2012 Global Survey of R&D Tax Incentives
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A significant number of countries now offer the critical operational pre-requisites for successfully conducting effective research and development (R&D), i.e., access to growing markets/customer base, access to talent, intellectual property protection, stable economy/government and information technology infra-structure. Accordingly, many countries are promoting optimization of R&D operations including re-location as part of their innovation-led economic development strategies. R&D tax incentives are an important component of these strategies.

Countries offering R&D tax incentives are often regarded as a favourable location for internationally-mobile R&D. When efficiently allocated, companies can effectively leverage their global R&D infrastructure resulting in the development of valuable intellectual properties.

R&D incentives vary by country with regard to the following “key” considerations:

- Computational mechanics;
- The levels of benefits available; and
- The certainty of realizing an economic benefit from the tax incentive.

Although the basic definition of “research and development” is similar across many countries, distinctions exist within sovereign laws. Some countries offer particularly lucrative incentives, subject to few restrictions on the location of the qualified research activity, funding of R&D, ownership of IP, etc.; while others offer basic incentives with significant limitations, including eligible industries, qualified costs, and applications procedures. Most research incentives are designed to encourage companies to maintain a certain level of R&D, with additional incentives for increased research spending. A few regimes offer tax benefits for capital investments in R&D, while most offer incentives for operational costs, i.e., wages, supplies and contractor fees. Moreover, many countries offer enhanced tax incentives for start-up companies.

This global survey summarizes and compares R&D tax incentives available in the countries typically considered as viable locations for conducting R&D. The tax rates and research incentives described below are effective as of September 2012, but are subject to change.

Many countries offer tax incentives to encourage research and development efforts leading to increased domestic business growth.
Australia

Background

Australia’s corporate income tax rate is currently 30%. Tax reform panels have recommended a reduction in the rate for small-to-medium sized enterprises, but the recommendation was withdrawn in May 2012.

Nature of Incentives

Australia’s corporate income tax regime includes R&D tax incentives. For tax years ending on or before June 30, 2011, this took the form of enhanced deductions and refunds under certain circumstances.

For tax years commencing on or after July 1, 2011, a two-tier R&D tax credit system replaced the previous regime. The R&D regime now takes the form of either:

- A refundable tax credit equal to 45% of the eligible R&D expenditures (but the expenditures are not deductible) where the eligible entity has gross receipts of less than $20M and is not controlled by exempt entities, or
- A 40% non-refundable tax credit for all other eligible entities.

Connected and affiliate entities may be taken into account in determining the $20M threshold.

Any excess non-refundable R&D tax credits can be carried forward indefinitely, but not carried back. The ability to use carried forward R&D tax credits is subject to ownership or same business continuity tests and would be reduced by certain amounts of non-taxable income.

There are mechanisms to reduce the additional incentive component of the R&D tax credits where the eligible entity receives a government grant to recoup expenditure on which a tax credit has been received. A reduction may also occur where R&D activities result in the output of a marketable product that is applied for the entity’s own use or supplied to another entity for profit.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. Entities that are resident in Australia for tax purposes due to incorporation, central management and control, or under the residency tie-breaker article of a Double Tax Agreement (DTA) are considered an eligible R&D entity. An Australian permanent establishment under a double tax agreement shall now also be an eligible R&D entity.

Australia provides a tax credit equal to 40% or 45% of eligible R&D expenditure, with the excess refundable to small and medium sized entities.

Qualifying expenditures may include staff costs, direct costs, overheads, supplies, and capital expenditures on activities that are defined as core or supporting R&D activities. Interest payments and building cost are excluded.

Core R&D activities will generally be experimental activities whose outcome cannot be determined in advance based on current knowledge, information and experience, and is conducted for the purpose of gathering new knowledge. Certain activities are specifically excluded from being core activities, including software development for the dominant purpose of internal business administration. These exclusions may still qualify as supporting R&D activities.

Supporting R&D activities will be those activities that are directly related to core R&D activities. However, if the activity is on the core exclusion list or produces goods or services, they must also be undertaken for the dominant purpose of supporting core R&D activities to be eligible.

IP and Jurisdictional Restrictions

For tax years commencing on or after July 1, 2011, intellectual property rights do not generally need to be retained in Australia. Previously, IP generally had to be retained in Australia, except for IP developed through activities that qualified for the 175% Incremental Concession (International). If there was no Double Tax Agreement (DTA) the Incremental Concession (International) was available to the extent such expenses were incurred in Australia. If technology was purchased for further development by the company, then the deduction for the purchase cost was limited to 1/3 of the expenditure on the internal development activities.

Activities can be physically performed outside Australia and remain eligible for benefits only if there is a significant scientific link to Australian core activities, and the activities are unable to be conducted in Australia. At least 50% of total costs must be incurred in Australia. For tax years ending on or before June 30, 2010, up to 10% of the activities qualifying for the previous super deduction could be conducted outside of Australia.

Other Concerns

Taxpayers must file the Application for Registration of R&D Activities within 10 months of the tax year end. The R&D tax credits are claimed on the taxpayer’s annual company income tax return.
Austria

Background

Austria’s corporate tax rate is 25%. Austria provides a cash back incentive for R&D activities.

Nature of Incentives

The incentive available for research intensive entities includes a 10% volume-based tax credit on all qualified R&D related expenditures, even if the company is in a tax loss or low profit position. The taxpayer must apply for the credit on the tax return. This benefit is refundable to the extent the credit exceeds the amount of the tax liabilities.

For subcontracted research expenditures, the cost basis is limited to €100K annually (for tax years beginning after December 31, 2011, the cost basis is increased to €1M annually, the tax benefit can therefore amount to a maximum of €100K).

Grants and subsidies received by the taxpayer that are exempt from Austrian corporate income tax reduce the base for the research credit.

For income from royalty payments related to self-developed intellectual properties or capital gains from sale of self-developed intellectual properties, the tax rate is reduced by half for individual taxpayers (not for corporations).

Austria provides a 10% refundable tax credit. Changes regarding the procedure for the application of R&D tax benefits are supposed to provide more legal certainty.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. Qualified R&D activity, in general, is any systematic or intensive study undertaken in the field of science or technology with the objective of using the results of the study for the production of new or fundamentally improved materials, devices, products, or processes.

Qualifying activities must be conducted with the purpose of increasing knowledge and developing new applications. The definition of research includes basic and applied research, as well as experimental development within the meaning of the Organisation for Economic Co-operation and Development (OECD) Frascati Manual. Software development is also a qualified activity.

Qualifying expenditures include: capital investment, finance costs, staff costs, overhead, leasing costs, and subcontractor fees.

When subcontracted R&D is performed, the principal (the party funding the research) may opt to claim the qualifying expenses instead of the subcontractor. The subcontractor must be a qualifying EU/EEC institution and is not a related party. The subcontractor fees are limited to maximum of €100K/€1M annually, leading to a tax benefit of €10K/€100K.

IP and Jurisdictional Restrictions

From 2013, an official expertise from the Austrian Research Promotion Organisation evaluating whether the conditions of R&D as defined in the Austrian Income Tax Act are fulfilled will be required before being able to apply for the R&D tax premium. The application for the expertise shall be filed electronically.

If certain conditions are fulfilled, a special notice of assessment which confirms the fulfilment of the legal requirements of R&D for a particular project (that might extend over more than one year) can be obtained and is binding for the tax authorities. The costs for this notice of assessment amount to €1K.

There is no need for existing patent protection of the result of the R&D activities or proof of the success of the R&D work. No restrictions are imposed upon the location of the IP.

Research activities have to be conducted in Austria. Subcontracted research must follow management and direction from an Austrian business or branch or permanent establishment in Austria. Further, the subcontractor has to be based within EU/EEA.
Belgium

Background

Belgium’s general corporate tax rate is 33.99%.

Nature of Incentives

- R&D Tax Credit and Investment Deduction: Beginning on January 1, 2012, taxpayer may elect a 15.5% one-time deduction of all R&D Investments recorded on the balance sheet (tangible and intangible) or 22.5% of the total depreciation amount for the same R&D Investments (i.e., taxpayer computes the depreciation amount and multiplies this amount by 22.5%). This is in addition to the standard depreciation deduction for such expenses; resulting in a super deduction of 122.5% of the amount of depreciation for capital assets, etc. used in research. Excess deductions may be carried forward indefinitely or converted into a tax credit refundable after 5 years.

- Patent Income Deduction (PID): Allows taxpayers to deduct 80% of their qualifying patent income from their taxable income (resulting in a 6.8% maximum effective tax rate).

- Partial Wage Tax Exemption: 75% withholding exemption granted to the company for wages paid to qualifying researchers working on R&D projects. Eligible employees must have masters or above degree in the scientific area. This incentive allows a 15%-20% decrease of the salary cost for a researcher dedicated to working on qualifying R&D projects. On some occasions, the diploma conditions are not imposed, i.e. Young Innovation Company, or University Research Agreement.

Additionally, companies may be granted temporary “innovation premiums” for their employees, thereby eliminating tax and social security withholding requirements.

Cash grants are available to R&D intensive entities from the regional government. The grants for research projects can amount up to 80% of total project expenditures depending on the location of the project, the types of R&D activities, and the type of funding instrument. The regional cash grants are usually not taxable.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries.

In order to receive the deduction or claim the benefit, the taxpayer must certify that the R&D investments are made in order to develop products/services that are:

- Innovative in the Belgian market; and,
- Have no negative environmental impact (or, if there is an environmental impact, the taxpayer has taken the steps necessary to mitigate such impact).

Qualifying costs include: salaries and wages, direct costs, subcontracting costs, overhead, and depreciation.

Patent income deductions, super deductions and wage tax exemptions are just a few of the incentives offered.

IP and Jurisdictional Restrictions

The R&D Tax Credit and Investment Deduction benefit may be claimed for R&D work performed outside Belgium; however the claimant must retain some associated IP in Belgium to receive the tax benefit.

There’s no IP ownership requirement for the Partial Wage Tax Exemption.

PID is applicable to patents developed by the Belgian entity, and is also applicable to improvements to existing patents owned by other legal entities.

Other Concerns

Taxpayer must file a claim for environmental certification though the regional authorities by March 31st and be awarded the certificate from the region in which the qualified activity occurs.
Brazil

Background

Brazil’s general corporate tax rate is 34%. All incentives are available for companies that operate under the Lucro Real tax regime.

Nature of Incentives

- **Super Deduction**: Super deduction equal to 160% of the total R&D expenditures.

- **Enhanced Super Deduction**: If the entity increases the amount of researchers exclusively dedicated to research projects by up to 5% in a given year, super deduction increases to 170%; and if headcount increases more than 5% in a given year, the super deduction increases to 180% of the qualified expenses. Employees who relocated internally to work exclusively in research projects may also be considered in the increase of the number of researchers.

- **Enhanced Super Deduction for Patents**: An extra 20% deduction is allowed for the qualifying costs incurred in developing a patent, but the super deduction is only allowed when a patent is registered. Since the super deduction is delayed until the patent is registered, few taxpayers take advantage of this provision.

- **Unused deductions may not be carried forward or carried back.**

- **Depreciation / Amortization**: For corporate income tax (CIT 34%) purposes only, 100% depreciation is allowed in the year of acquisition for new machinery, equipment, and instruments exclusively dedicated to research and development, as well as 100% amortization for intangibles used in research and development.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. Activities undertaken to achieve technological innovation qualify for the R&D tax incentives. These activities include designing new products or processes, as well as the aggregation of new functionalities or characteristics to a product or process, resulting in incremental improvements in quality or productivity. Additionally, software development qualifies as an R&D activity as long as it is undertaken to advance scientific or technical goals.

R&D expenditures include wages, salaries, and certain payments to third parties (e.g., laboratory tests, etc.), directly attributable to the conduct of qualified R&D activities.

Brazil offers super-deductions for research performed in Brazil and reduced excise tax for equipment used in research.

During 2011, Brazilian Internal Revenue Service (IRS) released a Normative ruling setting out some understandings in connection with R&D tax incentives.

Professionals Partially Dedicated to R&D - Taxpayer needs to adjust the employment contracts for the employees that are partially dedicated to research projects, in order to expressly indicate that such employees work as researchers in technological innovation projects. If this procedure is not adopted by the company, the expenses connected with the employees that have partial dedication to R&D should not be included in the R&D tax incentive calculation.

R&D Subcontracting - Brazilian legislation prevents the use of the tax incentives for subcontracting expenses, except if expenses relate to:

- Contract with national universities, research institutions or independent inventors, as long as the hiring company assumes the responsibility, enterprise risk management and control of project expenditures.

- Payments made to small businesses for the implementation of research projects, even if the subcontracted party participates on the profitability of the projects’ final economic results.

- Companies are allowed to claim as part of the qualified expenses amounts incurred for contracted technical services, such as laboratory trials and testing, as long as the taxpayer does not participate in the execution of the services (even if partially).

Supporting Services, Indirect Services and other Non-qualifying costs - Expenses related to supporting administrative and indirect services are not eligible, even if they can be associated with a research project. These non-eligible expenses include security, cleaning, maintenance, library and documentation services, as well as coordination, administration and financial monitoring of research projects.

IP and Jurisdictional Restrictions

Only expenditures incurred within Brazil are eligible for the incentives (except for IPI reduction benefit noted below). The resulting IP does not have to be held within Brazil.

Other Concerns

Companies must have a tax clearance certificate, regarding the whole calendar year in which the incentive is taken, to qualify for the super deduction.

Specific accounting controls are also required, i.e., the chart of accounts should present specific accounts indicating the R&D expenditures. Recent understandings from Brazilian
IRS included the need for an analytical control of costs and expenses for each R&D project, using consistent and standardized criteria throughout the calendar year, and recording in a detailed and individualized way all the expenditures incurred.

Brazil also provides the following additional research incentives:

- Equipment, machinery, and tools exclusively dedicated to R&D can be deducted when the expense is paid or incurred. However, if assets initially acquired for the use in R&D activities are later sold or destined to other activities, the expense paid or incurred should become taxable when they are sold or transferred to another area (non-R&D related).

- Equipment, machinery, and tools acquired exclusively for R&D by IT companies, as well as companies with automation activities, that benefit from specific IPI Reduction (see below), can take a super deduction on the cost of such equipment.

- IPI Reduction (federal excise tax): Equipment, machinery, and tools dedicated to R&D receive a 50% reduction of the IPI due. This incentive must be claimed at the time the research related equipment, machinery, or tools are acquired.
Canada

Background

Federal and provincial corporate tax rate (combined) on business income is between 11% and 31% in 2012 (rate is dependent upon the size of the corporation, ownership, and provincial jurisdiction).

The R&D credit is legislated in the Income Tax Act and administered by the Canada Revenue Agency (CRA). Claims must be filed using prescribed forms and strict deadlines apply (18 months after the end of the taxation year, no extensions).

As described below, changes to the R&D credit have been proposed, effective 2013 and 2014 with further actions to be implemented in the coming months and in Federal Budget 2012. The government has committed to working with industry representatives to address emerging issues such as access to capital and direct funding through grants.

Nature of Incentives

- **SR&ED Deductions** (Scientific Research and Experimental Development): Immediate deduction for all qualified current and capital expenditures (no super deduction). Expenditures may be carried forward indefinitely to be deducted in future years.

- **SR&ED Investment Tax Credit**: 20% federal tax credit (15% for tax years ending after 2013) for all qualifying R&D costs for eligible activities carried on in Canada by a corporation, partnership, individual or trust. The credits can be used to offset federal tax liabilities. Unused credits can be carried forward 20 years (10 years in some provincial jurisdictions) and carried back 3 years. The credit rate is increased to 35% for small Canadian-controlled private corporations (on first $3M of expenditures per year, see below). This 35% credit is 100% refundable for non-capital related expenditures; 40% refundable for capital expenditures.

- **Provincial SR&ED Incentives**: Tax credits ranging from 4.5% to 37.5% depending upon the provincial jurisdiction. Many provincial jurisdictions offer refundable credits.

- **Special federal and provincial tax credits** exist for selected industries, including: IT, media, video games, and film as well as development of new technologies that address issues of climate change, clean air, and water and soil quality.

- **Enhanced tax credits** exist for research conducted by universities, research centers, and research consortia.

- **Enhanced refundable provincial tax credit** available to corporations performing SR&ED in a private partnership.

Refundable Credits for Small Canadian-Controlled Private Corporation: Federal SR&ED investment tax credits are available to small Canadian-controlled private corporations on the first $3M of expenditures. The corporate group of companies must have less than $800K of taxable income and less than $50M in taxable capital in the prior year to be eligible. Federal refunds are not available for foreign controlled or public corporations; although many provincial credits are fully refundable to all corporations.

There is a cap on refundable credits, as noted above; however, there is no cap on the total amount of benefits available through R&D incentives.

Canada offers one of the most lucrative research credits in the world.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. To qualify for SR&ED incentives, work must be performed in Canada to advance the understanding of scientific relations or technologies, address known scientific or technological obstacles, and incorporate a systematic investigation by qualified personnel. Eligible work that qualifies includes:

- Experimental development to achieve technological advancement to create new materials, devices, products, or processes, or to improve existing ones;

- Applied research to advance scientific knowledge with a specific practical application in view; and,

- Basic research to advance scientific knowledge without a special practical application in view.

Eligible R&D expenses include wages, materials (consumed or transformed), 100% of subcontracted R&D (80% after 2012), overhead (or a proxy amount in lieu of overhead – see below for changes to proxy amounts), lease payments (exclude lease payments incurred after 2013), payments to universities, colleges, and consortia, and certain capital expenditures (excluded for property acquired after 2013). There are special computation rules for contract R&D expenses to prevent duplicate claims by Canadian companies, whether related or not.

Proposed Changes to Innovation Support in Canada

Budget 2012 proposals

The 2012 federal budget introduced a number of changes to the program which are proposed to take effect over the next 2 years:

- Reduce the 20% SR&ED investment tax credit rate to 15% for taxation years ending after 2013.

- No change to the enhanced 35% credit for eligible Canadian controlled private corporations.
- Exclude capital expenditures from SR&ED deductions and investment tax credits for property acquired after 2013.
- Exclude lease payments incurred after 2013.
- Exclude shared-use equipment for capital expenditure incurred after 2013.
- Reduce the prescribed proxy amount for overhead expenditures from 65% of salary cost of directly engaged labour to
  - i. 60% for 2012
  - ii. 55% for years after 2013
- Limit qualifying expenditures to arm’s length contractors to 80% of the contract payment for expenditures incurred after December 31, 2012.
- Exclude from qualifying expenditures incurred after December 31, 2013, any contract amount in respect of a capital expenditure made by an arm’s length contractor to fulfil an SR&ED contract.

**IP and Jurisdictional Restrictions**

There are no restrictions on the location of IP, although the Canadian company must have the right to exploit the results of sub-contracted research. Generally, research must be conducted within Canada to be eligible for tax credits. However, the exception is that up to 10% of the total salary claimed can be for services provided by employees performing SR&ED outside of Canada. Some provinces offer tax refunds for revenue earned from patents. These refunds apply to provincial taxes on income earned from assigning, licencing a qualified patent to a non-resident. Income derived from providing goods and services related to a qualified patent are also eligible.

**Other Concerns**

Taxpayers must submit extremely detailed information on prescribed Form T661 and T2 Schedule 31 in order to claim the federal R&D credit. The form requests detailed information for each eligible project (pre-approval is not required). Provincial credit forms are also required for each jurisdiction of the claim. The deadline for filing research credits is 18 months after the end of the company’s tax year. No extensions to this deadline are available and incomplete claims will be rejected.

Documentation must be maintained to support the claim in the event of an audit by the tax authorities. The tax authorities may conduct a review of the technical eligibility and/or the expenditures claimed. Refundable claims are to be reviewed within 120 days of receipt by the CRA of a complete claim (240 days for an amended return). Non-refundable claims should be reviewed within 365 days.
China

Background

China offers a host of tax and other incentives. The corporate tax rate is 25%. The R&D incentives are offered in the form of income tax deductions and reductions in enterprise income tax rates.

Nature of Incentives

- **Super deduction**: Tax deduction equal to 150% of the qualifying R&D expenses.
- **Rate Reduction**: Reduced 15% corporate tax rate for companies granted High and New Technology Enterprise (HNTE) status. HNTE status must be applied for and renewed every 3 years.
- The reduced rate of 15% also applies to qualified Technology Advanced Service Enterprises in designated cities with over 50% revenue derived from providing qualified technology advanced services outsourced by foreign entities. (This incentive is available from July 1, 2010 through December 31, 2013.)
- **Tax Exemption**: Business Tax Exemption for the transfer of qualified technology.

Tax Incentives for Technology/Software Companies:

- The first RMB 5M of income from qualified technology transfers are exempt from the Enterprise Income Tax (EIT).
- Any income from technology transfers in excess of RMB 5M is taxed at a 50% reduced EIT rate.
- Newly established Software companies are often granted tax holidays.
- Additionally, taxable Software companies may also be granted a business tax exemption on qualified income.
- Qualified foreign invested R&D centers may enjoy exemption on import duty, VAT and consumption tax on import of equipment.
- Qualified foreign invested R&D centers and domestic R&D institutions may claim a refund of VAT taxes on the purchase of Chinese domestic equipment.
- Qualified software companies may enjoy exemption of import duty on self-used equipment and materials.
- Qualified newly established HNTEs in special zones are often granted a tax holiday.

- HNTE companies are eligible for the 150% super-deduction in addition to the reduced corporate tax rate. Tax losses attributable to R&D super deduction claims can be carried forward up to 5 years.

**China offers a 150% super deduction for eligible research and development expenditures.**

Eligible Industries and Qualifying Costs

The Chinese government provides the following list of eight state encouraged industries that are considered in awarding HNTE status:

- Electronic Information Technology
- Biological & New Medical Technology
- Aviation & Space Technology
- New Materials Technology
- New Energy & Energy Conservation Technology
- High Technology Service Industry
- Resources & Environmental Technology
- Transformation of Traditional Industries through High-New Technology

Qualified activities include development of new technology, new products, and new production techniques. Qualifying expenditures include staff costs, direct costs, supplies, depreciation and amortization, design costs, equipment installation costs, intangible asset amortization, and contracted R&D costs.

**IP and Jurisdictional Restrictions**

Less than 40% of the R&D expenses (including subcontracting R&D costs) qualifying for the HNTE incentive may occur outside China. The IP must be located in China for HNTE.

In order for the authorities to grant super deduction approval, they may consider whether IP will be retained in China; however, this is not required by law.

**Other Concerns**

Government approval is required to take advantage of the tax incentives. The taxpayer must register and apply for approval with the Science & Technology Bureau and the tax authority.

**VAT Reform**

Under the VAT reform pilot program implemented in Shanghai starting on January 1, 2012, VAT will replace Business Tax and is levied on transportation industry and certain modern services, including R&D and technology services (such as transfer of technology and technology consulting), and information and technology services (including software related services, circuit design and
testing services, IT system services and process and procedure management services).

VAT exemption will apply to the technology transfers, technology development, related technology consulting and technical services and qualified offshore outsourcing services provided by taxpayers in Shanghai. It is expected that the VAT reform will roll out nationwide. The provinces/cities to join the pilot will include Beijing, Tianjin, Jiangsu, Zhejiang, Anhui, Fujian, Hubei, Guangdong, Xiamen and Shenzhen.
Czech Republic

Background

The Czech Republic’s corporate income tax rate is 19% in 2012. The Czech Republic offers a super deduction for costs incurred for qualified research activities.

Nature of Incentives

- Super deduction: Deduction equal to 200% of the costs incurred during the implementation of research and development projects.
- Tax relief: 10 years of corporate income tax relief for investments in technological centres and strategic service centres under the amended Investment Incentives Act effective from July 2012.
- Other Non-Tax Related R&D Incentives: Cash grant programs for research and development including capital expenditure (CAPEX) investment.

R&D projects include projects in the form of experimental or theoretical works, design or drawing works, calculations, proposed technologies, or the making of a functional sample or a product prototype or its part.

If the super deduction cannot be utilized in the year it is claimed, then it can be carried forward and utilized within the next three taxable periods.

Eligible Industries and Qualifying Costs

The basic criteria that distinguish research and development from other activities are the presence of a measurable element of novelty and clarification of research or technical uncertainties. The measurable element of novelty and research or technical uncertainties must be present even if the subject of the research is known in the industry, as long as the taxpayer can prove no one else in the industry is receiving economical benefit from the same research. The criteria for qualified research are very similar to the definition of R&D in the Frascati Manual.

Qualified activities include the introduction of new or improved technologies, systems or services, and the production of new or improved materials, products and equipment, design and verification of prototypes, pilots or demonstration equipment.

Eligible R&D expenditures can be carried forward 3 years.

Qualified expenses include wages and salaries; depreciation of tangible movable property and intangible assets used in direct relation to the project; and, other operating expenses directly related to the project (i.e., materials, supplies, retail tangible/intangible assets, expenses for books and magazines, electricity, heat, gas, telecommunications, and water and sewage rates). Subcontracted R&D services are not included as qualified expenses, with the exception of certification of R&D results. Future legislation plans to include R&D services provided by public universities and public research institutes as eligible expenses. The super deduction excludes expenses paid for through government and public subsidies.

IP and Jurisdictional Restrictions

There are no IP registration requirements. Not all R&D activities must occur within the Czech Republic to qualify for a super deduction, but qualified expenses described above must be tax deductible expenses of the Czech taxpayer.

Other Concerns

The taxpayer must provide a written “summary” document specifying the qualified activities before the start of the project.

Additionally, the taxpayer may file an application for a binding ruling on the qualifying research and development expenses with the local competent tax administrator.
France

Background

General corporate tax rate is 34.43%.

France offers an R&D tax credit that is volume-based and can be carried forward for 3-years. To the extent the credit is not utilized within that 3-year window the taxpayer is entitled to a refund.

A temporary measure was enacted to enable taxpayers to get immediate refunds for any unutilized research credits for the period from 2005 to 2009. Research credits for 2010 forward are subject to the 3-year utilization rule mentioned above, with an exception for SMEs, new companies, young innovative companies and companies facing financial issues – who are able to claim immediate refunds for any unutilized credits.

Nature of Incentives

R&D expenses are deductible in the year in which they were incurred. Additionally, France offers an R&D credit:

- 30% of the first €100M of qualified R&D expenditures incurred during the tax year; plus, 5% of any amount in excess of the €100M threshold.
- 40% (previously 50% in 2010) for new applicants for the first year (subject to limitation), 35% (previously 40% in 2010) for the second year (subject to limitation), and 30% thereafter.

France offers a host of other incentives aimed at encouraging the growth of R&D-intensive businesses including innovation grants and acceleration of depreciation deductions for fixed assets used in R&D activities.

Revenues derived from licensing (also apply to net-revenues of sub-licenses of eligible IP rights starting January 1, 2011) or sale of patent or patentable technology are taxed at 15% reduced rate, with the requirement that the technology must have been owned by the French company for at least 2 years and the sale of the technology to related parties are excluded from the benefit of the 15% rate. Moreover, for the French licensee, the royalty fee is deductible at the 33.33% rate (unless the licensee does not exploit the IP rights effectively).

Eligible Industries and Qualifying Costs

There is no restriction on the types of entities that may qualify for incentives. Qualified activities include basic research, applied research, and development activities. The definition of qualifying R&D is from the OECD Frascati Manual; providing generally that qualified R&D activities:

- Present a significant technological advancement when compared to the then current state of the art.
- Utilize the combined efforts of researchers, scientists and technologists.
- Is uncertain with regard to the anticipated outcome and includes complexity concerning the methodology itself.
- Require the usage of scientific methods/ protocols to achieve results.

Generally, eligible expenses include the following: R&D staff expenses, general and administrative expenses, depreciation allowances for assets used for R&D activity in France, patent costs, contract costs, and costs of technological monitoring. Materials consumed in the research process do not qualify. The law also allows an estimate of general and administrative (G&A) expenses, but the formula for estimating such expenses was changed for expenses incurred on or after January 1, 2011. The new formula for eligible G&A expenses includes general and administrative expenses equal to 50% of all R&D staff expenses (previously 75%), and 75% of depreciation allowance of assets used in R&D activities in France (research equipment and facilities).

Since there is no at risk rule in France, research credits can be claimed for contractors performing research on the taxpayer’s behalf on a time/materials basis. There are, however, new restrictions on contract research expenses effective January 1, 2011: First, there is a cap on private subcontracted expenses equal to 3 times the other qualifying expenses, before applying any other limits related to the subcontracting expenses computation (limit of €10M subcontracting expenses). Second, in the event the subcontractor and subcontracting entity are related, qualifying contract research is limited to €2M.

IP and Jurisdictional Restrictions

100% of the qualified activity must occur within the EU (as long as the expenditure is part of the company’s tax base). There is no restriction on the location of any resulting IP.

France offers one of the most generous research tax incentives of the OECD countries.

Other Concerns

The taxpayer can seek governmental pre-approval for projects; however, pre-approval is not required in order to benefit from any of these incentives. Taxpayers can also apply for contractor certification by the Ministry of Research. Payments to certified contractors are treated as R&D expenditures. For 2011 companies having R&D expenses higher than €100M have new documentation requirements. Failure to comply with these requirements may result in penalties. The French government is expected to issue changes to the research incentives by end of 2012.
Germany

Background
Germany’s corporate tax rate is generally 15%, with a 5.5% solidarity surcharge levied on corporate income tax (i.e. effective tax burden app. 15.8%). Municipal trade tax is imposed at rates usually between 14% and 17%, with rates determined by municipalities. The effective combined income rate (i.e., corporate income tax, trade tax, solidarity surcharge) is on average 30%.

Nature of Incentives
R&D incentives, mainly in the form of non-repayable cash grants, are awarded on a “per project” basis, most frequently for collaborative projects. There is no legal claim for R&D funding.

Grant rates can reach up to 50% of eligible project costs. Higher rates may be possible for SMEs.

The selection criteria for eligible projects include:
- Level of innovation
- Level of technical risk
- Level of economic risk

R&D loans can be an alternative to R&D grants. R&D loans are not contingent on conducting R&D activities in a specific technology field and there are no application deadlines. R&D loans are provided under different governmental programs. For instance, the ERP Innovation Program offers 100% financing of eligible R&D project costs up to €5M.

R&D tax incentives are not yet offered. However, the introduction of such is on the political agenda.

Eligible Industries and Qualifying Costs
Eligibility is not limited to particular industries. Companies in the following industries typically seek cash grants:
- Biotech and Life Sciences
- ICT (Information and Communications Technologies)
- Manufacturing
- Energy & Utilities

However, some industries are usually excluded from eligibility:
- Banks and companies in financial services
- Insurance companies

Germany offers grants for R&D intensive entities.

Qualified expenditures include: staff costs, materials, overhead, subcontracts, amortization, and travel costs. Cash grants are generally issued to reimburse the business for costs already incurred.

Qualified activities include:
- Fundamental Research – experimental or theoretical work aimed at gaining new knowledge;
- Industrial Research – research with a specific practical objective aimed at developing new products, processes, or services, or at improving existing ones; and
- Experimental Research – research aimed at producing draft, plans, and prototypes.

IP and Jurisdictional Restrictions
R&D activities and costs must be incurred within Germany. The exploitation of project results, including IP, must remain in Germany.

Other Concerns
Attractive grant programs exist for projects related to energy efficiency, CO2 reduction, and renewable energy. However, funding is not restricted solely to this sector.

Large projects require EU notification (generally above €7.5M).
Hungary

Background

Hungary’s corporate tax rate is 10% for taxable income up to HUF500M, then 19% exceeding that limit.

Nature of Incentives

- Super Deduction: 200% super deduction for qualifying expenditures if the related R&D activities are carried out within the scope of the taxpayer’s own business activities, which means activities that are performed with the taxpayer’s own tools and employees, either for its own profit, at its own risk, or upon being contracted by another party. Furthermore, qualified activities include cooperative R&D activities performed based on an agreement with another party.

- Patent Box: If IP is created as a result of the R&D, 50% of the gross amount of the royalty received (up to 50% of the profit before tax) may be deducted from the corporate income tax base upon the taxpayer’s election. (Example: If profit before tax is 80 and the royalties received are 100, the deduction is 50% of the royalty received limited to 50% of the profits before tax, i.e., the deduction is 40. If the profit before tax is 120, the deduction is limited to 50% of the royalty received, i.e., 50).

- As of January 1, 2012, a capital gains tax exemption applies to supplement the existing patent box benefit. Under the new rules, the capital gains derived from the transfer (sale or in-kind contribution) of qualifying IP is exempt from corporate income tax provided that
  1) the company makes an election with the tax authorities within 60 days following the date of the IP acquisition, and
  2) the company holds the assets for at least one year before any subsequent sale.

- As a counterpart to the capital gains exemption, any capital loss realized on the sale of qualifying IP is not allowed for corporate income tax purposes. This benefit is available to any type of IP, and the IP itself does not have to be "new" and may have been generated previously by another company.

- Local Business Tax Base Reduction: The R&D costs can be deducted when computing the local business tax base.

- Refunds of R&D incentives are not available.

Hungary provides a 200% super deduction and cash grants.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. Qualifying expenditures are defined broadly and include all direct costs incurred in R&D. Eligible expenditures typically include:

- Gross wage cost of new or existing R&D and/or marketing staff.
- Cost of new equipment.
- Cost of certain goods/materials/R&D services purchased from third parties.

IP and Jurisdictional Restrictions

There is no restriction on the location of IP. Incentives are available to foreign entities without Permanent Establishment (PE) who subcontract in Hungary. Tax incentives can be claimed by Hungarian companies providing R&D services to a related foreign party.

Other Concerns

R&D benefits can be claimed retrospectively within the statute of limitations. As of February 1, 2012, the legislature has developed a new request procedure to claim research tax benefits. This new procedure entails submitting the claim to an authority, namely the Hungarian Intellectual Property Office that evaluates and passes judgment on the claim which is binding upon the tax authority.

R&D intensive entities may receive substantial cash grants from Hungarian and EU sources.
India

Background

Corporate tax rate is 32.45%.

Nature of Incentives

As of April 1, 2012 the incentives for conducting R&D include:

- A 200% super deduction for in-house R&D expenditures, including capital expenditures (other than land and buildings). The super deduction is limited to taxpayers in the business of bio-technology or manufacturing and producing products (other than products on the negative list such as alcoholic products, tobacco products, cosmetics, toothpaste, aerated waters using blended flavouring concentrates, confectionary, record players, projectors, office machines and apparatus, steel furniture, safes, latex foam, crown corks and caps for packaging). The R&D facility must be approved by the Department of Scientific and Industrial Research (DSIR) in order to qualify for super deductions. Currently the benefit is available until March 31, 2017.
- 100% deduction for R&D expenses (other than land) related to the business that does not otherwise qualify for the above super deductions.
- A super deduction of 125% to 200% for payments made to prescribed entities carrying out research and development in India.
- A deduction of R&D employee salary and materials consumed within 3 years immediately preceding the commencement of the business.

There is no cap on the R&D benefits available in India.

The approval of expenditures for in-house research and development by a company for purposes of the 200% super deduction shall be subject to the following conditions:

- The R&D unit should be located in a separate earmarked area.
- The R&D unit should have exclusive manpower of its own.
- R&D expenses qualifying for the super deduction cannot be deducted under any other provision of the tax code.
- The facility cannot qualify if it is used exclusively for market research, sales promotion, quality control, testing, commercial production, style changes, routine data collection, or activities of like nature.
- The company must maintain a separate account for each approved facility which shall be audited annually and a copy thereof shall be furnished to the Secretary of the DSIR by October 31st of each succeeding year.
- Assets acquired with respect to development of scientific research and development facilities shall not be disposed of without the approval of the Secretary of the DSIR.

Research incentive is expected to be continued with the new Direct Taxes Code

Eligible Industries and Qualifying Costs

Qualifying expenditures include wages, supplies, utilities, and other expenses directly related to R&D. Specifically excluded expenses include general and administrative costs, depreciation, overheads, and allocated expenditures.

Expenses incurred in clinical drug trials qualify for research tax incentives only if pre-approved by the regulatory authority under any Central, State or Provincial Act and a patent application is filed under the Patents Act, 1970 for the new drug/therapy developed through the clinical trials.

R&D activities must be conducted in India. There is no location restriction with respect to IP.

Other Concerns

If the taxpayer is in a loss situation, unused benefits may be carried forward for the next eight years, but cannot be carried back to earlier years.

The Direct Taxes Code (DTC) is set to replace the existing income tax laws soon. The DTC is expected to continue the current 200% super deduction.
Ireland

Background

Ireland’s general corporate tax rate is 12.5%.

Ireland introduced significant modifications to its R&D tax credit regime effective for accounting periods beginning on or after January 1, 2009. All credits are computed on a group basis.

Nature of Incentives

- Deduction: R&D expenses are currently deductible in the year incurred.
- Incremental Credit: 25% incremental credit for all expenditures exceeding the “base amount.” The base amount equals the total qualified expenditures incurred during 2003. Starting from January 1, 2012, the first €100K of R&D expenditures is not limited to the base amount. If the company did not exist in 2003 or it incurred no qualified expenditures in the first 12 month accounting period ending after January 1, 2003, the base amount is zero and the credit is available for all expenditures.
- R&D Facilities Credit: 25% credit for expenditures incurred for buildings or structures used in the conduct of qualified R&D activities (provided at least 35% of the building is used for qualified R&D over a 4-year period). There is no base calculation for the buildings credit.
- Credits received in relation to accounting periods starting after January 1, 2012, can be used by key R&D employees to use against their personal income tax liability. A number of restrictions apply, amongst which are that the individual cannot be (or be connected to) a director or have a material interest in the company, and personal tax rate not being able to be reduced to less than 23%.
- R&D grants are also offered.

Unused credits may be carried back to reduce the tax liability of the preceding accounting period (and carried forward indefinitely). If the credit is not fully utilized in the current and preceding tax period, the excess may be carried forward or refunded to the taxpayer through payments from the Revenue Commissioners (payments made over 3 years).

Credit refunds are subject to limitation. Refunds are limited to the greater of the total corporation tax paid by the company for the 10 years prior to the period for which the company is making the claim or the payroll tax liabilities for the specific period in which the expenditures were incurred.

For accounting periods starting after June 22, 2011, the refund limits have been increased to include the payroll liabilities of the immediately preceding accounting period, subject to certain restrictions relating to refunds in prior years.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. R&D activities mean systematic, investigatory, or experimental activities in a field of science or technology that include basic research, applied research, and experimental development. Generally, four categories of activity qualify for the credit:

- Natural Sciences;
- Engineering & Technology;
- Medical Science: basic medicine, clinical medicine, or health sciences; and,
- Agricultural Sciences

Qualifying expenditures include royalties, expenses deductible for trading purposes (wages and supplies), plant and machinery entitled to capital allowances, revenue and capital expenditures on scientific research, and buildings subject to capital allowances. Contracted research costs up to a limit of 10% of total qualifying expenditures on research and development activities in any one year qualify under the tax credit scheme. This applies where the subcontractor carrying out the research and development is unrelated to the company who paid for the research. If an Irish company performs research for other unrelated companies for a fee, the company performing the research is permitted to claim the credit, as long as the company providing the funding is not claiming the credit. Where the R&D activities are contracted to a university or institute, the limit is 5% of the company’s R&D expenditures in the period. For accounting period ending after January 1, 2012, the subcontracting limit is the greater of €100K, or the 10% and 5% limits described above.

Other than the limitations due to subcontracted research above, a company is able to claim tax credits irrespective of whether it has received funding from a customer (including related entities) to carry out the research activities. However grants received towards qualifying R&D expenditure must be deducted from the costs included in a claim.

IP and Jurisdictional Restrictions

R&D activities must occur within Ireland or the European Economic Area (EEA). The credit is denied when the activities occur in an EEA nation where a corresponding tax deduction for such expenditures is permitted.

The resulting IP does not have to reside within Ireland. There’s a potential minimum 2.5% effective corporate tax rate on IP income (12.5% corporate tax rate on the net profit, which can result in a very low overall effective tax rate (20% x 12.5% = 2.5% ETR)). There is also a stamp duty
exemption available for IP meeting the definition as per S101 SDCA 99.

Other Concerns

No governmental pre-approval is required.

Credit must be claimed within 12 months after the end of the accounting period in which the expenditure was incurred.
Israel

Background

Israel’s corporate tax rate is 25% of business income. The Office of the Chief Scientist (OCS) of the Ministry of Industry Trade and Labor implements the government's policy encouraging and supporting industrial research and development. They are responsible for promoting industrial R&D that is likely to lead to new export products. The following incentives are available only if approved by the OSC after applying the following criteria: proven technological skill of the applicant, plan to implement the project in Israel (unless exempted by the research committee of the OCS), and a need for improvements to an existing product.

Nature of Incentives

Alternative Tax Program:

- Tax benefits are given to two kinds of companies; Companies located in Priority Area A, which are eligible for a lower tax rate of 10% tax rate in 2011-2012, 7% in 2013-2014. Companies located in Priority Area that is not A, which are eligible for a lower tax rate of 15% tax rate in 2011-2012, 12.5% in 2013-2014.

- If the company pays dividends during a tax year in which the complete exemption is effective, the dividends are taxed at 15% and any exempted taxes become immediately payable.

- Companies located in Priority Area A may also qualify for grants for investing in their manufacturing facilities. Grants are distributed by the Investment Center at the rate of 20% out of the total investment.

Strategic Program:

- The program is intended for large multi-national companies whose annual gross receipts exceed NIS20BN, invest a minimum of NIS100M in the project itself, and hire at least 250 new employees.

- Fulfilling the above requirements will allow the companies to use a reduced tax rate of 5% in Priority Area A and 8% in Priority Areas that are not A.

Companies must apply to the Office of the Chief Scientist of the Ministry of Industry Trade and Labor for tax exemptions, reduced tax rates and cash grants.

Eligible Industries and Qualifying Costs

Companies engaging in qualified R&D activities in the following industries are generally eligible for R&D incentives:

- Pharmaceuticals
- Software & Hardware Development
- Energy & Utilities

Qualifying expenditures generally include in-house labor costs, capital investments, supplies, overhead, and contract costs.

The Office of the Chief Scientist’s main program, the R&D Fund, supports R&D projects in Israel by offering conditional grants of up to 50% of the approved R&D expenditure, and up to 60% in priority regions. If the R&D project is successful, the company must repay the grant through royalty payments.

Israel also offers the following:

- Special benefits for Traditional Industries investing up to 7% of their taxable income in R&D: Industries in the food & beverage, textile, print, metal, and plastic sectors, will be exempted from refunding royalties to the OCS, until the end of 2012. Additional benefits may apply.

- A large Corporation (over NIS100M annual taxable income) establishing R&D centers in priority regions in Israel, will be granted up to 60% of the approved R&D expenses. The corporation must invest a cumulative amount of at least 60M NIS in a period of 24 to 36 months.

- The MAGNET Program sponsors innovative generic industry-oriented technologies, through synergetic collaboration between industrial companies and academic research groups.

- Technological Incubators that provide grants of up to 85% of approved expenses for nascent companies to develop innovative technologies.

- The Tnufa Program is designed to encourage and support an individual entrepreneur in his initial efforts to build a prototype, register a patent, design a business plan, etc. Grants are offered up to 85% of the approved expenses for a maximum of NIS50K for each project.

- Israeli companies can apply for grants in the European Commissions' Seventh Framework Programme (FP7), which is the main instrument for funding research and development activities, covering almost all scientific disciplines.

- Israel is participating in the EUREKA funding platform, which is the world’s largest program promoting industrial innovation, aiding and supporting industrial R&D projects aimed at developing new products and bringing them to the market.
• Bi-national funds and Bi-lateral agreements for competitive R&D which enable joint R&D programs with foreign counterparts worldwide.

IP and Jurisdictional Restrictions
Restrictions are unique to each grant program.
R&D activities must occur in Israel. The Israeli company must incur the R&D related expenditures.
The resulting IP does not have to reside within Israel, though location is considered in the granting process.

Other Concerns
Generally, R&D expenses are deducted in the year incurred, but some expenses are deducted in instalments over 3 years.
Italy

Background

Italy’s corporate tax rate (IRES) is 27.5% and Regional Tax on Productive Activities (IRAP) standard rate is 3.9% (rate depends upon the Region and the industry).

Nature of Incentives

- From June 26, 2012, a 35% tax credit is available for total labor cost incurred by companies hiring qualifying researchers. Eligible employees working on R&D projects must have at least a university degree. Researchers must be employed by the company for at least 3 years (the limit is 2 years for small and medium companies) and the credit is subject to a cap of €200K per company annually. The tax credit must be claimed by filing a form and can be used to offset Corporate Income Tax, Regional Tax, VAT, and withholding tax liabilities.

- For 2011 and 2012, Italy offers a new 90% tax credit for incremental expenditure for qualified research expenditures subcontracted to universities, research centers, or institutions recognized by the European Union or Italy. The subcontracted institutions can develop the projects in association, in consortium, or in joint ventures with other private entities. The tax credit is applied to incremental expenditures for qualified activities incurred in the year, exceeding the average expenditures incurred in 2008 through 2010. The tax credit is exempt from Corporate Income Tax and Regional Tax on Productive Activities; and can be utilized in three equal annual installments that the taxpayer can use to offset corporate tax, IRAP, VAT, and withholding tax liabilities.

- Wages of employees involved in research activities are fully deductible for IRAP purpose (while, generally, wages are not deductible for IRAP purposes).

Regional cash grants are available for R&D intensive entities.

Eligible Industries and Qualifying Costs

Eligibility is not limited to any specific industry. Qualified activities include basic research, applied research and development activities.

IP and Jurisdictional Restrictions

There are no specific jurisdictional restrictions on intellectual property.

Other Concerns

The 90% tax credit and the R&D IRAP deduction are claimed on the taxpayer’s annual tax return, while the 35% tax credit must be claimed filing a form.

To deduct wages of employees involved in R&D activities for IRAP purposes, the Italian Tax Authority requires a report to certify the researcher employee cost.

Italy has introduced a new 35% tax credit for recruitments of high skilled researchers.
Japan

Background

Japan’s general national corporate tax rate is approximately, 28% for fiscal periods beginning on or after April 1, 2012, and this will be reduced to 25.5% for fiscal periods beginning on or after April 1, 2015 (the rate is 30% for periods beginning before April 1, 2012). However, other local corporate tax rates apply when calculating the total corporate tax liability of a company, which is approximately 38% for fiscal periods beginning on or after April 1, 2012, reducing to approximately 36% for periods beginning on or after April 1, 2015. Previously the rate was approximately 41%. The Japanese R&D tax incentives are incremental and volume-based. A special non-refundable tax credit is extended to companies that have increased their research and development expenses.

Nature of Incentives

Small-and-Medium-Enterprises (SME): SME (Companies whose capital does not exceed JPY 100M, excluding a SME held by a large company/companies, whose capital exceeds JPY 100M):

- 12% of total R&D expenditures.
- The tax credit is limited to 20% of the company’s national corporate income tax liability before the credit is applied. The 20% limitation applies for fiscal periods beginning on or after April 1, 2012. Previously the limitation was 30% for the fiscal years beginning on or after April 1, 2009, up to March 31, 2012.

Large Companies:

- 8% to 10% of total R&D expenditures.
- The tax credit limitation is the same as for SMEs as outlined above.

Additional (for both SME & Large Companies):

Either:

Where the current period R&D expenditures exceed: (i) the annual average of the R&D expenditures for the 3 preceding fiscal years; and, (ii) the highest annual R&D expenditure for the previous 2 fiscal years, then the company may claim 5% of the incremental R&D expenditures (i.e., the current year expenditure less the amount in (i));

or

Where the current period R&D expenditure exceeds 10% of the average annual sales for the 4 most recent preceding fiscal years (including the current year), the company is eligible for a credit calculated using the following formula: (R&D expenditure less [Average Annual Sales x 10%]) multiplied by the R&D ratio (reduced by 10%), multiplied by 20%. The R&D Ratio is the amount of current year R&D expenses divided by average annual sales for the 4 most recent preceding fiscal years (including the current tax year).

The tax credit is limited to 10% of the company’s national corporate income tax liability before the credit is applied. The additional tax credit is available in relation to fiscal years commencing on or after April 1, 2008 and up to March, 31, 2014.

The R&D tax credit is available to blue tax return filers. Blue form tax return status is obtained by submitting an application form to the appropriate tax office. Furthermore, there are record keeping substantiation requirements applicable under the corporate tax law.

Another R&D credit system is applicable for a company conducting R&D jointly with a qualified R&D institution (e.g., designated universities).

Generally, unused R&D tax credits may be carried forward 1 year. The unused R&D tax credits for the fiscal years beginning on or after April 1, 2009 through March 31, 2010 may be carried forward up to 3 years. Research credits for fiscal years beginning on or after April 1, 2010 through March 31, 2011 may be carried forward 2 years.

Japan offers separate credits for Small-and-Medium Enterprises and Large Companies, as well as an additional credit for entities of all sizes.

Tax Incentive for Research Centers

A tax incentive has been introduced for Japanese entities that are exclusively engaged in R&D activities. This incentive cannot be claimed in conjunction with the R&D tax credit. This incentive permits a qualifying entity to deduct 20% of its income that is attributable to the approved business activities for the first 5 years of receiving the research center designation.

Eligible Industries and Qualifying Costs

Research credits are not limited to any specific industry, though the activity must be technological and scientific in nature. Consequently, research conducted in non-technical fields will generally not qualify for the research credit.

The expenses must be borne by the Japanese entity; if the funding is from another party (e.g. government agencies, customers, suppliers, etc.), then the R&D tax benefit is not available for those funded expenses.

To qualify for the credit, the expenses must be incurred in order to manufacture products, or to improve, design, formulate, or invent techniques.
Qualifying expenditures include in-house labor costs, supplies, overhead, depreciation on fixed assets, and contract costs. Generally, salaries mean the amount paid to employees who devote 100% of their time to R&D, though recent interpretations permit segregation of activities if clearly documented. Labor costs relating to performing qualifying activities may be allowable for R&D credit purposes, to the extent that details of the activities are clearly documented. Documentation should indicate the time spent by each employee on qualifying R&D activities, with details of appropriate calculations for the labor cost. The legislation is silent as to how to determine the applicable labor costs.

IP and Jurisdictional Restrictions

No provision of the Japanese law addresses where IP ownership should be retained. However, only tax deductible R&D expenses borne by the Japanese entity are eligible for the credit; thus, the general view is that the IP should be located in Japan. There is no location restriction on where the qualifying activity occurs (even when the R&D activity is sub-contracted to another party), though the Japanese company must bear the expenses.

Other Concerns

No prior approvals from government/regulatory agencies are required.

Credit must be claimed on the tax return for the relevant period. Claims on amended tax returns are not accepted.
Malaysia

Background

Malaysia’s general corporate tax rate is 25%.

R&D incentives include:

- Investment Tax Allowance (ITA);
- Super Deductions; and,
- Enhanced benefits for Pioneer Status (PS).

Nature of Incentives

Investment Tax Allowance (ITA):

- Companies performing in-house R&D to further its business may qualify for an ITA of 50% on the qualifying capital expenditure incurred within 10 years.
- R&D service providers may qualify for an ITA of 100% on the qualifying capital expenditure incurred within 10 years.
- The company can offset the ITA against 70% of its statutory income for each year of assessment.
- Any unutilized allowances can be carried forward to subsequent years until fully utilized.
- Generally, R&D service providers should have at least 70% of their income derived from R&D activities in order to qualify for the ITA. If an R&D company does not claim the benefit for services provided to related companies, the related companies can receive a 200% super deduction for payments made to the R&D Company for services rendered.
- This benefit is available only to companies that are certified by the Malaysian Investment Development Authority (MIDA).

200% Super Deductions:

- Companies performing in-house R&D to further its business are allowed to claim 200% super deductions for non-capital expenditures incurred in qualifying R&D, if approved by the Minister of Finance.
- 200% super deductions can also be claimed for cash contributions or donations to approved research institutes, and payments for the use of the services of approved research institutes, approved research companies, R&D companies, or contract R&D companies.
- Companies residing in Malaysia are eligible to claim the 200% super deduction for registration of patents, trademarks, and product licensing overseas if these expenses are primarily and principally incurred for the purpose of promoting the exports of goods or agricultural products manufactured, produced, processed, graded or sorted and assembled in Malaysia.
- Expenditures on R&D activities undertaken outside of Malaysia, including the training of Malaysian staff, will be considered for 200% super deductions on a case-by-case basis.
- Claims are submitted and reviewed by the Inland Revenue Board (IRB).
- Approved R&D expenditures incurred during the tax relief period for companies granted Pioneer Status can be accumulated and deducted after the tax relief period.

Enhanced Benefits for Pioneer Status:

The Minister of Finance is granted the authority to provide "pioneer status" to companies deriving income from certain activities and products that benefit the Malaysian economy. Promoted “activities” and “products” are determined by the Minister of Finance and published in the Government Gazette. R&D companies, high tech companies, software development companies, and manufacturing companies capable of producing world-class products are typically granted Pioneer Status. Statutory income earned by an R&D company provided Pioneer Status is exempt from tax for a period of 5 years. Pioneer Status, with government approval, can be extended for another 5 years.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. Qualified research, in general, is any systematic or intensive study undertaken in the field of science or technology with the objective of using the results of the study for the production or improvement of materials, devices, products, or processes.

Qualifying expenditures for the in-house research incentive include wages, supplies, technical services, technical costs, transportation costs, maintenance costs, rents, and other expenditures incurred directly for the conduct of qualified research.

IP and Jurisdictional Restrictions

The resulting IP does not have to reside within Malaysia.

The R&D activities must generally be performed within Malaysia.

Payments for technical services performed outside of Malaysia may qualify for the 200% super deduction when the amount expensed is less than 70% of the total allowable expenditure for the super deduction.

Other Concerns

Current in-house research projects must be pre-approved by the IRB before the 200% super deduction is permitted.
Mexico

Background

Mexico’s general corporate income tax rate is 30%.

Although research and development (R&D) incentives were eliminated as part of Mexico’s 2010 tax reform, funds have been allocated once again by the legislature to extend R&D grant programs to provide direct cash subsidies for qualified R&D projects undertaken in 2012.

The incentive is administered by the National Council for Science and Technology (CONACYT), which determines eligibility and grants the incentive to qualifying companies.

Nature of Incentives

The R&D incentives are provided in cash grants through the following three programs:

- **High Added Value Technological Innovation for Technological Research, Development, and Innovation (INNOVAPYME):** Granting economic support to micro, small, and medium-sized enterprises (MIPYMES) for activities preferably performed in conjunction with higher education institutions or research centers.

- **Development and Innovation of Precursor Technologies for Technological Research, Development, and Innovation (PROINNOVA):** Granting economic support to MIPYMES and large companies. Proposals are required to be presented on a network basis and must involve collaborative research with another entity and one research center/higher education institution.

- **Technological Innovation to Enhance Competitiveness for Technological Research, Development, and Innovation (INNOVATEC):** Granting economic support to large companies. Priority is given to collaborative proposals involving research centers or higher education institutions.

Applications for the cash grant may be submitted from November to February.

The grants provided by the above programs range from 22% to 80% of eligible R&D expenses paid by the Mexican company. The largest grants are generally awarded for collaborative research conducted with a research center or higher education institution.

R&D costs, such as wages, supplies, and contractor fees are deductible when paid or incurred for income and flat tax purposes. Generally, buildings and capital equipment used in research must be depreciated, but some expenses can be deducted if certain requirements are met.

Eligible Industries and Qualifying Costs

The R&D grants are not limited to specific industries. Eligible companies engaged in activities related to technological investigation, development, or innovation may qualify – particularly if the proposal includes collaborative research.

The grants offered will typically cover the related operating expenses for research centers or higher education institutes, project salaries, personnel travel expenses, expenses incurred to register intellectual property rights, technological studies, analyses, etc., certain scholarships, infrastructure creation expenses, and prototypes, pilot models, and their evaluation.

IP and Jurisdictional Restrictions

The qualified R&D activity must occur within Mexico. While intellectual property does not have to be retained in Mexico, this factor may be considered by the granting authorities in deciding whether to fund the R&D project.

Other Concerns

Annual application requirements mandate submission of documentation detailing the nature of the qualifying projects.

Mexico extends grant programs to fund R&D projects undertaken in Mexico.
The Netherlands corporate tax rate ranges from 20% to 25%. The nation offers three incentives to taxpayers engaged in qualified research:

- **WBSO**: This incentive reduces wage tax and social security contributions for employees engaged in R&D activities.
- **R&D Allowance (RDA)** is a Super Deduction (effective January 1, 2012): Taxpayers are allowed a super deduction of 140% of qualifying non-wage expenses directly attributable to qualified research activities.
- **Innovation Box (formerly the Patent Box)**

**Nature of Incentives**

Wage tax and social security contributions are reduced for R&D employees if the taxpayer qualifies for WBSO benefits. In 2012, the deduction is 42% (up to 60% for start-up companies) of the first €110K in R&D wage costs and 14% for the remaining wage costs with a maximum reduction of €14M per taxpayer. To receive the WBSO tax benefits, the taxpayer must receive certification from the Dutch Government in advance.

The super deduction is 140% of qualifying R&D expenses, but is limited to expenses other than wages, that are attributable to R&D. The application for the RDA is done simultaneously with the WBSO request.

In 2007, the Netherlands introduced the “patent box,” subsequently renamed the “innovation box” effective January 1, 2010. The innovation box applies to patented and non-patented innovations alike, provided that the R&D efforts qualify for the wage tax benefits for innovation (WBSO) – described above. There is no cap on the amount that can be allocated to the “innovation box.”

Development costs and losses on the exploitation of IP that are allocated to the “innovation box” can be deducted against the standard 25% tax. Beginning in 2010, the effective tax rate for income attributable to qualifying inventions allocated to the “innovation box” is reduced to 5%, giving 80% corporate tax exemption for qualifying income.

**Eligible Industries and Qualifying Costs**

WBSO, RDA, and Innovation Box are open for all industries. R&D means:

- The development of technically new physical products, physical production processes, software, or components thereof;
- Technical-scientific research seeking to explain phenomena in fields, such as physics, chemistry, biotechnology, production technology, and information and communications technology;
- Analysis of the technical feasibility of an R&D project;
- Technical research aimed at enhancing physical production processes or software.

Qualifying costs include wages paid to eligible employees for the WBSO tax incentive.

The RDA makes a distinction between operating costs (OPEX) and capital costs (CAPEX).

- OPEX expenses are considered to be “all amounts paid” for the qualifying WBSO and RDA project. Example includes raw material, third party services, and software license.
- CAPEX expenses are considered to be “all amounts paid” for the investment in new business assets, except investments in land and business assets which qualify for the energy or environmental investment allowance.

**IP and Jurisdictional Restrictions**

To claim the WBSO and RDA incentives, the R&D activities must occur within the EU and must be performed by employees on the Dutch payroll.

For the Innovation Box, it is essential that a qualifying intangible is developed for the risk and reward of a Dutch company. Ownership of the IP is an important consideration. If the patent is owned by a Dutch company, the related research activities can be subcontracted abroad.
Poland

Background

The Polish corporate tax rate is 19%. Since January 1, 2006, Polish law has provided tax incentives for R&D investments in new technology. Additional incentives are available to entities with the status of “Research and Development Centers”. Poland also offers a number of cash grant programs.

Nature of Incentives

- **Research Expenditure**: Expenditures incurred to conduct development activities are 100% tax deductible.

- **Tax Deduction and Exemptions for R&D Centers**: Entities having R&D Center status can establish an innovative fund. Monthly contributions to this fund amounting to 20% of revenue are treated as tax deductible costs. R&D Centers are also eligible for a real estate tax exemption, as well as rural and forest tax exemptions.

- **New Technology Tax Relief**: A company can deduct from its tax base up to 50% of expenditures incurred for the acquisition of new technology in the form of intangible assets such as proprietary rights, licenses, rights under patents or utility models, know-how, that result in improvement of existing products/services. In the case of loss, the tax deduction may be used during the subsequent 3 tax years.

- **Grants**: There are also EU and national budget grants available for up to 100% of R&D costs.

Eligible Industries and Qualifying Costs

The following expenditures are eligible for deduction and grants:

- Cost of personnel directly involved in R&D project.

- Depreciation costs for equipment used in R&D activity.

- Consultancy costs and other services linked to R&D.

- Other direct costs.

R&D Center Status: In order to acquire R&D Center status (given by the Minister of Economy), a company must submit a formal application and comply with the following conditions:

- Minimum net sales revenue of €1.2M for the previous financial year;

- Sales revenue of internal R&D services or industrial property rights accounting for 20% of net revenue; and,

- No outstanding regulatory liabilities.

New Technology Tax Relief: The new technology tax relief is available to all entities operating in Poland and acquiring new technologies, except for taxable persons using the flat rate method and enterprises which carry out business activity in special economic zones. The list of eligible expenditures includes only costs of acquired technological solutions in the form of intangible assets. Therefore, the costs of internal research and development as well as costs refunded from other public aid sources do not qualify for the technology incentive.

In order to use the technology incentive, a technological solution is not allowed to be used worldwide for a period exceeding 5 years, which needs to be supported by an opinion issued by an independent research unit. For audit purposes, the Company should obtain an opinion issued by an independent research unit confirming that at the time of its acquisition the new technological solution had not been used worldwide for a period exceeding 5 years. An enterprise that is the beneficiary of this tax incentive may not grant other entities rights to the new technology before a lapse of 3 tax years starting from the date when the tax incentive was used.

Poland is currently going through some significant changes in R&D Tax Credits. Proposed changes for R&D tax incentives are currently being considered – including proposals to expand the types of costs qualifying for the tax incentives.

IP and Jurisdictional Restrictions

There are no specific jurisdictional restrictions on intellectual property concerning R&D tax allowances.
Portugal

Background

The new Portuguese Tax Incentives Scheme for Corporate R&D (SIFIDE II) for 2011 through 2015 was approved on December 31, 2010. One significant change for 2012 and subsequent tax years is that the applications for tax incentives must be submitted by July of the following year. Also, applications for any open prior tax years must have been submitted by July 2012.

Nature of Incentives

The incentive consists of a credit against the Corporate Tax liability for expenditures incurred on R&D activities (net of any cash grants made by the Portuguese Government to the R&D project). The tax credit is both volume and incremental, according to the following rates and limits:

- **Base Rate**: 32.5% of the R&D expenditure during the tax year. New Small and Medium Enterprises (SME) may benefit, under certain circumstances, from a special increase of 10% of the base rate.
- **Incremental Rate**: 50% of qualified spending exceeding the average amount spent in the prior 2 tax periods – capped at €1.5M. Expenses for recruiting PhD’s are eligible for an additional 20% tax credit – with an overall limit of €1.8M.

Eligible Industries and Qualifying Costs

Eligibility is broad and is not limited to particular industries. The qualified activities could occur anywhere as long as the cost is incurred by a Portuguese company claiming the benefit.

The eligible expenditure includes:

- The acquisition cost of new fixed assets connected with R&D activities, except buildings and land.
- Wages of personnel directly involved in R&D activities. For 2012 tax year and going forward, it is limited to 90% for non-SMEs.
- Allocated costs of directors and professionals participating in the management of R&D institutions.
- Operating expenses, such as overhead and contracted R&D expenses from anyone other than public entities and/or entities not officially recognized as possessing R&D capabilities, of up to 55% of wages of personnel directly involved in R&D activities.
- Costs of contracting R&D activities from public entities and/or from entities recognized as possessing R&D capabilities.
- Expenditures incurred to raise capital for institutions that perform R&D and contributions to funds aimed to finance R&D.
- Costs of registration and maintenance of patents (applicable only for SMEs).
- Patent acquisition costs related to R&D activities (applicable only for SMEs for 2012 tax year and forward).
- Costs of R&D audits (applicable only for SMEs for 2012 tax year and forward).
- Expenses related to demonstration activities of approved R&D projects (applicable only for 2012 tax year and forward).

IP and Jurisdictional Restrictions

There are no specific jurisdictional restrictions on intellectual property concerning R&D tax benefits.

Other Concerns

There is a new application process requiring submissions by July of the following year (for 2012 tax year forward). If the tax liability for the year is insufficient to permit full utilization of the credit, any unutilized tax credit can be carried forward up to six taxable periods.

*Portugal extended its R&D tax credit through 2015 and imposed new rules from 2012 and forward.*
Russia

Background

The Russian corporate tax rate is 20%. Russia offers 150% super deduction for profits tax, reduced social security contributions, and a value added tax (VAT) exemption.

Nature of Incentives

- **Profits Tax:** While Russia did not historically offer deductions for R&D, such expenditure is currently deductible provided it involves the creation of new or improved products, commodities, works, or services.

- **150% Super Deduction:** Companies conducting R&D activities in prioritized industries can apply for a 150% super deduction to reduce profit taxes for certain R&D expenses as stipulated by the Russian government. A super deduction can be made even if such R&D activities fail to produce a new product or new service, etc. Losses for tax purposes as a result of super deductions can be carried forward for 10 years.

- **Depreciation:** Accelerated depreciation can be applied to fixed assets used in R&D activities.

- **Reduced Social Security Contributions:** Starting in 2011, companies involved in developing software (meeting certain operational requirements) can enjoy a reduced rate of 14% on annual remuneration up to a cap. Remuneration exceeding the cap is exempt.

- **Special Economic Zones:** Russian legal entities registered in a Technical and Innovation Special Economic Zone with no external branches or representative offices can have their profits tax rate reduced from 20% down to 0% depending on region. These companies also benefit from property tax exemption, a free customs zone, and a reduced rate of 14% for social security contributions. The approval process is quite complex.

- **Starting in 2010, companies operating within the Skolkovo Innovation Centre enjoy certain benefits:** 1) profit tax exemption; 2) VAT exemption; 3) property tax exemption; and, 4) a reduced rate of 14% for social security contributions. In the majority of the cases, the overall tax burden is limited to the 14% social security contribution on salaries. The approval process is straightforward. To receive such benefits, the company must be a Russian legal entity and be conducting one of the following targeted types of innovative activity: energy efficiency, nuclear engineering, space technology, medicine, or IT.

- **VAT exemption:** VAT exemption is applied for sales/transfer of the exclusive rights of inventions, utilities models, industrial designs, software, databases, topographies of integrated circuits, and know-how (and any attendant rights for using the above). Full VAT exemption is applied to the development of new products and technologies, and conceptual improvements made to existing products and technologies.

- **VAT exemption:** An import VAT exemption is applied to technological equipment stated in a government-approved list for which no equivalents are produced in Russia.

Eligible Industries and Qualifying Costs

R&D expenditures must relate to the development of new products, the improvement of production processes, or the development of new services. The list of qualifying R&D activities includes activities that are often performed by companies across many industries, not just in high technology, such as oil and gas, telecommunications, transportation, and information technology, among others. Qualifying costs include labour costs, R&D contractor expenses, depreciation of equipment used for R&D, and certain other expenses, with limitations.

IP and Jurisdictional Restrictions

In Russia, there are no provisions stipulating specific restrictions on whether or not activities need to be conducted within the country, nor on whether or not overseas R&D contractors can be used. The most significant restriction with respect to companies applying for super deduction is that they must conduct R&D activities for their own purposes and not as a contractor of a third party.

Super deduction can be applied regardless of whether the R&D activities are successful, i.e., whether or not the activity resulted in IP. If the R&D activities led to the creation of IP, the super deduction is capitalized and intangible assets can be amortized within two years. The cost of acquiring IP is not eligible for the super deduction.

Other Concerns

Russian tax authorities require R&D reports to be filed in accordance with national standards. Such reports may be subject to evaluation by research institutes engaged in specific fields of R&D.

Russia offers 150% super deduction for qualifying R&D activities and enhanced benefits for businesses located in special zones.
Singapore

Background

The general corporate tax rate is 17% with partial tax exemption granted for the first S$300K of otherwise taxable income.

Nature of Incentives

Section 14D Base Deduction:

Section 14D provides an exception to the general rule that new product and process development costs must be amortized, by allowing current deductions for R&D expenditures incurred by a taxpayer in the conduct of its trade or business (including payments to R&D organizations).

Eligible expenses include: wages and salaries, materials, and utilities incurred directly for R&D activity. Capital expenditures on plant, machinery, land, or buildings, or on alterations, additions, or extensions to buildings, or in the acquisition of rights arising in or arising out of R&D are specifically excluded. For the tax years from 2009 to 2015, the R&D expenditures need not be related to the entity’s existing trade or business unless the R&D is performed outside Singapore.

Unutilized R&D expenditures may be carried forward indefinitely, subject to substantial shareholders’ test. They may also be carried back subject to certain restrictions.

Section 14DA Additional Deduction:

Qualifying expenditures incurred during tax years from 2009 to 2015 may, in addition to qualifying for the Section 14D Base Deduction, qualify for an additional deduction of 50% of qualifying R&D expenditures. Qualifying expenditures have been defined to include only staff costs, consumables, and any other expense prescribed by the Minister. This is a narrower definition of qualifying expenses than under Section 14D. Expenditures incurred on R&D performed outside of Singapore do not qualify for the additional deduction of 50%.

Section 14DA Enhanced Deduction:

The enhanced deduction is granted for 5 years from tax years 2011 to 2015. Under this scheme, the tax deduction of qualifying R&D expenditures on R&D carried out in or outside of Singapore is enhanced as follows:

- A 250% (for Singapore based R&D) or 300% (for non-Singapore based R&D) enhanced deduction is granted on the first S$400K of qualifying R&D expenditures incurred per year. This is in addition to the 100% (“base deduction”) and 50% (“additional deduction” for Singapore R&D only) on qualifying R&D expenditures incurred under Section 14D and Section 14DA respectively. With this enhancement, there will be up to 400% tax deduction available on the first S$400K of such expenditures incurred.
- The base deduction and additional deduction remain applicable to qualifying R&D expenditures exceeding the S$400K incurred per year.
- For the tax years 2011 to 2012, the enhanced deduction is granted under a combined cap of S$800K over the 2 year period; and for tax years 2013 to 2015, the enhanced deduction is granted under a combined cap of S$1.2M over the 3 year period.

The R&D expenditures need not be related to the entity’s existing trade or business as long as the R&D is performed in Singapore. In addition, there is the option (in lieu of the tax deduction) to convert up to S$100K of tax deductions into a non-taxable cash grant at the conversion rate of 30% (i.e., S$30K) for tax years 2011 and 2012; and 60% for tax years 2013 to 2015 (i.e. S$60K). For the tax years 2011 and 2012, the conversion caps are pooled to give a combined cap of S$200K over these two tax years (i.e. cash grant of up to S$60K). There is also the option for companies to defer for effectively a year of qualifying expenditure incurred in the current financial year, up to a cap of S$100K.

Section 14E Deduction:

This provision allows super deductions of up to 200% of certain specified qualified expenditures approved by the government for R&D projects carried out in Singapore. Unutilized R&D expenditures may be carried forward indefinitely, subject to substantial shareholders’ test. They may also be carried back subject to certain restrictions.

The combined total claims under Section 14E and Sections 14, 14D, and 14DA, with respect to the approved project, are capped at 200% of the taxpayer’s actual expenditures. However, the 200% restriction does not apply to R&D expenditures that qualify for the Section 14DA Enhanced Deduction.

Eligible Industries & Qualifying Costs

R&D means “any systematic, investigative and experimental study that involves novelty or technical risk carried out in the field of science or technology with the objective of acquiring new knowledge or using the results of the study for the production or improvement of materials, devices, products, or processes.” Certain activities are excluded from the definition of R&D; including software-related R&D to develop modifications/customization of existing software.
Entities conducting R&D may claim the tax benefits described above regardless of their industry classification.

**IP and Jurisdictional Restrictions**

If the R&D payments are made by an entity to a R&D organization outside Singapore, a claim for deduction shall be allowed to such entity, provided that the R&D expenditures are related to the entity’s existing trade or business and that any benefit that arises from the R&D accrues to the entity itself.

Section 14D Base and Section 14DA Enhanced Deductions: R&D may take place outside of Singapore. The entity does not need to have the legal ownership of the resulting IP in Singapore. Beneficial ownership with the right to commercialize the IP would suffice. No prior approval is required to claim these deductions.

Section 14DA Additional Deduction: Only R&D activities undertaken in Singapore qualify for the Section 14DA Additional deduction. No prior approval is required to claim the deduction.

Section 14E R&D Deduction: The R&D project must be carried out in Singapore and must receive special approval from the Minister (advance application with the Singapore Economic Development Board is required).

**Other Concerns**

When expenses exceed trade income, the excess may be carried forward and set off against future taxable profits, provided the shareholders of the company are substantially (50% or more) the same on the last day (i.e., December 31st) of the year of loss and on the first day (i.e., January 1st) of the year of assessment in which the loss is to be set off. A loss carry back for 1 year is allowed, but restricted to a cap of S$100K.
South Africa

Background

South Africa’s general corporate tax rate is 28% (small business corporations pay taxes at 0% to 28%).

Nature of Incentives

Super Deduction: South Africa provides a volume-based super deduction equal to 150% of the qualifying operational expenditures incurred directly for purposes of R&D.

Accelerated Depreciation: Capital expenditures incurred to develop or construct assets used in the conduct of qualifying R&D activities qualify for favourable accelerated depreciation, as follows:

- 50% in the year that the asset is brought into use for the first time by the taxpayer;
- 30% for year 2; and,
- 20% for year 3.

For new and unused plant or machinery placed in service after October 1, 2012:

- 40% in the year that the asset is brought into use for the first time by the taxpayer, and
- 20% in each of the three succeeding years of assessment.

For used plant or machinery placed in service after October 1, 2012:

- 20% in the year that the second hand asset is brought into use, and
- 20% in each of the four succeeding years of assessment.

Apportionment is not available for partial years.

Eligible Industries and Qualifying Costs

Industries that are typically eligible for the super deduction include, but are not limited to:

- Pharmaceuticals
- Software Services
- Software Development
- Design Centers
- Automotive
- Energy & Utilities
- Mining & Natural Resources

For R&D expenses to qualify, they must relate to activities that are undertaken within South Africa and involve systematic investigative or systematic experimental activities of which the result is uncertain for the purpose of:

- Discovering non-obvious scientific or technological knowledge; or
- Creating any invention, design, computer program or knowledge essential to the use of such invention, design or computer program; or
- Developing or significantly improving any invention, design, computer program or knowledge, if that development or improvement relates to any:
  - New or improved function;
  - Improvement of performance;
  - Improvement of reliability; or
  - Improvement of quality.

South Africa offers super deductions of operational expenditure incurred directly for the purpose of research and development.

Further, these expenses must be intended to be used by the taxpayer in the production and conduct of their trade and business. Expenses incurred while conducting the following activities do not qualify as R&D expenditures:

- Market research, market testing or sales promotion;
- Administration, financing, compliance or similar expenditure;
- Routine testing, analysis, collection of information or quality control in the normal course of business;
- The development of internal business processes unless those internal business processes are mainly intended for sale or licence;
- Social science research, including the arts and humanities;
- Oil and gas or mineral exploration or prospecting except R&D carried on to develop technology used for that exploration or prospecting;
- The creation or development of financial instruments or financial products; and
- The creation or enhancement of trademarks or goodwill.

All non-capital costs, including supplies, in-house and contract labor, overhead, etc. are eligible for the super deduction if they are directly related to the R&D activities.

IP and Jurisdictional Restrictions

Qualifying activities must occur in South Africa. IP must be created in South Africa, but it does not need to be held within South Africa.
Other Concerns

If the business is in a loss position, the benefit may be carried forward until utilized.

When a company receives funding from another company (or any other entity), the company that can determine and alter the research methodology may claim the deduction. Special rules apply to controlled groups of companies.

If a government grant is received by the taxpayer to fund the research activities, an amount equal to the funded portion must not be taken into account for the purpose of the deduction.

Preapproval is required from the Department of Science and Technology (DST). Only expenditure incurred from the date of submission of an application to the DST may qualify.
South Korea

Background

The corporate tax rate in South Korea ranges from 11% to 24.2% (dependent upon the taxpayer’s tax base). South Korea offers a general tax credit for R&D expenditures, plus an additional credit for expenses incurred for investments in R&D equipment.

Nature of Incentives

Small and Medium Sized Enterprises (SME):

- The credit equals the greater of either: 1) 50% of current year R&D expenses exceeding the average of the 4 prior years R&D expenditures; or, 2) 25% of current R&D expenditures.
- 30% tax credit computed on current R&D expenditures if the R&D expenditures are incurred in relation to R&D activities for the New Growth Engine Industry or Original Source Technology programs designated by the government authority.
- If a SME purchases certain intellectual property prescribed by the tax law from a Korean third-party resident, the SME is entitled to claim a tax credit in the amount of 7% of the purchase price.

Large Companies (Non-SMEs):

- The credit equals the greater of: 1) 40% of current year R&D expenditures exceeding the average of the 4 prior years R&D expenditures; or, 2) the R&D expenditures for the current year multiplied by the following rate capped at 6%: 3% plus “additional rate” defined as 50% of R&D expense ratio (R&D expense divided by revenue).
- 20% tax credit computed on current R&D expenditures if the R&D expenditures are incurred in relation to R&D activities for the New Growth Engine Industry or Original Source Technology programs designated by the government authority.

Unused R&D credits may be carried forward 5 years (no refund).

In addition to incremental and volume based credits, an investment tax credit is permitted for R&D equipment.

Investment Tax Credit for R&D Equipment:

- Credit equals 10% of the total investment amount for certain R&D equipment.
- Eligible expenses include costs of machinery, facilities, tools, office machines, telecommunications instruments, testing machines, optical instruments, etc. used in the conduct of R&D activities.

Unused R&D credits may be carried forward 5 years (no refund).

R&D Reserve Deduction:

Taxpayers can fully deduct R&D expenses. In addition, a taxpayer can deduct, in year 1, as qualified R&D expenses an amount equal to 3% of its revenue, called the “R&D reserve deduction”. After 3 years, the taxpayer is required to add the R&D reserve deduction back into income on a proportionate basis for the next 3 years (years 4 through 6). However, if the taxpayer’s total qualified R&D expenditures during years 1 through 3 are less than the R&D reserve deduction taken in year 1, the taxpayer is obligated to pay interest on the difference.

Eligible Industries & Qualified Costs

R&D activities include research conducted by the certified R&D department of the company and/or qualifying bodies (i.e., universities, colleges, research institutes) to develop technology for the company, trademark design, and development, manpower training, and quality control.

Qualified R&D costs include labor costs (salaries, wages, bonuses, etc.), materials costs (samples, parts, and raw materials used in the conduct of R&D), rent for R&D equipment, commissions paid to the qualifying body, training costs, and other costs (trademark development costs, design development costs, consulting fees, and quality guarantee costs).

IP and Jurisdictional Restrictions

All R&D expenditures directly related to the R&D activities of the company may be claimed in the tax credit computation regardless of the location of the R&D activities, except for research subcontracted to academic institutions – which must be located in South Korea. Any resulting IP does not have to be held by the South Korean company. The R&D tax credits are not allowed for R&D service providers.

Other Concerns

Companies may file an amended return to claim the credit up to 3 years from the date the original tax return was due.
Spain

Background
The Spanish corporate income tax ("CIT") rate is 30%. Spain applies different tax rates for small companies (25% to 30%), oil companies (35%), savings banks (25%), Real Estate Investment Trusts (REITs of 19%), and investment funds (1%). Spain offers immediate deduction of qualified R&D expenditures, as well as offering research tax credits for technological innovation.

Nature of Incentives
- Volume Credit: The volume based credit is equal to 25% of the R&D expenses incurred in the tax year.
- Incremental Credit: The incremental credit equals 42% of the amount of the current year expenditures exceeding the average of such expenditures incurred in the preceding two tax years. If the taxpayer’s current year spend exceeds the average of the prior two years, the taxpayer receives a credit equal to 25% of the current expenses plus 42% of the excess over the base.
- Personnel Credit: A 17% credit for wages paid to qualified researchers dedicated exclusively to R&D.
- R&D Equipment Credit: An 8% credit for amounts invested in tangible and intangible fixed assets, excluding real estate, used exclusively in the conduct of qualified R&D.
- Expenses incurred for research activities that result in a technological innovation for existing products receive an 8% credit. The credit is increased to 12% for expenses incurred from June 3, 2011. However, the maximum allowed expenses is limited to €1M for the acquisition of know-how, licenses and patents.
- Patent Box: 50% of the income from the assignment of patents is exempt from taxable income:
  - Patents
  - Designs, formulas or secret proceedings
  - Know-how

This leads to an effective rate of 15% for companies subject to the standard corporate tax rate.

Credit Limitations: If the amount of qualified R&D expenses for the tax year exceeds 10% of the tax due (after reducing for tax credits), the tax credits may offset up to 25% of the gross tax due.

Unused credits may be carried forward for 18 years (no refund).

Spain offers a volume-based and incremental research tax credits

Eligible Industries & Qualified Costs
All industries are eligible for R&D tax credits for costs incurred in qualifying activities.

R&D activities include original planned investigation aimed at acquiring new knowledge and greater understanding in scientific or technological fields. Development is considered to be the application of the results of research or of any other kind of scientific knowledge for the manufacture of new materials or products or for the design of new production processes or methods, as well as substantial technological improvement of materials, products, processes, or previously existing methods (including software development).

Qualifying R&D expenses include: wages paid to employees engaging in research, as well as the cost of investments in fixed assets that are exclusively dedicated to R&D activities. Supplies and indirect expenses are excluded.

IP and Jurisdictional Restrictions
In order to qualify for any credit, all qualified R&D must take place in Spain or a member state of the European Union or in the European Economic Area. IP ownership does not affect whether the taxpayer can claim the credit or not.

Other Concerns
On October 7, 2011, the Council of Ministers approved to extend the validity of the National R&D and Technical Innovation (TI) Plan that will be the strategic focus of the Spanish R&D and TI policy for the 2012. In 2012, the allocation for R&D policy amount to €5.633BN.
Turkey

Background

Turkey’s general corporate tax rate is 20%.

Turkey introduced significant modifications to its R&D tax incentives by R&D Law No 5746 which is effective beginning January 4, 2008.

Nature of Incentives

- 200% Super Deduction: 200% of qualifying R&D expenditures (which are already booked as expenses) are deducted in determining taxable income.

- 150% Incremental Deduction: For R&D centers with 500 or more full-time-equivalent workers, an additional deduction against taxable income is allowed equal to 50% of the increase in R&D expenditures from the prior year.

- Income Tax Withholding Incentive: 80% (90% for PhD personnel) of wages of R&D or supporting personnel (except for public employees) are exempt from withholding taxes.

- 50% of the company’s contribution of social security premium is compensated by the Treasury for 5 years.

- All the papers prepared for R&D activities are exempt from stamp duty.

- Grants (Not Considered Income): Grants received from government entities, voluntary trusts and international funds in support of R&D activities are recorded in a special fund account instead of being classified as income and added to the tax base.

- Technology Development Zones: Income earned for software production and R&D activities in Technology Development Zones are exempt from Income and Corporate Tax until December 31, 2023. Income earned from delivered services, like system management, data management, application software, internet, mobile and military control applications, were exempt from Value Added Tax during the Income and Corporate Tax exemption period mentioned above. Wages of researchers, software workers and R&D workers working in these zones are also exempt from Income Tax.

Eligible Industries & Qualified Costs

The type of industry has no bearing on the availability of the incentives. Qualification is based solely upon the nature of the activities conducted within Turkey. Activities undertaken to achieve technological innovation qualify for the R&D tax incentives. Software activities are limited to new and original concepts.

Volume and incremental based deductions, in addition to other generous research tax incentives, are available.

R&D expenditures must be incurred within Turkey, and include starting material costs, depreciation and amortization, labor costs (salaries and wages), outsourced benefits and services, duties, taxes and levies on R&D related activities (such as real estate tax on R&D land or customs duty on imported R&D related materials, etc.), and other indirect cost for the conduct of qualified research (such as public utility services, transportation expenses, communication expenses, maintenance and repair expenses, insurance expenses, etc.). Allocated general administrative expenses are excluded.

IP and Jurisdictional Restrictions

There is no obligation to create an IP as a result of the R&D projects. There is no obligation for the Turkish Company to be the owner of the IP to claim the research benefit associated with the expenses.

Other Concerns

R&D deductions can be carried forward indefinitely, but the amounts are limited under a complicated formula set forth in the Tax Procedures Law.

R&D Activities are subject to a Sworn Fiscal Consultant’s (SFC) certification. A taxpayer who benefitted from R&D deductions has to give a SFC Certification Report to its tax office certifying that its R&D deductions are computed and applied correctly.
United Kingdom

Background

The corporate tax rate ranges between 20 to 26%.
R&D occurs when a project seeks to achieve an advance in science or technology through the resolution of scientific or technological uncertainties. R&D also includes qualifying indirect activities as part of a project.

Nature of Incentives

The United Kingdom offers two volume-based incentives; one that is available to companies that fall within the definition of a Small-or-Medium-Sized-Enterprise (SME), and the other for companies that do not fall within that definition (Large Companies). Generally, an SME company must have fewer than 500 employees and either gross revenues of less than €100M or gross assets of less than €86M. Affiliated companies are generally considered in determining if a company qualifies as an SME.

- Large Companies: 130% super deduction;
- SMEs: 200% super deduction (175% before April 1, 2011; and 225% after April 2012); and
- Cash Credits: Cash credits are available for SMEs in loss position, up to 25% of the qualified expenditure, (24.5% before April 1, 2011 and 24.75% after 1 April 2012).

Unused tax benefits may be carried forward for an indefinite period to offset against future profits of the same trade unless there is a change in ownership and a change in the nature of the trade within three years of each other.

Currently, there are no caps on R&D deductions for Large Companies. However, there is a cap that restricts the amount of tax benefit available to SMEs, over and above the benefit that would have been available had the company not been an SME, to €7.5M per R&D project.

Capital expenditures are excluded from the super deduction, but a full deduction for capital property used in R&D can be claimed in the year the expenditure is incurred; rather than being amortized for tax purposes in accordance with the usual rules.

Expenditures on land, patents and patent protection are specifically excluded.

Large Companies can claim the relief on costs associated with work that is contracted for them as long as it was contracted by another Large Company or any person not subject to UK tax, e.g., UK Large Company performs research for a U.S. company that is not subject to UK tax. SMEs cannot claim the more advantageous small company relief on costs that are subsidized or related to activities that were contracted to them, although they may be able to make a claim under the less generous Large Company relief (which means the SME would be unable to monetize losses into cash refunds).

The Patent Box enables companies to apply a lower rate of Corporation Tax to profits earned after April 1, 2013 from its patented inventions and certain other innovations. The relief will be phased in from April 1, 2013 and the lower rate of Corporation Tax to be applied will be 10%.

UK offers a 130% super deduction for Large Companies and a 200% super deduction for SME Companies.

Eligible Industries & Qualified Costs

The type of industry has no bearing on the availability of the incentive. Qualification is based solely upon the nature of the activities.

Companies may claim the incentive for their expenditures on the following cost categories as long as the total exceeds GBP 10K for the year (this requirement will not be applicable after April 1, 2012):

- Employing staff who is directly and actively engaged in carrying out R&D.
- Paying a staff provider for the services of personnel who are directly and actively engaged in carrying out R&D (limited to 65% of the payment).
- Consumable or transformable materials used directly in carrying out R&D (broadly, physical materials which are consumed or transformed in the R&D process).
- Power, water, fuel, and computer software used directly in carrying out R&D.
- SMEs can claim 65% of R&D related subcontract costs. Large Companies can only claim subcontract costs if they are paid to a university, health authority, charity, scientific research organization, individual, or a partnership of individuals.
- Payments to volunteers for participating in clinical trials.

IP and Jurisdictional Restrictions

There is no IP ownership requirement for either regime.

Other Concerns

No pre-approval is required to take advantage of the applicable tax benefit. Taxpayers may file new or amended claims up to the first anniversary of the filing deadline for the tax return. This generally equates to two years from the end of the accounting period. As part of the current Budget Plan, there’s a proposal for an ‘above the line’ credit which may allow larger companies that currently have tax losses to claim a tax refund within an agreed period of time. The
refund may impact companies with foreign parents who have previously found that the UK R&D tax benefit is limited by the group’s overall tax position. The proposal will not affect the benefit currently available to SMEs. It is expected that the final draft will be introduced with Budget 2013.
United States

Background

Corporate taxable income is subject to graduated tax rates, ranging from 15% to 35%.

Tax credits are provided for qualified research expenses, i.e., the tax credit offsets federal income tax and the income tax in states offering research credits.

Nature of Incentives

The U.S. provides two methods for computing the incremental credit for 2011:

- **20% Credit**: The “traditional credit” equal to 20% of the amount of the expenditures exceeding a “base amount” (complicated computation estimating the amount of gross receipts a company would expect to spend on qualified research); or,
- **14% Credit**: The alternative simplified credit (ASC) equal to 14% of the excess of the qualified research expenditures over 50% of the average of the three prior years’ expenditures.

There are also special credits for basic research (e.g., research conducted in universities), payments to energy research consortium, and research relating to orphan drug

Computational adjustments: There are several computational adjustments that significantly reduce the true value of these R&D tax credits:

- While qualifying R&D expenses are currently deductible, taxpayers must reduce the current deduction by the amount of the tax credit. Alternatively, taxpayers’ can elect on a timely filed return to take the credit at a reduced rate of 13% for the regular credit or 9.1% for the ASC.
- There is a minimum base amount applicable only to the traditional credit equal to 50% of current qualifying R&D expenditures. The cumulative effect of limiting deductions (or electing a reduced credit rate of 13%) and the minimum base amount, is that the maximum value of the traditional credit is 6.5% of current qualified R&D spending.
- There is no minimum base amount for the alternative simplified credit. If, however, there is no qualified research spending in any one of the 3 prior years, the credit is equal to 6% of qualified research spending in the current tax period.

Eligible Industries & Qualified Costs

The incentive is intended to benefit all industries conducting qualified research. Consequently, all industries are eligible for the research credit.

Qualifying costs include: wages for in-house labor, 65% of contract labor, and supplies used in the research process. Overhead and capital expenditures are excluded.

IP and Jurisdictional Restrictions

There is no restriction on the location of any resulting IP. Qualifying activities must be performed within the U.S., and the related qualifying costs must be incurred by a U.S. taxpayer (although such costs may be reimbursed by a foreign affiliate).

Other Concerns

Taxpayers may amend prior year returns to claim tax credits when the tax year is open for assessment of tax.

Prior approval of projects or activities is not required.

The U.S. R&D Credit has been extended through December 31, 2011. Legislation to further extend the research credit is expected.
Summary of Key Criteria
Refundable credits:

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>For tax years commencing on or after July 1, 2011, an eligible entity will be entitled to either:</td>
</tr>
<tr>
<td></td>
<td>1. A refundable tax credit of 45% of eligible expenditures incurred where aggregate gross receipts are less than $20M; or</td>
</tr>
<tr>
<td></td>
<td>2. A non-refundable tax credit of 40% of eligible expenditures incurred where aggregate gross receipts are $20M or greater.</td>
</tr>
<tr>
<td>Austria</td>
<td>10% volume-based refundable credit on all qualifying R&amp;D-related expenditures. For subcontracted research expenditures, the credit is subject to a cap of €100K annually, and this limit is increased to €1M for tax year beginning on or after January 1, 2012.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Excess tax deductions may be converted into a tax credit refundable after 5 years.</td>
</tr>
<tr>
<td>Canada</td>
<td>Federal credits issued to small Canadian controlled private businesses are refundable on the first $3M of expenditures.</td>
</tr>
<tr>
<td>France</td>
<td>If research tax credits are not utilized within 3 years, the taxpayer receives a refund for the unutilized credit. The refund rule was modified for 2005 – 2009 providing that unutilized credits were currently refundable, i.e., the taxpayer was not limited to refunds for tax credits that were unutilized after 3 years. Research credits also remain refundable in 2010 for SMEs, new companies, young innovative companies and companies facing financial issues.</td>
</tr>
<tr>
<td>Ireland</td>
<td>Unused credits may be carried back 1 accounting period and carried forward indefinitely. If there are unutilized credits after the carryback, the taxpayer may apply for a refund (payable over 3 years), subject to certain limitations and caps.</td>
</tr>
<tr>
<td>Singapore</td>
<td>There is an option to convert up to S$100K of tax deductions into non-taxable cash grant for each qualifying tax year from 2011 to 2012 at the conversion rate of 30%, and from 2013 to 2015 at the rate of 60%.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Cash credits are available for SMEs in a loss position, up to 25% of qualified expenditures. The rate will change to 24.75% after 4/1/2012.</td>
</tr>
</tbody>
</table>
Intellectual property must be retained in the country:

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>In order to gain and retain the HNTE status, any resulting IP rights must be located in China. Approval authorities often consider whether IP will be retained in China in granting approval to take super deductions, but this is not required by law.</td>
</tr>
<tr>
<td>Germany</td>
<td>Taxpayer must retain any associated IP in Germany.</td>
</tr>
<tr>
<td>Israel</td>
<td>The location of IP is a factor in evaluating grant applications, but otherwise not legally required.</td>
</tr>
<tr>
<td>Japan</td>
<td>No provision of the Japanese law addresses where IP ownership should be retained. However, only tax deductible R&amp;D expenses borne by the Japanese entity are eligible for the credit; thus, the general view is that the IP should be located in Japan.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Location of IP is a factor in government pre-approval process, but otherwise not legally required.</td>
</tr>
<tr>
<td>Mexico</td>
<td>Location of IP is a factor in grant issuance decision process, but otherwise not legally required.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>For the Innovation Box, it is essential that a qualifying intangible is developed for the risk, rights and ownership of a Dutch taxpayer.</td>
</tr>
<tr>
<td>Russia</td>
<td>Location of IP is a factor in government pre-approval process, but otherwise not legally required.</td>
</tr>
<tr>
<td>South Africa</td>
<td>IP must be created in South Africa, though it is not required to be held there.</td>
</tr>
</tbody>
</table>
Qualified research activity must occur within the country:

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Activities must occur in Austria. Subcontracted research activities may occur in a branch or a plant within EU or EEA, but the activity must be based on management direction from the Austrian taxpayer.</td>
</tr>
<tr>
<td>Brazil</td>
<td>Qualified activities must occur in Brazil.</td>
</tr>
<tr>
<td>China</td>
<td>Qualified activities must occur in China. However, less than 40% of the activity qualifying for the HNTE incentive may occur outside of China.</td>
</tr>
<tr>
<td>France</td>
<td>Qualified activities must occur in EU.</td>
</tr>
<tr>
<td>Germany</td>
<td>Qualified activities must occur in Germany.</td>
</tr>
<tr>
<td>India</td>
<td>Qualified activities must occur in India.</td>
</tr>
<tr>
<td>Ireland</td>
<td>Qualified activities must occur within Ireland or EEA. The credit is denied when the activities occur in an EEA country where a corresponding tax deduction for such expenditures is permitted.</td>
</tr>
<tr>
<td>Israel</td>
<td>Qualified activities must occur in Israel.</td>
</tr>
<tr>
<td>Italy</td>
<td>Contracted universities, research centers, or institutions must be recognized by Italy or EU.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Qualified activities must occur in Malaysia.</td>
</tr>
<tr>
<td>Mexico</td>
<td>Qualified activities must occur in Mexico.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>To claim the WBSO and RDA incentives, the qualified activities must occur within the EU. Since the incentive is related to the Dutch wage tax for WBSO, it is primarily based on activities performed within the Netherlands.</td>
</tr>
<tr>
<td>Singapore</td>
<td>In order to claim the 14DA additional deduction and 14E deduction, the qualified activity must occur in Singapore.</td>
</tr>
<tr>
<td>South Africa</td>
<td>Qualified activities must occur in South Africa.</td>
</tr>
<tr>
<td>Spain</td>
<td>Qualified activities must occur in Spain, EU, or EEA.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Qualified activities must occur in Turkey.</td>
</tr>
<tr>
<td>United States</td>
<td>Qualified activities must occur in the U.S. (though such costs may be reimbursed by an affiliate overseas).</td>
</tr>
</tbody>
</table>
Qualified research activities can occur outside the country:

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Research activities can occur outside Australia if: (i) if there is a significant scientific link to core research activities undertaken in Australia; (ii) the activities cannot be conducted in Australia, and (iii) at least 50% of total costs are incurred in Australia.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Research activities may occur outside of Belgium.</td>
</tr>
<tr>
<td>Canada</td>
<td>Research must be undertaken in Canada; however, up to 10% of total wages can be incurred for research activities outside of Canada.</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Research activities may occur outside of Czech Republic as long as the qualified expenses are deductible by the Czech taxpayer.</td>
</tr>
<tr>
<td>Hungary</td>
<td>Research activities may occur outside of Hungary. Incentives are also available to foreign entities without Permanent Establishment (PE) who subcontracts in Hungary.</td>
</tr>
<tr>
<td>Japan</td>
<td>Research activities may occur outside of Japan, even when the activities are sub-contracted to another party. The Japanese company must bear the financial expenses.</td>
</tr>
<tr>
<td>Poland</td>
<td>Research activities may occur outside of Poland.</td>
</tr>
<tr>
<td>Portugal</td>
<td>Research activities may occur outside of Portugal; however, the qualified expenses must be incurred by a Portuguese entity.</td>
</tr>
<tr>
<td>Russia</td>
<td>Research activities may occur outside of Russia.</td>
</tr>
<tr>
<td>Singapore</td>
<td>The expenses related to 14D base deduction and 14DA enhanced deduction do not have to relate to research performed in Singapore.</td>
</tr>
<tr>
<td>South Korea</td>
<td>Research activities may occur outside of South Korea; however, any subcontracted research to university or college must be located in South Korea.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Research activities may occur outside of United Kingdom.</td>
</tr>
</tbody>
</table>
Qualified contract research allowed:

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Contract expenditures are included as qualified expenses if they are directly related to research activities.</td>
</tr>
<tr>
<td>Austria</td>
<td>Subcontracted research expenses can be claimed by the party funding the research, with a credit cap of €100K per year (increased to €1M for tax year beginning on or after January 1, 2012). The subcontractor must be a qualifying EU/EEC institution and is not a related party.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Contract expenditures are included as qualified expenses.</td>
</tr>
<tr>
<td>Brazil</td>
<td>Contractor payments for technical services may be qualified if the taxpayer does not participate in the research. Payments made to small businesses for the implementation of research projects are qualified. Contracts with national universities, research institutions, and independent inventors are only qualified if the taxpayer assumes all responsibility, enterprise risk management, and project cost control.</td>
</tr>
<tr>
<td>Canada</td>
<td>Contracted research to third parties, university, college and consortium are qualified. There are special rules for contract research to prevent duplicate claims. For contract expenditures incurred on or after January 1, 2013, there’s a 80% limit. For contract expenditures incurred on or after January 1, 2014, contract amount related to capital expenditures made by an arm’s length contractor for fullfil an SR&amp;ED contract is excluded.</td>
</tr>
<tr>
<td>China</td>
<td>80% of the contracted research expenses paid to local subcontracting parties (e.g., PRC entities, university, research center, technology service center) are included in the qualified research expenses. For companies claiming the HNTE status, less than 40% of contracted research may occur outside the country.</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Only contract expenses incurred to certify research results are eligible for the research benefit.</td>
</tr>
<tr>
<td>France</td>
<td>There is a cap on private subcontracted research equal to 3 times the other qualifying expenses (limit of €10M subcontract expenses). If the contracted parties are related, the expenses that can be taken into account are limited to €2M. The limitations on contract research are applicable from 12/1/2011.</td>
</tr>
<tr>
<td>Hungary</td>
<td>Contract expenditures are included as qualified expenses as long as the contractor is a Hungarian taxpayer.</td>
</tr>
<tr>
<td>India</td>
<td>125%-200% super deduction for payments made to prescribed research entities.</td>
</tr>
<tr>
<td>Ireland</td>
<td>Contract expenditures are included as qualified expenses with a cap of 10% of total qualified expenses in a given year. Where the R&amp;D activities are contracted to a university or institute, the limit is 5% of the company’s R&amp;D expenditures in the period. For accounting period ending after January 1, 2012, the subcontracting limit is the greater of €100K, or the 10% and 5% limits The contractor must be unrelated to the funding taxpayer.</td>
</tr>
<tr>
<td>Italy</td>
<td>For 2011 and 2012, 90% tax credit is available for incremental qualified research expenses paid to contracted research centers, institutions, or universities.</td>
</tr>
<tr>
<td>Japan</td>
<td>Contract expenditures are included as qualified expenses for both SME and large companies.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Contract expenditures are included as qualified expenses if incurred directly for the conduct of qualified research</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Contract expenditures are included as qualified expenses for the RDA incentive starting in 2012.</td>
</tr>
</tbody>
</table>
Qualified contract research allowed (Cont.):

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>Contract expenditures are included as qualified expenses.</td>
</tr>
<tr>
<td>Portugal</td>
<td>Contract expenditures are included as qualified expenses. However from 2012 onwards they are limited to 55% of the qualifying staff costs if not paid to universities or other public research institutions, as well as to other entities officially recognized as possessing R&amp;D capabilities.</td>
</tr>
<tr>
<td>Russia</td>
<td>Contract expenditures are included as qualified expenses.</td>
</tr>
<tr>
<td>Singapore</td>
<td>Contract expenditures are eligible for the various deductions.</td>
</tr>
<tr>
<td>South Africa</td>
<td>Contract expenditures are eligible for the 150% super deduction if they are directly related to the research activities.</td>
</tr>
<tr>
<td>South Korea</td>
<td>Contract expenditures are included as qualified expenses if paid to university or other research institutions.</td>
</tr>
<tr>
<td>Spain</td>
<td>Contract expenditures are included as qualified expenses if the contractor is located in Spain or a member state of the EU/EEA.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Contract expenditures are included as qualified expenses.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>SMEs can claim 65% subcontracted costs. Large companies can only claim subcontracted expenses if paid to university, health authority, charity, scientific research organization, individuals, or a partnerships of individuals.</td>
</tr>
<tr>
<td>United States</td>
<td>Companies can claim 65% of contract research if the subcontracted activities are within the United States.</td>
</tr>
</tbody>
</table>
## Treatment of income and expenses related to intellectual properties (IP): 

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>If a taxpayer purchases technology for further internal development, the deduction for the purchase cost is limited to 1/3 of the expenditures on the internal development activities.</td>
</tr>
<tr>
<td>Austria</td>
<td>For income from royalty payments related to self-developed IP or capital gains from sale of self-developed IP, the tax rate is reduced by 50% for individual taxpayers.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Taxpayers can deduct 80% of qualifying IP income from taxable income, resulting in 6.8% maximum effective tax rate.</td>
</tr>
</tbody>
</table>
| Brazil    | 1) An extra 20% deduction is for IP related development expenses, but only if a patent is registered.  
   2) 50% reduction of the IPI excise due for equipments, machinery, tools dedicated to R&D  
   3) Equipment, machinery, and tools exclusively dedicated to R&D can be deducted when the expenses are incurred. |
| China     | 1) Taxpayer granted HNTE status has a reduced 15% income tax rate.  
   2) For Technology/Software companies, the first 5M RMB is tax exempt from Enterprise Income Tax (EIT).  
   3) Any income from technology transfers in excess of 5M RMB is taxed at 50% reduce EIT rate. |
| France    | If a technology has been owned by a French taxpayer for at least 2 years, the revenue derived from licensing or sub-licensing, or sale of IP are taxed at 15%. For French licensee, the royalty fee is deductible at 33.33%. |
| Hungary   | 50% of the gross royalty from IP (up to 50% of profit before tax) maybe deducted from the tax base. As of January 1, 2012, capital gains tax exemption applies to gains from the sale/transfer of qualifying IP. |
| Ireland   | There’s a potential minimum 2.5% effective corporate tax rate on IP income. |
| Malaysia  | Taxpayer is allowed to claim the 200% super deduction for IP and trademark application expenses. |
| Netherlands | Development costs related to IP development (allocated to the Innovation Box) can be deducted against income. Income attributable to qualifying invention is reduced to 5% (instead of the 20%-25%). |
| Poland    | A taxpayer can deduct from its tax base up to 50% of expenditures incurred for the acquisition of new technology in the form of intangible assets such as proprietary rights, licenses, rights under patents or utility models, know-how, that result in improvement of existing products/services. |
| South Korea | If an SME purchases certain IP (prescribed in the tax law) from a Korean third-party resident, the SME is entitled to claim a tax credit in the amount of 7% of the purchase price. |
| Spain     | 50% of IP related income is exempt from taxable income. |
| Turkey    | Income earned from software development and other R&D activities in the Technology Development Zones are exempt from Income and Corporate Tax until 12/31/2023. Wages of researchers, R&D workers, and software workers in the zone is exempt from Income Tax. Income from technology services are exempt from VAT tax for the same period. |
| United Kingdom | IP income to be taxed at the reduced 10% (to be effective in April 2013). |
Countries offering research grants only:

<table>
<thead>
<tr>
<th>Country</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>Non-repayable cash grants for research projects awarded on a “per project” basis.</td>
</tr>
<tr>
<td>Mexico</td>
<td>Cash grants provided through 1) High Added Value Technological Innovation for Technological Research, Development, and Innovation; 2) Development and Innovation of Precursor Technologies for Technological Research, Development, and Innovation; 3) Technological Innovation to Enhance Competitiveness for Technological Research, Development, and Innovation.</td>
</tr>
</tbody>
</table>
Jurisdictions Offering Super Deductions:

Note: For the United Kingdom, the super deduction is currently 200% for SMEs and 130% for non-SMEs.
<table>
<thead>
<tr>
<th>Country</th>
<th>Nature of Benefit Available</th>
<th>Income Tax Benefit Generally Available</th>
<th>Specific Pre-Approval Required from Government</th>
<th>Refundable/Carryforward</th>
<th>Cap/Limitations on Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Tax credit</td>
<td>1. Refundable tax credit of 45% of eligible expenditure incurred where aggregate gross receipts are less than $20M.</td>
<td>Taxpayers must file the Application for Registration of R&amp;D Activities within 10 months of the tax year end.</td>
<td>Excess credits are refundable if aggregate gross receipts are less than $20M.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Non-refundable tax credit of 40% of eligible expenditure incurred where aggregate gross receipts are $20M or greater.</td>
<td></td>
<td>Carry forward excess credits if aggregate gross receipts are $20M or greater.</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>Tax credit</td>
<td>10% tax credit on qualifying R&amp;D related expenditures.</td>
<td>From 2013, review by Austrian Research Promotion Organization is required before applying for R&amp;D tax benefit.</td>
<td>Refundable credits are paid in cash.</td>
<td>€1M for tax year beginning after January 1, 2012, cap annually on subcontracted research expenses.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Special deduction</td>
<td>1. A one-time deduction of 15.5% of all R&amp;D Investments or a current deduction of 22.5% of depreciation related to R&amp;D assets.</td>
<td>Taxpayer must file a claim for environmental certification though the regional authorities by March 31st to obtain benefits from the Investment Deduction.</td>
<td>Excess tax deductions may be carried forward indefinitely or converted into a tax credit refundable after 5 years.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. Elimination of tax and social security withholding requirements for certain companies granted temporary &quot;innovation premiums&quot;.</td>
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<td></td>
<td></td>
<td>5. Grants.</td>
<td></td>
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</tr>
<tr>
<td>Country</td>
<td>R&amp;D Activities Must Occur in Country</td>
<td>Costs Must be Incurred in Country</td>
<td>IP Must be Retained in Country</td>
<td>Industry Eligibility Restriction</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Activities can be physically performed outside Australia and still be eligible for benefits if there is a significant scientific link to Australian core activities and they are unable to be conducted in Australia.</td>
<td>At least 50% of total costs must be incurred in Australia.</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>Qualified activities must occur within Austria. Subcontracted research must occur inside the European Union or European Economic Area; however, the Austrian entity must fund the research endeavor.</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Country</td>
<td>Nature of Benefit Available</td>
<td>Income Tax Benefit Generally Available</td>
<td>Specific Pre-Approval Required from Government</td>
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<tr>
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</tr>
</tbody>
</table>
| Brazil  | Super deduction           | 1. 160% super deduction of the total R&D expenditures.  
<pre><code>                          |                                           | Companies must have a tax clearance certificate to qualify for the super deduction. | Unused deductions may not be carried forward or carried back. | No |
</code></pre>
<p>|         |                           | 2. The super deduction increases to 170% of the qualified expenses if the entity increases the amount of researchers by up to 5% in a given year. |                                           |                                                       | |
|         |                           | 3. The super deduction increases to 180% of the qualified expenses if the entity increases the amount of researchers by more than 5% in a given year. |                                           |                                                       | |
|         |                           | 4. Enhanced R&amp;D tax super deduction for patents is an extra 20% deduction when a patent is registered. |                                           |                                                       | |
|         |                           | 5. Special depreciation/amortization for R&amp;D assets. |                                           |                                                       | |
| Canada  | Tax credits               | 20% federal tax credit for all qualifying R&amp;D costs. (15% after 2013). Enhanced refundable credits (35%) are available for Qualified Canadian controlled private corporations. Tax credits are also available from provincial authorities. | No | Federal SR&amp;ED investment tax credits are refundable on the first $3M of annual expenditures if earned by a small Canadian-controlled private corporation. The corporate group of companies must have less than $800K of taxable income and less than $50M in taxable capital in prior year to be eligible. Other unused credits can be carried forward 20 years (10 years in some provincial jurisdictions) and carried back 3 years. | No cap on non-refundable credits. |</p>
<table>
<thead>
<tr>
<th>Country</th>
<th>Nature of Benefit Available</th>
<th>Income Tax Benefit Generally Available</th>
<th>Specific Pre-Approval Required from Government</th>
<th>Refundable/Carryforward</th>
<th>Cap/Limitations on Benefits</th>
</tr>
</thead>
</table>
| China            | Super deduction and tax exemption | 1. 150% super deduction of the qualifying R&D expenses.  
  2. Business Tax Exemption for the transfer of qualified technology.  
  3. Corporate tax rate for companies granted High and New Technology Enterprise (HNTE) status is reduced from 25% to 15%.  
  4. Newly established Technology and Software companies receive a tax holiday (and new established HNTEs in certain provinces may receive tax holidays).  
  5. Enterprise Income Tax exemptions for certain qualified technology transfers.  
  6. Qualified domestic and foreign invested R&D enjoy exemption on import duty, VAT and consumption tax on imports, and VAT refund on purchase of Chinese domestic equipment. | Companies must apply for approval with the Science & Technology Bureau, and tax authorities.                                                                 | Tax losses attributable to R&D super deduction claims can be carried forward up to 5 years.                    | No                           |
| Czech Republic   | Super deduction and cash grants | 1. 200% super deduction of qualified R&D costs.  
  2. Cash grant programs for research and development including CAPEX investment.  
  3. Tax relief for 10 years of corporate income tax relief for investments in qualified areas.                                                                                                                                | Yes                                                                                                            | If the deduction cannot be claimed in the year in which it arose (due to a tax loss or the deduction exceeding the annual tax base) the deduction (or remaining part thereof) may be carried forward and utilized within the next three taxable periods. | No                           |
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Canada</td>
<td>Generally research must be undertaken in Canada; however, 10% of eligible wages incurred outside of Canada may be claimed for the R&amp;D tax credit.</td>
<td>Yes, generally.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>No</td>
<td>Qualified expenses must be tax deductible expenses of a Czech taxpayer.</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Country</td>
<td>Nature of Benefit Available</td>
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</table>
| **France** | Tax credits, cash grants and accelerated depreciation | 1. 30% tax credit for the first €100M of qualified R&D expenditures incurred during the tax year; plus an additional 5% of any amount in excess of the €100M threshold.  
2. Increased credits are available for new credit applicants (40% for the first year of application (subject to limitation), 35% for the second year (subject to limitation), and 30% thereafter).  
3. Cash grants for R&D and acceleration of depreciation deductions for fixed assets used in qualified research. | No | If research tax credits are not utilized within 3 years, the taxpayer receives a refund for the unutilized credit.  
The refund rule was modified for 2005 – 2009 providing that unutilized credits were currently refundable. Research credits also remain refundable in 2010 for SMEs, new companies, young innovative companies and companies facing financial issues. | From 12/1/2011, cap on private subcontracted research equal to 3 times the other qualifying expenses (limit of €10M subcontract expenses). If the contracted parties are related, the expenses that can be taken into account are limited to €2M. |
| **Germany** | Cash grants | R&D intensive entities may receive cash grants from the government, up to 50% of eligible project expenses. | Yes | N/A | No |
| **Hungary** | Super deductions | 1. 200% corporate income tax base super deduction.  
2. 50% royalty deduction when IP is created as a result of R&D  
3. Capital gains tax exemption for transfer/sale of qualifying IP.  
4. Cash grants from Hungarian and EU sources. | As of February 1, 2012, new request procedure requires submitting the claim to the Hungarian Intellectual Property Office. | No | No. |
| **India** | Super deductions | 1. 200% super deduction for in-house R&D expenditures.  
2. 125% - 200% super deduction for payment to research institutions.  
3. Deduction of R&D employee salary and material consumed within 3-year immediately preceding the commencement of the business. | RD facility must be approved by Department of Scientific and Industrial Research. | If the taxpayer is in a loss situation, unused benefits may be carried forward for 8 years. | No |
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<th>Industry Eligibility Restriction</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>100% of the qualified activity must occur within the European Union (as long as the expenditure is part of the company’s tax base).</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Germany</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Hungary</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>India</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>The 200% super deduction is limited to taxpayers in the business of bio-technology or manufacturing and producing products (other than products on the negative list such as alcoholic products, tobacco products, cosmetics, toothpaste, aerated waters using blended flavoring concentrates, confectionary, record players, projectors, office machines and apparatus, steel furniture, safes, latex foam, crown corks and caps for packaging).</td>
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</table>
| Ireland | Tax credits and grants      | 1. 25% incremental credit for all expenditures exceeding the “base amount”. From January 1, 2012, the first €100K of R&D expenditures is not limited to the base amount.  
2. 25% credit for expenditures incurred for buildings or structures used in the conduct of qualified R&D activities.  
3. R&D grants are also offered.  
4. Starting January 1, 2012, credits can be used to offset against R&D employees personal income tax liabilities. | No | Unused credits may be carried back 1 accounting period and carried forward indefinitely. If there are unutilized credits after the carryback, the taxpayer may apply for a refund (payable over 3 years), subject to certain caps. | Refunds are limited to the greater of the total tax paid by the company for the 10 years prior to the period for which the company is making the claim or the payroll tax liabilities for the specific period in which the expenditures were incurred. After 6/22/2011, the limit have been increased to include the payroll liabilities of the immediate preceding accounting period. |
| Israel  | Tax rate reductions and grants | 1. Tax rate reductions though the Alternative Tax Program and Strategic Program.  
2. Several grant programs are available. | Yes, for grants. | N/A | N/A |
| Italy   | Tax credits for 2011 and 2012 | 1. 90% tax credit on incremental qualified expenses over 2008 – 2010.  
2. 35% credit for eligible R&D employees related salary.  
3. Salaries of employees involved in research activities are deductible for IRAP. | The 35% credit must be claimed by filing an appropriate form. | No | No |
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</thead>
<tbody>
<tr>
<td>Ireland</td>
<td>R&amp;D activities must occur within Ireland or the European Economic Area. The credit is denied when the activities occur in an EEA nation where a corresponding tax deduction for such expenditures is permitted.</td>
<td>Yes – Costs must be incurred within the EEA (credit is denied when the activities occur in an EEA nation where a corresponding tax deduction for such expenditures is permitted).</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Israel</td>
<td>Yes</td>
<td>Yes</td>
<td>No, but could be a factor in evaluating grant applications.</td>
<td>No, but could be a factor in evaluating grant applications.</td>
</tr>
<tr>
<td>Italy</td>
<td>Subcontracted research to universities, research centers or institutions must be recognized by EU or Italy.</td>
<td>Subcontracted research to universities, research centers or institutions must be recognized by EU or Italy.</td>
<td>No</td>
<td>No</td>
</tr>
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</table>
| Japan   | Tax credits                 | 1. The credit equals 8% to 10% of qualifying expenditures for large companies.  
2. The credit equals 12% of qualifying expenditures for small and medium enterprises (SMEs).  
3. Both SMEs and Large Companies are eligible for an Additional Incremental Credit.  
4. In 2012, R&D centers are allowed 20% deduction of its income in the first 5 years of obtaining R&D center designation. | No. But taxpayer has to be a blue form tax return filer. | The carryforward period for unused credit varies from 1 to 3 years depending upon the tax period within which they were earned. | The credit is limited to 20% of the company's national tax liability before credit is applied. The Additional Incremental Credit is limited to 10% of the company's national income tax liability. |
| Malaysia| Super deduction and allowances | 1. ITA of 50% on qualified capital expenses for company conducting R&D.  
2. ITA of 100% on qualified capital expenses for R&D service providers.  
3. 200% super deduction. | Certain in-house projects must be pre-approved by the IRB. | ITA - Any unutilized allowances can be carried forward to subsequent years until fully utilized. | Taxpayer can offset ITA against 70% of its income for each year of assessment. |
| Mexico  | Grants                      | There are no tax benefits available, only grants. | Grant application process | N/A | N/A |
| Netherlands | Super deduction and Tax rate reduction | 1. Wage Tax Credit of 42% (can be as high as 60% for start-up companies) of the first €110K in R&D wage costs and 14% for the remaining wage costs.  
2. Innovation Box reduced tax rate for revenue attributable to patents and innovation.  
3. Research and Development Allowance (RDA) allows 140% non-wage expense super deduction. | Yes, for the Wage Tax Credit and RDA. | No | Wage Tax Credit has a maximum reduction of €14M per taxpayer. |
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<th>Cap/Limitations on Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poland</td>
<td>Tax deduction and grants</td>
<td>1. R&amp;D Centers can make monthly contributions to an “innovative fund” amounting to 20% of revenue which are then treated as deductible costs.</td>
<td>Yes, to obtain R&amp;D Center status.</td>
<td>Technology Incentives - Carry forward to the subsequent 3 tax years.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. A company can deduct from its tax base up to 50% of expenditures incurred for the acquisition of new technology in the form of intangible assets.</td>
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<tr>
<td>Portugal</td>
<td>Tax credit</td>
<td>1. Base rate: 32.5% of the R&amp;D expenditure during the tax year. New Small and Medium Enterprises (“SME”) may benefit, under certain circumstances, from a special increase of 10% of the base rate.</td>
<td>No</td>
<td>The tax credit can be carried forward up to six taxable periods.</td>
<td>The incremental credit is limited to €1.5M or to €1.8M (in the cases of expenses for recruiting PhD’s).</td>
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<td>2. Incremental rate: 50% of the incremental expenditure of the period, over the simple average of the two previous tax years, up to €1.5M. Expenses of recruiting PhD’s are eligible for an additional 20% and the incremental incentive limit, in these cases, is €1.8M.</td>
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<tr>
<td>Japan</td>
<td>No</td>
<td>Yes</td>
<td>While the law does not address whether IP ownership must be retained in Japan, the general view is that the IP should be located in Japan.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>Yes</td>
<td>Payments for technical services performed outside of Malaysia may qualify for the 200% super deduction when the amount expended is less than 70% of the total allowable expenditure for the super deduction.</td>
<td>No, but could be considered in government pre-approval process.</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Yes</td>
<td>Yes</td>
<td>Factor considered in the grant issuance decision process.</td>
<td>No</td>
<td></td>
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<tr>
<td>Netherlands</td>
<td>Qualified activity must occur within the European Union.</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Poland</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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<tr>
<td>Portugal</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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</table>
| Russia   | Exemption and super deduction | 1. 150% super deduction for certain R&D expenses.  
2. Reduced social security contribution for certain companies.  
3. Reduced profit tax rate for certain companies.  
5. VAT exemption for certain incomes. | Yes, as required by Russian tax authorities. | Losses for tax purposes resulting from super deductions can be carried forward for 10 years. | No |
| Singapore | Super deductions | 1. 100% base deduction for qualifying R&D expenses incurred.  
2. Additional 50% deduction for certain R&D expenses incurred in Singapore.  
3. Additional 250% or 300% enhanced deduction on the first $1400K of certain R&D expenses.  
4. 200% super deduction for certain expenses approved by government. | Government approval needed for 200% super deduction. | Unutilized R&D expenditures may be carried forward indefinitely, subject to substantial shareholders’ test. They may also be carried back subject to certain restrictions. In lieu of tax deduction, there’s an option to convert up to $100K to cash grant at 30% for tax years 2011-2012, and 60% for 2013-2015. | The combined total claims are capped at 200% of actual expenditures. However, this does not apply to R&D expenditures that qualify for the Section 14DA Enhanced Deduction. |
| South Africa | Super deductions and accelerated depreciation | 1. 150% volume-based super deduction.  
2. Accelerated depreciation for R&D related capital expenditures. | Yes, pre-approval required from the Department of Science and Technology. | Unlimited carryforward | No |
| South Korea | Tax credits and reserve deduction | 1. Tax credits for SMEs and Large Companies.  
2. Investment tax credits.  
3. 3% deduction of revenue from taxable income. | No | Unused credits may be carried forward 5 years. | Certain limitations apply to Large company tax credits. |
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<tbody>
<tr>
<td>Russia</td>
<td>No</td>
<td>No</td>
<td>No, but location of IP is a factor in government evaluation process.</td>
<td>No</td>
</tr>
<tr>
<td>South Korea</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>The R&amp;D tax credits are not allowed for R&amp;D service providers.</td>
</tr>
<tr>
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<tr>
<td>Spain</td>
<td>Tax credits</td>
<td>1. Volume and incremental tax credits for qualified expenditures.</td>
<td>No</td>
<td>Unused credits may be carried forward for 18 years.</td>
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<td>2. Credit for wages paid to qualified investigators.</td>
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<td>3. R&amp;D equipment credit used in qualified R&amp;D.</td>
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<td>4. Patent Box reduces the tax rate for income attributable to patent.</td>
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<tr>
<td>Turkey</td>
<td>Super deduction</td>
<td>1. 200% super deduction for R&amp;D expenses.</td>
<td>Yes</td>
<td>R&amp;D deductions can be carried forward indefinitely but the amounts are limited under a complicated formula set forth in the Tax Procedurals Law.</td>
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<td>2. 150% incremental deduction for increase in R&amp;D expenses for R&amp;D center with more than 500 FTE.</td>
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<td>3. 50% of social security contribution premium is compensated for 5 years.</td>
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<td>5. Technology Development Zone benefit.</td>
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<td>6. Exempt from stamp duty for R&amp;D research papers.</td>
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<tr>
<td>United Kingdom</td>
<td>Super deduction and credit</td>
<td>1. 130% volume-based super deduction for large companies.</td>
<td>No</td>
<td>Unused deductions may be carried forward indefinitely, unless there is a change in ownership and a change in the nature of the trade within three years. Loss position SMEs allowed cash credits.</td>
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<tr>
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<td></td>
<td>2. 200% volume-based super deduction for small/medium sized companies (SMEs).</td>
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<td></td>
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<td>3. Cash credits for loss position SMEs.</td>
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<td>4. Patent Box.</td>
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<tr>
<td>United States</td>
<td>Tax credit</td>
<td>1. 20% traditional credit. or 14% Alternative Simplified Credit</td>
<td>No</td>
<td>Unused credits may be carried back 1 year and forward 20 years.</td>
</tr>
<tr>
<td>Country</td>
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<tr>
<td>Spain</td>
<td>All qualified R&amp;D must occur in Spain or a member state of the European Union or European Economic Area.</td>
<td>All qualified R&amp;D must occur in Spain or a member state of the European Union or European Economic Area.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Turkey</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>No</td>
<td>No, but the related costs must be deductible in computing UK taxable profits in order to remain eligible.</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>United States</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Deloitte Global R&D Leaders:

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact</th>
<th>Email</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austrailia</td>
<td>Sergio Duchini</td>
<td><a href="mailto:sduchini@deloitte.com">sduchini@deloitte.com</a></td>
<td>61 (3) 9671 7376</td>
</tr>
<tr>
<td>Austria</td>
<td>Herbert Kovar</td>
<td><a href="mailto:hkovar@deloitte.at">hkovar@deloitte.at</a></td>
<td>43 (1) 53700 3600</td>
</tr>
<tr>
<td>Belgium</td>
<td>Patrick Brauns</td>
<td><a href="mailto:pbrauns@deloitte.be">pbrauns@deloitte.be</a></td>
<td>32 (2) 6006662</td>
</tr>
<tr>
<td>Brazil</td>
<td>Flavia Crosara</td>
<td><a href="mailto:flaviacrosara@deloitte.com">flaviacrosara@deloitte.com</a></td>
<td>55 (19) 3707-3124</td>
</tr>
<tr>
<td>Canada</td>
<td>Natan Aronshtam</td>
<td><a href="mailto:naronshtam@deloitte.ca">naronshtam@deloitte.ca</a></td>
<td>(416) 643 8701</td>
</tr>
<tr>
<td>China</td>
<td>Wei BJ Chen</td>
<td><a href="mailto:weichen@deloitte.com">weichen@deloitte.com</a></td>
<td>86 (10) 8520 7528</td>
</tr>
<tr>
<td>Czech Republic/Poland</td>
<td>Magdalena Burnat-Mikosz</td>
<td><a href="mailto:mburnatmikosz@deloitte.com">mburnatmikosz@deloitte.com</a></td>
<td>48 (22) 5110065</td>
</tr>
<tr>
<td>France</td>
<td>Thomas Perrin</td>
<td><a href="mailto:tperrin@deloitte.fr">tperrin@deloitte.fr</a></td>
<td>33 (1) 55 61 69 48</td>
</tr>
<tr>
<td>Germany</td>
<td>Frank Burkert</td>
<td><a href="mailto:fburkert@deloitte.com">fburkert@deloitte.com</a></td>
<td>49 (40) 32080 4611</td>
</tr>
<tr>
<td>Hungary</td>
<td>Lajos Bagdi</td>
<td><a href="mailto:lbagdi@deloitteCE.com">lbagdi@deloitteCE.com</a></td>
<td>36 (1) 428 6986</td>
</tr>
<tr>
<td>India</td>
<td>Ashesh Safi</td>
<td><a href="mailto:asafi@deloitte.com">asafi@deloitte.com</a></td>
<td>91 (22) 6619 8442</td>
</tr>
<tr>
<td>Ireland</td>
<td>Michael Sheehan</td>
<td><a href="mailto:micsheehan@deloitte.com">micsheehan@deloitte.com</a></td>
<td>353 (2) 1490 7032</td>
</tr>
<tr>
<td>Israel</td>
<td>Nadav Gil</td>
<td><a href="mailto:ngil@deloitte.com">ngil@deloitte.com</a></td>
<td>(972) 3 608 5555</td>
</tr>
<tr>
<td>Italy</td>
<td>Ranieri Villa</td>
<td><a href="mailto:ravilla@sts.deloitte.it">ravilla@sts.deloitte.it</a></td>
<td>39 0105317831</td>
</tr>
<tr>
<td>Japan</td>
<td>Mark Brandon</td>
<td><a href="mailto:marbrandon@deloitte.com">marbrandon@deloitte.com</a></td>
<td>81 (03) 6213 3864</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Daniel Lim</td>
<td><a href="mailto:daniellim@deloitte.com">daniellim@deloitte.com</a></td>
<td>603 7712 5139</td>
</tr>
<tr>
<td>Mexico</td>
<td>Humberto Zapien</td>
<td><a href="mailto:hzapien@deloittemx.com">hzapien@deloittemx.com</a></td>
<td>52-55-508 065 18</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Helene Geijtenbeek</td>
<td><a href="mailto:hgeijtenbeek@deloitte.com">hgeijtenbeek@deloitte.com</a></td>
<td>31 8 828 88962</td>
</tr>
<tr>
<td>Portugal</td>
<td>Sergio Oliveira</td>
<td><a href="mailto:seoliveira@deloitte.pt">seoliveira@deloitte.pt</a></td>
<td>351 21 0427527</td>
</tr>
<tr>
<td>Russia</td>
<td>Vasily Markov</td>
<td><a href="mailto:vmarkov@deloitte.ru">vmarkov@deloitte.ru</a></td>
<td>(7) 81 270 371 062556</td>
</tr>
<tr>
<td>Singapore</td>
<td>Hwee Chua Low</td>
<td><a href="mailto:hclow@deloitte.com.sg">hclow@deloitte.com.sg</a></td>
<td>65 6216 3290</td>
</tr>
</tbody>
</table>
## Deloitte Global R&D Leaders:

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact</th>
<th>Email</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>South Africa</strong></td>
<td>Newton Cockcroft</td>
<td><a href="mailto:ncockcroft@deloitte.co.za">ncockcroft@deloitte.co.za</a></td>
<td>(27) 11 806 5298</td>
</tr>
<tr>
<td><strong>South Korea</strong></td>
<td>Jee Won Kwon</td>
<td><a href="mailto:jekwon@deloitte.com">jekwon@deloitte.com</a></td>
<td>(82) 2 6676 2416</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>Cayetano Olmos</td>
<td><a href="mailto:colmos@deloitte.es">colmos@deloitte.es</a></td>
<td>(34) 9323 04848</td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
<td>Ufuk Sogutluoglu</td>
<td><a href="mailto:usogutluoglu@deloitte.com">usogutluoglu@deloitte.com</a></td>
<td>(90) 212 366 62 26</td>
</tr>
<tr>
<td><strong>United Kingdom</strong></td>
<td>Carmen Aquerreta</td>
<td><a href="mailto:caquerreta@deloitte.co.uk">caquerreta@deloitte.co.uk</a></td>
<td>(44) 20 7007 3928</td>
</tr>
<tr>
<td><strong>United States of America</strong></td>
<td>Sean Gogerty</td>
<td><a href="mailto:sgogerty@deloitte.com">sgogerty@deloitte.com</a></td>
<td>(973) 602-6560</td>
</tr>
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