

Researchers' Report 2013

Country Profile: Slovak Republic



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1. Key data

National R&D intensity target

"The Slovak Republic has set a national R&D intensity target of 1%. In 2011, the Slovak R&D intensity was 0.68% of GDP, where public sector R&D intensity amounted to 0.36% and business R&D intensity 0.27%. The Slovak Republic belongs to the group of Member States which are not on track to reach their Europe 2020 target (1% of GDP of R&D intensity) and there is a need to raise its annual rate of increase in total (public + private) R&D investment. Under these circumstances, in order to reach its national target by 2020, the Slovak Republic would need an annual growth rate of 4.7% over the decade 2010-2020, slightly higher of the EU average of 4.1%. This is possible to achieve provided the right policies are implemented.

Overall, the research & innovation system in the Slovak Republic is characterized by a very low R&D intensity in both the public & private sectors. The Slovak R&D intensity is one of the lowest in Europe and also very low compared to the reference group countries CZ, IT, HU, SI (average of 1.27%). However and in spite the overall decrease of the R&D intensity in the Slovak Republic over the last decade, public support to R&D has increased significantly (EUR 86 million in 2000 to EUR 219 million in 2010), notably due to the financing from EU resources (mainly through Structural Funds). Between the two programming periods of 2000-2006 and 2007-2013, the Slovak Republic increased the allocations to research and innovation (RTDI) by 19%. In total, over the period 2007-2013, the country received EUR 1.103 billion of the EU Structural Funds (a ratio of 81.2% of the total GBAORD), to research, innovation and entrepreneurship. For the 2011 and 2012 public state budget allocated to R&D, there was a further increase of 9% and 18% respectively, but a decrease is foreseen for the 2013 budget due mainly to measures to reduce public deficit.

In the private sector, domestic firms, including a great number of SMEs and a few large companies, are characterised by low R&D expenditure and productivity levels. As a result, the production system is dominated by technology imports. Therefore, a major challenge for Slovakia remains to raise the R&D intensity in Slovak firms. The FP7 success rate of the Slovak Republic in terms of EU contribution of 12.3% is lower than the average EU-27 of 20.4%. In terms of applicants, the Slovak success rate of 19.2% is close to the EU-27 average of 21.2%. Among the FP7 research priority areas, Slovakia is most active in "Marie-Curie Actions", in "information and communication technologies" and in "research for the benefit of SMEs".¹

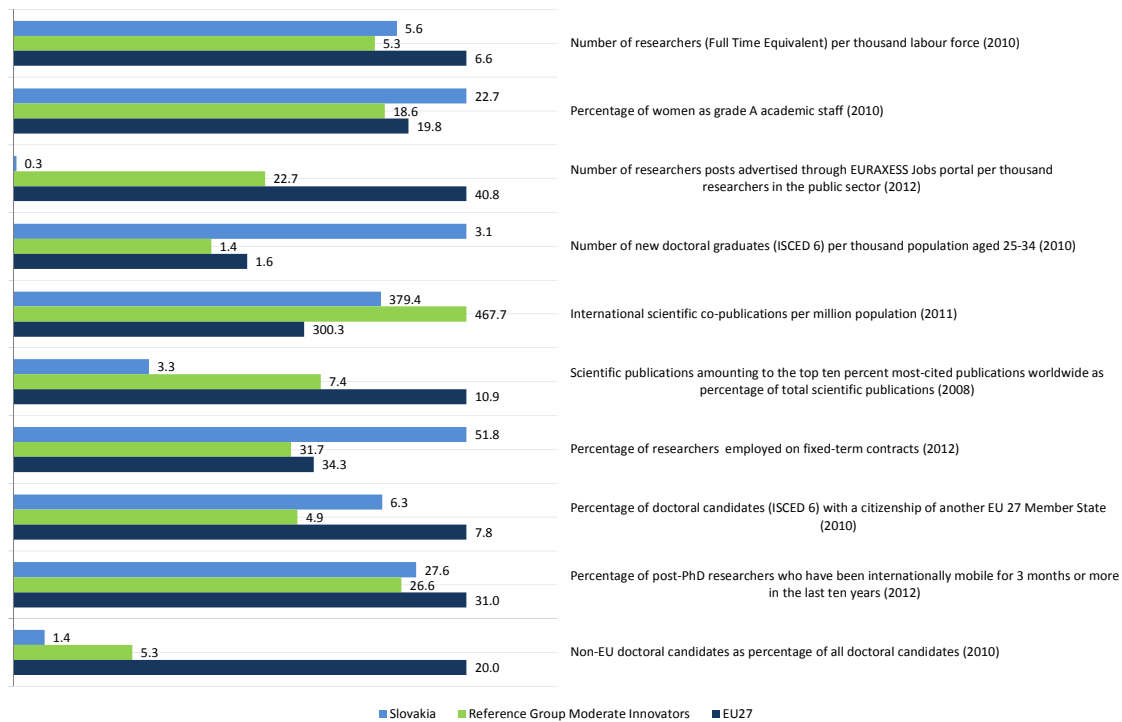
Key indicators measuring the country's research performance

The figure below presents key indicators measuring the Slovak Republic's performance on aspects of an open labour market for researchers against a reference group and the EU-27 average.²

¹ European Commission (2013), "Research and Innovation performance in EU Member States and Associated countries. Innovation Union progress at country level 2013"

² The values refer to 2012 or the latest year available

Figure 1: Key indicators – Slovak Republic



Source: Deloitte

Data: Eurostat, SHE Figures, EURAXESS Jobs Portal, UNESCO OECD Eurostat education survey, Innovation Union Scoreboard 2013, MORE2

Notes: Based on their average innovation performance across 25 indicators, Czech Republic, Greece, Hungary, Italy, Lithuania, Malta, Portugal, Slovakia and Spain show a performance below that of the EU-27. These countries are the Moderate innovators³.

Stock of researchers

The table below presents the stock of researchers by Head Count (HC) and Full Time Equivalent (FTE) and in relation to the active labour force.

Table 1: Human resources – Stock of researchers

Indicator	Slovak Republic	EU Average/Total
Head Count per 1 000 active labour force (2010)	8.89	10.17
Head Count (2010)	24 049	2 435 487
FTE per 1 000 active labour force (2010)	5.62	6.64
Full time equivalent (FTE) (2010)	15 183	1 589 140

Source: Deloitte

Data: Eurostat

2. National strategies

The Government of the Slovak Republic has adopted a package of measures aimed at training enough researchers to meet its R&D targets and at promoting attractive employment conditions in public research institutions. The table below presents key programmes and initiatives intended to implement the strategic objectives to train enough researchers to reach Slovakia's R&D targets, to promote attractive working conditions, and to address gender and dual career aspects.

Table 2: National strategies

Measure	Description
Act of 23 April 2009 on Incentives for Research and Development and on amendment of the Act No. 595/2003 Coll. on Income Tax as	The Act provides entrepreneurs with incentives for R&D with a view to enhancing the level of R&D and the competence of the State administration authorities in providing incentives for research and development and checking their use.

³ European Commission (2013), "Innovation Union Scoreboard 2013"

Measure	Description
amended	
APVV (SRDA) - Slovak Research and Development Agency (2005)	The APVV is the Slovak Republic's research and development grant agency. It is responsible for promoting R&D in all fields of research, including international research cooperation. SRDA is also the instrument for the distribution of public funding for R&D on a competitive basis.
Innovation Strategy of the Slovak Republic for 2007 to 2013	The Innovation Strategy was prepared by the Ministry of Economy in 2007. It became a milestone in innovation policy in Slovakia as the country had no national innovation plan. The Strategy contains numerous references to learning from other countries. The most frequently mentioned are innovation policy bodies and tools from Belgium, Finland (TEKES), France, Israel (risk capital initiatives), Sweden (Vinnova), the UK, the European Union and OECD (statistics on innovation). The Innovation Strategy contains three innovation development priorities: – Priority 1: High-quality infrastructure and an efficient system for development of innovation; – Priority 2: High-quality human resource infrastructure; – Priority 3: Efficient innovation policy tools.
Long-term Plan of the State Science and Technology Policy by the year 2015	The Long-term Plan of the State Science and Technology Policy by the year 2015 aims at coordinating the State's science and technology policies in line with ERA policy and the Lisbon Strategy. The main objectives include: - Increasing the involvement of science and technology in the overall development of the Slovak Republic; - Creating harmonised and interlinked conditions for development and the functioning of the system of science and technology to address both internal (national) but also external (international) demands; - Promoting coordination of science and technology, infrastructure, international scientific and technological cooperation, evaluation, popularisation, and monitoring of research and development. Update of the Long-term Plan of the State Science and Technology Policy by 2015 (Phoenix Strategy) (2011) The objective of the Update is to propose a course of action for the solution of current problems in the area of research and development in Slovakia. The document only updates some sections of the Long-term Plan (and does not replace it), identifying new measures in the area of research and development for better results. It also constitutes the basis for drawing up a long-term plan of State science and technology policy for the period beyond 2015.
Minerva 2.0 – Slovakia into the first league (2011)	The Minerva 2.0 strategy was introduced by the Government of Slovakia's Plenipotentiary for Knowledge Economy in collaboration with other ministries. The strategy identifies key obstacles to a rapid and efficient development of the knowledge economy in Slovakia and proposes a set of 26 measures designed to overcome these barriers. The measures cover three main areas: 1. Development of human resources; 2. Systematic support for scientific and innovative research; 3. Reform of the institutional and legal frameworks.
Strategy for the Popularisation in Society of Science and Technology (Approved by Resolution of the Government of the Slovak Republic No. 103/2007)	The Strategy for Popularisation aims at exchanging information between the research and development community and the rest of society to stimulate the interest of elementary and secondary school children in science and technology. Science and technology results are presented to young people and knowledge transfer from academia to public life is promoted.

Source: Deloitte

3. Women in the research profession

Measures supporting women researchers in top-level positions

In 2010, the percentage of women grade A academic staff was 22.7% in the Slovak Republic compared with 18.6% among the Innovation Union reference group and the EU average of 19.8%⁴.

⁴ See Figure 1 "Key indicators – Slovak Republic"

The Slovak Republic government has introduced a number of laws, initiatives and programmes aimed at raising the proportion of women in top-level positions in research, technology and innovation (RTD). They include the following laws and programmes:

Table 3: Women in the research profession – Key programmes and initiatives

Measure	Description
Expert working Group of the Ministry of Education for the Gender Equality (2008-ongoing)	In October 2008, the Ministry of Education created the Sector Expert Working Group on Gender Equality ⁵ . It aims to coordinate the implementation of tasks arising from the Manifesto of the Government on the promotion of gender equality (2006) and other laws prepared in accordance with the recommendations of the EU addressing gender equality and human rights in the education sector. It also aims to improve the implementation of the principle of gender equality in policies and to introduce effective cooperation with other departments, particularly with the Ministry of Labour, Social Affairs and Family, as well as public administration institutions and NGOs.
Framework Programme on Equal Opportunities (2002)	Since 2002, the Slovak Republic has been adhering to its Framework Programme on Equal Opportunities between men and women. This programme covers all European policies designed to equality between men and women. In 2011, of 28 596 researchers in Slovakia, 44% were women. Although the Slovak researcher community has grown by 840 annually on average for the last decade, the share of female researchers has remained stable at 44%.
Gender Equality Strategy for the Years 2009-13	In 2007, the Government of the Slovak Republic launched the Gender Equality Strategy for the Years 2009-13. The Strategy commits the Government of the Slovak Republic to promote equality between women and men as an important factor in the development of democracy and the realisation of human rights in order to fulfil obligations under the Lisbon Strategy as well as international treaties.

Source: Deloitte

Measures to ensure a representative gender balance

The Government of the Slovak Republic has not introduced specific gender quotas to ensure a representative gender balance for researchers at all levels of the career ladder, or in selection/evaluation committees.

Maternity leave

Under Slovak legislation, women receiving publicly-funded fellowships may interrupt their grants and go on maternity leave for up to 36 months. However, Slovak legislation does not refer to the interruption and/or extension of contracts to go on maternity leave; if a female researcher is on a fixed term contract, it is up to the employer to decide. Usually the employer temporarily replaces the female researcher on maternity leave with someone else, who will be fully involved in the project. Therefore, the female researcher does not lose her position, but she is only replaced for the duration of her maternity leave.

4. Open, transparent and merit-based recruitment

Recruitment system

In the Slovak Republic, institutions generally implement their own recruitment policy. The autonomy of the institutions is completely ring-fenced and cannot be influenced by the State. Job vacancies are published on relevant Europe-wide online platforms (including EURAXESS) and use the English language.

Open recruitment in institutions

The table below presents information on open recruitment in higher education and public research institutions.

Table 4: Open recruitment in higher education and public research institutions

Do institutions in the country currently have policies to ...?	Yes/No	Description
– publish job vacancies on relevant national online platforms	Yes	-
– publish job vacancies on relevant Europe-	Yes	.

⁵ The working group is now operational under the Ministry of Foreign and European affairs of the Slovak Republic

Do institutions in the country currently have policies to ...?	Yes/No	Description
wide online platforms (e.g. EURAXESS)		
– publish job vacancies in English	Yes	-
– systematically establish selection panels	Yes	-
– establish clear rules for the composition of selection panels (e.g. number and role of members, inclusion of foreign experts, gender balance, etc.)	Yes	-
– publish the composition of a selection panel (obliging the recruiting institution)	No	-
– publish the selection criteria together with job advert	Yes	-
– regulate a minimum time period between vacancy publication and the deadline for applying	Yes	-
– place the burden of proof on the employer to prove that the recruitment procedure was open and transparent	Yes	-
– offer applicants the right to receive adequate feedback	Yes	-
– offer applicants the right to appeal	Yes	Applicants have the right to appeal, but in most cases they do not make use of it.

Source: Deloitte

EURAXESS Services Network

In 2012, the number of researcher posts advertised through the EURAXESS Jobs portal per thousand researchers in the public sector was 0.3 in the Slovak Republic compared with 22.7 among the Innovation Union reference group and an EU average of 40.8⁶.

Information on entry conditions, transfer of social security and pension contributions, accommodation and, administrative assistance is available on EURAXESS Slovakia⁷ as well as on the information portal for Science, Research and Innovation⁸.

5. Education and training

Measures to attract and train people to become researchers

The topic of attracting young talented people to become researchers has been embedded in the Long-Term Plan of the State Science and Technology Policy by the year 2015. Measure 4.1.2. of this long-term plan aims to raise young peoples' interest in research and development. It focuses on education and training of potential employees in research and development in primary schools, secondary schools and high schools, and supports life-long training.

In addition, the Strategy for the Popularisation in Society of Science and Technology encourages talented students and young researchers to pursue the researcher profession, and supports the development of new research departments in institutions and companies.

The establishment of the National Centre for Science and Technology in Society⁹ (in 2007) supports the Government in its efforts to popularise science and technology. The prime objective of the National Centre is to "popularise science and technology across the Slovak Republic and looking abroad". Its main services include administrative and organisational support to universities, state research and development organisations, business sector research departments, and non-profit research and development organisations.

In Slovakia, popularisation takes place through workshops and lectures (such as the Scientific Hour, the Scientific Café – Science in Centre, the Scientific Patisserie), mainly under the auspices of Slovak universities

⁶ See Figure 1 "Key indicators – Slovak Republic"

⁷ Available at: <http://www.euraxess.sk>

⁸ Available at: <https://www.vedatechnika.sk/SK/Stranky/default2.aspx>

⁹ Available at: <https://www.vedatechnika.sk/SK/VEDAASPOLOCNOST/NCPVAT/Stranky/default.aspx> (in Slovak)

and organisations focusing on popularisation (such as the Slovak Centre of Scientific and Technical Information (CVTI), the Ministry of Education, Science, Research and Sport of the Slovak Republic, the National Centre for Science and Technology in Society, and *Schola Ludus*). This project motivates students to ask questions and conduct personal research, and thus attract pupils and secondary school students to work in science and technology.

The Slovak Research and Development Agency (SRDA) offers a grant under a programme called “Programme for Human Resources in Research and Development and Popularisation”. The Programme aims at increasing R&D job opportunities and improving researchers’ working conditions at a post-doc level while promoting international collaboration between the national and foreign R&D institutions. The programme’s dual objective is to increase:

- The competitiveness of Slovakia through the consolidation of the country’s research and development potential, and to popularise science and research among the general public; and
- The skills and knowledge of those working in research and development after the completion of their doctoral studies, with a view also to leading to an increase in the added value for society.

The Government of the Slovak Republic has not adopted specific measures to increase the number of female students taking science to an advanced (doctoral) level. The Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic for the Structural Funds of EU (ASFEÚ) is responsible for managing the Operational Programme (OP) Education by implementing the following measures:

- Measure 1.2.: Tertiary Schools and R&D as Driving Forces in the Development of the Knowledge Society; and
- Measure 2.1.: Support of Life-Long Learning.

Doctoral graduates by gender

The table below shows the number of doctoral graduates in the Slovak Republic by gender as a ratio of the total population.

Table 5: Doctoral graduates by gender

Indicator	Slovak Republic	EU Average
New doctoral graduates (ISCED 6) per 1 000 population aged 25-34 (2010)	3.1	1.5
Graduates (ISCED 6) per 1 000 of the female population aged 25-34 (2010)	3.1	1.4
Graduates (ISCED 6) per 1 000 of the male population aged 25-34 (2010)	3.1	1.6

Data: Eurostat

Funding of doctoral candidates

The table below summarises different funding opportunities for doctoral candidates.

Table 6: Funding schemes available to doctoral candidates

Funding scheme	Description
Scholarships	The National Scholarship Programme for the Support of Mobility of Students, PhD Students, university Teachers and Researchers was approved by the Government of the Slovak Republic in 2005. It is funded by the Ministry of Education, Science, Research and Sport of the Slovak Republic. The National Scholarship Programme supports both the inward and outbound mobility of students, PhD students, university teachers and researchers: – Inward mobility scholarships target foreign students, PhD students, university teachers and researchers to come and work at Slovak universities and other Slovak research organisations; – Outbound mobility scholarships target: • Students and PhD students at Slovak universities (both national and foreigners with permanent residence in the Slovak Republic) to go abroad and study at a second level of higher education, or carry out research at a foreign university or at a foreign research organisation; and • Students, full-time PhD students, university teachers and researchers from the Slovak Academy of Sciences (both national and foreigners with permanent residence in the Slovak Republic) to travel abroad for studying or doing research.
Stipend/grant	The Ministry of Education, Science, Research and Sport of the Slovak Republic (MESRS) provides all doctoral students at Slovak universities with grants.

Source: Deloitte

Measures to increase the quality of doctoral training

See chapter 5 “Education and training” (“Funding of doctoral candidates”, “Measures to improve researchers’ funding opportunities”) and chapter 6 “Working conditions”.

Skills agenda for researchers

The Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic for the Structural Funds of EU (ASFEÚ), was set up by the Ministry of Education, Science, Research and Sport of the Slovak Republic in 2007. Its main objective is to ensure the continuous process of acceptance, assessment, financial management and monitoring of projects (acting as the intermediary body) funded under the EU Structural Funds for the period 2007–13. It carries out activities as the managing authority for the Operational Programme Education and Operational Programme Research and Development.

One of the priority axes under the Operational Programme Education is Axis 2 ‘Life-long Learning as the Basic Principle of a Knowledge Society’ with the aim of supporting life-long learning in different R&D sectors and increasing the quality of education.

In addition, the update of the Long-Term Plan of the State Science and Technology Policy by 2015 (Phoenix Strategy) promotes life-long learning activities by supporting joint doctoral programmes in English, developing lifelong learning training courses at a post-doc level and encouraging international cooperation schemes between Slovak and foreign institutions.

6. Working conditions

Measures to improve researchers’ funding opportunities

The following table summarises the measures to increase researchers’ funding opportunities:

Table 7: Funding opportunities for researchers

Measure	Description
Slovak Research and Development Agency (SRDA) grant scheme (ongoing)	The SRDA Grant scheme provides funding opportunities for research and development activities as follows: – General Calls – Research and development support in all areas of science; – Programme for Human Potential Support in R&D and Science Popularisation; – Support for Research and Development SMEs; – Support for Creation and Activities of Research and Education Centres of Excellence; – Support for University and Academy cooperation with Entrepreneurship; – Support for Preparation of FP7 projects; – Bilateral cooperation; – Multilateral cooperation.
Switzerland – Slovak Scholarship Sciex Doctoral & Post-doc Fellowship¹⁰ (2008)	PhD students from Slovakia, who have pursued doctoral studies at a Slovak institution (university or the Slovak Academy of Science), are eligible to apply for a ‘Sciex’ PhD scholarship. Researchers from Slovakia with a PhD (or equivalent) who are employed at an eligible Slovak institution (university or the Slovak Academy of Science) can also apply for a ‘Sciex’ PostDoc Fellowship. There is no age limit for applicants. The evaluation criteria are: high professional commitment of the team members; cross-linked, team-minded participants; ideal scientific correlation; intensive support from the host and home institution.
The Cultural and Educational Grant Agency (KEGA) (ongoing)	The KEGA - Cultural and Educational Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic – offers grants in the fields of applied research in education, new models and technologies in educational processes. KEGA is one of the basic financial tools of project-based funding, with a budget of approximately EUR 2.5 million each year.
The Scientific Grant Agency (VEGA) (ongoing)	The VEGA – the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences – offers scientific grants in the fields of basic research in all fields of science. Created in 1996, VEGA is one of the basic financial tools of project-based funding, with a

¹⁰ Available at: <http://www.sciex.sk/sk/main/o-programe>

Measure	Description
	budget of approximately EUR 10 million each year.

Source: Deloitte

Remuneration

In the Slovak Republic, the remuneration of researchers working in the public sector is covered by the Public Service Act No.313/2001 Coll. This determines the remuneration levels and conditions. However, the remuneration package of researchers depends on the financial resources available to each public organisation.

The update of the Long-term Plan of the State Science and Technology Policy by 2015 (Phoenix Strategy) includes the following measures:

- Measure 3.2.: Higher education schools as an instrument of HR development: creating opportunities for support, including legislative support by law, for post-doctoral training as a standard follow-up after completion of doctoral study, for the preparation of independent academic or research careers; also consider using the so-called installation grants as a support instrument for post-doctoral training; and
- Measure 3.8.: Internationalisation in the area of R&D: support attracting prominent foreign scientists and foreign research institutions to Slovakia; the inbound mobility of prominent foreign scientists with a view to long-term intense work at a university or another research organisation will necessitate a comprehensive solution to their pay; it will also be necessary to address the potential problem of different remuneration of high-quality domestic scientists, compared with a prominent foreign expert coming to Slovakia to work.

Researchers' Statute

The Public Service Act No.313/2001 Coll. along with the Labour Code¹¹ defines researchers' salaries, career development and employment contracts.

'European Charter for Researchers' & 'Code of Conduct for the Recruitment of Researchers'

The Rector's Conference as well as the Slovak Academy of Sciences have adopted and are implementing the 'Charter & Code' principles.

Autonomy of institutions

In the Slovak Republic, each university and public research institute acts as an autonomous employer (Act No. 131 of 21 February 2002 on Higher Education and on Changes and Supplements to Some Law and ACT 125 from the 24th of March 2011, amending and supplementing Law no. 131/2002 Coll. on universities and on amendment of certain acts as amended and amending and supplementing Act no. 461/2003 Coll. on Social Insurance as amended).

Universities¹² have the exclusive right to provide and organise higher education, science and research. Public universities are self-governing in terms of:

- Internal organisation;
- Number of selected applicants to enroll, admissions process (conditions and decisions);
- Creation and implementation of curricula and organisation of studies (programmes);
- Academic rights and responsibilities of students;
- Orientation and life-long learning (including artistic and other creative activities); and
- Researchers' employment and job structure for university education.

Career development

Currently, there are no explicit career prospects for researchers. In the recent past, the Slovak Research and Development Agency published calls under the "Human Resources in Research and Development and Popularisation" programme, which aimed, *inter alia*, at a continuous increase in the skills and knowledge of

¹¹ Labour Code, Slovak Republic – Slovakia, Collection of Laws, Years 2001 – 2011, (full wording January 2012), available at: <http://www.employment.gov.sk/en.html>

¹² Public, state and private universities are governed by the Act No.131 of 21 February 2002 on Higher Education and on Changes and Supplements to Some Law and ACT 125 from the 24th of March 2011, amending and supplementing Law no. 131/2002 Coll. on universities and on amendment of certain acts as amended and amending and supplementing Act no. 461/2003 Coll. on Social Insurance as amended)

R&D employees after the completion of their doctoral studies. This programme was closed in 2009, and has not been replaced.

Shift from core to project-based funding

The projects and programmes of the Slovak Research and Development Agency as well as national R&D Programmes currently under preparation are the basic instruments for project-based funding in the Slovak Republic. Both support a more efficient national R&D system.

Social security benefits (sickness, unemployment, old-age)

In the Slovak Republic, social security coverage and health insurance are deducted from the researcher's wage. Legislation on extra social security schemes and/or pension provisions for researchers has not yet been developed.

7. Collaboration between academia and industry

The update of The Long-term Plan of the State Science and Technology Policy by 2015 (Phoenix Strategy) encourages researchers to move from the public to the business sector.

The following table summarises programmes designed to boost collaboration between academia and industry, and to foster doctoral training in cooperation with industry.

Table 8: Collaboration between academia and industry

Agency	Description
The Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic for the Structural Funds of the EU (ASFEÚ) (ongoing)	The Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic for the Structural Funds of the EU (ASFEÚ) encourages knowledge transfer between academia and industry. The Agency is responsible for managing the Research & Development Operational Programme and in particular, priority axis 2 on "Support to research and development" followed by: – Measure 2.1.: Support for networks of excellence in research and development as pillars of regional development and support for international cooperation; – Measure 2.2.: Transfer of knowledge and technology from research and development into practice.
The Slovak Innovation and Energy Agency (SIEA) (ongoing)	The SIEA was established under the Ministry of Economy to boost business sector innovation and to support innovation. The Agency aims to strengthen the links between industry and research through the creation of regional innovation structures involving municipalities, universities, academy institutes and firms.
The Slovak Research and Development Agency (SRDA) (ongoing)	One of the responsibilities of the Agency is to encourage research collaboration between university departments and institutes, and the business sector to increase private sector investment in research and education. The Agency manages two relevant grant programmes: 1. VMSP 2007 and 2009 - Programme for Research and Development SMEs to promote technical and technological development and innovation in SMEs, with special attention to micro-enterprises, spin-off and start-up firms; 2. SUSPP 2007 and 2009 - Programme for the Cooperation of Universities and the Slovak Academy of Sciences with Entrepreneurship to boost investments from the private sphere into research and education.

Source: Deloitte

8. Mobility and international attractiveness

In 2010, the percentage of doctoral candidates (ISCED 6) with citizenship of another EU-27 Member State was 6.3% in the Slovak Republic compared with 4.9% among the Innovation Union reference group and an EU average of 7.8%¹³. In the same year, the percentage of non-EU doctoral candidates as a percentage of all doctoral candidates was 1.4% in the Slovak Republic compared with 5.3% among the Innovation Union reference group and an EU average of 20.0%¹⁴.

¹³ See Figure 1 "Key indicators – Slovak Republic"

¹⁴ Ibid

Measures aimed at attracting and retaining 'leading' national, EU and third country researchers

The table below summarises key measures aimed at attracting and retaining leading national, EU and third-country researchers.

Table 9: Measures to attract and retain 'leading' national, EU and third-country researchers

Measure	Description
Act No.172/2005 Coll. on the organisation of State support for research and development	Council Directive 2005/71/EC of 12 October 2005 on “a specific procedure for admitting third-country nationals for the purposes of scientific research” was transposed by national Act No.172/2005 Coll. on the organisation of State support for R&D, as later amended. The Ministry of Education, Science, Research and Sport has developed a set of methodological guidelines for hosting third-country researchers to carry out activities in research and development. The methodological guidelines regulate the procedure for hosting third-country researchers who are not citizens of EU, the EEA or the Swiss Confederation for the purpose of carrying out activities in research and development. Only a legal entity carrying out R&D that has been empowered to receive third-country researchers and that concludes a hosting agreement with the foreigners can host foreigners to carry out activities in R&D.
Long-term Plan of the State Science and Technology Policy by the year 2015	The Long-term Plan of the State Science and Technology Policy by the year 2015 contains provisions on attracting people working abroad in the fields of research and development to return to Slovakia and work at a Slovak R&D organisation. It aims at improving information on researchers' mobility opportunities and it also encourages national R&D organisations to adopt more attractive working conditions for foreign experts.
National Scholarship Programme for the Support of Mobility of Students, PhD Students, University Teachers and Researchers (2005)	The National Scholarship Programme supports both the inward and outbound mobility of students, PhD students, university teachers and researchers. See chapter 5 “Education and training” for more information.
Programme for Human Potential Support in R&D and Science Popularisation (2006-2010)	The Programme aimed to increase the R&D job opportunities and improve researchers' working conditions at a post-doc level while promoting international collaboration between the national and foreign R&D institutions. Calls were opened in the years 2006, 2007 and 2009. The grant scheme was operated until 2010.

Source: Deloitte

Inward mobility (funding)

The Slovak Research and Development Agency under the “Programme for Human Potential Support in R&D and Science Popularisation” promotes projects oriented towards the reintegration of citizens of the Slovak Republic with a PhD (or equivalent) who had spent more than two years continuously working at research and development institutions abroad.

In 2007, the Ministry of Education, Research, Science and Sport established National Centre for the Popularisation of Science and Technology in Society (NCP S&T), a department of the Slovak Centre of Scientific and Technical Information (SCSTI), to raise awareness of science and technology (S&T) across Slovakia as well as abroad.

Researchers from third countries are not sufficiently aware of the possibility of applying for a Researchers' Visa and consequently its advantages. They mostly apply for a work visa which in the end they do not receive.

The various Ministries and national funding bodies support researchers for them to return from abroad (see chapter 5 “Education and training” and chapter 6 “Working conditions”).

Outbound mobility

The Ministry of Education, Science, Research and Sport of the Slovak Republic is promoting bilateral cooperation programmes with twelve EU and non-EU countries, thus encouraging scientific collaboration and mobility of researchers. The bilateral calls for cooperation are managed by the Slovak Research and Development Agency (SRDA) and involve the following countries: Austria, Bulgaria, Czech Republic, China, France, Greece, Hungary, Italy, Poland, Portugal, Romania, Russian Federation, Slovenia, Serbia, South Africa, and Ukraine.

Promotion of 'dual career'

The Slovak Republic does not currently promote policies supporting researchers' dual careers.

Portability of national grants

Publicly funded grants or fellowships are not portable to other EU countries.

Access to cross-border grants

The majority of grants are open to Slovak and foreign candidates regardless of their nationality. However, national legislation requires the recipient of the financial support to be a research institution located in the territory of the Slovak Republic.