciation = acquisition price / depreciation period for the particular depreciation category (see below).

The annual depreciation rates applicable to tangible and intangible assets using the straight-line depreciation are defined as follows:

Depreciation Category	Annual rate
1	1 / 4
2	1 / 6
3	1 / 12
4	1 / 20

### **Accelerated depreciation method**

Under this method, depreciation is computed as follows:

- for the first year, the depreciation allowance is computed by dividing the price of the asset by the coefficient applicable to the depreciation category;
- in the second and following years, the book value (i.e. the original price of the asset less the total of depreciation allowances in the previous years) is first multiplied by two and then divided by the appropriate coefficient which has been reduced by the number of years the depreciation has already been taken.

Depreciation category	Coefficient for accelerated depreciation	
	First year	Subsequent years
1	4	5
2	6	7
3	12	13
4	20	21

#### *1.2.2 Position under personal income tax legislation*

Please refer to the position under corporate income tax legislation.

### **1.3 Territorialisation Issue**

#### *1.3.1 Position under corporate income tax legislation*

Costs incurred in the Slovak Republic and costs incurred abroad are allowed under the general principles set out by the Slovak Income Tax Act.



### *1.3.2 Position under personal income tax legislation*

Please refer to the position under corporate income tax legislation.

## **1.4 Pure research costs v. development costs**

### *1.4.1 Position under corporate income tax legislation*

Pure research costs are deductible under the general principles set out by the Slovak Income Tax Act. Development costs incurred with new assets are to be activated and depreciated over the relevant depreciation period as set out by the accounting legislation. Other development costs can be taken as direct expense. Technical appreciation is to be depreciated.

### *1.4.2 Position under personal income tax legislation*

Please refer to the position under corporate income tax legislation.

## **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

### *1.5.1 Position under corporate income tax legislation*

No specific relief is granted.

### *1.5.2 Position under personal income tax legislation*

Please refer to the position under corporate income tax legislation.

## **1.6 Cash refund, carry forward and carry back possibilities**

### *1.6.1 Position under corporate income tax legislation*

No. Only tax losses can be carried forward for five years.

### *1.6.2 Position under personal income tax legislation*

Please refer to the position under corporate income tax legislation.

## **2 Incentives for R & D expenditure**

### **2.1 Incentives under corporate/ personal income tax legislation**

Not available under the current Slovak income tax legislation.

## ***2.2 Incentives under wage tax legislation***

Not available under the current wage tax legislation.

## **Slovenia**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

The Corporate Income Tax Law (hereinafter: CITL) does not define research and development expenditure. However, Art. 11.3 of the new CITL, which will become effective on 1 January 2005, provides that the Slovene Accounting Standards (hereinafter: SAS) are to be applied in the determination of deductible costs. The same principle is applied under the current CITL.

Under SAS 2 (2002) (Para. 2.42), research expenditures are defined as the costs of investigation performed with the anticipation that new science and professional knowledge and understanding will accrue. The development expenditures are defined as the costs of transforming the results of research or knowledge into a production plan or project for a new or partly new product or service, prior to its manufacturing or sale.

##### *1.1.2 Position under personal income tax legislation*

Under Art. 35.2 of the new Personal Income Tax Law (hereinafter: PITL), which will become effective on 1 January 2005), income and costs of individual entrepreneurs are defined based on CITL provisions. Consequently, the rules as described under 1.1.1. apply. The same principle applies under the current PITL.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

Under SAS 2 (2002) provisions, which apply for income tax purposes, research expenditures are directly deductible in the year in which they are incurred.

Development expenditures are treated as long-term intangible assets and are subject to depreciation, provided that the following conditions are fulfilled:

- the application or the sale of the outcome of the development project may increase the competitive position of the entity;
- the entity intends to complete the project, and to apply or sale its results;
- the entity is capable of applying or selling the outcome of the project;
- the economical utility of the project is probable;

- the entity has technical, financial and other resources necessary to complete the project, and to apply or sell its outcome; and
- the entity has a capacity to measure the cost of intangible assets during the process of development.

The law does not provide for depreciation rates or a minimum depreciation period. Development costs are depreciated under the economic depreciation method, i.e. depreciation write-offs correspond to the actual fall in the value during useful period. If the actual fall in the value cannot be determined, a straight-line method must be applied.

Development expenditures that do not qualify as intangible assets are directly deductible in the year in which they are incurred.

#### *1.2.2 Position under personal income tax legislation*

See 1.2.1 above

### **1.3 Territorialisation Issue**

#### *1.3.1 Position under corporate income tax legislation*

SAS 2 (2002) does not distinguish between research and development expenditures incurred in Slovenia and abroad (see however 2.1 below for R&D incentives).

#### *1.3.2 Position under personal income tax legislation*

See 1.3.1 above

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

For the definition of both terms, see 1.1.1. For the tax treatment, see 1.2.1.

#### *1.4.2 Position under personal income tax legislation*

See 1.4.1 above

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1 Position under corporate income tax legislation*

Domestic tax law does not provide for any specific relief with respect to land or buildings used to carry out the research. For equipment, see 2.1 below.

### *1.5.2 Position under personal income tax legislation*

See 1.5.1 above

## **1.6 Cash refund, carry forward and carry back possibilities**

### *1.6.1 Position under corporate income tax legislation*

Domestic tax law does not allow for a cash refund. Losses may be carried forward for 5 years. Loss carry-back is not allowed.

### *1.6.2 Position under personal income tax legislation*

See 1.6.1 above

## **2 Incentives for R & D expenditure**

### **2.1 Incentives under corporate/ personal income tax legislation**

Under the current CITL (Art. 39), taxpayers may deduct from the taxable base an amount of 20% of the year's investment in any assets (except for motor vehicles). In addition, a 20% deduction is allowed for investments in equipment and long-term intangible assets. Long-term financial assets and leased assets do not qualify. The investment must be made in Slovenia. The deductible amount is limited to the taxable base. If the assets acquired are disposed of within 3 years, the appropriate deduction is recaptured.

Further, the current CITL allows taxpayers to set up an annual tax-free reserve of up to 10% of the taxable income calculated before the deduction of losses carried forward. The reserve must be used for investments in long-term assets or participations in resident legal entities. If the reserve is not so used within 4 years, the unused amount is added back to taxable income.

Under the new CITL, which will become effective on 1 January 2005, the investment incentive system has been changed. Art. 49(2) of the new CITL grants a 10% incentive for investments in equipment and long-term intangible assets. An additional 10% incentive is granted for investment in equipment for research and development purposes. Both investments must be made in Slovenia. The deductible amount is limited to the taxable base. If the assets acquired are disposed of within 3 years, the appropriate deduction is recaptured.

The incentives as presented above do not apply to individual taxpayers.

## **Spain**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

The Spanish Corporate Income Tax Law (TRLIS) provides, in its article 35, the following relevant definitions:

- Research: the original ascertainment and planning that pursues the discovery of a new knowledge and a greater understanding in the scientific or technological sphere.
- Development: the implementation of the results of the research or whatever other kind of scientific research for the manufacture of new materials or production systems, along with the substantial technological improvement of materials, products, processes or preexisting systems.

Additionally, the law also considers as R&D activities the materialization of the results of the research in a plan, scheme or design, along with the creation of the first non-marketable prototype and the initial demonstration projects or pilot projects.

The design and preparation of a collection of samples for the launch of new products, as well as the conception of advanced software is also included into research and development activity, where it entails significant scientific or technological progress through the development of new theorems or algorithms or through the creation of operating systems or new languages. Habitual or routine software-related activities are not included.

- Additionally, Spanish Law contains another concept: Technological Innovation (which also entitles the taxpayer to certain tax incentives (see section 2)), defined as: the activity whose result is the obtaining of new products or production processes or substantial meaningful technological improvements above and beyond those that are already existing. New products and processes are considered to be those whose features or applications are, from the technological viewpoint, substantially different from those previously existing. Such activity includes the materialization of new products or processes in a plan, scheme or design, along with the creation of the first non-marketable prototype and initial demonstration or pilot projects, provided that they are not converted into or used for industrial application or commercial use.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

R&D expenses are generally deductible without restrictions (art. 14 TRLIS). However, expenses on R&D activities carried out by a related party are deductible only if there is a previous written contract identifying the projects and entitling to the use of the results and the expenses are allocated on a rational basis depending on the rights to use those results.

As a rule, income and expenses must be consistently allocated to a financial period on an accrual basis (Art. 19 TRLIS). Expenses allocated in a later financial period will be allocated in the period that they were booked provided that they will not imply a lower taxation.

As regards the accounting treatment of R&D costs/expenditures they must be considered, as a general rule, as costs included in the profit/losses account of the financial period. They can only be capitalized and treated as intangible assets if:

- There is a materialization of the results of the R&D in a plan.
- There is a specific distribution and assignment of the expenses.
- There are expectations for success.
- There are expectations for profits and viability.
- There are enough financial means to cover the project.

Capitalized R&D expenses may be depreciated in a period not exceeding five years, unless they become patent rights that are required to be depreciated in a period not exceeding ten years. Depreciation allowances for assets acquired as a result of study and research are calculated on their cost less the amount already deducted (Art. 11 TRLIS). Additionally, Art. 11.2 TRLIS allows a free depreciation for tangible and intangible assets connected to the R&D&T activities, except for buildings, which can be depreciated in a period over ten years.

### ***1.3 Territorialisation Issue***

In general terms, the rules described above apply notwithstanding the fact that the cost/expenditure has been incurred abroad.

### ***1.4 Pure research costs v. development costs***

No distinction is made in this respect for tax purposes. The rules described above apply to both types of costs/expenditures. A distinction is however made for accounting purposes between basic research and development.

### ***1.5 Relief in respect of land, buildings and equipment used to carry out the research***

See incentives in section 2.1.

### ***1.6 Cash refund, carry forward and carry back possibilities***

Any cost/expenditure is deducted from the taxpayer's taxable income. If deductible expenses exceed taxable income, then the company will have derived a net operating loss. Net operating losses may be carried forward for 15 years. Losses must be carried forward and set off in the same order as incurred and booked into a separate intangible asset account indicating to which year(s) they relate. No carry-back is allowed (Art. 25 TRLIS).

There are anti-avoidance rules limiting the transfer of loss-making companies.

## **2 Incentives for R & D expenditure**

Spanish Law contains, in Art. 35 TRLIS, tax credits and incentives to enhance R&D& Technological Innovation activities.

### ***2.1 Incentives under corporate/ personal income tax legislation***

#### ***2.1.1 Qualifying R &D&T expenditure***

These incentives apply to R&D&T expenditures. The definitions of what Spanish Law understands as R&D&T expenses in view of the application of the tax incentives have been summed up in point 1.1.

In addition, it is necessary to establish the specific expenses that the Spanish Corporate Law includes in the concept of Technical Innovation as defined in point 1.1:

- Projects the execution of which is entrusted with universities, public research agencies or innovation and technology centres, recognized and registered as such under Royal Decree 2609/1996, of December 20.
- Industrial design and production process engineering, which includes the conception and preparation of plans, drawings, and media intended to define the descriptive elements, technical specifications and operating characteristics necessary for the manufacture, testing, installation, and use of a product.
- Acquisition of advanced technology in the form of patents, licenses, know-how and designs. Amounts paid to persons or entities related to the taxpayer shall not give the right to take the tax credit. The base in this connection may not exceed €1,000,000.
- Obtainment of a certificate of compliance with the quality assurance standards of the ISO 9000, GMP or like series, but excluding expenses relating to the implementation of such standards.

However there are some activities expressly excluded from the ambit of these tax credits under Art. 35 TRLIS:



- The activities that do not entail a meaningful scientific or technological innovation. In particular, the ordinary efforts to improve the quality of products or processes, the adaptation of a pre-existing product or production process to the specific requirements of a client, etc.
- Industrial production and provision of goods and services and its distribution is also excluded by the Law from the definition. In particular, the planning of the productive activity.
- The exploration of matters of social science and the exploration and research of minerals and hydrocarbons.

### 2.1.2 *Nature of the incentive*

The main features of these tax incentives for R&D activities are as follows:

- 30% of the expenses incurred in the tax period. If the expenses incurred in the research and development activities in the tax period are higher than the average of those incurred in the two preceding years, the rate established in the preceding paragraph shall apply up to that average, and 50% to the amount by which that average is exceeded.
- In addition to the tax credit applicable pursuant to the provisions of the preceding paragraphs, a tax credit of 20% of the amount of the following period expenses shall also be granted:
  - a) Personnel expenses of the entity relating to qualified researchers assigned solely to R&D activities.
  - b) Expenses relating to R&D projects arranged with universities, public research agencies or innovation and technology centres, recognized and registered as such under Royal Decree 2609/1996, of December 20, governing Innovation and Technology Centres.
- 10% of investments in tangible fixed assets and intangible assets, excluding real estate and land, provided that they are connected to R&D activities.

In determining the tax credit base, the amount of R&D&T expenses shall be reduced by 65% of the subsidies received to encourage those activities and allocable as a revenue in the tax period.

Additionally, tax credits for Technological Innovation, as it has been defined in point 1.1, are:

- 15% for projects entrusted to universities.
- 10% for the rest.

Those tax credits offset the corporate income tax payable of the year up to 35% of the amount of the gross corporate income tax liability (i.e. the liability after the application of international double tax credits but before application of any other credit or prepayment). This ceiling may be increased to 45% where the R&D&T credit exceeds 10% of the gross corporate tax liability. Any excess over the ceilings may be carried forward over 15 years.

### *2.1.3 Restrictions (based on eligibility criteria)*

Incentives are available for all types (sizes) of companies. Pursuant to current law and the tax authorities' interpretation, the R&D&T tax credit established under Spanish legislation is available even if:

- The R&D&T costs have been rebilled to a resident or nonresident third party, or
- The R&D&T activity is partly carried on abroad (limited to 25% of total project expenses) but the costs are borne by the Spanish resident company. (Territorialization issue)

No other particular restrictions apply.

### *2.1.4 Cash refund, carry forward and carry back possibilities*

See 2.1.2 above.

### *2.1.5 Compliance verification*

The verification of the fulfillment of the R&D&T requirements is usually done during tax audits. However, in order to the application of the incentives described, companies planning to incur in R&D&T expenses are able to:

- Apply to the Ministry of Industry for a certificate related to the compliance of the requirements for the application of the incentives. This certificate is binding for the tax authorities.
- Request for a binding ruling from the tax authorities about the interpretation and application of the incentives.
- Require the tax authorities for an advance agreement on the R&D&T expenditures.

## **2.2 Incentives under wage tax legislation**

None, but there are incentives for individual non-residents who move its residence to Spain ("impatriados").

## Sweden

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

Under Ch. 16, Sec. 9 Income Tax Law (IL) an enterprise is entitled for current deductions for R&D expenses that have, or may in the future have, consequences for the trade or business of the enterprise. A current deduction is also granted in respect of expenses incurred for obtaining information on such R&D.

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

R&D costs include all expenses in connection with basic research, applied research and development work. Basic research is an original investigation undertaken with the hope of gaining new scientific or technological knowledge and understanding. Applied research is a planned investigation undertaken with the hope of gaining new scientific or technological knowledge and understanding. Development is the translation of research findings or other knowledge into a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services prior to the commencement of commercial production (Sec. 9 Swedish Accounting Standards Board, Recommendation 1 (BFN R 1))

R&D costs include all direct costs such as salaries, wages and other related costs of personnel engaged in R&D activities and the cost of materials and services used in R&D activities. R&D costs also include all indirect costs such as overhead costs related to the R&D activities. Further, the R&D costs include depreciation of equipment and facilities to the extent that they are used for R&D activities and other costs related to R&D activities, such as amortization of patents and licences (Sec. 11 BFN R 1).

##### *1.1.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

Swedish tax law does not contain specific amortization rules for R&D expenses. However, income from business must be computed in accordance with accounting principles, unless the tax law provides otherwise. In practice, this means that R&D expenses normally are deducted on a current basis and not deferred.

The BFN R 1 regulates the right to amortize on R&D expenses. R&D expenses may be deferred to future periods if all of the following criteria are satisfied (Sec. 13a-e BFN R 1):

- the product or process is clearly defined and the costs attributable to the product or process can be separately identified;
- the technical feasibility of the product or the process has been demonstrated;
- the management of the enterprise has indicated its intention to produce and market, or use, the product or process;
- there is a clear indication of a future market for the product or process or, if it is to be used internally rather than sold, its usefulness for the enterprise can be demonstrated; and
- adequate resources exist, or are reasonably expected to be available, to complete the project and market the product or process.

The effect of the above restrictions is that expenses incurred in connection with basic research, i.e. an original investigation undertaken with the goal of gaining new scientific or technological knowledge and understanding, cannot be deferred (Sec. 14 BFN R 1).

The deferral of R&D expenses is limited to the amount of expenses that can be reasonably expected to be recouped from related future revenues or future cost reductions. R&D that has been expensed during earlier years cannot be deferred retroactively later on (Sec. 14 BFN R 1).

Ch. 18, Sec. 1 IL regulates the taxpayer's right to amortize R&D expenses. The right to amortize R&D expenses follows the rules on depreciation of machinery and equipment. Deferred R&D expenses are therefore generally depreciated in accordance with the commercial accounts of the enterprise as described below. The main rule is declining-balance depreciation (*räkenskapsenlig avskrivning*). A supplementary rule provides for a straight-line depreciation. The most favourable method may be selected for each income year.

In order to be allowed to use the declining-balance method or the supplementary rule, the enterprise must, inter alia, satisfy the following conditions:

- the enterprise must keep proper accounting records, including an annual statement of profits and losses (Ch. 18, Sec. 14 IL);
- the depreciation charged for tax purposes must be equal to the depreciation charged in the commercial accounts (Ch. 18, Sec. 14 IL); and
- if the enterprise was not required to prepare annual accounts and is subsequently converted into an enterprise that is required to prepare such accounts, the value of an asset, for depreciation purposes, should be the tax value the asset had at the time of the conversion (Ch. 18, Sec. 20 IL).

Under the main rule, annual depreciation is calculated, in accordance with the commercial accounts, as a percentage of the total amount of the aggregated book value of all qualifying assets at the beginning of the tax year, plus the cost of acquisition of

qualifying assets purchased during the year that are still a part of the business at the end of the year, less the consideration received for assets sold or destroyed during the year (Ch. 18, Sec. 13 (1) IL). The maximum rate of depreciation by way of this method is 30% (Ch. 18, Sec. 13 (2) IL).

Assets purchased and resold during the same year may be fully written off in the year of purchase, but the proceeds of sale are included in the taxable profit (Ch. 18, Sec. 5 IL). Under the declining-balance method, the value of depreciable assets never reaches zero. Thus, the enterprise's depreciable assets constantly diminish, unless new assets are acquired. In order to eliminate this disadvantage, a supplementary rule can be used whereby the assets are classified by year of acquisition, and a 20% annual straight-line depreciation is applied to each asset (Ch. 18, Sec. 17 IL). If the total book value of the assets calculated under this alternative rule is below the book value as calculated under the main rule, the lower amount may be taken as the value of the assets in the balance sheet. It is important to realize that both the main and the supplementary rules are optional; at the end of the year, the company may elect which method to apply. The selected method must be applied uniformly to all assets.

Finally, if the enterprise can demonstrate that the market value of the assets is lower than the net book value after depreciation under the supplementary rule, excess depreciation may be claimed so that the value for tax purposes does not exceed the highest acceptable value under the Swedish Generally Accepted Accounting Principles (GAAP).

The "depreciation on the basis of depreciated book value" (*restvärdesavskrivning*) is the only method available to an enterprise that does not satisfy the conditions for the application of depreciation in accordance with the commercial accounts, as described above. However, this form of depreciation is generally similar to the declining-balance method under the main rule, the only major difference being that under this method the annual depreciation is limited to 25% of the depreciated book value instead of 30%. Also, under this method, depreciation taken for tax purposes need not be equal to the depreciation taken in the commercial accounts. The supplementary rule (20% straight-line annually) does not apply.

The same methods and rates are used for other (non R&D expenditure, e.g. acquisition cost of patents, licenses, trademarks, goodwill and similar rights).

Under the accounting depreciation rules (Ch. 4, Sec. 4 Law on Annual Accounting (ÅRL)), research and development costs should be written off over a period of maximum 5 years, unless a longer period can be established with reasonable certainty.

### *1.2.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

### **1.3 Territorialisation Issue**

#### *1.3.1 Position under corporate income tax legislation*

Eligible costs are deductible regardless of whether incurred within Sweden or abroad.

#### *1.3.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

There is no distinction made between ‘pure’ research costs and development costs.

#### *1.4.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1 Position under corporate income tax legislation*

There is no relief available in respect of land, buildings and equipment used to carry out the research.

#### *1.5.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax legislation.

### **1.6 Cash refund, carry forward and carry back possibilities**

#### *1.6.1 Position under corporate income tax legislation*

Losses may be carried forward indefinitely. They must, however, be deducted from profits as soon as a profit is available (Ch. 40, Sec. 2 IL). There is no possibility of getting cash refund.

#### *1.6.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax law.

## **2 Incentives for R & D expenditure**

Currently, there are no special tax incentives or reliefs available in Sweden in respect of research and development expenses.

## The Netherlands

### 1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation

#### 1.1 Definition of R & D costs/expenditure

##### 1.1.1 Position under corporate income tax legislation

A definition for research and development (R & D) costs was introduced in 1993.<sup>76</sup> The law defines R & D activities as systematically organized activities carried out in the Netherlands, which are directly and exclusively aimed at technical-scientific research or the development of listed technical new products. The listed products are<sup>77</sup>:

- 1) innovative physical products;
- 2) parts of innovative physical products;
- 3) physical production processes;
- 4) parts of physical production processes;
- 5) software; or
- 6) parts of software

The research or development must take place by or for an enterprise involved in R & D activities which is obliged to withhold wage tax or by a sole entrepreneur subject to income tax.<sup>78</sup>

R & D activities do not include market research, organizational and administrative activities.<sup>79</sup>

Restrictions to the definition of R & D activities are set by a defining Regulation<sup>80</sup> This regulation, as amended (text 2004), indicates that R & D activities do not include the following activities:

- 1) the analysis and development of services;
- 2) maintenance of software and enhancing existing software to make it equipped for an existing hardware or software-platform (i.e. the hardware and processing mechanism).
- 3) the manufacturing and construction of equipment or software for use in practice;

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<sup>76</sup> Law for the advancement of R & D activities (*Wet Bevordering Speur- en Ontwikkelingswerk*) of 28 April

1994, which applies retroactively from 1 January 1994.

<sup>77</sup> Art. 1(1)(n) of the law for the advancement of R & D activities.

<sup>78</sup> Art. 1(1)(l) and Art. 1(1)(m) of the law for the advancement of R & D activities.

<sup>79</sup> Art. 1(3)(a) to (c) of the law for the advancement of R & D activities.

<sup>80</sup> Art. 1 Regulation to define R & D activities of 1997.



- 4) activities with respect to the introduction or input and adaptation of (parts of) technology, products and processes or software purchased or to be purchased;
- 5) research concerning the existence of minerals;
- 6) the exercise of policy and strategic studies;
- 7) the organisation of courses, education and symposia;
- 8) the analysis and evaluation of existing production processes, if there is no direct relation with R & D activities;
- 9) comparative research concerning products, if there is no direct relation with R & D activities ;
- 10) modification of merely the design and size of products or software;
- 11) quality control, other than the direct control of R & D activities carried out and quality guarantee;
- 12) the processing of architectural and installation technical designs on the basis of existing techniques;
- 13) preparation and carrying out of production;
- 14) the building of a pilot-plant on production scale, or a prototype with a productive or commercial significance;
- 15) additional activities carried out by a company involved in R & D which is obliged to withhold wage tax or a taxpayer involved in R & D activities, which in itself do not qualify as R & D activities;
- 16) activities with respect to the adoption or modification of existing products or processes which is not significant from technological point of view; and
- 17) activities with respect to the development or adoption of methods of preparation and the compilation of a new product, which do not result in a technical new function principle of the product concerned.

### *1.1.2 Position under personal income tax legislation*

The definition and restrictions described under 1.1.1. also apply for personal income tax purposes.

## **1.2 Treatment of R & D expenditure as per general (non-incentive) provisions**

### *1.2.1 Position under corporate income tax legislation*

Research and development costs are fully deductible as normal business expenses, provided that they do not constitute a hidden profit distribution and are not in conflict with the arm's length principle.<sup>81</sup> Accounting law differs in this respect from tax law. Under accounting law, research and development costs may be booked as an intangible fixed asset if they will yield returns for the company in future.<sup>82</sup>

### *1.2.2. Position under personal income tax legislation*

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<sup>81</sup> Art. 9 Corporate Income Tax Act.

<sup>82</sup> Art. 365, Title 9, Book 2 of the Civil Law Code concerning the annual accounts and the annual report.

Research and development costs are fully deductible as normal business expenses, provided that they are not in conflict with the arm's length principle.<sup>83</sup> Accounting law differs in this respect from tax law. Under accounting law research and development costs may be booked as an intangible fixed asset if they will yield returns for the company in future.

### **1.3 Territorialisation Issue**

#### *1.3.1 Position under corporate income tax legislation*

Companies are taxed on their worldwide income.<sup>84</sup> The term "business profits" is defined as the total sum of any type of profit and gain realized in conducting a business. Basically, corporate income tax is imposed on the worldwide income less allowable deductions during the entire period of tax liability of the company.<sup>85</sup> Those deductions include foreign R & D costs.

#### *1.3.2 Position under personal income tax legislation*

The position is the same as for the corporate income tax.

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

No such distinction is made.

#### *1.4.2 Position under personal income tax legislation*

No such distinction is made.

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1 Position under corporate income tax legislation*

No special relief is available in respect of land, buildings and equipment used to carry out the research. The normal depreciation rules apply. In general, commercial and industrial buildings are depreciated under the straight-line method. The depreciable base is the historical cost price less residual value. Land as such is not depreciable. The depreciation rates are determined by the circumstances, but, in general, the rate for commercial buildings is 2%; for industrial buildings, the rates range from 2% to 3%.

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<sup>83</sup> Art. 3.25 Income Tax Act.

<sup>84</sup> Art. 8 Corporate Income Tax Act.

<sup>85</sup> Art. 3.8. Income Tax Act.

Plant, machinery and equipment are generally depreciated under the straight-line method. The depreciable base in general is the historical cost price.

The depreciation rates are determined by the circumstances. In general, the following annual depreciation rates under the straight-line method are accepted:

- plant and machinery: 10% to 20%;
- office equipment: 10% to 33.3%
- personal computers: 25% to 33.3%; and
- cars: 20%.

In certain situations degressive depreciation or accelerated depreciation might be available as described under the incentives.

#### *1.5.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax.

### **1.6 Cash refund, carry forward and carry back possibilities**

#### *1.6.1 Position under corporate income tax legislation*

Losses can be carried back three years and carried forward for an indefinite period. It is not possible to obtain a carry forward or carry back for R & D incentives which cannot be used in a certain year.

#### *1.6.2 Position under personal income tax legislation*

The position is the same as under the corporate income tax.

## **2 Incentives for R & D expenditure**

### **2.1 Incentives under corporate/personal income tax legislation (Research and development deduction (Aftrek voor speur- en ontwikkelingswerk))**

#### *2.1.1 Qualifying R & D expenditure*

The R & D deduction applies to all R & D activities if the criteria described under 2.1.3. are met. No distinction is made between research and development. Furthermore, the incentive does not depend on the type of costs made. No incentive applies with respect to land, buildings and equipment.

#### *2.1.2 Nature of the incentive*

An entrepreneur who spends 625 hours or more per year on research and development, which is stipulated as qualifying R&D activity through an R&D-clarification issued by

the Ministry of Economic Affairs, can deduct an additional amount of EUR 11,000, besides the incentives available for entrepreneurs<sup>86</sup>. For individuals who were not entrepreneur in one or more years during the last 5 years and have not claimed this deduction more than twice in that period, the deduction may be increased by EUR 5,500.<sup>87</sup> Former shareholders of a corporation who continue a business after conversion of the corporation into a sole entrepreneurship or partnership are, however, not entitled to this increased deduction.<sup>88</sup> If the employees of a subsidiary and the employees of the subsidiary's holding company carry out R&D activities, both companies have to request an R&D declaration.

The incentive is not volume-based, i.e. dependent on the level of R & D expenditure.

None of the incentives provides for a deduction of R & D costs.

The only incentive to which a maximum deduction applies, is the wage tax incentive described below.

### *2.1.3 Restrictions (based on eligibility criteria)*

The restrictions for the Research and Development deduction incentive are<sup>89</sup>:

- 1) the incentive only applies to a sole proprietorship, and not to a corporation;
- 2) the incentive is not granted to entrepreneurs who spend less than 625 hours on R & D activities in the Netherlands;
- 3) the increased deduction is not available to entrepreneurs who were entrepreneur for more than 4 years in the last five years and who obtained an R&D declaration with respect to more than two years; and
- 4) the increased deduction is not available after the conversion of a corporation into a sole entrepreneurship.

The activities must be carried out in the Netherlands.

### *2.1.4 Cash refund, carry forward and carry back possibilities*

The deduction facility is only available if the entrepreneur makes a profit. Otherwise, the incentive is lost for the year concerned because no carry forward or carry back is possible. However, the wage and social security premium reduction facility, described below, can be carried forward for the part not yet used after the wage tax and/or social security premium was reduced to zero.<sup>90</sup>

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<sup>86</sup> Art. 3.77 Income Tax Act.

<sup>87</sup> Art. 3.77(2) Income Tax Act.

<sup>88</sup> Art. 3.77(2) Income Tax Act.

<sup>89</sup> Art. 3.77 Income Tax Act.

<sup>90</sup> Art. 1b of the Implementation regulation for wage withholding and social security premiums.

### 2.1.5 Compliance verification

In order to apply the deduction facility and the wage tax facility described below the entrepreneur has to request an R & D declaration (*Speurwerk & Ontwikkeling (S&O)-verklaring*) in advance which stipulates that he will meet the criteria. An R & D declaration can be obtained from a special department of the Ministry of Economic Affairs (*Senternovem* department). The request for such a declaration must be filed at least 4 weeks prior to the beginning of the calendar year (or half calendar year) during which the R & D activities will be initiated.

## 2.2 Incentives under wage tax legislation

### 2.2.1 Nature of the incentive

Reduction of payment obligation concerning wage withholding tax and general social security premiums (*Afdrachtsvermindering loonbelasting en premies volksverzekeringen*).

The facility applies to entrepreneurs:

- 1) whose employees are directly engaged in carrying out R & D activities; and
- 2) individuals supplying independent services if they employ employees carrying out R & D activities.

In addition, the facility is available to institutions, not carrying out entrepreneurial activities, which carry out R & D activities for a Dutch company, a cooperation between several Dutch companies or a Dutch trading association or commodity board.

The reduction amounts to 42% of the first EUR 110,000 of the total salaries of such employees and 14% on any excess (for 2004). The maximum annual reduction per employer is EUR 7,941,154 (for 2004)<sup>91</sup>. With respect to companies included in a so-called fiscal unity (tax-consolidated group) the maximum annual reduction applies to the entire fiscal unity. For employers (companies or individuals) who employed employees during a maximum of 4 years during the last five years and who obtained an R&D declaration with respect to at the maximum 2 years during those 5 years, the reduction is increased to 60% of the first EUR 110,000 of the total salaries of such employees and 14% on any excess (for 2004).<sup>92</sup>

For the determination of the relevant R & D wage, the employer may choose between the following methods:

- 1) the actual R & D wage method, under which the reduction is based on the actual wage; and
- 2) the simplified method to determine the R & D wage, under which the R & D wage is calculated by means of the following formula:

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<sup>91</sup> Art. 21(1) Reduction for wage withholding and social security premiums.

<sup>92</sup> Art. 21(2) Reduction for wage withholding and social security premiums.

Hours spent on R&D activities

----- \* the annual employment income  
Annual total number of hours actually worked

The deduction is applied pro rata for the months not yet past at the moment on which the R & D declaration was received. E.g. if the declaration was received in January, the deduction is 1/12 per month and if the declaration was received in August the deduction is 1/5 per month.

### 2.2.2 *Qualifying R & D expenditure*

The wage tax and social security premium reduction is not dependent on the type of R & D costs. If a company conducts qualifying R & D activities and has obtained the R&D declaration from the Ministry of Economic Affairs, a reduction of wage withholding tax is available for salaries paid to employees performing these activities.

### 2.2.3 *Restrictions based on eligibility criteria*

The qualifying R & D activities must be systematically organized and carried out in the Netherlands and must be directly and exclusively aimed at technical research and scientific research on new technical tangible products, production processes or software.

The maximum annual reduction per employer is EUR 7,941,154 (2004).<sup>93</sup>

### 2.2.4 *Compliance verification*

The reduction may be applied after having obtained an R & D declaration from the Ministry of Economic Affairs (*Senternovem* department). The request for such a declaration must be filed at least 4 weeks prior to the beginning of the calendar year (or half calendar year) in which the R & D activities will be initiated.<sup>94</sup> Furthermore, the entrepreneur has to keep a project and hour administration, which must, for each working day contain the following information<sup>95</sup>:

- 1) the total number of hours an employee carrying out R & D activities has worked during a day;
- 2) a registration of how many of those hours were spent on R & D activities; and
- 3) a registration of how many hours an employee spent on which project/part of a project;

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<sup>93</sup> See note 14.

<sup>94</sup> Arts. 22 and 24 Reduction for wage withholding and social security premiums.

<sup>95</sup> Arts. 22(7) and 25 Reduction for wage withholding and social security premiums and Implementation regulation administrative requirements R & D deduction of 14 May 2003, published in the Official Gazette 2003, 96 and Art. 3 to 6 Implementation regulation for the reduction of wage withholding and social security premiums.

Entrepreneurs also must keep a project administration, which describes the nature and content of the activities, and the progress made in relation to purpose, phase and time schedule of the project.

In addition, the administration has to contain the following information:

- 1) the R & D declaration;
- 2) copies of the request(s);
- 3) the names of the employees involved in R & D activities, for each separate project;
- 4) the amount of salary each employee has received for R & D activities per project; and
- 5) a calculation of the wage withholding and social security premium reduction.

The entrepreneur must file a return indicating the total wage related to the R&D activities, the amount of the R&D reduction and the amount of temporary reductions applied during the previous calendar year within four months after the end of the calendar year. The return counts as a request for repayment and the repayment of the amount counts as a decision to which the entrepreneur can file an objection.

Finally, substantiating documents have to be kept such as employment notes, hour records, administration of holidays, agenda's etc. This information may be requested by the tax administration.

The hour and project administration has to be finalised within 2 months following the quarter in which the activities took place. An hour record form can be downloaded from [www.senter.nl/wbso](http://www.senter.nl/wbso).

If the documentation requirements are not met, the reduction may be decreased or the R & D Declaration may be withdrawn. If the declaration is withdrawn, an assessment must be filed with the tax administration. The tax administration will issue an assessment, which may be enhanced by a penalty.

The described documentation must be maintained for 7 years.

Requests for an R&D declaration must be filed at least 4 weeks prior to 1 January or 1 July. Consequently, the requests with respect to the year 2005 must be filed at the latest by 3 December 2004. Requests with respect to the second half-year must be filed by 2 June 2005.

## **United Kingdom**

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

Whether activities are R&D is decided by reference to generally accepted accounting principles (GAAP), e.g. Statement of Standard Accounting Practice (SSAP) 13, subject to the power of the Treasury to prescribe activities that are or are not to be treated as R&D activities (s 837A ICTA 1988). For this purpose the Department of Trade & Industry (DTI) has issued “Guidelines on the meaning of R&D for tax purposes” which are binding for tax purposes (SI 2000/2081).

The definition in SSAP 13 is itself based on the “Frascati” definition used by the OECD for the purposes of R&D surveys. Qualifying R&D must be:

- pure research – to acquire new scientific or technical knowledge for its own sake;
- applied research – to gain new information directed at a specific practical objective; or
- development – using scientific or technical knowledge to produce new or improved materials, products or devices.

The following activities are not R&D activities:

- research in the social sciences, arts or humanities, except where it forms an integral part of the R&D;
- quality control routine testing and analysis;
- cosmetic or stylistic alterations to existing products;
- operational research such as management or efficiency studies;
- corrective action regarding breakdowns in commercial production;
- legal and administrative work concerning patent applications, and the protection, sale or licensing of patents;
- the construction, relocation or rearrangement of facilities or equipment which is not to be used wholly and exclusively for R&D activities;
- market research, testing or development, or sales promotion;
- exploring or drilling for minerals, oil or gas;
- scientific and technical information services unless they form part of a larger R&D project;
- routine computer maintenance and software development;
- routine medical care;
- the commercial and financial steps necessary for the marketing, production or distribution of new or improved products or services;
- administration and support services which are not undertaken wholly and exclusively in connection with R&D activities.



Software can qualify as R&D either as the object of the R&D or as the means to achieve the R&D.

Whether activities constitute R&D is ultimately referred to the Secretary of State for Trade & Industry for a final decision.

#### *1.1.1 Position under corporate income tax legislation*

R&D allowances (previously called scientific research allowances) are available for capital expenditure on R&D that is related to a trade carried on or to be carried on S 439 Capital Allowances Act (CAA) 2001).

Qualifying capital expenditure includes expenditure incurred on facilities for carrying out R&D work, including buildings (but not the land element) and plant or machinery forming part of a building. Expenditure on the acquisition of rights in or arising out of R&D does not qualify (s 438 CAA 2001).

Eligible activities also include oil and gas exploration and appraisal (s 437 CAA 2001).

#### *1.1.2 Position under personal income tax legislation*

R&D allowances can also be claimed for personal income tax purposes by individuals carrying on a trade, but not by those carrying on a profession.

### **1.2 Treatment of R & D expenditure as per general (non-incentive) provisions**

#### *1.2.1 Position under corporate income tax legislation*

The R&D allowance for capital expenditure takes the form of accelerated (tax) depreciation of the eligible costs at the rate of 100% of the expenditure (s 441 CAA 2001).

Revenue expenditure on R&D is allowable as a deduction in computing the profits of a trade (S 82A ICTA 1988; s 68 & Sch 19 FA 2000).

Similar relief is given for amounts paid to a scientific research association (SRA) pursuing scientific research related to the trade, or to an approved university or similar institution. For this purpose scientific research is defined as natural or applied science for the advancement of knowledge. The SRA or university must be approved by the Secretary of State for Trade & Industry (s 82B ICTA 1988).

#### *1.2.2 Position under personal income tax legislation*

See 1.2.1 above.

### **1.3 Territorialisation Issue**

#### *1.3.1 Position under corporate income tax legislation*

Although the legislation does not include a requirement that the research be carried on in the UK, the approval process for research outsourced to SRAs tends to favour use of facilities and institutions in the UK.

#### *1.3.2 Position under personal income tax legislation*

See 1.3.1.

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

There is a distinction for accounting purposes between pure research and development, but this is not explicitly stated in the tax law. However, development costs are less likely to qualify for R&D if they do not advance knowledge.

#### *1.4.2 Position under personal income tax legislation*

See 1.4.1.

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1 Position under corporate income tax legislation*

Capital expenditure on buildings and equipment, but not land, can qualify for R&D allowances (s 440 CAA 2001).

#### *1.5.2 Position under personal income tax legislation*

See 1.5.1.

### **1.6 Cash refund, carry forward and carry back possibilities**

R&D expenditure is not eligible for cash refunds. Eligible capital and revenue expenditure is taken into account in computing the profit or loss of the trade. The rules for utilising trading losses of companies differ from those for individuals (see below).

#### *1.6.1 Position under corporate income tax legislation*

Trading losses can be used to:

- offset other profits of the company in the same year (s 393 (2) Income and Corporation Taxes Act (ICTA) 1988);
- offset profits of other group companies in the same year (s 403 ICTA 1988);
- offset profits of the company in the previous year (s 393 (2) ICTA 1988);
- offset profits of the company from the same trade in future years without any time limit for their use (s 393 (1) ICTA 1988).

### *1.6.2 Position under personal income tax legislation*

Trading losses can be used to:

- offset other income of the individual in the same year (S 380(1) ICTA 1988);
- offset income of the individual in the previous year (s 380 (2) ICTA 1988);
- offset profits of the individual from the same trade in future years without any time limit for their use (s 385 ICTA 1988).

## **2 Incentives for R & D expenditure**

### *2.1 Incentives under corporate/ personal income tax legislation*

There is no general scheme of investment tax credits in the UK. However, a special scheme for revenue expenditure on R&D by companies was introduced in 2000, and subsequently amended in 2002 and 2004. The scheme only applies for the purposes of corporate income tax. There are currently three different schemes of relief:

- large company scheme (s 53 & Sch 12 FA 2002) for expenditure incurred after 31 March 2002;
- small and medium-sized company (SME) scheme (s 69 & Sch 20 FA 2000; Sch 15 FA 2002) for expenditure incurred after 31 March 2000;
- vaccine research scheme (s 43, Sch 13 & 14 FA 2002) available to all companies for expenditure incurred after 21 April 2003.

The vaccine research scheme was implemented following EC state aid approval.

There are no specific R&D incentives under personal income tax legislation.

#### *2.1.1 R & D Tax Credit*

##### *2.1.1.1 Qualifying R & D expenditure*

The general rules for determining what constitutes R&D apply (see 1.1 above), subject specific additions or exclusions. Oil and gas exploration and appraisal are excluded from the relief.

In the original legislation eligible expenditure was generally restricted to labour costs and consumable stores (i.e. materials and equipment used up in the R&D activity). Eligible labour costs were originally limited to in-house directors and employees directly and

actively engaged in R&D. The Finance Act 2003 extended the relief to externally provided workers who are similarly engaged in R&D. The Finance Act 2004 further amended the rules to enable relief to be claimed for the cost of software licences, power, fuel and water used for these purposes, with effect for large companies from 1 April 2004 and for smaller companies as soon as state aid approval has been obtained from the European Commission.

#### *2.1.1.2 Nature of the incentive*

SMEs which spend a minimum of GBP 10,000 a year on qualifying R&D expenditure can qualify for a tax credit of 50% of the expenditure. This increases the general 100% relief for R&D spending to 150%. SMEs that have no profits can carry the relief forward for offset against future corporation tax liabilities or surrender their R&D losses in return for payment of a tax credit equal to 24% of the cash cost of the qualifying R&D. The maximum credit which may be claimed is limited to a company's pay-as-you-earn and social security contributions for a period. The definition of SMEs is linked to the definition used by the European Commission for state aid purposes. SMEs are allowed to claim the large company relief (see below) where they are not entitled to the SME credit as a result of receiving state aid or another subsidy.

Large companies can claim a deduction of 125% of R&D expenditure (Sch 12 FA 2002). The relief is based on the above-mentioned relief for SMEs.

Both large companies and SMEs incurring expenditure on the research and development of vaccines against tuberculosis, malaria, HIV and AIDS to a deduction of an additional 50% of the qualifying expenditure. Thus, for example, if a large company incurs qualifying R&D expenditure on vaccine research it can claim a deduction equal to 175% of the qualifying expenditure.

#### *2.1.1.3 Restrictions (based on eligibility criteria)*

The credit is available for research and development undertaken inside and outside of the United Kingdom.

See 2.1.2. for the distinction between the relief for large companies and the relief for SMEs.

Where R&D work is outsourced, the rules provide that:

- large companies can claim a 125% deduction for expenditure on work subcontracted to, or contributions to fund R&D by, tax exempt bodies (e.g. hospitals, universities, SRAs and charities) but not for work outsourced to other companies;
- SMEs can claim a 150% deduction for expenditure on work subcontracted to such bodies, to other SMEs or to large companies;

- SMEs can claim a 125% deduction for expenditure on work subcontracted to them by such bodies or by a government agency or a large company;
- large companies and SMEs can claim a 150% deduction for expenditure on vaccine research subcontracted to, or contributions to fund vaccine research by, such bodies.

For these purposes the charity or SRA must be established in the UK, but there is no similar restriction in the case of universities.

In the case of SMEs only, the intellectual property rights arising from the R&D must vest in the SME.

#### *2.1.1.4 Cash refund, carry forward and carry back possibilities*

Only SMEs can claim a cash refund (see 2.1.2 above).

Expenditure qualifying for an enhanced deduction is taken into account in computing the profit or loss of the trade. For the rules for using trading losses see 1.6.1 above.

#### *2.1.1.5 compliance verification*

Corporation tax and income tax on self-employed traders are self-assessed taxes. R&D relief is claimed by the taxpayer when filing their annual tax return and accounts. The tax office dealing with the relevant taxpayer can initiate enquiries into any reliefs claimed in the return.

The legislation incorporates anti-avoidance provisions targeting arrangements to enable a company to claim R&D relief to which it would not otherwise be entitled.

## **2.2 Incentives under wage tax legislation**

There are no specific R&D incentives under wage tax legislation.

## **United States of America**

The US Internal Revenue Code (IRC) provides tax incentives for research and development expenditures as follows:

Qualified R&D expenditures can be deducted in the year incurred by the taxpayer or, if the taxpayer elects, can be amortization over a period of not less than 60 months (IRC § 174);

A 20% tax credit can be claimed by taxpayers who increase R&D expenditures (IRC § 41(a)(1));

A 20% tax credit can be claimed by taxpayers who increase basic research, i.e., pure research (IRC § 41(a)(2)); and

A 50% tax credit can be claimed for clinical drug testing for rare diseases and medical conditions (IRC § 45C).

The texts of these sections are attached at the end of this report. These sections apply to R&D expenditures incurred by both corporations and individuals except for the 20% credit for basic research, which can be claimed only by corporations.

### **1 Relevant General Tax Provisions under Corporate/ Personal Income Tax Legislation**

#### ***1.1 Definition of R & D costs/ expenditure***

##### *1.1.1 Position under corporate income tax legislation*

The definition of R&D expenses is discussed below under the incentive provisions.

##### *1.1.2 Position under personal income tax legislation*

The definition of R&D expenses is discussed below under the incentive provisions.

#### ***1.2 Treatment of R & D expenditure as per general (non-incentive) provisions***

##### *1.2.1 Position under corporate income tax legislation*

Taxpayers who do not elect to deduct R&D expenditures as described in 2.1.1. below will be required to capitalize the R&D expenditures during the development period for the new product or new technology. This results from the general rule of the IRC that expenditures for assets with a useful life that extends beyond the close of the taxable year must be capitalized. IRC § 263. If the research is not successful, i.e., if there is no new

product or technology that can be used by the taxpayer, the R&D expenditures can be deducted at the time the research effort is abandoned. If the research is successful, the R&D expenditures will represent part of the capital acquisition cost of the new product or technology and can be recovered by depreciation or amortization deductions over the expected lifetime of the new product or technology.

#### *1.2.2 Position under personal income tax legislation*

Same rules apply to individuals as to corporations.

### **1.3 Territorialisation Issue**

#### *1.3.1 Position under corporate income tax legislation*

In the non-incentive context, there is no restriction on the place where the R&D is performed, whether within in the United States or in a foreign jurisdiction.

#### *1.3.2 Position under personal income tax legislation*

In the non-incentive context, the same rules apply to individuals as to corporations.

### **1.4 Pure research costs v. development costs**

#### *1.4.1 Position under corporate income tax legislation*

In the non-incentive context, there is no distinction between pure research costs and development costs.

#### *1.4.2 Position under personal income tax legislation*

In the non-incentive context, the same rules apply to individuals as to corporations.

### **1.5 Relief in respect of land, buildings and equipment used to carry out the research**

#### *1.5.1 Position under corporate income tax legislation*

In the non-incentive context, commercial real property can be depreciated on a straight-line basis over a period of 39 years. In the case of equipment, depreciation is permitted on a straight-line or accelerated basis that depends on the type of property. IRC §§ 167-168. The depreciation period is normally 3, 5, or 7 years, and the maximum rate of depreciation allowed is 200% of the declining basis of the property, i.e., 200% of the straight-line amount, and switching to the straight-line method when that method gives a greater deduction than the 200% declining balance method. No depreciation is permitted for undeveloped land.

### *1.5.2 Position under personal income tax legislation*

In the non-incentive context the same rules apply to individuals as to corporations.

## **1.6 Cash refund, carry forward and carry back possibilities**

### *1.6.1 Position under corporate income tax legislation*

If the deduction of R&D expenditures in the non-incentive case creates or increases a net operating loss (NOL) for the current year, the NOL can be carried back to offset positive taxable income in the prior 2 taxable years and can be carried forward to reduce taxable income in the following 20 taxable years. IRC § 172. If the carry back of the NOL to the prior two years offsets tax that was paid in those years, a tax refund can be claimed from the Internal Revenue Service.

### *1.6.2 Position under personal income tax legislation*

The same NOL rules generally apply to both individuals and corporations. There are variations in the manner in which the NOL deduction is computed, but the treatment of R&D expenditures is the same in both cases. If the R&D expenditures create an NOL for the current year, the NOL can be carried back to prior two years and a refund can be claimed, or the NOL can be carried forward to the following 20 years.

## **2. Incentives for R & D expenditure**

### **2.1 Incentives under corporate/ personal income tax legislation**

#### *2.1.1 Deduction for R&D expenditures under IRC § 174.*

IRC § 174 permits taxpayers to elect to treat R&D expenditures as either (i) immediately deductible in the year incurred or (ii) as a deferred expense that is amortizable on a straight-line basis over a period of not less than 60 months beginning with the month in which the taxpayer first realizes the benefits from the expenditures. IRC § 174 is a special rule in the IRC that applies specifically to R&D expenditures.

##### *2.1.1.1 Qualifying R & D expenditure*

- (i) The tax deduction for R&D expenditures under IRC § 174 applies to amounts incurred for R&D in the experimental or laboratory sense. Regulations issued by the Treasury Department (Treasury Regulation § 1.174-2(a)) provide that the research must be intended to discover information that would eliminate uncertainty concerning the development or improvement of a "product". The definition in the regulations is as follows:



The term *research or experimental expenditures*, as used in section 174, means expenditures incurred in connection with the taxpayer's trade or business which represent research and development costs in the experimental or laboratory sense. The term generally includes all such costs incident to the development or improvement of a product. The term includes the costs of obtaining a patent, such as attorneys' fees expended in making and perfecting a patent application. Expenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the appropriate design of the product. Whether expenditures qualify as research or experimental expenditures depends on the nature of the activity to which the expenditures relate, not the nature of the product or improvement being developed or the level of technological advancement the product or improvement represents.

The term "product" as used in the above definition includes any pilot model, process, formula, invention, technique, patent, or similar property, and includes products to be used by the taxpayer in its trade or business as well as products to be held for sale, lease, or license.

The costs of developing computer software are eligible for deduction in the same manner as R&D expenses either in the year incurred or over a 5-year amortization period. The rules for the treatment of the development costs for computer software are set out in IRS Revenue Procedure 2000-50.

Expenditures for certain items are excluded from qualifying for the R&D deduction. This includes ordinary testing or inspection of materials or products for quality control (quality control testing); efficiency surveys; management studies; consumer surveys; advertising or promotions for products; acquisition of another's patent, model, production or process; or research in connection with literary, historical, or similar projects. Treasury Regulation § 1.174-2(a)(3).

Qualifying expenditures for R&D are deductible whether they are paid or incurred by the taxpayer or incurred by another person or organization (such as a research institute, foundation, engineering company, or similar contractor) for R&D conducted on the taxpayer's behalf. Treasury Regulation § 1.174-2(a)(8). Thus, R&D applies both to in-house research and to research that is contracted out to be performed by third parties. In the case of research conducted by third parties, it must be clear that the taxpayer will acquire ownership of the new product or technology that results from the research.

- (ii) There is no distinction between expenditures on 'pure' research and expenditure on developments for purposes of the deduction or amortization rules under IRC § 174. Costs incurred for the design, development, fabrication and testing of

prototypes can qualify for the deduction or amortization provided they meet the definition of qualified R&D expenditures.

- (iii) The R&D deduction or amortization cannot be claimed for expenditures for the acquisition or improvement of land or for expenditures for the acquisition or improvement of depreciable property to be used in connection with the research and development. IRC § 174(c). The acquisition or improvement costs of such property or equipment must be depreciated over the useful life of the property acquired.

If the taxpayer develops depreciable property as a result of its own research, for example an item of equipment, the R&D costs attributable to the development can be deducted or amortized as R&D expenditures under IRC § 174, but the cost of the component materials of the property and the costs of labour and other elements involved in the construction and installation of the property must be capitalized and recovered through depreciation. Treasury Regulation § 1.174-2(b)(4). The Treasury Regulations illustrate this with the example of a new machine developed by the taxpayer at a cost of USD 30,000, including R&D costs of USD 20,000 and labour and material cost to construct the machine of USD 10,000. The example holds that the R&D costs may be deducted or amortized under IRC § 174, but the labour and materials must be capitalized and recovered by depreciation deductions.

In the case of contract research, an R&D deduction is not permitted for expenditures for the acquisition or improvement of land or depreciable property, used in connection with the R&D if the taxpayer acquires rights of ownership in the land or depreciable property.

#### *2.1.1.2 Nature of the incentive*

- (i) The incentive provided by IRC § 174 permits taxpayers to elect to treat R&D expenditures as either (i) immediately deductible in the year incurred or (ii) as deferred expenses that are amortizable on a straight-line basis over a period of not less than 60 months beginning with the month in which the taxpayer first realizes the benefits from the expenditures.

Treasury Regulation § 1.174-4(a)(3) provides that unless the taxpayer shows otherwise, the taxpayer will be deemed to have begun to realize benefits from the deferred expenditures in the month in which the taxpayer first puts the process, formula, invention, or similar property to which the expenditures relate to an income producing use.

- (ii) The IRC § 174 deduction is based on the amount of R & D expenditure incurred during the taxable year. It is not incremental or related to the increase in the R & D expenditures over the amount in prior years.

- (iii) The difference between deductibility or amortization of R & D expenditures under IRC § 174 and the deduction in the absence of IRC § 174 is that the costs would be required to be capitalized and recovered by deductions over the life of the new product or technology developed, which would usually be longer.
- (iv) There is no limit or ceiling on the amount of R&D expenditures that can be deducted or amortized under IRC § 174. The deductions or amortization amounts can fully offset taxable income.

In the case of taxpayers who are individuals, the R&D expenditures must be amortized over a 10-year period for purposes of computing the liability for alternative minimum tax (AMT) under IRC § 55(b)(2)(A)(ii).

A deduction for R&D expenditures cannot be claimed if the 20% R&D tax credit is claimed for such expenditures under IRC § 41(a)(1) or (a)(2) discussed in 2.1.2. and 2.1.3. below, or if the 50% tax credit for clinical drug testing is claimed under IRC § 45C discussed in 2.1.4. below. IRC § 280C.

#### *2.1.1.3 Restrictions (based on eligibility criteria)*

- (i) For purposes of the deduction or amortization of R&D expenditures under IRC § 174, there is no territorial restriction on the location where the R&D expenditures are incurred, whether within the United States or in a foreign jurisdiction. However, for taxpayers who claim the US foreign tax credit, it will be necessary to allocate R&D expenditures between US and foreign sources for purposes of computing the foreign tax credit limitation. The requirements for this are specified in Treasury Regulation § 1.861-17.
- (ii) The deduction or amortization of R&D expenditures under IRC § 174 do not depend upon the size of the business conducted by the company or the individual. It is a requirement, however, that the R&D must be conducted in connection with a trade or business carried on by the taxpayer.
- (iii) As mentioned above, in the case of research that is performed by third parties, the taxpayer must acquire ownership of the product or technology that results from the research.

#### *2.1.1.4 Cash refund, carry forward and carry back possibilities*

If the deduction or amortization of R&D expenditures under IRC § 174 creates or increases a net operating loss (NOL) for the taxpayer, the NOL can be carried back to offset positive taxable income in the prior 2 taxable years and can be carried forward to the following 20 taxable years to offset the taxable income in those years. IRC § 172. If the carry back of the NOL to the prior 2 years offsets tax that was paid in those years, a

tax refund can be claimed from the Internal Revenue Service. A cash refund cannot be obtained in the current year if the R&D expenditures exceed taxable income.

#### *2.1.1.5 Compliance verification*

Taxpayers who claim the deduction or amortization for R&D expenditures under IRC § 174 must do so on the tax return filed for the year the expenses are incurred. There are no special compliance requirements for R&D expenditures as compared to other types of business deductions. Taxpayers are required to keep business records of the expenses to be verified by the Internal Revenue Service if the taxpayer is audited. No prior approval of the research that gives rise to the R&D deduction or amortization is required.

#### *2.1.2 Tax credit for R&D expenditures under IRC § 41(a)(1).*

IRC § 41(a)(1) permits taxpayers to claim a 20% tax credit for increasing R&D expenditures over a base amount. This credit was originally enacted in 1981.

##### *2.1.2.1 Qualifying R & D expenditures*

- (i) The 20% credit under IRC § 41(a)(1) applies to in-house research expenses and contract research expenses incurred in connection with “qualified research”. This term is defined in the same manner as qualified expenditures under IRC § 174, which is discussed above, with additional requirements to insure that the research is technological in nature and related to improving the business of the taxpayer.

The additional requirements for the 20% R&D credit are as follows: (1) the research must be undertaken for the purpose of discovering information (i) which is technological in nature and (ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer; and (2) substantially all the activities of the research are elements of a process of experimentation for a purpose that relates to a new or improved function, performance, or reliability or quality. Research cannot qualify if it is related to matters of style, taste, cosmetic, or seasonal design factors. IRC § 41(d)(1) and (d)(3).

Treasury Regulations require that the research must be undertaken for the purpose of discovering information that is technical in nature and is intended to eliminate uncertainty concerning the development or improvement of a business component. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the business component or the appropriate design of the business component. Treasury Regulation § 1.41-4(a)(3).

In order to be technological in nature, the Treasury Regulations require that the process of experimentation used to discover the information must rely on

principles of the physical or biological sciences, engineering, or computer science. Treasury Regulation § 1.41-4(a)(4).

The test for whether research is qualified research as defined above must be satisfied with respect to each “business component” of the taxpayer. A business component is defined to mean any product, process, computer software, technique, formula, or invention, which is to be held by the taxpayer for sale, lease, or license, or to be used in a trade or business of the taxpayer. IRC § 41(d)(2).

There are 8 specified categories of research that are excluded from eligibility for the 20% R&D tax credit:

- (1) research conducted after the beginning of commercial production of the commercial component;
- (2) research related to the adaptation of an existing business component to a particular customer’s requirements or needs;
- (3) research related to the reproduction of an existing business component (in whole or in part) from a physical examination of the business component itself or from plans, blue prints, detailed specifications, or publicly available information with respect to such business component;
- (4) surveys and studies, including any (i) efficiency survey, (ii) activity relating to management function or technique, (iii) market research, testing, or development (including advertising or promotions), (iv) routine data collection, and (v) routine or ordinary testing or inspection for quality control;
- (5) research with respect to computer software which is developed by or for the benefit of the taxpayer primarily for internal use by the taxpayer, other than for use in (i) an activity which constitutes qualified research or (ii) a production process which meets the definition of qualified research;
- (6) research conducted outside the United States, the Commonwealth of Puerto Rico, or any possession of the United States;
- (7) research in the social sciences, arts, or humanities; and
- (8) research to the extent funded by any grant, contract, or otherwise by another person or governmental entity

Expenses for qualified research fall into two categories: in-house research expenses and contract research expenses.

In-house research expenses include the following: (1) wages paid to employees who are engaged in qualified research services, which includes engaging in qualified research or engaging in direct supervision or direct support of qualified research activities; (2) amounts paid for supplies used in the conduct of qualified research; and (3) amounts paid to third persons for the right to use computers in the conduct of qualified research. For

purposes of item (2), supplies do not include land, improvements to land, or property that subject to depreciation.

Contract research expenses are defined to mean 65% of amounts paid to other parties (not including employees of the taxpayer) for qualified research conducted on behalf of the taxpayer. The research must be conducted at the risk of the taxpayer, i.e., if payment is contingent on the success of the research by the other party, the payment will not qualify. Treasury Regulation § 1.41-2(e).

- (ii) The 20% R&D credit under IRC § 41(a)(1) does not distinguish between pure research costs and R&D expenditures for commercial development. The credit is available for both. The definition of qualified expenditures for which the credit can be claimed requires that the purpose of the R&D must be to develop a new or improved business component of the taxpayer as discussed in (i) above.
- (iii) The 20% R&D credit under IRC § 41(a)(1) does not apply to expenditures for land, improvements to land (i.e., buildings) or property subject to an allowance for depreciation (i.e., equipment). IRC § 41(b)(2)(C).

#### *2.1.2.2 Nature of the incentive*

- (i) The 20% R&D tax credit is measured by reference to the amount by which the taxpayer increases its R&D expenditures over a base period amount of gross receipts. Until 1988 the 20% R&D credit was measured by reference to the increase in the taxpayer's R&D expenditures in absolute terms, but Congress determined that businesses normally calculate their research budgets as a fixed percentage of gross receipts, and that it was therefore more appropriate to grant the R&D tax credit on the same basis. According to commentators:<sup>96</sup>

Because Congress found that businesses often determine their research budgets as a fixed percentage of gross receipts, it was thought appropriate to index each taxpayer's base amount to the average growth in gross receipts, thereby rewarding taxpayers for research expenses that are in excess of amounts that would have been expended anyway. Moreover, it was believed that by using gross receipts as an index, firms in fast-growing sectors of the economy would not be unduly rewarded if their "research intensity", as measured by their ratio of qualified research to gross receipts, did not correspondingly increase. Similarly, firms in slow-growth sectors of the economy would still, under this approach, be able to earn credits as long as they maintained research expenditures commensurate with their own sales growth. Adjusting the base to gross receipts was thought also to have the effect of effectively indexing the

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<sup>96</sup> Paul W. Oosterhuis and John S. Stanton, *Research and Development Expenditures*, Tax Management Portfolio No. 42-3<sup>rd</sup> at A44-A45 (Bureau of National Affairs, Washington, D.C.).

credit for inflation while preventing taxpayers from being rewarded for increases in research spending that are attributable solely to inflation.

Congress therefore changed the law beginning in 1989 to measure the 20% R&D tax credit by reference to the taxpayer's gross receipts over a 4-year base period.

The technical calculation is that the R&D credit is equal to 20% of the excess of the taxpayer's qualified R&D expenditures for the current year over the taxpayer's "base amount". The base amount is defined as the taxpayer's "fixed base percentage" multiplied times the taxpayer's average annual gross receipts for the prior 4 taxable years. The "fixed base percentage" is ratio of the taxpayer's aggregate qualified research expenses for the taxable years that started after 31 December 1983 and before 1 January 1989 (i.e., the 5 taxable years from 1984 to 1988) to the taxpayer's aggregate gross receipts for those years, but not to exceed 16%. Special rules are provided to compute the fixed base percentage for start-up companies that first incurred R&D expenditures after this period or were not in existence for more than 3 years during this period.

A floor applies to the base amount so that it may not be less than 50% of the taxpayer's qualified R&D expenditures for the current year.

To give a simple illustration, assume that the taxpayer's qualified R&D expenditures for the current year are USD 1000, the taxpayer's average annual gross receipts for the prior 4 years are USD 5000, and the fixed base percentage is the 16% maximum permitted. The 20% R&D tax credit would tentatively be USD 40 [ $20\% \times (\text{USD } 1000 - (16\% \times \text{USD } 5000))$ ]. However, since the base amount cannot be less than 50% of the taxpayer's qualified R&D expenditures for the current year, the minimum R&D credit will be USD 100 [ $20\% \times (50\% \times \text{USD } 1000)$ ].

IRC § 41(c)(4) permits the R&D tax credit to be computed under an alternative incremental method based on a graduated percentage of the excess of the taxpayer's qualified R&D expenditures for the current year over the average annual gross receipts for the prior 4 years.

The R&D credit under the alternative incremental method is equal to the sum of: (1) 2.65% of the amount by which the qualified R&D expenditures for the current year exceed 1% of the average annual gross receipts for the prior 4 years but do not exceed 1.5% of such average annual amount; (2) 3.2% of the amount by which the qualified R&D expenditures for the current year exceed 1.5% of the average annual gross receipts for the prior 4 years but do not exceed 2.0% of such average annual amount; and (3) 3.75% of the amount by which the qualified R&D expenditures for the current year exceed 2.0% of the average annual gross receipts for the prior 4 years.

R&D expenditures cannot be claimed for the 20% R&D credit if they are claimed for the 20% tax credit for basic research under IRC 41(a)(2) discussed in 2.1.3. below or the 50% tax credit for orphan drug testing under IRC § 45C discussed in 2.1.4. below.

- (ii) The 20% credit for R&D expenditures is incremental. As described above it is based on the increase in R&D expenditures measured as a percentage of the taxpayer's gross receipts.
- (iii) The 20% R&D credit is not available under the normal (non-incentive) R&D rules.
- (iv) The 20% R&D tax credit is within a category referred to in the IRC as general business tax credits and it limited, combined with the taxpayer's other business tax credits, to offsetting tax liability in excess of the greater of (1) 25% of the regular tax liability over USD 25,000, or (2) the taxpayer's liability for the alternative minimum tax (AMT). IRC § 38(c). In other words, the 20% R&D credit cannot offset the AMT liability and can offset only the tax excess above 25% of the regular tax liability over a USD 25,000 base amount.

#### *2.1.2.3 Restrictions (based on eligibility criteria)*

- (i) The 20% R&D credit cannot be claimed for research conducted outside the United States, Puerto Rico, or any possession of the United States. IRC § 41(d)(4)(F).
- (ii) The 20% R&D credit is equally available to all types (sizes) of companies.

#### *2.1.2.4. Cash refund, carry forward and carry back possibilities*

If the 20% R&D tax credit under Section 41(a)(1) exceeds the limitation described in 2.1.2.2.(iv) above, the excess R&D credit is non-refundable but can be carried back to the prior taxable year and can be carried forward to the following 20 taxable years. IRC § 39.

If a tax was paid in the prior year to which the excess R&D credit is carried back, a tax refund can be claimed from the Internal Revenue Service to the extent that the credit is within the unused limitation for that year. If the credit has not been used by the end of the 20-year carryforward period, the unused credit can be claimed as a tax deduction in the first year after the end of the carryforward period. IRC § 196.

#### *2.1.2.5 Compliance verification*

The 20% R&D credit is claimed by filing IRS Form 6765 (Credit for Increasing Research Activities) with the taxpayer's return for the year the credit is claimed. IRS Form 6765 and the related instructions are attached at the end of this report.



Treasury Regulations require that the taxpayer must retain records in sufficiently usable form and detail to substantiate that the expenditures are eligible for the 20% R&D tax credit. The information must be retained until the time limit for assessment of taxes expires. Treasury Regulation § 1.41-4(d). No prior approval of the research that gives rise to the tax credit is required. report.

### *2.1.3 Tax credit for basic research under IRC § 41(a)(2)*

IRC § 41(a)(2) permits taxpayers to claim a 20% tax credit for incremental R&D expenditures for basic research, i.e., for pure research. This credit was enacted at the same time as the 20% credit under IRC § 41(a)(1) in 1981. It is part of the same statutory provision but has significantly different qualification requirements and different computation rules..

#### *2.1.3.1 Qualifying R & D expenditures*

- (i) The 20% credit under IRC § 41(a)(2) for basic research applies to original investigations for the advancement of scientific knowledge that does not have a commercial objective. IRC § 41(e)(7). The 20% credit for basic research applies only for payments made to qualified organizations that conduct research, which are defined to include higher educational institutions (i.e., colleges and universities), scientific research organizations, tax-exempt scientific organizations, and certain tax-exempt organizations that make grants to higher educational institutions.

The 20% basic research credit is not available for research in the social sciences, arts or humanities. Social sciences include economics, business management, and behavioral sciences. Treasury Regulation § 1.41-4(c)(8).

- (ii) The 20% tax credit under IRC § 41(a)(2) is limited to pure research. The credit is not permitted for research that has a commercial objective.
- (iii) The 20% R&D credit under IRC § 41(a)(2) does not apply to expenditures for land, improvements to land (i.e., buildings) or property subject to an allowance for depreciation (i.e., equipment).

#### *2.1.3.2 Nature of the incentive*

- (i) The 20% R&D credit for basic research applies to payments made to qualified institutions to conduct R&D. The credit is calculated as 20% of the excess of the basic research payments over the total of two base amounts related to the corporation's R&D expenditures during a 3-year base period and to the corporation's normal contributions to universities.

The first base amount is the “minimum basic research amount”. This defined as 1% of the amount paid for in-house research and contract research during a base period that includes the 3 taxable years immediately preceding the first taxable year that begins after 31 December 1983 (i.e., the three taxable years from 1981 to 1983). If the corporation was not in existence for at least one year in this three year base period, the minimum basic research amount may not be less than 50% of the basic research payments for the year the credit is claimed. In other word, corporations that were in existence in the 1981 to 1983 period will measure the first base amount by reference to the amounts paid for in-house research and contract research during this period, and for other corporations the first base amount will be 50% of the basic research payments for the current year.

The second base amount is the “maintenance of effort amount” and is defined as the excess of the corporation’s charitable university contributions during the base period over the taxpayer’s charitable university contributions for the current year. The base period contributions are adjusted for inflation in order to make the comparison with the current year. The purpose of the second base amount is prevent corporations from re-designating charitable contributions to be research contributions, and to allow the credit only if the corporation makes research contributions to universities above the amount of charitable contributions during the base period. In other words, Congress did not intend to permit corporations to merely change the designation of amounts that they would historically contribute to universities in any case from general amounts (i.e., not designated for research) to research amounts. The “maintenance of effort amount” requires that the contributions to universities for basic research must exceed the historic level of general charitable contributions before the credit can be claimed.

If a corporation makes basic research payments that do not exceed the total of the two fixed base amounts, and the 20% basic research credit cannot therefore not be claimed, the payments will be treated as contract research expenses for which the general 20% R&D credit can be claimed under IRC § 41(a)(1) described in 2.1.2. above.

R&D expenditures that qualify for the 50% tax credit for orphan drug testing under IRC § 45C cannot be taken into account for purposes of the 20% R&D credit for basic research under IRC § 41(a)(2).

- (ii) The 20% R&D credit for basic research is incremental. As described above it is based on the increase over the base period amounts.
- (iii) The 20% credit is not available under the normal (non-incentive) R&D rules.
- (iv) The 20% tax credit for basic research is within the category of general business tax credits and it is limited to offsetting tax liability in the same manner as the R&D credit under IRC § 41(a)(1) described in 2.1.2.2.(iv) above.

### *2.1.3.3 Restrictions (based on eligibility criteria)*

- (i) The 20% R&D credit for basic research cannot be claimed for research conducted outside the United States, Puerto Rico, or any possession of the United States. IRC § 41(d)(4)(F).
- (ii) The 20% R&D credit for basic research is equally available to all types (sizes) of companies.
- (iii) The 20% credit for basic research under IRC § 41(a)(2) is available only to corporations and cannot be claimed by individuals.

### *2.1.3.4 Cash refund, carry forward and carry back possibilities*

Same rules apply as for 20% R&D credit under IRC § 41(a)(1) discussed in 2.1.2.4. above.

### *2.1.3.5 Compliance verification*

Same rules apply as for 20% R&D credit under IRC § 41(a)(1) discussed in 2.1.2.5. above. In addition there must be a written agreement between the corporation and the qualified organization that will conduct the research.

## *2.1.4 Tax credit for clinical drug testing under IRC § 45C*

IRC § 45C permits taxpayers to claim a 50% tax credit for expenditures for clinical drug testing for rare diseases and medical conditions. This credit was originally enacted in 1983. The drugs to which the credit applies are referred to as “orphan drugs”. The name derives from the circumstance that the drugs will treat a relatively few number of people and that pharmaceutical companies are not normally willing to undertake research to determine their effectiveness for human treatment. The 50% tax credit is intended to create an incentive for testing these drugs.

### *2.1.4.1. Qualifying R & D expenditures*

- (i) The 50% tax credit under IRC § 45C for clinical drug testing applies to payments that would qualify for the credit for R&D expenses under IRC § 41(a)(1) discussed in 2.1.2.1 above with the modification that the research must be for human clinical testing of drugs for rare diseases or medical conditions. IRC § 45C(b)(2). The credit is thus allowed for qualified in-house clinical drug testing expenses and qualified contract clinical testing expenses. A modification applies so that 100% of qualified contract clinical testing expenses are eligible for the drug testing credit, whereas only 65% of contract expenses are eligible for the 20% R&D credit discussed in 2.1.2. above.

A rare disease or condition that qualifies the drug for the credit is defined as one that either (1) affects less than 200,000 persons in the United States, or (2) affects more than 200,000 persons in the United States but for which there is no reasonable expectation that the cost of developing and making a drug available in the United States for such disease or condition will be recovered from sales of the drug in the United States.

In order to qualify, the drug on which the testing is conducted must be designated pursuant to the US Federal Food, Drug, and Cosmetic Act, and the testing must be carried out after the date the drug is designated pursuant to the Act and before the date the drug has been approved for public use. The clinical testing of the drug must be carried out by or on behalf of the person who has been designated as the manufacturer or sponsor of the drug under the US Federal Food, Drug, and Cosmetic Act.

The 50% tax credit cannot be claimed for testing that is funded by a grant, contract, or otherwise by any other person or government entity.

- (ii) The 50% tax credit for clinical drug testing under IRC § 45C is limited to expenses for clinical drug testing as described above.
- (iii) The 50% tax credit for clinical drug testing under IRC § 45C does not apply to expenditures for land, improvements on land (i.e., buildings) or equipment used to carry out the research.

#### *2.1.4.2 Nature of the incentive*

- (i) The 50% credit is equal to 50% of the expenses incurred for qualified clinical testing expenses during the taxable year.
- (ii) The 50% credit for orphan drug testing is volume based (i.e., it corresponds to the amount of expenditures during the taxable year).
- (iii) The 50% credit for clinical drug testing is not available under the normal (non-incentive) R&D rules.
- (iv) The 50% tax credit for clinical drug testing is within the category of general business tax credits and it is limited to offsetting tax liability in the same manner as the R&D credit described in 2.1.2.2.(iv) above.

#### *2.1.4.3 Restrictions (based on eligibility criteria)*

- (i) The 50% R&D credit for clinical drug testing can not normally be claimed for clinical testing that occurs outside the United States. An exception applies if the following conditions are present: (1) the testing is conducted outside the United

States because there is not a sufficient testing population within the United States; and (2) the testing is conducted by a United States person or a person who is not related to the taxpayer and who has been designated as the manufacturer or sponsor of the drug under the US Federal Food, Drug, and Cosmetic Act. IRC § 45C(d)(2).

- (ii) The 50% credit for clinical drug testing is equally available to individuals and to all types (sizes) of companies.

#### *2.1.4.4. Cash refund, carry forward and carry back possibilities*

Same rules apply as for general 20% R&D credit under IRC § 41(a)(1) discussed in 2.1.2.4. above except that a deduction is not permitted at the end of the 20-year carryforward period if the credit is still unused.

#### *2.1.4.5 Compliance verification*

The 50% credit for clinical drug testing is claimed by filing IRS Form 8820 (Orphan Drug Credit) with the taxpayer's return for the year the credit is claimed. IRS Form 8820 and the related instructions are attached at the end of this report.

There is no requirement of pre-approval of the expenditures or the research, although the clinical drug testing program must comply with the requirements in the US Federal Food, Drug, and Cosmetic Act described above. In addition, Treasury Regulation § 1.28-1(d)(1)(iv) requires that the taxpayer must maintain records sufficient to substantiate that the rare disease or condition that will be treated by the drug meets the requirements described in 2.1.4.1.(i) above.

## **2.2 Incentives under wage tax legislation**

The United States does not provide incentives for R&D expenditures under wage tax legislation, i.e., there are no tax benefits granted to employers with respect to withholding taxes on salaries paid to employees who perform R&D.

## ATTACHMENTS

### IRC Section 41: Credit for Increasing Research Activities

#### (a) General rule

For purposes of section 38, the research credit determined under this section for the taxable year shall be an amount equal to the sum of

(1) 20 percent of the excess (if any) of -

(A) the qualified research expenses for the taxable year,  
over

(B) the base amount, and

(2) 20 percent of the basic research payments determined under subsection (e)(1)(A).

#### (b) Qualified research expenses

For purposes of this section

(1) Qualified research expenses

The term "qualified research expenses" means the sum of the following amounts which are paid or incurred by the taxpayer during the taxable year in carrying on any trade or business of the taxpayer -

(A) in-house research expenses, and

(B) contract research expenses.

(2) In-house research expenses

(A) In general

The term "in-house research expenses" means -

(i) any wages paid or incurred to an employee for qualified services performed by such employee,

(ii) any amount paid or incurred for supplies used in the conduct of qualified research, and

(iii) under regulations prescribed by the Secretary, any amount paid or incurred to another person for the right to use computers in the conduct of qualified research.

Clause (iii) shall not apply to any amount to the extent that the taxpayer (or any person with whom the taxpayer must aggregate expenditures under subsection (f)(1)) receives or accrues any amount from any other person for the right to use substantially identical personal property.

(B) Qualified services

The term "qualified services" means services consisting of

(i) engaging in qualified research, or

(ii) engaging in the direct supervision or direct support of research activities which constitute qualified research.

If substantially all of the services performed by an individual for the taxpayer during the taxable year consists of services meeting the requirements of clause (i) or (ii), the term "qualified services" means all of the services performed by such individual for the taxpayer during the taxable year.

(C) Supplies

The term "supplies" means any tangible property other than

(i) land or improvements to land, and

(ii) property of a character subject to the allowance for depreciation.

(D) Wages

(i) In general

The term "wages" has the meaning given such term by section 3401(a).

(ii) Self-employed individuals and owner-employees

In the case of an employee (within the meaning of section 401(c)(1)), the term "wages" includes the earned income (as defined in section 401(c)(2)) of such employee.

(iii) Exclusion for wages to which work opportunity credit applies

The term "wages" shall not include any amount taken into account in determining the work opportunity credit under section 51(a).

(3) Contract research expenses

(A) In general

The term "contract research expenses" means 65 percent of any amount paid or incurred by the taxpayer to any person (other than an employee of the taxpayer) for qualified research.

(B) Prepaid amounts

If any contract research expenses paid or incurred during any taxable year are attributable to qualified research to be conducted after the close of such taxable year, such amount shall be treated as paid or incurred during the period during which the qualified research is conducted.

(C) Amounts paid to certain research consortia

(i) In general

Subparagraph (A) shall be applied by substituting "75 percent" for "65 percent" with respect to amounts paid or incurred by the taxpayer to a qualified research consortium for qualified research on behalf of the taxpayer and 1 or more unrelated taxpayers. For purposes of the preceding sentence, all persons treated as a single employer under subsection (a) or (b) of section 52 shall be treated as related taxpayers.

(ii) Qualified research consortium

The term "qualified research consortium" means any organization which (I) is described in section 501(c)(3) or 501(c)(6) and is exempt from tax under section 501(a),

(II) is organized and operated primarily to conduct scientific research, and

(III) is not a private foundation.

(4) Trade or business requirement disregarded for in-house research expenses of certain startup ventures

In the case of in-house research expenses, a taxpayer shall be treated as meeting the trade or business requirement of paragraph (1) if, at the time such in-house research expenses are paid or incurred, the principal purpose of the taxpayer in making such expenditures is to use the results of the research in the active conduct of a future trade or business

(A) of the taxpayer, or

(B) of 1 or more other persons who with the taxpayer are treated as a single taxpayer under subsection (f)(1).

(c) Base amount

(1) In general

The term "base amount" means the product of -

- (A) the fixed-base percentage, and
- (B) the average annual gross receipts of the taxpayer for the 4 taxable years preceding the taxable year for which the credit is being determined (hereinafter in this subsection referred to as the 'credit year').

(2) Minimum base amount

In no event shall the base amount be less than 50 percent of the qualified research expenses for the credit year.

(3) Fixed-base percentage

(A) In general

Except as otherwise provided in this paragraph, the fixed-base percentage is the percentage which the aggregate qualified research expenses of the taxpayer for taxable years beginning after December 31, 1983, and before January 1, 1989, is of the aggregate gross receipts of the taxpayer for such taxable years.

(B) Start-up companies

(i) Taxpayers to which subparagraph applies

The fixed-base percentage shall be determined under this subparagraph if

- (I) the first taxable year in which a taxpayer had both gross receipts and qualified research expenses begins after December 31, 1983, or
- (II) there are fewer than 3 taxable years beginning after December 31, 1983, and before January 1, 1989, in which the taxpayer had both gross receipts and qualified research expenses.

(ii) Fixed-base percentage

In a case to which this subparagraph applies, the fixed-base percentage is

- (I) 3 percent for each of the taxpayer's 1st 5 taxable years beginning after December 31, 1993, for which the taxpayer has qualified research expenses,
- (II) in the case of the taxpayer's 6th such taxable year, 1/6 of the percentage which the aggregate qualified research expenses of the taxpayer for the 4th and 5th such taxable years is of the aggregate gross receipts of the taxpayer for such years,
- (III) in the case of the taxpayer's 7th such taxable year, 1/3 of the percentage which the aggregate qualified research expenses of the taxpayer for the 5th and 6th such taxable years is of the aggregate gross receipts of the taxpayer for such years,
- (IV) in the case of the taxpayer's 8th such taxable year, 1/2 of the percentage which the aggregate qualified research expenses of the taxpayer for the 5th, 6th, and 7th such taxable years is of the aggregate gross receipts of the taxpayer for such years,
- (V) in the case of the taxpayer's 9th such taxable year, 2/3 of the percentage which the aggregate qualified research expenses of the taxpayer for the 5th, 6th, 7th, and 8th such taxable years is of the aggregate gross receipts of the taxpayer for such years,
- (VI) in the case of the taxpayer's 10th such taxable year, 5/6 of the percentage which the aggregate qualified



- research expenses of the taxpayer for the 5th, 6th, 7th, 8th, and 9th such taxable years is of the aggregate gross receipts of the taxpayer for such years, and
- (VII) for taxable years thereafter, the percentage which the aggregate qualified research expenses for any 5 taxable years selected by the taxpayer from among the 5th through the 10th such taxable years is of the aggregate gross receipts of the taxpayer for such selected years.
- (iii) Treatment of de minimis amounts of gross receipts and qualified research expenses  
The Secretary may prescribe regulations providing that de minimis amounts of gross receipts and qualified research expenses shall be disregarded under clauses (i) and (ii).
- (C) Maximum fixed-base percentage  
In no event shall the fixed-base percentage exceed 16 percent.
- (D) Rounding  
The percentages determined under subparagraphs (A) and (B) (ii) shall be rounded to the nearest 1/100th of 1 percent.
- (4) Election of alternative incremental credit
- (A) In general  
At the election of the taxpayer, the credit determined under subsection (a)(1) shall be equal to the sum of -
- (i) 2.65 percent of so much of the qualified research expenses for the taxable year as exceeds 1 percent of the average described in subsection (c)(1)(B) but does not exceed 1.5 percent of such average,
- (ii) 3.2 percent of so much of such expenses as exceeds 1.5 percent of such average but does not exceed 2 percent of such average, and
- (iii) 3.75 percent of so much of such expenses as exceeds 2 percent of such average.
- (B) Election  
An election under this paragraph shall apply to the taxable year for which made and all succeeding taxable years unless revoked with the consent of the Secretary.
- (5) Consistent treatment of expenses required
- (A) In general  
Notwithstanding whether the period for filing a claim for credit or refund has expired for any taxable year taken into account in determining the fixed-base percentage, the qualified research expenses taken into account in computing such percentage shall be determined on a basis consistent with the determination of qualified research expenses for the credit year.
- (B) Prevention of distortions  
The Secretary may prescribe regulations to prevent distortions in calculating a taxpayer's qualified research expenses or gross receipts caused by a change in accounting methods used by such taxpayer between the current year and a year taken into account in computing such taxpayer's fixed-base percentage.
- (6) Gross receipts  
For purposes of this subsection, gross receipts for any taxable year shall be reduced by returns and allowances made during the

taxable year. In the case of a foreign corporation, there shall be taken into account only gross receipts which are effectively connected with the conduct of a trade or business within the United States, the Commonwealth of Puerto Rico, or any possession of the United States.

(d) Qualified research defined

For purposes of this section -

(1) In general

The term "qualified research" means research -

(A) with respect to which expenditures may be treated as expenses under section 174,

(B) which is undertaken for the purpose of discovering information -

(i) which is technological in nature, and

(ii) the application of which is intended to be useful in the development of a new or improved business component of the taxpayer, and

(C) substantially all of the activities of which constitute elements of a process of experimentation for a purpose described in paragraph (3).

Such term does not include any activity described in paragraph (4).

(2) Tests to be applied separately to each business component

For purposes of this subsection -

(A) In general

Paragraph (1) shall be applied separately with respect to each business component of the taxpayer.

(B) Business component defined

The term "business component" means any product, process, computer software, technique, formula, or invention which is to be -

(i) held for sale, lease, or license, or

(ii) used by the taxpayer in a trade or business of the taxpayer.

(C) Special rule for production processes

Any plant process, machinery, or technique for commercial production of a business component shall be treated as a separate business component (and not as part of the business component being produced).

(3) Purposes for which research may qualify for credit

For purposes of paragraph (1)(C) -

(A) In general

Research shall be treated as conducted for a purpose described in this paragraph if it relates to -

(i) a new or improved function,

(ii) performance, or

(iii) reliability or quality.

(B) Certain purposes not qualified

Research shall in no event be treated as conducted for a purpose described in this paragraph if it relates to style, taste, cosmetic, or seasonal design factors.

(4) Activities for which credit not allowed

The term "qualified research" shall not include any of the following:

(A) Research after commercial production

Any research conducted after the beginning of commercial production of the business component.

(B) Adaptation of existing business components

Any research related to the adaptation of an existing business component to a particular customer's requirement or need.

(C) Duplication of existing business component

Any research related to the reproduction of an existing business component (in whole or in part) from a physical examination of the business component itself or from plans, blueprints, detailed specifications, or publicly available information with respect to such business component.

(D) Surveys, studies, etc.

Any -

- (i) efficiency survey,
- (ii) activity relating to management function or technique,
- (iii) market research, testing, or development (including advertising or promotions),
- (iv) routine data collection, or
- (v) routine or ordinary testing or inspection for quality control.

(E) Computer software

Except to the extent provided in regulations, any research with respect to computer software which is developed by (or for the benefit of) the taxpayer primarily for internal use by the taxpayer, other than for use in -

- (i) an activity which constitutes qualified research (determined with regard to this subparagraph), or
- (ii) a production process with respect to which the requirements of paragraph (1) are met.

(F) Foreign research

Any research conducted outside the United States, the Commonwealth of Puerto Rico, or any possession of the United States.

(G) Social sciences, etc.

Any research in the social sciences, arts, or humanities.

(H) Funded research

Any research to the extent funded by any grant, contract, or otherwise by another person (or governmental entity).

(e) Credit allowable with respect to certain payments to qualified organizations for basic research

For purposes of this section -

(1) In general

In the case of any taxpayer who makes basic research payments for any taxable year -

(A) the amount of basic research payments taken into account under subsection (a)(2) shall be equal to the excess of -

- (i) such basic research payments, over
- (ii) the qualified organization base period amount, and

(B) that portion of such basic research payments which does not exceed the qualified organization base period amount shall be treated as contract research expenses for purposes of subsection (a)(1).

(2) Basic research payments defined

For purposes of this subsection -

(A) In general

The term "basic research payment" means, with respect to any taxable year, any amount paid in cash during such taxable year by a corporation to any qualified organization for basic research but only if -

- (i) such payment is pursuant to a written agreement between such corporation and such qualified organization, and
- (ii) such basic research is to be performed by such qualified organization.

(B) Exception to requirement that research be performed by the organization

In the case of a qualified organization described in subparagraph (C) or (D) of paragraph (6), clause (ii) of subparagraph (A) shall not apply.

(3) Qualified organization base period amount

For purposes of this subsection, the term "qualified organization base period amount" means an amount equal to the sum of -

- (A) the minimum basic research amount, plus
- (B) the maintenance-of-effort amount.

(4) Minimum basic research amount

For purposes of this subsection -

(A) In general

The term "minimum basic research amount" means an amount equal to the greater of -

- (i) 1 percent of the average of the sum of amounts paid or incurred during the base period for -
  - (I) any in-house research expenses, and
  - (II) any contract research expenses, or
- (ii) the amounts treated as contract research expenses during the base period by reason of this subsection (as in effect during the base period).

(B) Floor amount

Except in the case of a taxpayer which was in existence during a taxable year (other than a short taxable year) in the base period, the minimum basic research amount for any base period shall not be less than 50 percent of the basic research payments for the taxable year for which a determination is being made under this subsection.

(5) Maintenance-of-effort amount

For purposes of this subsection -

(A) In general

The term "maintenance-of-effort amount" means, with respect to any taxable year, an amount equal to the excess (if any) of

- (i) an amount equal to -
  - (I) the average of the nondesignated university contributions paid by the taxpayer during the base period, multiplied by
  - (II) the cost-of-living adjustment for the calendar year in which such taxable year begins, over
- (ii) the amount of nondesignated university contributions paid by the taxpayer during such taxable year.

(B) Nondesignated university contributions

For purposes of this paragraph, the term "nondesignated university contribution" means any amount paid by a taxpayer

to any qualified organization described in paragraph (6) (A) -  
(i) for which a deduction was allowable under section 170,  
and

(ii) which was not taken into account -

(I) in computing the amount of the credit under this  
section (as in effect during the base period) during any  
taxable year in the base period, or

(II) as a basic research payment for purposes of this  
section.

(C) Cost-of-living adjustment defined

(i) In general

The cost-of-living adjustment for any calendar year is the  
cost-of-living adjustment for such calendar year determined  
under section 1(f) (3), by substituting 'calendar year 1987'  
for 'calendar year 1992' in subparagraph (B) thereof.

(ii) Special rule where base period ends in a calendar year  
other than 1983 or 1984

If the base period of any taxpayer does not end in 1983 or  
1984, section 1(f) (3) (B) shall, for purposes of this  
paragraph, be applied by substituting the calendar year in  
which such base period ends for 1992. Such substitution shall  
be in lieu of the substitution under clause (i).

(6) Qualified organization

For purposes of this subsection, the term 'qualified  
organization' means any of the following organizations:

(A) Educational institutions

Any educational organization which -

(i) is an institution of higher education (within the  
meaning of section 3304(f)), and

(ii) is described in section 170(b) (1) (A) (ii).

(B) Certain scientific research organizations

Any organization not described in subparagraph (A) which -

(i) is described in section 501(c) (3) and is exempt from  
tax under section 501(a),

(ii) is organized and operated primarily to conduct  
scientific research, and

(iii) is not a private foundation.

(C) Scientific tax-exempt organizations

Any organization which -

(i) is described in -

(I) section 501(c) (3) (other than a private foundation),

or

(II) section 501(c) (6),

(ii) is exempt from tax under section 501(a),

(iii) is organized and operated primarily to promote  
scientific research by qualified organizations described in  
subparagraph (A) pursuant to written research agreements, and

(iv) currently expends -

(I) substantially all of its funds, or

(II) substantially all of the basic research payments  
received by it,

for grants to, or contracts for basic research with, an  
organization described in subparagraph (A).

(D) Certain grant organizations

Any organization not described in subparagraph (B) or (C)

which -

(i) is described in section 501(c)(3) and is exempt from tax under section 501(a) (other than a private foundation),

(ii) is established and maintained by an organization established before July 10, 1981, which meets the requirements of clause (i),

(iii) is organized and operated exclusively for the purpose of making grants to organizations described in subparagraph (A) pursuant to written research agreements for purposes of basic research, and

(iv) makes an election, revocable only with the consent of the Secretary, to be treated as a private foundation for purposes of this title (other than section 4940, relating to excise tax based on investment income).

(7) Definitions and special rules

For purposes of this subsection -

(A) Basic research

The term "basic research" means any original investigation for the advancement of scientific knowledge not having a specific commercial objective, except that such term shall not include -

(i) basic research conducted outside of the United States, and

(ii) basic research in the social sciences, arts, or humanities.

(B) Base period

The term "base period" means the 3-taxable-year period ending with the taxable year immediately preceding the 1st taxable year of the taxpayer beginning after December 31, 1983.

(C) Exclusion from incremental credit calculation

For purposes of determining the amount of credit allowable under subsection (a)(1) for any taxable year, the amount of the basic research payments taken into account under subsection (a)(2) -

(i) shall not be treated as qualified research expenses under subsection (a)(1)(A), and

(ii) shall not be included in the computation of base amount under subsection (a)(1)(B).

(D) Trade or business qualification

For purposes of applying subsection (b)(1) to this subsection, any basic research payments shall be treated as an amount paid in carrying on a trade or business of the taxpayer in the taxable year in which it is paid (without regard to the provisions of subsection (b)(3)(B)).

(E) Certain corporations not eligible

The term "corporation" shall not include -

(i) an S corporation,

(ii) a personal holding company (as defined in section 542), or

(iii) a service organization (as defined in section 414(m)(3)).

(f) Special rules

For purposes of this section -

(1) Aggregation of expenditures

(A) Controlled group of corporations

In determining the amount of the credit under this section -

- (i) all members of the same controlled group of corporations shall be treated as a single taxpayer, and
- (ii) the credit (if any) allowable by this section to each such member shall be its proportionate shares of the qualified research expenses and basic research payments giving rise to the credit.

(B) Common control

Under regulations prescribed by the Secretary, in determining the amount of the credit under this section -

- (i) all trades or businesses (whether or not incorporated) which are under common control shall be treated as a single taxpayer, and
- (ii) the credit (if any) allowable by this section to each such person shall be its proportionate shares of the qualified research expenses and basic research payments giving rise to the credit.

The regulations prescribed under this subparagraph shall be based on principles similar to the principles which apply in the case of subparagraph (A).

(2) Allocations

(A) Pass-thru in the case of estates and trusts

Under regulations prescribed by the Secretary, rules similar to the rules of subsection (d) of section 52 shall apply.

(B) Allocation in the case of partnerships

In the case of partnerships, the credit shall be allocated among partners under regulations prescribed by the Secretary.

(3) Adjustments for certain acquisitions, etc.

Under regulations prescribed by the Secretary -

(A) Acquisitions

If, after December 31, 1983, a taxpayer acquires the major portion of a trade or business of another person (hereinafter in this paragraph referred to as the 'predecessor') or the major portion of a separate unit of a trade or business of a predecessor, then, for purposes of applying this section for any taxable year ending after such acquisition, the amount of qualified research expenses paid or incurred by the taxpayer during periods before such acquisition shall be increased by so much of such expenses paid or incurred by the predecessor with respect to the acquired trade or business as is attributable to the portion of such trade or business or separate unit acquired by the taxpayer, and the gross receipts of the taxpayer for such periods shall be increased by so much of the gross receipts of such predecessor with respect to the acquired trade or business as is attributable to such portion.

(B) Dispositions

If, after December 31, 1983 -

- (i) a taxpayer disposes of the major portion of any trade or business or the major portion of a separate unit of a trade or business in a transaction to which subparagraph (A) applies, and

- (ii) the taxpayer furnished the acquiring person such information as is necessary for the application of subparagraph (A),

then, for purposes of applying this section for any taxable

year ending after such disposition, the amount of qualified research expenses paid or incurred by the taxpayer during periods before such disposition shall be decreased by so much of such expenses as is attributable to the portion of such trade or business or separate unit disposed of by the taxpayer, and the gross receipts of the taxpayer for such periods shall be decreased by so much of the gross receipts as is attributable to such portion.

(C) Certain reimbursements taken into account in determining fixed-base percentage

If during any of the 3 taxable years following the taxable year in which a disposition to which subparagraph (B) applies occurs, the disposing taxpayer (or a person with whom the taxpayer is required to aggregate expenditures under paragraph (1)) reimburses the acquiring person (or a person required to so aggregate expenditures with such person) for research on behalf of the taxpayer, then the amount of qualified research expenses of the taxpayer for the taxable years taken into account in computing the fixed-base percentage shall be increased by the lesser of -

- (i) the amount of the decrease under subparagraph (B) which is allocable to taxable years so taken into account, or
- (ii) the product of the number of taxable years so taken into account, multiplied by the amount of the reimbursement described in this subparagraph.

(4) Short taxable years

In the case of any short taxable year, qualified research expenses and gross receipts shall be annualized in such circumstances and under such methods as the Secretary may prescribe by regulation.

(5) Controlled group of corporations

The term "controlled group of corporations" has the same meaning given to such term by section 1563(a), except that -

(A) "more than 50 percent" shall be substituted for "at least 80 percent" each place it appears in section 1563(a)(1), and

(B) the determination shall be made without regard to subsections (a)(4) and (e)(3)(C) of section 1563.

(g) Special rule for pass-thru of credit

In the case of an individual who -

- (1) owns an interest in an unincorporated trade or business,
- (2) is a partner in a partnership,
- (3) is a beneficiary of an estate or trust, or
- (4) is a shareholder in an S corporation,

the amount determined under subsection (a) for any taxable year shall not exceed an amount (separately computed with respect to such person's interest in such trade or business or entity) equal to the amount of tax attributable to that portion of a person's taxable income which is allocable or apportionable to the person's interest in such trade or business or entity. If the amount determined under subsection (a) for any taxable year exceeds the limitation of the preceding sentence, such amount may be carried to other taxable years under the rules of section 39; except that the limitation of the preceding sentence shall be taken into account in lieu of the limitation of section 38(c) in applying section 39.



(h) Termination

(1) In general

This section shall not apply to any amount paid or incurred -

(A) after June 30, 1995, and before July 1, 1996, or

(B) after June 30, 2004.

(2) Computation of base amount

In the case of any taxable year with respect to which this section applies to a number of days which is less than the total number of days in such taxable year, the base amount with respect to such taxable year shall be the amount which bears the same ratio to the base amount for such year (determined without regard to this paragraph) as the number of days in such taxable year to which this section applies bears to the total number of days in such taxable year.

## **IRC Section 45C: Clinical Testing Expenses for Certain Drugs for Rare Diseases or Conditions**

### (a) General rule

For purposes of section 38, the credit determined under this section for the taxable year is an amount equal to 50 percent of the qualified clinical testing expenses for the taxable year.

### (b) Qualified clinical testing expenses

For purposes of this section -

#### (1) Qualified clinical testing expenses

##### (A) In general

Except as otherwise provided in this paragraph, the term 'qualified clinical testing expenses' means the amounts which are paid or incurred by the taxpayer during the taxable year which would be described in subsection (b) of section 41 if such subsection were applied with the modifications set forth in subparagraph (B).

##### (B) Modifications

For purposes of subparagraph (A), subsection (b) of section 41 shall be applied -

(i) by substituting 'clinical testing' for 'qualified research' each place it appears in paragraphs (2) and (3) of such subsection, and

(ii) by substituting '100 percent' for '65 percent' in paragraph (3)(A) of such subsection.

##### (C) Exclusion for amounts funded by grants, etc.

The term 'qualified clinical testing expenses' shall not include any amount to the extent such amount is funded by any grant, contract, or otherwise by another person (or any governmental entity).

##### (D) Special rule

For purposes of this paragraph, section 41 shall be deemed to remain in effect for periods after June 30, 1995, and before July 1, 1996, and periods after June 30, 2004.

#### (2) Clinical testing

##### (A) In general

The term 'clinical testing' means any human clinical testing -

(i) which is carried out under an exemption for a drug being tested for a rare disease or condition under section 505(i) of the Federal Food, Drug, and Cosmetic Act (or regulations issued under such section),

(ii) which occurs -

(I) after the date such drug is designated under section 526 of such Act, and

(II) before the date on which an application with respect to such drug is approved under section 505(b) of such Act or, if the drug is a biological product, before the date on which a license for such drug is issued under section 351 of the Public Health Service Act; and

(iii) which is conducted by or on behalf of the taxpayer to whom the designation under such section 526 applies.

##### (B) Testing must be related to use for rare disease or condition

Human clinical testing shall be taken into account under subparagraph (A) only to the extent such testing is related to

the use of a drug for the rare disease or condition for which it was designated under section 526 of the Federal Food, Drug, and Cosmetic Act.

(c) Coordination with credit for increasing research expenditures

(1) In general

Except as provided in paragraph (2), any qualified clinical testing expenses for a taxable year to which an election under this section applies shall not be taken into account for purposes of determining the credit allowable under section 41 for such taxable year.

(2) Expenses included in determining base period research expenses

Any qualified clinical testing expenses for any taxable year which are qualified research expenses (within the meaning of section 41(b)) shall be taken into account in determining base period research expenses for purposes of applying section 41 to subsequent taxable years.

(d) Definition and special rules

(1) Rare disease or condition

For purposes of this section, the term "rare disease or condition" means any disease or condition which -

- (A) affects less than 200,000 persons in the United States,
- or (B) affects more than 200,000 persons in the United States but for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for such disease or condition will be recovered from sales in the United States of such drug.

Determinations under the preceding sentence with respect to any drug shall be made on the basis of the facts and circumstances as of the date such drug is designated under section 526 of the Federal Food, Drug, and Cosmetic Act.

(2) Special limitations on foreign testing

(A) In general

No credit shall be allowed under this section with respect to any clinical testing conducted outside the United States unless -

- (i) such testing is conducted outside the United States because there is an insufficient testing population in the United States, and
- (ii) such testing is conducted by a United States person or by any other person who is not related to the taxpayer to whom the designation under section 526 of the Federal Food, Drug, and Cosmetic Act applies.

(B) Special limitation for corporations to which section 936 applies

No credit shall be allowed under this section with respect to any clinical testing conducted by a corporation to which an election under section 936 applies.

(3) Certain rules made applicable

Rules similar to the rules of paragraphs (1) and (2) of section 41(f) shall apply for purposes of this section.

(4) Election

This section shall apply to any taxpayer for any taxable year only if such taxpayer elects (at such time and in such manner as the Secretary may by regulations prescribe) to have this section apply for such taxable year.

## IRC Section 174: Research and Experimental Expenditures

### (a) Treatment as expenses

#### (1) In general

A taxpayer may treat research or experimental expenditures which are paid or incurred by him during the taxable year in connection with his trade or business as expenses which are not chargeable to capital account. The expenditures so treated shall be allowed as a deduction.

#### (2) When method may be adopted

##### (A) Without consent

A taxpayer may, without the consent of the Secretary, adopt the method provided in this subsection for his first taxable year -

(i) which begins after December 31, 1953, and ends after August 16, 1954, and

(ii) for which expenditures described in paragraph (1) are paid or incurred.

##### (B) With consent

A taxpayer may, with the consent of the Secretary, adopt at any time the method provided in this subsection.

#### (3) Scope

The method adopted under this subsection shall apply to all expenditures described in paragraph (1). The method adopted shall be adhered to in computing taxable income for the taxable year and for all subsequent taxable years unless, with the approval of the Secretary, a change to a different method is authorized with respect to part or all of such expenditures.

### (b) Amortization of certain research and experimental expenditures

#### (1) In general

At the election of the taxpayer, made in accordance with regulations prescribed by the Secretary, research or experimental expenditures which are -

(A) paid or incurred by the taxpayer in connection with his trade or business,

(B) not treated as expenses under subsection (a), and

(C) chargeable to capital account but not chargeable to property of a character which is subject to the allowance under section 167 (relating to allowance for depreciation, etc.) or section 611 (relating to allowance for depletion),

may be treated as deferred expenses. In computing taxable income, such deferred expenses shall be allowed as a deduction ratably over such period of not less than 60 months as may be selected by the taxpayer (beginning with the month in which the taxpayer first realizes benefits from such expenditures). Such deferred expenses are expenditures properly chargeable to capital account for purposes of section 1016(a)(1) (relating to adjustments to basis of property).

#### (2) Time for and scope of election

The election provided by paragraph (1) may be made for any taxable year beginning after December 31, 1953, but only if made not later than the time prescribed by law for filing the return for such taxable year (including extensions thereof). The method so elected, and the period selected by the taxpayer, shall be adhered to in computing taxable income for the taxable year for

which the election is made and for all subsequent taxable years unless, with the approval of the Secretary, a change to a different method (or to a different period) is authorized with respect to part or all of such expenditures. The election shall not apply to any expenditure paid or incurred during any taxable year before the taxable year for which the taxpayer makes the election.

(c) Land and other property

This section shall not apply to any expenditure for the acquisition or improvement of land, or for the acquisition or improvement of property to be used in connection with the research or experimentation and of a character which is subject to the allowance under section 167 (relating to allowance for depreciation, etc.) or section 611 (relating to allowance for depletion); but for purposes of this section allowances under section 167, and allowances under section 611, shall be considered as expenditures.

(d) Exploration expenditures

This section shall not apply to any expenditure paid or incurred for the purpose of ascertaining the existence, location, extent, or quality of any deposit of ore or other mineral (including oil and gas).

(e) Only reasonable research expenditures eligible

This section shall apply to a research or experimental expenditure only to the extent that the amount thereof is reasonable under the circumstances.

(f) Cross references

(1) For adjustments to basis of property for amounts allowed as deductions as deferred expenses under subsection (b), see section 1016(a)(14).

(2) For election of 10-year amortization of expenditures allowable as a deduction under subsection (a), see section 59(e).

### Overview of key elements of treatment of r & d expenditure under corporate income-tax laws

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
Austria	Yes	Deductible if revenue expenditure  Amortization if capital expenditure.	No	Yes	No	Yes, No approval required
Belgium	Yes	Current cost deduction/ amortization (option for taxpayer); depreciable assets - amortization	No	Yes	Yes	General tax treatment: Yes  Incentives not available in case of subcontracted research.  No approval required.
Cyprus	No	Deductible if revenue expenditure  Amortization if capital expenditure.	No	No	Not Relevant	Same general tax treatment for subcontracted research.  No approval

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
						required.
Czech Republic	No	Deductible, unless the research result constitutes an intangible property. Amortization if research results constitute intangible property.	No	No	Not Relevant	Yes.  No approval needed.
Denmark	Yes	Deduction/ amortization (option for taxpayer)	No	Yes	No	Yes.  No approval needed.
Estonia	Not relevant due to peculiar tax system in Estonia	No deduction for any expense; only dividend distribution tax (instead of tax on income)	Not Relevant	No	Not Relevant	Not Relevant
Finland	No	Deduction/	No	Yes	Not Relevant	Yes.

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
		amortization (option for taxpayer)				No approval needed.
France	Yes	Deductible if revenue expenditure  Amortization if capital expenditure.	No	Yes	Yes	Yes.  In case of subcontracted research, the Research Tax Credit (CIR) is available only if the research is subcontracted to a public research enterprise or a private company approved by the government.
Germany	Yes	Deductible if revenue expenditure  Amortization	No	No	Not Relevant	Yes.  No approval needed.



Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
		if capital expenditure.				
Greece	Yes	Deductible if revenue expenditure  Amortization if capital expenditure.	No	Yes	No	Yes.  No approval needed.
Hungary	No	Deductible; amortization (option for taxpayer) in case of experimental development	No	Yes	No	Yes.  No approval needed.
Ireland	Yes	Deductible/ 100% tax depreciation	No	Yes	No(From EEA perspective)	Amounts paid to approved body or an Irish university for carrying out research is deductible.  Generally, subject to limited

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
						exception, R & D tax credit is not available in case of subcontracted research.
Italy	No	Deduction/ amortization (option for taxpayer)	No	Yes	No	Yes.  No approval needed.
Japan	Yes	Deduction/ amortization (option for taxpayer, for certain assets only depreciation)	No	Yes	Yes (for some incentives)	Yes, except in case of special tax credit for industry-academia-government joint research. This special tax credit would be available in case of subcontracted research only if the research is subcontracted to certain institutions.

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
						No approval needed.
Latvia	No	Generally deductible/a mortization of fixed assets	No	No	Not Relevant	Yes.  No approval needed.
Lithuania	No	Deductible/ amortization of fixed assets	No	No	Not Relevant	Yes.  No approval needed.
Luxembourg	No	Deduction/ amortization (option for taxpayer)	No	No	Not Relevant	Yes.  No approval needed.
Malta	No in general tax provisions, but yes in Art. 14(h) ITA	Deductible if revenue expenditure  Amortization if capital	No	Yes	No	Yes.  No approval needed.

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
		expenditure.				
The Netherlands	Yes	Deductible/ depreciation on tangible fixed assets	No	No	No <sup>97</sup>	Yes.  No approval needed.
Poland	Yes	Deductible if revenue expenditure  Amortization if capital expenditure.	No	No	Not Relevant	Yes.  No approval needed.
Portugal	Yes	Deduction/ amortization (option for taxpayer); tangible fixed assets depreciated	No	Yes	No	Yes, expenditure on subcontracted research qualifies for the “tax reserve for investment regime” if the research is subcontracted to a qualifying research institution.

<sup>97</sup> There is a territorialization issue in respect of a relevant incentive under the Dutch wage tax legislation. However, since this Overview Table deals only with the corporate tax items, it is not covered in this table.

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
Slovak Republic	Yes	Deductible if revenue expenditure  Amortization if capital expenditure.	No	No	Not Relevant	Yes.  No approval needed.
Slovenia	Yes, as from 1 January 2005	Deductible if revenue expenditure  Amortization if capital expenditure.	No	Yes	No	Yes.  No approval needed.
Spain	Yes	Generally deductible/ free depreciation of R & D assets	No	Yes	Yes	Yes.  No approval needed.
Sweden	Yes	Generally deductible, if capitalized then amortization, tangible fixed assets	No	No	Not Relevant	Yes.  No approval needed.

Country	R & D Expense Defined?	Treatment under general Provisions	Territorialization Issue for cost deduction under general provisions?	Specific Incentives for R & D Expenses?	Territorialization issue for one or more incentives?	Same treatment even in case of subcontracted research?
		depreciated				
UK	Yes	Deductible/ 100% accelerated depreciation for capital expenditure	No	Yes	No	Yes. As regards R & D tax credit, the amount of credit in respect of subcontracted research depends on the size of the company.  No approval needed.
US	Yes	Deductible if revenue expenditure  Amortization if capital expenditure.	No	Yes	No	Yes.  No approval needed.