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Global Research & Development Incentives Group

April 2017

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Welcome to PwC's Global R&D Incentives Group

The important role innovative companies play in their national economies has led to the enactment of tax incentives and grant programmes to encourage additional research investments by businesses. To stimulate innovation, many jurisdictions around the globe provide research incentives in the form of tax credits, "super" deductions, or even cash grants. In addition, some jurisdictions provide relief in the form of reduced tax for income associated with technology-based intellectual property. Understanding these tax incentives—along with the impact of transfer pricing, intellectual property protection and location, grants, and capital investments to maximize the return on investments in research—is critical for business decision makers.

Diarmuid MacDougall,
Group Leader
Global R&D Incentives

Leverage our experience

The PwC Global R&D Incentives Group, part of the PwC Global International Tax Services Network, has assisted hundreds of clients around the world in structuring their R&D programmes, improving their return on investment in research and their effective tax rate. We also work with governments to design and improve tax regimes, fostering innovation, which ultimately can stimulate economic growth.

Our team consists of tax, financial, engineering, and science professionals who understand the technical challenges confronting companies in different industries and countries. Since the types of research incentives vary from country to country, businesses need advisers who have experience with the various incentives at all stages of the innovation value chain. Our established network of professionals across the world deliver analysis that can help mitigate risk, manage your tax burden, identify and develop critical, strategic initiatives, and support the implementation through documentation of the key aspects of various relief and corporate tax incentives.

Suchi Lee,
Global Leader
International Tax Services

Industry scope

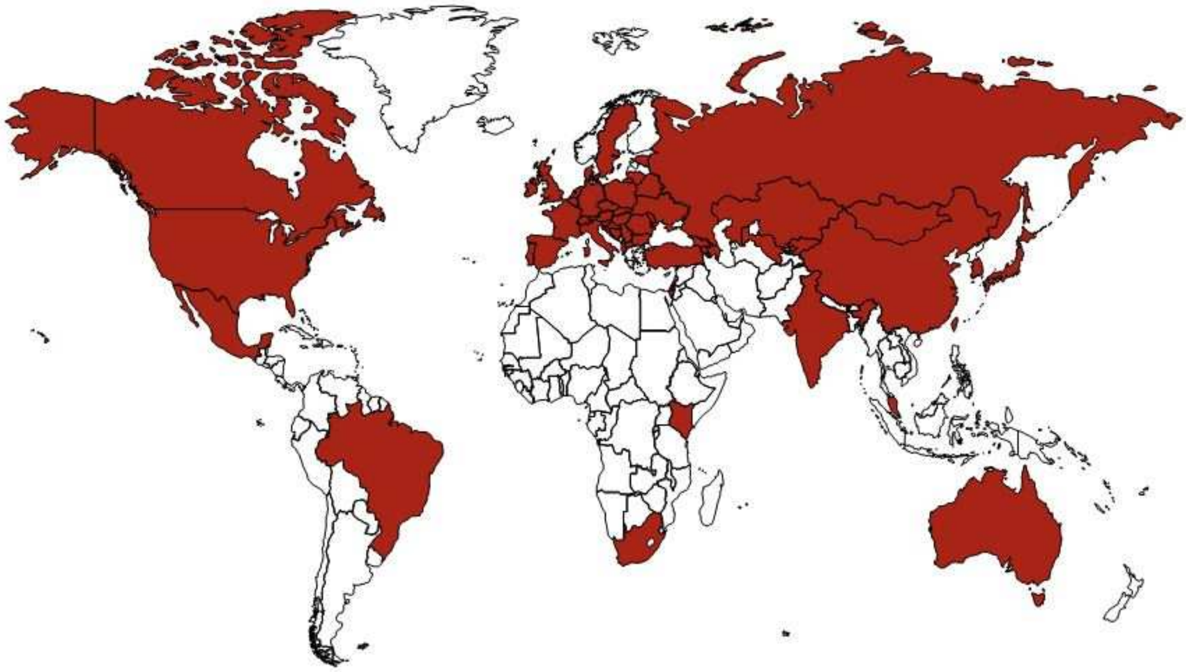
PwC's global R&D team has experience in many industries, including:

- Aerospace
- Agriculture
- Automotive
- Chemicals
- Clean Tech
- Energy
- Entertainment & Media
- Life Sciences
- Manufacturing
- Mining
- Oil & Gas
- Pharmaceuticals
- Pulp & Paper
- Retail
- Software
- Technology
- Telecommunications
- Transportation
- Utilities

Working together

Because it takes strong working relationships to deliver effective solutions, we apply an integrated approach. Our goal is to create a lasting relationship with you.

We have the capabilities to understand the global picture



Business focus

Qualifying for, and quantifying these incentives presents companies with a challenge. PwC can support your R&D objectives both locally and globally with in-depth and well coordinated R&D teams. Our global network of R&D professionals, located in more than 30 countries, combines extensive experience in analysing the often ambiguous statutory language concerning research incentives with knowledge of the rules used by local taxing authorities. Our professionals include technical specialists with extensive industry experience that assist in identifying those research activities that qualify for incentives that might be otherwise overlooked.

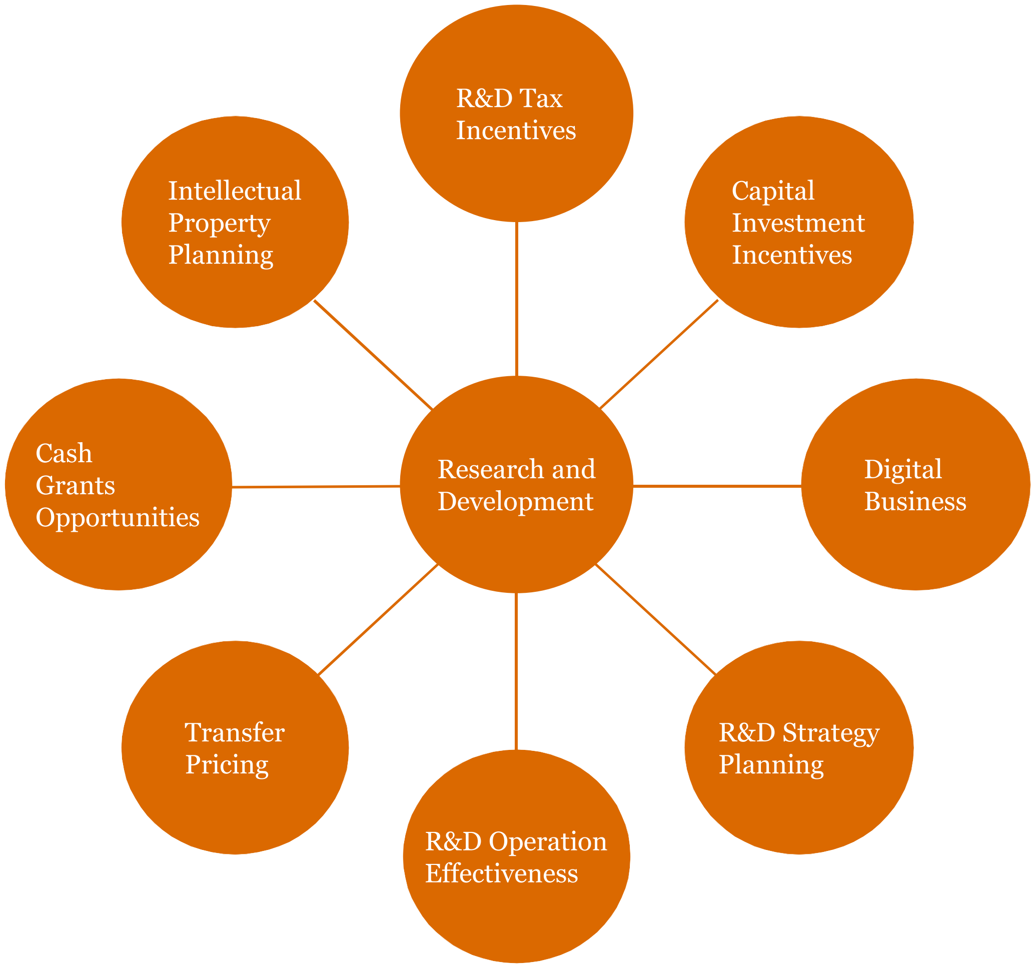
In the countries highlighted above, we assist our clients to:

- Competitively plan in the global economy
- Consider new and/or alternative jurisdictions for innovation and growth
- Connect their global research
- Respond to economic and legislative changes
- Consider the impact of IP migration.

We team with your global and local staff to train individuals on the implementation of strategies to:

- Identify available research activities
- Analyse detailed accounting records to find costs available for jurisdictional relief
- Consider existing and potential alternative tax planning strategies based on the rules in differing jurisdictions, taking into account not only the incentives for research expenditures, but various implications such as withholding taxes, available grants for job creation, and corporate tax rate reductions for the licensing of intellectual property
- Gather, organise, and develop documentation to support and defend the eligible costs in the event of an enquiry by the tax authorities
- Develop procedures and technologies intended to improve the efficiency and effectiveness of identifying, documenting, calculating, and sustaining current and future incentives

The Big Picture – Research and Development



Many countries including Austria, Belgium, Canada, Denmark, France, Ireland, The Netherlands, Spain and the UK provide a payable R&D credit so the business obtains cash even if it has tax losses. In some countries the scheme rules mean the credit is still accounted for in taxation whereas in others, particularly in France, Ireland and the UK, it is accounted for "Above The Line" enhancing earnings before tax. The earnings benefit has a higher profile with R&D budget holders and a greater impact on financial performance and is attracting much more focus. PwC is helping many businesses record the benefit in the year of expenditure on an accruals basis, rather than retrospectively.

Our global network of experienced R&D professionals are trained in identifying and documenting research expenditures. However, PwC's work does not end with a review of what has already been done. We understand the value of collaborating with teams involved in all stages of the R&D process.

Your global strategy may require planning where you choose to invest in R&D based on ownership of intellectual property and jurisdictional relief. Our team, including our international tax specialists, can help large multinational companies take advantage of available incentives, consider the effect on transfer pricing, and review your company's global tax strategy for cross-border structuring.

Working with you, we will develop strategies to assist you in obtaining your goals of expansion and growth. We will jointly develop effective strategies for obtaining grants, incentives for innovation, and alternative energy/green initiatives.

Patent Boxes

As outlined in the comparison table, eleven European Union (EU) countries have adopted "patent box" regimes that sharply reduce the corporate tax rate on qualifying intellectual property (IP) income to a nominal rate of 0-22 percent (effective tax rates typically are lower).

What is a "Patent Box"

Tax incentives can be provided at the front-end of the innovation cycle, in the years when R&D expenditures are incurred, and/or at the back-end, in the years when income is generated from exploiting IP. Front-end tax incentives include "super" deductions and tax credits for qualifying R&D expenses. By contrast, patent box regimes are back-end incentives that provide a reduced corporate income tax rate for certain income arising from the exploitation of IP generally through a percent deduction or exemption of qualified IP income.

Patent/innovation boxes have come under OECD scrutiny to ensure they are not harmful tax practices. The schemes in many territories have had to change so that the profits attracting the lower tax rate are multiplied by a 'nexus' fraction (broadly R&D done in-house plus payments to third parties divided by total R&D costs). This has the effect of reducing the profits taxed at the lower rate to reflect the proportion of the R&D done in-territory rather than the R&D that is paid for. The fraction requires R&D costs to be tracked by product or IP asset making a much closer linkage between R&D performed, patent benefits and the calculations needed for these incentives.

Tax Incentive Highlights

Country	R&D Credit	R&D Super Deduction	Patent or Innovation Box
Australia	√		
Austria	√		
Belgium	√	√	√*
Brazil		√	
Canada	√		
China		√	
Czech Republic		√	
Denmark	√**		
France	√		√
Hungary	√	√	√
India		√	
Ireland	√		√
Israel		√	√
Italy	√		√
Japan	√		
Kazakhstan		√	
Korea	√		√
Latvia		√	
Lithuania		√	
Luxembourg			√
Malta	√	√	√
Netherlands	√***		√
Poland		√	
Portugal	√		√****
Romania		√	
Russia		√	
Singapore		√	
Slovak Republic		√	New legislation in discussion
South Africa		√	
Spain	√		√
Switzerland			√
Turkey	√	√	√*****
United Kingdom	√******	√	√
United States	√		

*Patent Income Deduction Regime (PID) abolished and replaced by Innovation Income Deduction regime (IDD) as from 1 July 2016. For patents requested or acquired before 1 July 2016 (including supplementary protection certificates), taxpayers can still apply old PID regime until 30 June 2021 (irrevocable option)
**Limited to the tax value of loss incurred in the current assessment year up to DKK 25 million resulting from immediate deduction of R&D costs. Jointly taxed companies are subject to the same limitation on group level.
*** The former "R&D super deduction" has been integrated in the above the line R&D credit as from 2016
****The Corporate Tax Reform that has effect from the beginning of 2014 introduced a Patent Box regime for some IP created after January 2014.
*****For more details please refer to comparison page 15, country information pages 40 & 41 and contact R&D team in Turkey, per contact list on page 45
******The UK government introduced a new R&D credit scheme for large companies, effective for expenditure incurred from 1 April 2013. The new scheme initially ran alongside the R&D super deduction for large companies but became mandatory from 1 April 2016.

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Belgium	France
Effective tax rate	IID (*): 5.1% PID (*): 6.8%	15% - 15.5%
Qualifying IP	IID: Patents and supplementary protection certificates, breeders' rights, orphan drugs, data and marketing exclusivity (as granted by EU or other government bodies), IP of copyrighted software PID: Patents and supplementary protection certificates	Patents, extended patent certificates, patentable inventions, and industrial fabrication processes
Qualifying income	IID: Net innovation income PID: Gross patent income	Royalties net of cost of managing qualified IP
Acquired IP?	IID & PID: Yes, if it is further developed	Yes, subject to specific conditions
Cap on benefit?	IID: No cap on benefit PID: Deduction limited to 100% of pretax	No
Includes embedded royalties?	IID & PID: Yes	No
Includes gain on sale of qualified IP?	IID: Yes (subject to conditions) PID: No	Yes
Can R&D be performed abroad?	IDD: Yes, but the overall responsibility and supervision over the R&D activities needs in practice to remain within the Belgian entity. Note also that outsourcing to related parties will negatively impact the IID net tax benefit. PID: Yes, if R&D centre qualifying as a branch of activity (condition not applicable for SME's)' and oversight remains in the company'	Yes
Credit for tax withheld on qualified royalty?	IDD & PID: Yes	Yes
Year enacted	IDD: July 2016 PID: 2007	2001, 2005, 2010,2011**
Applicable to existing IP?	IDD: Yes - for more information please reach out to contacts as listed on page 42. PID: IP granted or first used after January 1, 2007	Yes

* Patent Income Deduction Regime (PID) abolished and replaced by Innovation Income Deduction regime (IDD) as from 1 July 2016. For patents requested or acquired before 1 July 2016 (including supplementary protection certificates), taxpayers can still apply old PID regime until 30 June 2021 (irrevocable option). Therefore, both regimes are still foreseen in the overview..
**The French Finance Act for 2012 (enacted in 2011) has added new conditions to the deductibility of patent concession fees.

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Hungary	Ireland
Effective tax rate	4.5%-9%*	6.25% on qualifying profits
Qualifying IP	Patents, utility models, plant variety rights, supplementary protection certificates, patented topography of micro-electronic semiconductors, copyright software, exclusive rights, registration as an orphan medical product	A qualifying computer program or patent which is the result of qualifying R&D activities.
Qualifying income	Profits gained from qualifying assets. (Nexus approach is applicable)	Profits of a specified trade relevant to the qualifying IP.
Acquired IP?	Yes – Limitations may apply based on the nexus rate.	If qualifying IP is acquired and further R&D activities are undertaken by the Irish company on the acquired IP, there may be some scope (although limited) to claim the relief subject to formula.
Cap on benefit?	Deduction is limited to 50% of qualifying profits, max. 50% of the pretax profit	The profits qualifying for the regime are limited by reference to a formula that takes account of the qualifying R&D expenditure that has been incurred by the Irish company on the development of the IP. If the qualifying R&D expenditure incurred by the Irish company is limited, the benefit would also be limited .
Includes embedded royalties?	Yes.	Yes
Includes gain on sale of qualified IP?	Yes. The sale of certain (reported) IP rights may be exempted. Exemption may also apply on non-reported IP rights.	No
Can R&D be performed abroad?	Yes – Limitations may apply. (own R&D activity is required).	Limited - the R&D activities must be undertaken by the Irish company employees in an EU member State and the costs must not qualify for a tax deduction in such Member State.
Credit for tax withheld on qualified royalty?	Yes.	Yes
Year enacted	2003 – with significant changes in 2016.	Enacted in December 2015 with effect for accounting periods beginning on or after 1 January 2016.
Applicable to existing IP?	Yes – limitation may apply due to the changes in 2016.	Yes – where the Irish company has incurred qualifying research and development expenditure in the creation of the qualifying IP and holds the IP. Where the Irish company acquires IP, there may be some limited scope to claim the relief if the Irish company carries out further research and development activities on the IP.

*Effective Tax Rate can further be reduced with additional tax planning

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Israel	Italy
Effective tax rate	9%/16% - according to the geographic location in the country of the company performing the R&D.	2015: 21.98%** 2016: 18.84%** From 2017: 13.95%**
Qualifying IP	N/A* Companies which provide Industrial R&D services for a foreign resident, subject to governmental “Office of the Chief Scientist” approval, are eligible for tax relief)	In general all the IP potentially subject to protection, including: patents, trademarks***, software protected by copyrights, models, designs, know-how, formulas, processes and licensed IP.
Qualifying income	Income generated by providing Industrial R&D services for a foreign resident.	The net income from qualifying IP is relevant for the regime for a percentage calculated as the ratio between the *qualifying expenditure (R&D costs for the maintenance, increase or development of the IP)* and the total expenditure incurred for producing the IP.
Acquired IP?	No	Yes, purchased and licenced IP costs are capped to 30% of the qualified expenditure incurred.
Cap on benefit?	No	The exemption is limited to the 50% (30% for FY 2015 and 40% for FY 2016) of the net income from qualifying IP.
Includes embedded royalties?	Yes	Yes. In case of direct use of IP (i.e. no royalties), the amount of qualifying income is determined on the basis of an APA to be filled to the Italian Tax Authority.
Includes gain on sale of qualified IP?	N/A	Yes, the potential capital gains arising from the sale of the qualifying IP are fully exempt of taxation, provided at least 90% of said gains is reinvested in the development of other IP with the same nature within the next two years after the sale.
Can R&D be performed abroad?	Yes, under certain limitations	Yes, the Country where R&D is performed is irrelevant.
Credit for tax withheld on qualified royalty?	No	No
Year enacted	2004 onward	2015
Applicable to existing IP?	N/A	Yes

*Patent Box regime offers tax relief for companies which provide industrial R&D services for a foreign resident, which means the IP is owned by the foreign company.
**The effective tax rate includes both Corporate Tax (so called IRES) and Regional Tax (so called IRAP). The ordinary tax rate for IRES and IRAP is respectively equal to 27.5% and 3.9% for a total of 31.4%. Starting from 1st January 2017 the IRES rate is 24%.
*** Trademark is actually included in Patent Box regime, however due to OECD recommendation could be excluded shortly.

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Korea
Effective tax rate	5~11% (Sale of IP) 7.5~16.5%(Royalty)
Qualifying IP	Domestically self-developed patents, utility models, scientific technical secrets and technic (excluding industrial property, foreign construction and engineering activities)
Qualifying income	Gain on transfer of qualifying IP owned by Small & Medium Enterprises (SMEs) and Medium-Scale Companies (MSCs) to domestic corporations or residents (excluding related party) Royalty income of qualifying IP excluding technic by SMEs to others (excluding related party)
Acquired IP?	No
Cap on benefit?	Subject to minimum tax (10~17% for MSCs and 7% for SMEs)
Includes embedded royalties?	Yes (limited to self-developed IP)
Includes gain on sale of qualified IP?	Yes
Can R&D be performed abroad?	No
Credit for tax withheld on qualified royalty?	Yes
Year enacted	2014
Applicable to existing IP?	Yes

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Luxembourg	Malta
Effective tax rate	5.76%	0% - 6.25%
Qualifying IP	Patents, trademarks, designs, domain names, models, and software copyrights	Qualifying Patents are exempt from Maltese income tax*
Qualifying income	Royalties	Gross patent income
Acquired IP?	Yes, from non directly associated companies	Yes
Cap on benefit?	No	No
Includes embedded royalties?	Yes	No
Includes gain on sale of qualified IP?	Yes	No
Can R&D be performed abroad?	Yes	Yes
Credit for tax withheld on qualified royalty?	Yes	No
Year enacted	2008	2010
Applicable to existing IP?	IP developed or acquired after December 31, 2007	Yes

*Malta used to have a patent exemption, but applications are no longer processed by the Maltese Tax Authorities, and existing Patent Box benefits are expiring.

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Netherlands	Portugal
Effective tax rate	5.00%	11.5% (50% of CIT)
Qualifying IP	Software and Patented IP developed under approved R&D projects for large taxpayers; For small taxpayers also non-patented IP developed under approved R&D projects	Patented inventions and other innovations such as models and industrial designs protected by IP rights
Qualifying income	Net income from qualified IP	Gross income from qualifying IP. Sale or licensing to related parties are excluded
Acquired IP?	Yes, if IP is further self-developed under an approved R&D project	No
Cap on benefit?	No	No
Includes embedded royalties?	Yes	No
Includes gain on sale of qualified IP?	Yes	Yes
Can R&D be performed abroad?	Yes, provided that the gravity point of development takes place in the Netherlands under an approved R&D projects and subject to Nexus Approach (including 30% uplift)	Yes, but self-developed by the licensor
Credit for tax withheld on qualified royalty?	Yes, subject to limitations	Yes, subject to limitations
Year enacted	2007 , 2010, 2017	2014*
Applicable to existing IP?	Patented IP developed or redeveloped from 2007; IP from approved R&D projects from 2008, IP from 30 June 2016 subject to Nexus Approach and other BEPS 5 criteria.	Only to IP developed after December 31, 2013

*The Corporate Tax Reform that has effect from the beginning of 2014 introduced a Patent Box regime for some IP created after January 2014.

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Spain	Switzerland (Only applicable for the canton of Nidwalden)*
Effective tax rate	Minimum CIT rate of 10% (Please see below –can R&D be performed abroad?-)	8.8% (including federal tax)
Qualifying IP	Patents, secret formulas, processes, plans, models, designs, and know-how. Software is excluded	Patents, trademarks and similar IP (in line with Art 12 of the OECD Model tax treaty)
Qualifying income	Net income from qualified IP	Gross patent income (less cost of acquired IP)
Acquired IP?	Yes, but if the IP has been created, at least partially, by third related parties, the CIT reduction would be proportionally reduced	Yes
Cap on benefit?	No	No cap, however only applicable for cantonal taxes
Includes embedded royalties?	No	No
Includes gain on sale of qualified IP?	Yes. However, the acquirer must not be a related party	Yes
Can R&D be performed abroad?	Yes, but if the licensor have not self-developed the IP, the CIT incentive could be reduced according to the proportion among the expenses incurred by the licensor (including collaboration from third non related parties) and the total expenses and acquisition cost of the IP	Yes, if oversight remains with NW company
Credit for tax withheld on qualified royalty?	Yes, subject to limitations	Yes, however capped to tax effectively paid
Year enacted	July 2016 (current treatment)	2011
Applicable to existing IP?	Yes. However, there are possibilities to apply former Spanish Patent Box legislation regarding IP assets that have been developed in prior years	Yes

*The introduction of a Swiss wide patent box and super deduction is currently reflected in the draft bill of corporate tax reform III

Comparison of Patent Box Regimes (April 2017)

Tax Factors	Turkey	UK
Effective tax rate	10%	Minimum 10%
Qualifying IP	1. Invention arising as a result of research, development, innovation and software activities realised in Turkey and is patented or utility model certified* 2. Licence, patent, adaptation, development, revision, deployment and plug-in derived from the software or products developed as a result of the research and development activities in technology development zones*	Patents, supplementary protection certificates, plant variety rights, and certain medicinal or plant protection products
Qualifying income	Net income from qualified IP	Net income from qualifying IP. Income from qualifying IP includes all profits from sales of products which incorporate a patented innovation, plus royalty income and gains on sales of patent rights. The UK has adopted the nexus approach, whereby benefit of the patent box are linked to R&D expenses incurred by the taxpayer.
Acquired IP?	No for TDZ, Yes for Law No. 6518	Yes, if further developed. If the acquiring company carried on the R&D prior to acquisition (e.g. as contract R&D), then can include this for the nexus ratio.
Cap on benefit?	Yes, subject to conditions	No
Includes embedded royalties?	Yes	Yes
Includes gain on sale of qualified IP?	Yes	Yes
Can R&D be performed abroad?	No	Yes but limited – benefit of regime depends on level of R&D carried out by taxpayer itself.
Credit for tax withheld on qualified royalty?	1- Yes, subject to conditions. 2- No, for TDZ regime.	Yes
Year enacted	1. For upcoming legislation 01/01/15 2. For TDZ regime 2001	2013
Applicable to existing IP?	1- Yes, IP income only arising from invention as a result of research, development, innovation and software activities realised in Turkey and is patented or utility model certified by Turkish Patent Institute. 2- No, IP income only arising from R&D activities carried out in techno parks.	Yes

*For more details please refer to country information pages 40 & 41 and contact R&D team in Turkey, per contact list on page 45

Global R&D credits & incentives by country (April 2017)

The information on this chart, pages 16 - 41, includes select credits and incentives, and is for general information purposes only and should not be used as a substitute for consultation with professional advisors.

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Australia	1. 45%* refundable R&D tax offset for grouped turnover of less than $20 million; **or** 2. 40%* non-refundable R&D tax offset for grouped turnover more than $20 million. 3. The incentive is effectively capped at a maximum of $100M of eligible R&D expenditure. * - Reduced from 45% to 43.5% and from 40% to 38.5% for income years starting on or after 1 July 2016. Recent Taxpayer Alerts released by the Commissioner of Taxation (the Commissioner), in conjunction with the Department of Industry, Innovation and Science (AusIndustry) outline the Commissioner's and AusIndustry's concern on: - Eligibility of R&D activities registered; - Expenditure claimed may not relate to eligible R&D activities; and - Adequate levels of governance by taxpayers, review of the activities registered and expenditure claimed. The Taxpayer Alerts released to date include: - Construction Activities; - Ordinary business activities; - Agricultural activities; and - Software Development activities.	Based on volume	Available if overseas expenditure is less than the amount of expenditure on 'core' Australian R&D and: 1. the overseas R&D cannot be performed in Australia **and** 2. the overseas activity has significant scientific linkage to at least one of the Australian core R&D activities	IP may be held outside Australia however it must be held within the same Multinational Group as the Australian entity

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Australia	Yes - if grouped turnover <$20 million	Non-refundable R&D tax credit can be carried forward and used in future years	Discreet grant funding available and other business incentives.

Global R&D credits & incentives by country (April 2017)

The information on this chart, pages 16 - 41, includes select credits and incentives, and is for general information purposes only and should not be used as a substitute for consultation with professional advisors.

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Austria	**R&D premium** Tax credit of 12% for qualifying R&D expenses incurred by Austrian companies, thus Austrian R&D premium is in line with Nexus- Approach of OECD, which requires qualified R&D expenses as a prerequisite for tax incentives related to R&D. R&D premium is credited irrespective of whether companies are in a tax profit or loss position. Two types of R&D premium: **1.** **Internal R&D** premium is a 12% volume-based tax credit on all qualified R&D related expenditure available to domestic companies performing eligible R&D in Austria. Premium is not capped. An application for approval has to be filed electronically after the end of each fiscal year to obtain confirmation from Austrian Research Promotion Agency (FFG) that R&D activities performed by a company meet criteria. **2.** **For subcontracted R&D** that is placed by an Austrian entity or permanent establishment with a subcontractor located in the EU or EEA, a 12% volume-based tax credit may also be claimed on all qualified R&D related expenditure. Subcontracted R&D premium is capped with max base amount of €1,000,000 p.a., hence a total R&D premium of €120,000. Subcontractor must not be under the controlling influence of the hiring company and there should not be a tax group in place between the hiring company and the subcontractor. According to the recent government programme Austrian research premium shall be increased to 14% of the qualified R&D related expenses in 2018. Please note that the council of ministers will negotiate the details in April 2017.	Volume-based tax credit	Yes. In case the research premium for subcontracted R&D is claimed. The subcontractor to whom R&D activities are outsourced may also be located in the European Union or European Economic Area.	Under certain conditions yes, especially in case R&D activities are performed in Austria for a foreign principal (i.e. outsourced R&D).

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Austria	12% volume-based tax credit on all qualified R&D related expenditure; also available in a loss making position (may be refunded in cash to bank account)	No.	**Other incentive:** Cash grants, loans granted at favourable interest rates , Aussumption of liability, Venture Capital/share holdings **What can be funded?** - Innovation - R&D - Environmental Protection - Regional Development - Projects of Small/Medium sized companies - De minimid aidd (e.g. investment growth premium of 10-15% of the qualifying investment cost depending on the size of the company, application only possible until 31 Dec 2017 respectively 31 Dec 2018 depending on size criteria) **Who?** Austria Economic Service (AWS), Austrian Research Promotion Agency (FFG), Municipal credit (KPC), Austrian Tourism Bank (ÖHT), Austrian Control Bank (OeKB), EC – Incentives (e.g. Horizon 2020) and several federal state promotion companies

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Belgium	• One-time R&D investment deduction of 13.5% (*) of the acquisition value of qualifying R&D investments • Spread R&D investment deduction of 20.5% (*) of the depreciation on qualifying R&D Investments • The above incentives can be claimed in the form of an R&D tax credit which corresponds to the R&D investment deduction, multiplied by the standard corporate tax rate of 33.99% (*) Rate for financial years ending between 31 December 2017 and 30 December 2018 (included)	Based on volume of investment in qualifying R&D assets (including capitalised R&D expenses)	Yes, part of the R&D can be contracted out to parties located outside Belgium (also possible to benefit from local R&D benefits)	The law does not explicitly require that the IP which results from the overall R&D activities should remain in Belgium. The impact on R&D tax incentives should be analysed on a case-by-case basis
Brazil	160% to 200% “super deduction”	Volume based	Yes. However, only expenses incurred with Brazilian entities and individuals are subject to the “super deduction”	Yes

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Belgium	Yes, if the incentive is claimed in the form of an R&D tax credit, the remaining balance of unused R&D tax credits after five tax years is paid to the company.	Unused R&D investment deduction/R&D tax credit is carried forward for an unlimited period.	• 13.5% (*) investment deduction on acquisition value of qualifying patents • Special expat tax status for foreign researchers temporarily assigned to Belgium • 80% payroll withholding tax exemption. The exemption is assigned to qualifying research programs. • Specific advantageous regime for qualifying SMEs that qualify as young innovative companies • Regional R&D grants available, which are exempt from corporate income tax • Notional interest deduction for equity funded R&D activities (*) Rate for financial years ending between 31 December 2017 and 30 December 2018 (included)
Brazil	No	No	• 50% reduction on the IPI (Federal VAT) levied on acquired R&D machinery and equipment (domestic or imported) • Accelerated depreciation for new R&D machinery and equipment acquired (Income Taxes purposes) • Accelerated amortisation for the acquisition cost of intangibles related to R&D activities (Income Taxes purposes) • Zero withholding tax rate on the remittances for registration and maintenance of trademarks and patents abroad

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Canada	1. 20% non-refundable federal tax credit on qualified expenditures. Reduced to 15% after 2013. Certain Canadian controlled private corporations are eligible for the 35% refundable credit on the first $3 million of qualified expenditures; and 2. Provincial tax credits, ranging from 4.5% to 37.5%, certain of which are refundable	Credit on volume	Yes, however only to the extent of 10% of salaries of Canadian residents performing the R&D	Yes
People's Republic of China	• 150% "super deduction" • 15% reduced Corporate Income Tax ("CIT") rate for High and New Technology Enterprise ("HNTE") (Standard CIT rate is 25%) • Zero-rated VAT/VAT exemption for export of R&D services • Value-added Tax ("VAT") exemption on certain technology related offshore outsourcing services • 15% reduced CIT rate for Technology Advanced Service Enterprise ("TASE") in pilot cities • CIT exemption/reduction on technology transfer income • VAT exemption on income arising from technology transfer, technology development and associated consulting/services • Duty/VAT/Consumption Tax free importation of certain R&D equipment imported by qualified foreign-invested R&D center • VAT refund for purchasing certain R&D equipment by qualified domestic and foreign-invested R&D centers	Deduction on volume	No, where an Chinese enterprise entrusts the R&D activities to overseas organizations or individuals, the incurred R&D expenses are not eligible for R&D super deduction.	• Super deduction: No, Companies as consignee carrying out cross boarder contract R&D activities are usually not allowed super deduction. • HNTE: Chinese entity should have proprietary IP rights or minimum 5 years worldwide exclusive license of the respective core technology of its main products/services. • TASE: No IP ownership requirements
Czech Republic	200/210% super deduction	200% super deduction on volume,. 210% super deduction on increment	Yes, provided it is performed by the party claiming the deduction and not a third party	Yes

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Canada	• Federal credits are refundable for certain Canadian controlled private corporations. • Certain of the provincial credits are refundable.	Unused non-refundable federal and provincial tax credits may be carried forward 20 years or carried back 3 years	• 65% uplift on eligible salary based expenditures. Uplift reduced to 60% for 2013, and to 55% after 2013 • Certain federal and provincial direct funding programs may be available for R&D activities • R&D capital expenditures attract 100% tax depreciation in the year available for use. Repealed for years after 2013
People's Republic of China	No	China does not have R&D credits, but tax loss which may be generated from R&D expense super deduction can be carried forward for 5 years.	• R&D centers may import self-used equipment, related technologies, accessories, and spare parts exempt from import duties • Also provides indirect tax incentives for R&D, namely VAT zero-rate / exemption for export of R&D services under the Business Tax to VAT Pilot Program. • Extend categories and scopes for eligible R&D expenses and activities by excluding activities and industries that are not applicable to the super deduction treatment. The application procedure is also simplified compared with the historical application procedure, but the enterprises will need to pay more attention to technical analysis and internal R&D project management in order to track the R&D expenses accurately. • There may be various local financial subsidies granted by local governments to support R&D activities upon approval.
Czech Republic	No	Non-utilised allowance may be carried forward 3 years	Investment incentives available for setting up/expansion of: (i) production facilities, (ii) technological centres (the R&D allowance cannot be used for projects that are supporter by another form of public support). There are also various grants for R&D or innovation.

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Denmark	1. Danish tax law allows for an immediate write-off of capital expenditures for R&D. Alternatively, the taxpayer may choose to depreciate the cost for tax purposes in the same year and the following four years on a straight-line basis. 2. Companies have been granted the opportunity to apply to the Danish tax authorities for a cash payment equal to the value of tax losses incurred in the current tax assessment year of negative taxable income relating to R&D costs of up to DKK 25 million resulting from immediate tax deductions. The cash payments cannot exceed an amount of DKK 5,5 million (the tax value of DKK 25 million at tax rate of 22 %) in 2016 and going forward. For companies subject to joint taxation, the limit of DKK 25 million applies at group level. 3. It is possible to fully deduct costs related to purchase of patents and know-how (including rights/licenses to utilize patents or know-how) in the year of acquisition. Alternatively the costs can be amortized annually with up to 1/7 of the acquisition price.	Volume based	Yes	Yes
France	• 30% rate up to €100m eligible expenses • 50% rate up to €100m eligible expenses for overseas territory. • 5% credit in excess of €100m eligible expenses • Scope of the R&D tax credit has been extended to some innovation expenditures such as prototypes, design and pilot plants for new products incurred by small and medium-size enterprises. For said expenses, the credit rate is 20%, and applies to a maximum of €400,000 of innovation expenses (i.e. assessment basis) • French Tax Authorities (FTA) have published new guidelines on subcontracting expenses t and public subsidies and staff expenses that have toughened the regime	Credit on volume	Yes, if performed in EC countries, Norway and Iceland, subject to conditions	Yes

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Denmark	Yes, see “tax incentive/relief “ item 2 concerning tax credits.	Tax losses may be carried forward indefinitely. Denmark applies a minimum taxation rule under which tax losses carried forward can reduce taxable income exceeding DKK 7.8525 million (2016 figures) with 60% only. Taxable income up to a threshold of DKK 7.8525 million can be fully off-set against tax losses carried forward. Unused tax losses may be utilized in following income years.	• Researchers hired by a Danish company may benefit from a significantly reduced income tax rate for up to 5 years. • Grant funding available
France	Yes	Excess credits may be carried forward 3 years Any unused tax credit is refundable at the end of this three year period. As an exception, excess credits are immediately refundable to certain qualifying companies.	The R&D tax credit tax ruling process has been adjusted as from 1st January 2013: a tax ruling could be requested from the French tax authorities to confirm the eligibility of the R&D projects launched during a given year. The tax ruling request in this respect shall be filed no later than six months before the R&D tax credit filing deadline (i.e. by mid-November 2017 for R&D expenses incurred in 2017).

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Germany	No	No	No	The law does not explicitly require that the IP which results from the overall R&D activities should remain in Germany but specific limitations could be included in the grant agreement. The impact on R&D grants should be analysed on a case-by-case basis.
Hungary	• 200% "super deduction" • 12-year tax allowance for certain investments made for research projects with present value of at least HUF 100 million (approx. EUR 330,000) available up to 80% of the calculated corporate income tax liability	Deduction on volume	Yes. Contracted R&D activities as well as mutual R&D activities performed based on R&D agreement are also possible.	Yes
India	• 200% "super deduction" - Weighted deduction for capital and revenue expenditure (other than cost of land or building) for approved "in-house" R&D expenditure for units recognised by the Department of Scientific and Industrial Research (DSIR) * • no deduction available for expenditure incurred after 31 April 2017 • 100% deduction – Revenue and capital expenditure (other than cost of land) on scientific research activity	Subject to the satisfaction of certain specific conditions, the weighted deduction can be claimed based on amount of R&D spend in a given year	This position has not been tested so far by the India tax authorities	Yes, subject to ownership remaining with the Indian Company who has undertaken such R&D. Further, foreign patent filing expenditure is not allowed as a weighted deduction.

* In the case of Electronics Corporation of India Ltd. it was held by the Tribunal (appellate authority) that the quantum of weighted deduction certified by DSIR is not amenable to questioning by the tax/appellate authorities. The said deduction cannot be tampered by the tax/appellate authorities.

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Germany	No	No	R&D projects can count on numerous forms of financial support. There are many programs allocating R&D grants, interest-reduced loans, and special partnership programs. Financing is provided by the European Union (EU), the German government, and the individual German states. Funding ranges from 25% to 50% of eligible costs for industrial research projects . Specific limitations are defined in the relevant call for projects.
Hungary	No	Yes. If R&D costs are capitalized as intangible assets, the amortization on these assets is deductible during the amortization period. Also - in case of a negative corporate income tax base - 9,5% of the amount of tax base decreasing item used regarding R&D activity may be utilized as social contribution tax allowance.	State and EU sponsored grants for R&D purposes are also available. Direct own R&D costs can also be deducted from the from the base of the Hungarian local business tax (tax rate is maximum2% of the net sales revenue, decreased by the material costs, direct costs of R&D, costs of subcontractors' work, and certain part of costs of goods sold and costs of mediated services) and innovation contribution (tax rate is 0.3% of the base of the local business tax). The Hungarian government established the Hungarian Intellectual Property Office ("HIPO"). This organization is authorized to issue binding rulings in order to identify whether future R&D project of Hungarian companies qualifies as R&D projects. The HIPO acts as an advisor in assistance with the Tax Authority regarding retrospective R&D project as well.
India	No	No carry forward is permissible although a tax loss generated out of such tax allowance is permissible.	• 125% deduction - Any sum paid to specified / approved research institutions and companies recognised by the prescribed authority for this purpose. • 175% deduction - Any sum paid to specified/approved research association which has the object of undertaking scientific research or to a specified/approved university/ college/ other institution to be used for scientific research • 200% deduction - Any sum paid to National Laboratory / Indian institute of Technology (IIT)/ University/ specified person with a specific direction to use it for scientific research undertaken under the programme approved by the head of National Laboratory/ IIT/University • Additionally, certain indirect tax benefits in are available on certain goods and services, subject to conditions

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Ireland	25% tax credit plus a trading reduction of 12.5% to give an effective overall reduction of 37.5%	Volume based	Yes, if 1. Performed in the European Economic Area and 2. No tax deduction is available in the other country	Yes
Israel	R&D expenses shall be deducted in the tax year incurred when such expense has been approved as an R&D expense by the relevant government department . The approval in regard to industrial related projects is generally granted by the Office of the Chief Scientist ("OCS"). When such OCS approval is not obtained, the expense shall be deducted over three tax years.	Based on volume of investment in qualifying R&D assets.	Yes, part of the R&D can be contracted out to parties located outside of Israel, subject to OCS approval.	Yes . However, eligibility for the tax deduction may vary.
Italy	Tax credit equal to: 50% of the incremental expenses related to: • Amortization quote of machinery and laboratory equipment used for the R&D; • R&D employees; • external qualified R&D contracts; • Technical and industrial property expertise. The credit cannot exceed € 20.000.000 per year. Minimum R&D expense amount must be equal to € 30.000.	Based on incremental R&D investments respect to the average of the R&D expenses sustained in FYs 2012, 2013, 2014. Newco credit is computed on the base of the total amount of the R&D expenses. The incentive is in force up to FY 2020.	External qualified R&D contracts must be in force with an Italian resident company, a EU company, a EEA (European Economic Area) company or a company resident in a country that allows an adequate exchange of information. The 2017 Budget law provided that a resident company or a permanent establishment of a non resident company which carry out R&D activities based on a contract in force with a EU company, a EEA company or a company resident in a country that allows an adequate exchange of information, can benefit from the credit.	Not explicitly provided in the rules, therefore it should be analysed on a case-by-case basis.
Japan	1. Maximum credit of 25% of total tax liability (plus 5% of special R&D cost based credit, i.e., joint R&D with or contracted R&D by university or public research institution, etc.). 2. Additional and temporal 10% credit.	1. Credit on volume 2. Temporal credit on incremental spending until the fiscal year ending before 1 April 2019 (2-year extension proposed under the 2017 Tax Reform)	Yes	Generally speaking, while not explicitly provided in the rules, it appears that the IP needs to stay within the Japanese "tax net". It is possible that this may include, however, IP held in a foreign branch of a Japanese company since earnings from a foreign branch are taxable in Japan.

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Ireland	Yes	Excess credits may be refunded or carried forward indefinitely	Various government grant incentives for establishing or expanding R&D activities in Ireland, e.g., capital, employment, training, feasibility, pilot projects, etc. For accounting periods commencing from 1 January 2012, companies who are in receipt of an R&D tax credit will now in certain instances have the option to reward key employees.
Israel	No	Tax loss generated from R&D deductions can be carried forward indefinitely.	1. When R&D costs are borne by a taxpayer that is not the owner of an enterprise performing the R&D, or, the taxpayer participates in R&D costs of another developer in consideration for a reasonable return, and when such R&D projects also enjoy governmental grants, the R&D expenses incurred shall generally be deducted over two tax years. The deductible expenses allowed to a participant in R&D costs of another developer generally may not exceed 40% of the taxable income of the taxpayer in the year in which the expenses were incurred. 2. R&D Grants - Companies can be provided with certain grants for R&D activities according to the R&D Law, subject to a prior approval of the OCS. 3. “The Angels Law” - A single taxpayer which his investment in an R&D company complies with different criteria, can deduct his investment as an expense over maximum of 3 years. The total tax benefit shall not exceed approximately USD 1.25M.
Italy	The credit is non-refundable, it can be used to offset tax payables without any limitation.	Not specifically stated, therefore is reasonable that the credit may be carried forward indefinitely.	Accounting documentation must be certified by an auditor. R&D tax credit incentives can be added to Patent Box Regime.
Japan	No	No	Government bodies provide various grants for R&D activities. Special Measures for the Promotion of R&D by Certified Multinational Enterprises.

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Kazakhstan	• Expenses related to creation of industrial property unit s (inventions, utility models and industrial designs) are eligible for an additional tax deduction of 50% (an effective deduction of 150%) . This incentive is applicable if all the following conditions are met: 1) patent issued by the competent authorities is available; 2) R&D expenses are confirmed by relevant State authority; 3) result of R&D expenses implemented in Kazakhstan (should by supported by the conclusion of authorized State body). • CIT exemption for companies engaged in R&D (if 90% of revenue is generated from R&D activities), provided certain criteria are met. • VAT exemption for R&D turnover related to implementation of a state order.	• Volume based	No	No
Korea	1. Tax credit to the extent of either (i) 1% to 3% (25% for Small & Medium Enterprises; SMEs, 8% for Medium-scale Companies ; MSCs, 15% or 10% for the intermediate stage from SMEs to MSCs) of the current R&D expenses or (ii) 30% (40% for MSCs, 50% for SMEs) of the incremental portion of the current R&D expenses over the amount of last year. 2. R&D tax credit for core technologies as authorised by government ministries as well as pre designated strategic growth industries: 20% ~ 30% (30% for SMEs) of the current expenditures.	Credit on either incremental or volume. However, the incremental method cannot be used in case of either (i) no R&D expense has been incurred during the previous four years or (ii) the R&D expenses of last year are less than the average of the previous four years.	Yes (R&D should be performed by dedicated R&D department or R&D center)	Yes, subject to ownership remaining with the Korean company
Latvia	**1. R&D costs:** 300% super -deduction is applied for qualifying R&D costs (with the exception of depreciation and amortisation charges) - e.g., taxpayers can claim a corporate income tax (CIT) deduction for their R&D expenses multiplied by a coefficient of 3.	Volume based	Yes, if R&D services are received from the scientific institution which is a resident of the EU or EEA country that has concluded the double tax treaty with Latvia.	Tax payer will loose possibility to use increased deduction, if it transfers (sells) IP ownership rights during at least 3 calendar years after calendar year when last expenses related to the IP has been included. No requirements for IP registration country has been introduced.
	2. Law on Aid for Start-up companies outlines the following state aid programs: • Fixed minimum social tax payment upon confirmation with the employee. • Support program for attracting highly qualified workers. • Corporate income tax relief up to 100%; no personal income tax liability.	Volume based	The law does not provide any specific restrictions	The law does not provide any specific restrictions

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Kazakhstan	No	Carry forward of losses from R&D activities is available for 10 years as part of general tax losses carry forward.	• Preferential tax treatment is available for companies registered in the special economic zone "Park of innovative technologies" (SEZ "PIT"). • The following tax benefits are available: • 100% reduction of corporate income tax; • Exemption from Property tax, Land tax, levy on land plots usage. • To enjoy these benefits 70% of gross annual income must be generated from R&D activities.
Korea	No	Excess credits can be carried forward 5 years.	1. Investment tax credit on facilities for the purpose of R&D and job training up to 1% to 6% of such investment. These rates are differentiated by the company size. In other words, a 1% tax credit would apply to large companies while 3% and 6% would apply to MSCs and SMEs respectively.
Latvia	1. **R&D costs:** No	R&D costs are deductible in the tax period they are incurred regardless of whether a taxable profit or loss is reported for the period. Any tax loss arising after the deduction of R&D costs can be carried forward indefinitely. If the R&D costs are capitalised they are deductible according the period used for depreciation for financial purposes	• Prior to starting a new R&D project taxpayer should perform certain activities - e.g. define the objectives of the project. describe the scientific or technological uncertainty, which is expected to be resolved as well as the expected innovation etc. Further description of these activities must be added to project documentation , which will be reviewed by State commission to apply the tax incentive. • If R&D projects were subsidized by the State or EU grants , tax incentive may not be applied
	2. **Law on Aid for Start-up companies:** No	Not applicable	The start ups must meet the following criteria to qualify for the beneficial regime & incentives: • Attracted EUR 30k investments in the period of 5 years; • The turnover within first 5 years is at least 200k, but does not exceed EUR 5m; • There are no distributed dividends; • The start-up meets innovative company criteria (it has or has submitted patent for innovative product, at least 50% of costs are within R&D, 70% of employees have master's or doctor's degree), etc.

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Lithuania	Qualifying R&D costs (except for depreciation or amortisation costs of fixed assets) may be deducted three times from income during the tax period when they are incurred, i.e. 300% deduction is applied.	Volume based	Yes, if R&D works are performed in a country of the European Economic Area or in a country which has concluded a double taxation treaty with Lithuania.	No requirements for the resulting IP to reside in Lithuania are established.
Malta	R&D expenditure qualifies as a tax deductible expense and spread equally over a six year period. An option to deduct 150% of the actual amount incurred for such R&D expenses exists (with limitations). Additionally, R&D schemes exist, subject to approval, that provide tax credits on specific expenditures, part-financing and refunds of expenditure paid by a qualifying entity.	Deduction on volume	Yes Yes (with limitations)	Yes (but rules may vary)
Mexico	No	No	80% of the R&D activities must be performed in Mexico.	The IP resulting must be registered with the Mexican IP Authorities, even if it could be registered abroad.
Mongolia	Different incentives are available for the companies implementing the innovative projects: • three-year CIT exemption for sales of domestically produced innovative goods, services and works; • VAT exemption on imported raw materials required for innovative production; • five-year CIT exemption for companies registered and operating in Free Trade Zones; • stabilization of tax rates; • deferral and /or scheduled payment of VAT and customs duty for imported equipment and machinery; • tax exemptions for different taxes; • accelerated depreciation for tax purposes; • deduction of trading expenses; • concluding the investment agreement with the Government	Generally no, but certain qualifying criteria can be applied to investors and projects	No	Not clearly specified by the law

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Lithuania	No	All R&D costs can be deducted during the tax period when they are incurred despite whether a company has calculated taxable profits or losses during a respective period. Tax losses calculated after R&D investment deduction can be carried forward indefinitely.	• R&D documentation containing a description of R&D works (objectives, implementation process, results and other related information) is required in order to apply the tax incentive. • Tax incentive is not applied for R&D works which were subsidized by the State grants. • Reduced depreciation/amortization rates can be applied for fixed assets solely used in R&D activities.
Malta	Yes (with conditions)	Excess income tax deductions can be carried forward indefinitely.	Grants are available depending on the specific scheme
Mexico	No	No	The Mexican Government provides complementary financial support for the R&D projects developed in Mexico on annual basis to promote competitiveness and innovation. The funds usually grant a percentage of the investment spent mainly in the following concepts: training, acquisition of specialized equipment, human resources, specialized consulting fees (foreign and local), IP protection strategy, trials, pilot and prototype expenses. The National Council of Science and Technology (CONACyT) is the Mexican authority in charge of granting funds with reference to R&D activities, however, there are other funding options according to State or Sector. One important aspect to consider, is that once a project is favoured by one Fund, it cannot receive any further support from the Mexican Government, for the same phase/stage/activities.
Mongolia	N/A	Extended period for tax losses carry forward are available for: • investors registered and operating in Free Trade Zones (five years); • qualifying foreign and domestic investors	Non-tax support from the state authorities is available for companies implementing the innovative projects, for example: • financing support; • financial guarantees; • accelerated depreciation; • grants to a patent owner who developed innovative products; • paying the expenses on international standardization etc. Non-tax incentives available under the law: • longer period to use a land; • regulatory incentives to conduct operations in Free Trade Zones and technology and science parks; • increase of quota of foreign employees; • exemption from employment fees for foreign employees; • simplified visa arrangements, etc

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Netherlands	• R&D credit (above the line) for qualifying R&D wages, investments and expenses: 32% for the first Euro 350k and 16% on the excess amount (known as WBSO) • Corporate tax deduction for IP development costs at once.	Volume based	For the R&D credit the activities should take place inside the EU territory and by staff on a Dutch payroll	Yes for R&D credits
Poland	Additional tax deduction of R&D costs incurred: • 30% - R&D personnel salaries, • 20% for SME's for other R&D costs (e.g. depreciation, R&D services, raw materials) • 10% for large entities for other R&D costs (e.g. depreciation, R&D services, raw materials) Since 2017 the above limits are expected to grow – amended bill under negotiations - (up to 50% of salaries and 30% for other R&D costs)	Volume	Yes, but R&D expenses need to be in the local company's books to qualify	Yes
Portugal	**SIFIDE** Tax Credit = 0,325Dn + 0,5[Dn - (Dn-1 + Dn-2)/2)] Where D stands for the amount of R&D expenses incurred each year, net of non-reimbursable financial Government contributions.	Combination of volume and incremental based	Yes, but R&D expenses need to be in the local company's books to qualify	Yes
Romania	50% additional deduction of the eligible expenses from research and development activities that lead to results which can be capitalised by the tax payer to its own use . The eligible research and development activity must be applicative research and / or technological development, relevant to the taxpayer's activity .	Deduction on volume. The deduction is granted separately for each research and development project.	Yes, the R&D may be performed also outside the country in one of the EU Member States or the EEA Member States.	No

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Netherlands	No	No	Several grants are available for R&D, mostly through a sectoral approach (e.g., ICT, Life Science, Chemistry) and provide up to 50% cash grants for eligible cost
Poland	No	Yes. Possibility to carry forward the tax credit for 8 years if you are in a tax-loss position in current year	• grants for R&D projects aimed at developing new products and technologies • cash grants for R&D works and commercialization of innovative environmentally-friendly technologies, allowing also for financing the investment stage of a project • opportunity to benefit from cash grants dedicated to industrial research and development works conducted within the particular sectors (separate schemes available for aviation sector, medicines, gaming industry, drones, chemistry, textile, steel – other under negotiations) • co-financing of costs incurred by filing a patent application • possibility to obtain governmental cash grants for creation of R&D centers (under construction) • cash grants for the science and industry sector within the scope of applied research in various scientific fields
Portugal	No	Possibility to carry forward the tax credit for 8 years (6 years until 2013).	There's a financial grant program available (cumulative with R&D tax credits)
Romania	No	Yes, as part of tax losses . Tax losses may be carried forward for 7 years	Support is provided for the development of the research capacities in enterprises. The procurement of instruments, equipment, computers, software, etc necessary for R&D activity is financed. Personal income tax exemption applies for qualified IT personnel involved in software development activities. A new Government Decision is in force, providing a state aid scheme for the period 2012-2013. This scheme is aimed at supporting R&D investments and hence employment in the R&D sector. The maximum aid is 50% of eligible costs = salary costs (gross wages plus mandatory social security contributions) for the new jobs created through the investment. These costs are calculated over a period of 2 consecutive years. However, the maximum amount of aid which may be granted is limited to €28.125 million. The main requirement for the eligible companies is to maintain the created jobs for a period of at least 5 years from the moment of receiving the first state aid payment.

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Russia	• Expenses related to R&D activities in certain areas included into Government-approved list are eligible for tax deduction with a coefficient of 1.5; • Investment tax credit /deferral on profits tax, regional and local tax payments (with interest accrued and due upon repayment of tax) is available for companies performing R&D activities; • Accelerated depreciation rate for certain assets used for R&D activities; • Possibility to set up a deductible provision for future R&D expenses; • Possibility of immediate tax write-off for computer hardware for certain IT companies; • Preferential rates on social contributions for IT companies (period of application for this incentive was recently extended up until the end of 2023); • VAT exemption for R&D activities financed from Russian statutory budgets and scientific non-commercial funds.	Volume-based	Yes	Yes
Singapore	• 150% super deduction on qualifying R&D expenditure (including staff costs, vendor costs, and consumables) • 200% super deduction requiring Minister approval on qualifying R&D expenditure (including staff costs, vendor costs, and consumables) • Productivity and Innovation Credit - PIC (Year of Assessment [YA] 2011 to YA 2018): Deductions/Allowances of 400% (instead of 150%) on up to S$400,000 of total qualifying expenditure per year across six qualifying activities, including R&D. • With effect from YA 2012, the scope of R&D activities under PIC is expanded to include R&D cost sharing agreements. • PIC+ scheme for qualifying small & medium size enterprises introduced with effect from YAs 2015 to 2018. The expenditure cap under the PIC+ scheme will be S$600,000 for each of the 6 qualifying activity per YA.	• Deduction on volume excluding amounts claimed under PIC • Deduction on volume excluding amounts claimed under PIC • PIC on R&D up to S$400,000 • PIC+ on R&D up to S$600,000	No No Yes, under PIC program from YA11 to YA18, up to S$400,000 p.a. may be incurred on overseas R&D (subject to satisfaction of the condition that the overseas R&D activities are related to the taxpayer's trade or business). Yes, under PIC+ program from YAs 2015 to 2018, up to S$600,000 p.a. may be incurred on overseas R&D (subject to satisfaction of condition that overseas R&D activities are related to taxpayer's trade or business).	Yes, so long as the IP can be exploited by the local company. IP ownership can be either legal or economic in nature, and formal registration, whilst not required, may reside outside Singapore. See above. See above. See above.

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Russia	No	Carry forward of losses from R&D activities is available for indefinite period (up from 10 years previously) as part of general tax losses carry forward. Starting from 2017, taxable base of a current period can be reduced by 50% or less using losses from previous periods (down from 100%).	Beneficial tax treatment is available for companies registered as tax residents of Skolkovo Innovation Center or Special Economic Zones organized in Russian regions. Skolkovo residents are eligible for the following tax benefits: • Exemption from the CIT, VAT, Property tax for a limited period of time; • Reduced rates of mandatory social contributions and some other tax incentives. Tax residents of the Special Economic Zones are eligible for the following tax concessions: • reduced CIT rate (0-18 % instead of 20%); • exemption from property tax; • reduced rates for social contributions (with respect to tax residents of Technological Special Economic Zones and tax residents involved in R&D activities of Industrial Special Economic Zones); • other tax incentives. The above tax concessions can differ depending on the region of the Special Economic Zone and peculiarities of the local tax legislation. Tax benefits for R&D activity are also available as part of Rosnano and Russian Venture Company grant programs.
Singapore	• PIC - For YA11 to YA12, can cash out up to 30% of the first $100,000 of expenditure on qualifying activities. For YA13 to YA18, can cash out 60% of first $100,000 of expenditure on qualifying activities. • PIC+ - For YA2015 to YA2018, can cash out up to 60% of first $100,000 of expenditure on qualifying activities.	Yes	Yes, multiple grants available for multiple fields, including innovation, product development, and IP management

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Slovak Republic	1. Cash incentives for R&D from the state budget 2. Income tax relieve in form of superdeduction	Incremental	1. Yes, law does not exclude such possibility. However, the practice has been that until now, only Slovak entities with R&D performed in Slovakia applied for the aid.	Yes
South Africa	Super charged deduction of 150%; • 100% of qualifying R%D expenditure is claimed automatically • Further 50% of qualifying R&D expenditure is claimed upon pre-approval by the Department of Science and Technology (DST)	Volume based	No	IP can be held outside the country
Spain	1. 25% credit **plus** 2. 42% credit **plus** 3. 8% credit on certain asset acquisitions 4. 17% certain staff salaries 5. 12% credit on technological innovation.	1. Credit on R&D volume of expenses **plus** 2. Credit on R&D volume of incremental expenses **plus** 3. Credit on volume of assets (acquisition costs) exclusively assigned to R&D projects 4. Credit on R&D volume of expenses related to researchers qualified and exclusively linked to R&D activities. 5. credit on volume for technological innovations (industrial design and production process engineering)	Yes, but must be related to activities carried out in Spain, any Member State of the EU or Iceland, Liechtenstein or Norway.	Yes
Switzerland	Future R&D expenses are to a certain extent tax deductible (by booking a respective provision). Tax deductibility for future R&D expenses is limited to 10% of the annual taxable profit and capped at CHF 1 Mio. This is incentive is only available for future R&D expenses relating to 3rd parties.	N/A	Yes	Yes, if economic ownership is in Switzerland

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Slovak Republic	No	No	Other grants for R&D are accessible via EU funds.
South Africa	No	If the company is in a tax loss position the benefit may be carried forward until it is utilised	No
Spain	Yes. It is possible under certain circumstances, to ask for a cash-refund for the amount of unused R&D&TI tax credits up to €3 million. Regarding R&D projects the referred limit can be increased by up to €5 million	Excess credits may be carried forward 18 years	Tangible and intangible fixed assets, excluding buildings, used for R&D activities may be freely depreciated for CIT purposes. Social Security contributions can be reduced (40%) regarding the researchers assigned exclusively to R&D&TI activities. In principle this reduction is not compatible with R&D&TI tax credits in relation to the same staff. Autonomous regions provide additional incentives or grants to certain specific business.
Switzerland	N/A	N/A	N/A

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
Turkey	**R&D Law No.5746:** All eligible innovation and R&D expenditures made in R&D centres, technology centres, R&D and innovation projects supported by governmental institutions, foundations established by law or international funds. • 100% R&D deduction over the eligible innovation and R&D expenditures. The same expenditures can also be capitalised and expensed through amortisation over five years. • Companies with separate R&D centres employing more than 500 R&D personnel can – in addition to the above deduction – deduct half of any increase in R&D expenditures over R&D expenditures in the previous period. • 80% (90% for personnel with a PhD degree) of the salary income of eligible R&D and support personnel is exempt from income tax. • Half of the employer portion of social security premiums for R&D and support personnel are funded by the Ministry of Finance. • Documents prepared in relation to R&D activities are exempt from stamp duty. **Technology Development Zones Law No.4691:** • Profit derived from the software development activities or research and development activities in techno parks is exempt from corporate income tax until 31 December 2023. • The salaries of R&D and support personnel working in techno parks are exempt from income tax. • Half of the employer portion of social security premiums for R&D and support personnel are funded by the Ministry of Finance. • Deliveries of certain types of software (system management, data management, business application, sector-specific, internet, mobile and military command control application software) produced by the companies operating in techno parks are exempt from 18% VAT.	Incremental	No	Yes

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
Turkey	No	Any unutilized R&D deduction can be carried forward without any time limitation, indexed to the revaluation rate which is an approximation of inflation rate.	• Grants funding by several governmental institutions for eligible R&D projects • Other grants for R&D are accessible via EU funds • Corporate income tax exemption • R&D deduction • Income tax exemption • Social security premium support • Stamp tax exemption • VAT exemption (only for delivery of software and services)

Global R&D credits & incentives by country (April 2017)

Country	Tax incentive/relief	Incremental or volume based?	May the R&D be performed outside the country?	May the resulting IP reside outside the country?
United Kingdom	"Super deduction" : Large Companies • from 1 April 2013 option to claim the 10% Research & Development expenditure credit (RDEC) instead of 130% super deduction. From 1 April 2015 the rate is 11%. • from April 2016 RDEC is mandatory. • the RDEC is payable to loss-making companies. Small and medium Enterprises(SMEs): • 175% pre 1 April 2011 • 200% from 1 April 2011 to 31 March 2012 • 225% from 1 April 2012	Deduction on volume	Yes	Yes
United States	20% Credit (regular method) 14% Credit (Alt. Simplified Credit)	Credit on incremental spending, **with** limitations Credit on incremental spending, **without** Limitations	No No	Yes, provided the research is funded by the foreign related party

Global R&D credits & incentives by country (April 2017)

Country	Refundable option	Carry forward	Grants/other
United Kingdom	**Large companies** – A cash credit is available from 1 April 2013 under the new R&D Expenditure Credit. There is no ability to receive a cash credit under the super-deduction regime which is available instead of the new credit until 2016. **SMEs** – ability to surrender losses for cash back – assuming sufficient losses, effective cashback is 24.75% (cashback rate of 11% on a super deduction of 225%). For expenditure incurred from 1 April 2014, the effective cashback has increased to 32.625% (cashback rate of 14.5% on a super deduction of 225%).	Extra deduction reduces taxable profits. If a loss results this can be carried forward indefinitely, offset current profits (including other UK group companies) and offset prior year profits. **Large company RDEC -** loss making companies - it is possible to carry forward any withheld tax and excess credit due to restrictions.	Expenditure on assets used for R&D attracts 100% tax depreciation in the year of acquisition. Regional grants are available.
United States	No	Excess credits may be carried back 1 year and forward 20	States provide R&D credit in addition to various business incentives. in addition to the credit, R&D expenditures are deductible in determining taxable income.

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