

Ministry of Education, Science, Research and Sport  
of the Slovak Republic

Ministry of Economy of the Slovak Republic

# OPERATIONAL PROGRAMME RESEARCH AND INNOVATION

FOR PROGRAMMING PERIOD 2014 - 2020

October 2014

<b>CCI</b>	2014SK16RFOP001
<b>Title</b>	Operačný program Výskum a inovácie
<b>Version</b>	1.2
<b>First year</b>	2014
<b>Last year</b>	2020
<b>Eligible from</b>	1. 1. 2014
<b>Eligible to</b>	31. 12. 2023
<b>EC decision number</b>	
<b>EC decision date</b>	
<b>MS amending decision number</b>	
<b>MS amending decision date</b>	
<b>MS amending decision entry into force date</b>	
<b>NUTS regions covered by the operational programme</b>	NUTS 1 NUTS 2

# TABLE OF CONTENTS

<b>1.</b>	<b>STRATEGY FOR THE OPERATIONAL PROGRAMME RESEARCH AND INNOVATION CONTRIBUTION TO THE UNION STRATEGY FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH AND THE ACHIEVEMENT OF ECONOMIC, SOCIAL AND TERRITORIAL COHESION.....</b>	<b>6</b>
1.1	STRATEGY FOR THE OPERATIONAL PROGRAMME RESEARCH AND INNOVATION CONTRIBUTION TO THE UNION STRATEGY FOR SMART, SUSTAINABLE AND INCLUSIVE GROWTH AND TO THE ACHIEVEMENT OF ECONOMIC, SOCIAL AND TERRITORIAL COHESION.....	6
1.1.1	Description of the programme's strategy research and innovation for contributing to the delivery of the union strategy for smart, sustainable and inclusive growth and for achieving economic, social and territorial cohesion.....	6
1.1.1.1	MAIN AREAS OF NEEDS IDENTIFIED TO DELIVER THE INVESTMENT STRATEGY OF THE OP R&I .....	8
1.1.1.2	INVESTMENT STRATEGY OF THE OPERATIONAL PROGRAMME RESEARCH AND INNOVATION .....	15
1.1.2	Justification for the choice of thematic objectives and corresponding investment priorities having regard to the partnership agreement, based on an identification of regional and, where appropriate, national needs including the need to address the challenges identified in relevant country-specific recommendations adopted in accordance with article 121(2) tfeu and the relevant council recommendations adopted in accordance with article 148(4) tfeu, taking into account the ex ante evaluation. ....	27
1.2	JUSTIFICATION FOR THE FINANCIAL ALLOCATION .....	30
<b>2.</b>	<b>A DESCRIPTION OF PRIORITY AXES OF THE OPERATIONAL PROGRAMME RESEARCH AND INNOVATION .....</b>	<b>34</b>
2.1	PRIORITY AXIS 1: SUPPORTING RESEARCH, DEVELOPMENT AND INNOVATION .....	34
2.1.0	Fund, category of region and calculation basis for union support .....	34
2.1.1	INVESTMENT PRIORITY 1.1: Enhancing research and innovation infrastructure and capacities to develop research and innovation excellence, and promoting centres of competence, in particular those of european interest .....	34
2.1.1.1	SPECIFIC OBJECTIVES CORRESPONDING TO THE INVESTMENT PRIORITY AND EXPECTED RESULTS.....	34
2.1.2	Action to be supported under the investment priority 1.1.....	37
2.1.2.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 1.1.....	37
2.1.2.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	42
2.1.2.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	43
2.1.2.4	PLANNED USE OF MAJOR PROJECTS .....	43
2.1.2.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 1.1 .....	43
2.1.3	INVESTMENT PRIORITY 1.2 promoting business investment in research and innovation, and developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies .....	44
2.1.3.1	SPECIFIC OBJECTIVES CORRESPONDING TO THE INVESTMENT PRIORITY AND EXPECTED RESULTS.....	44
2.1.4	Action to be supported under the investment priority 1.2.....	45
2.1.4.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 1.2.....	45
2.1.4.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	50
2.1.4.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	51
2.1.4.4	PLANNED USE OF MAJOR PROJECTS .....	51
2.1.4.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 1.2 .....	51
2.1.5	Performance framework .....	53
2.1.5.1	ESTIMATED FINANCIAL PROGRESS UNDER PRIORITY AXIS 1.....	53
2.1.6	Categories of interventions .....	55
2.1.7	Summary of the planned use of technical assistance, including actions to reinforce the administrative capacity of authorities and beneficiaries under priority axis 1 .....	56
2.2	PRIORITY AXIS 2: SUPPORTING RESEARCH, DEVELOPMENT AND INNOVATION IN THE BRATISLAVA REGION.....	56
2.2.0	Fund, category of region and calculation basis for union support .....	56
2.2.1	INVESTMENT PRIORITY 2.1: Enhancing research and innovation infrastructure and capacities to develop research and innovation excellence, and promoting centres of competence, in particular those of european interest .....	57
2.2.2.1	SPECIFIC OBJECTIVES CORRESPONDING TO THE INVESTMENT PRIORITY AND EXPECTED RESULTS.....	57
2.2.2	Action to be supported under the investment priority 2.1.....	57
2.2.2.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 2.1.....	57
2.2.2.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	59
2.2.2.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	59
2.2.2.4	PLANNED USE OF MAJOR PROJECTS .....	60
2.2.2.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 2.1 .....	60
2.2.3	INVESTMENT PRIORITY 2.2 Promoting business investment in research and innovation, and developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting	

	investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies .....	61
2.2.3.1	SPECIFIC OBJECTIVES OF THE INVESTMENT PRIORITY AND EXPECTED RESULTS.....	61
2.2.4	Action to be supported under the investment priority 2.2.....	62
2.2.4.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 2.2.....	62
2.2.4.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	64
2.2.4.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	65
2.2.4.4	PLANNED USE OF MAJOR PROJECTS .....	65
2.2.4.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 2.2 .....	65
2.2.5	Performance framework .....	67
2.2.6	CATEGORIES OF INTERVENTIONS.....	69
2.2.7	Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries under priority axis 2 70	
2.3	PRIORITY AXIS 3: ENHANCING THE COMPETITIVENESS AND GROWTH OF SMES.....	70
2.3.1	Fund, category of region and calculation basis for union support .....	70
2.3.2	INVESTMENT PRIORITY 3.1: Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators.....	71
2.3.2.1	SPECIFIC OBJECTIVES CORRESPONDING TO THE INVESTMENT PRIORITY AND EXPECTED RESULTS.....	71
2.3.3	Action to be supported under the investment priority 3.1.....	71
2.3.3.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 3.1.....	71
2.3.3.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	75
2.3.3.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	76
2.3.3.4	PLANNED USE OF MAJOR PROJECTS .....	77
2.3.3.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 3.1 .....	77
2.3.4	INVESTMENT PRIORITY 3.2: Developing and implementing new business models for smes, in particular with regard to internationalisation .....	77
2.3.4.1	SPECIFIC OBJECTIVES CORRESPONDING TO THE INVESTMENT PRIORITY AND EXPECTED RESULTS.....	77
2.3.5	Action to be supported under the investment priority 3.2.....	78
2.3.5.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 3.2.....	78
2.3.5.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	80
2.3.5.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	81
2.3.5.4	PLANNED USE OF MAJOR PROJECTS .....	81
2.3.5.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 3.2 .....	81
2.3.6	INVESTMENT PRIORITY 3.3 Supporting the creation and the extension of advanced capacities for product and service development.....	82
2.3.6.1	SPECIFIC OBJECTIVES CORRESPONDING TO THE INVESTMENT PRIORITY AND EXPECTED RESULTS.....	82
2.3.7	Action to be supported under the investment priority 3.3.....	83
2.3.7.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 3.3.....	83
2.3.7.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	86
2.3.7.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	86
2.3.7.4	PLANNED USE OF MAJOR PROJECTS .....	86
2.3.7.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 3.3 .....	87
2.3.8	Performance framework .....	88
2.3.9	Categories of interventions .....	91
2.3.10	Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries under priority axis 3 92	
2.4	PRIORITY AXIS 4: DEVELOPING COMPETITIVE SMES IN THE BRATISLAVA REGION .....	92
2.4.0	Fund, category of region and calculation basis for union support .....	92
2.4.1	INVESTMENT PRIORITY 4.1: Supporting the capacity of smes to grow in regional, national and international markets, and to engage in innovation processes .....	92
2.4.1.1	SPECIFIC OBJECTIVE CORRESPONDING TO THE INVESTMENT PRIORITY AND EXPECTED RESULTS .....	92
2.4.2	Action to be supported under the investment priority 4.1.....	93
2.4.2.1	DESCRIPTION OF THE TYPE AND EXAMPLES OF ACTIONS TO BE SUPPORTED AND THEIR EXPECTED CONTRIBUTION TO THE SPECIFIC OBJECTIVES INCLUDING, WHERE APPROPRIATE, THE IDENTIFICATION OF MAIN TARGET GROUPS, SPECIFIC TERRITORIES TARGETED AND TYPES OF BENEFICIARIES UNDER INVESTMENT PRIORITY 4.1.....	93
2.4.2.2	GUIDING PRINCIPLES FOR SELECTION OF OPERATIONS .....	96
2.4.2.3	PLANNED USE OF FINANCIAL INSTRUMENTS.....	96
2.4.2.4	PLANNED USE OF MAJOR PROJECTS .....	96

2.4.2.5	OUTPUT INDICATORS FOR INVESTMENT PRIORITY 4.1 .....	96
2.4.3	Performance framework .....	98
2.4.4	Categories of interventions .....	100
2.4.6	Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries under priority axis 4....	101
2.5	PRIORITY AXIS 5: TECHNICAL ASSISTANCE .....	101
2.5.0	Fund, category of region and calculation basis for union support .....	101
2.5.1	Specific objectives and expected results .....	101
2.5.2	Actions to be supported and their expected contribution to the specific objectives.....	102
2.5.3	Categories of interventions .....	104
<b>3.</b>	<b>FINANCING PLAN OF THE OPERATIONAL PROGRAMME.....</b>	<b>106</b>
<b>4.</b>	<b>INTEGRATED APPROACH TO TERRITORIAL DEVELOPMENT.....</b>	<b>108</b>
4.1	COMMUNITY-LED LOCAL DEVELOPMENT (CLLD).....	108
4.2	INTEGRATED SUSTAINABLE URBAN DEVELOPMENT MEASURE .....	108
4.3	INTEGRATED TERRITORIAL INVESTMENTS (ITI) .....	108
4.4	MEASURES FOR INTERNATIONAL AND TRANSNATIONAL ACTIONS UNDER THE OPERATIONAL PROGRAMME THE BENEFICIARIES OF WHICH ARE PRESENT IN AT LEAST ONE OTHER COUNTRY .....	108
4.5	CONTRIBUTION OF THE PLANNED ACTIVITIES UNDER THE PROGRAMME FOR MACRO-REGIONAL AND SEA-BASIN STRATEGIES SUBJECT TO THE NEEDS OF PROGRAMME AREA AS IDENTIFIED BY THE MEMBER STATE .....	108
<b>5.</b>	<b>SPECIFIC NEEDS OF GEOGRAPHICAL AREAS MOST AFFECTED BY POVERTY OR OF TARGET GROUPS MOST THREATENED BY DISCRIMINATION OR SOCIAL EXCLUSION .....</b>	<b>109</b>
5.1	GEOGRAPHICAL AREAS MOST AFFECTED BY POVERTY/TARGET GROUPS MOST THREATENED BY DISCRIMINATION OR SOCIAL EXCLUSION .....	109
5.2	STRATEGY FOR SOLUTION OF SPECIFIC NEEDS OF GEOGRAPHICAL AREAS MOST AFFECTED BY POVERTY/TARGET GROUPS MOST THREATENED BY DISCRIMINATION OR SOCIAL EXCLUSION.....	109
<b>6</b>	<b>SPECIFIC NEEDS OF GEOGRAPHICAL AREAS WITH SEVERE AND PERMANENT NATURAL OR DEMOGRAPHICAL HANDICAPS .....</b>	<b>109</b>
<b>7.</b>	<b>AUTHORITIES AND BODIES RESPONSIBLE FOR MANAGEMENT, CONTROL AND AUDIT, AND THE ROLE OF RELEVANT PARTNERS .....</b>	<b>109</b>
7.1	RELEVANT AUTHORITIES AND BODIES .....	109
7.2	INVOLVEMENT OF RELEVANT PARTNERS.....	110
7.2.1	Measures adopted to involve relevant partners in the preparation of operational programme and the role of partners at implementation, monitoring and evaluation of the operational programme.....	110
7.2.1.1	PREPARATION OF THE OP R&I .....	110
7.2.1.2	IMPLEMENTATION, MONITORING AND EVALUATION OF THE OP R&I.....	111
<b>8.</b>	<b>COORDINATION BETWEEN THE FUNDS, THE EAFRD AND OTHER UNION AND NATIONAL FUNDING INSTRUMENTS, AND WITH THE EIB.....</b>	<b>112</b>
<b>9.</b>	<b>EX-ANTE CONDITIONALITIES.....</b>	<b>116</b>
9.1	IDENTIFICATION OF EX-ANTE CONDITIONALITIES AND ASSESSMENT OF THEIR FULFILMENT .....	116
9.2	ACTIONS TO FULFIL GENERAL AND THEMATIC EX-ANTE CONDITIONALITIES .....	132
<b>10.</b>	<b>ACTIONS TO REDUCE THE ADMINISTRATIVE BURDEN FOR APPLICANTS/BENEFICIARIES .....</b>	<b>145</b>
10.1	ASSESSMENT OF THE ADMINISTRATIVE BURDEN FOR GRANT APPLICANTS AND BENEFICIARIES IN THE PROGRAMMING PERIOD 2007-2013.....	145
10.2	ACTIONS PLANNED TO REDUCE THE ADMINISTRATIVE BURDEN UNDER OP R&I.....	145
<b>11.</b>	<b>HORIZONTAL PRINCIPLES .....</b>	<b>147</b>
11.1	SUSTAINABLE DEVELOPMENT .....	147
11.2	EQUAL OPPORTUNITIES AND NON-DISCRIMINATION.....	148
11.3	EQUALITY BETWEEN MEN AND WOMEN .....	148
<b>12.</b>	<b>SEPARATE ELEMENTS.....</b>	<b>149</b>
12.1	LIST OF MAJOR PROJECTS .....	149
12.2	PERFORMANCE FRAMEWORK OF OPERATIONAL PROGRAMME.....	150
12.3	LIST OF PARTNERS INVOLVED IN PREPARATION OF PROGRAMME .....	151
<b>13.</b>	<b>ANNEXES TO OPERATIONAL PROGRAMME.....</b>	<b>153</b>

- 1. Strategy for the Operational Programme Research and Innovation contribution to the Union strategy for smart, sustainable and inclusive growth and the achievement of economic, social and territorial cohesion**
- 1.1 Strategy for the Operational Programme Research and Innovation contribution to the Union strategy for smart, sustainable and inclusive growth and to the achievement of economic, social and territorial cohesion**
- 1.1.1 Description of the programme's strategy Research and Innovation for contributing to the delivery of the Union strategy for smart, sustainable and inclusive growth and for achieving economic, social and territorial cohesion.**

The Operational Programme Research and Innovation (OP R&I) represents a joint programme document of the Ministry of Education, Science, Research and Sports of the Slovak Republic (MoESRS SR) and the Ministry of Economy of the Slovak Republic (MoE SR) for the granting of support from European Structural and Investment Funds (ESIF) during the programming period 2014–2020 in the area aimed to create a stable innovation-friendly environment for all relevant entities and to promote the efficiency and performance of the system of research, development and innovations as a basic pillar for reinforcing competitiveness, sustainable economic growth and employment.

The OP R&I is based on the priorities of the Europe 2020 strategy and on the main recommendations of the Small Business Act and the Entrepreneurship 2020 Action Plan.

In 2012, the total spending on R&D in the Slovak Republic (SR) constituted only 0.82%<sup>1</sup> of the GDP (EU28 2.06%, EU15 2.15% and V4 1.27%). By 2020, Slovakia plans to increase the share of private sources in the total R&D spending in line with the Europe 2020 Strategy, while preserving at least the current share of public sources in the total R&D spending, so that the proportion of public and private sources was 1:2 with minimum total R&D spending of 1.2% GDP<sup>2</sup>. One of the main tools to achieve this objective is the implementation of the OP R&I which aims to enhance the innovation activity and competitiveness of enterprises in order to increase their added value, stimulate growth and job creation, and improve performance in R&I, including quality of higher education and increased private investments in R&I.

The OP R&I actions are based on the European Commission's (EC) recommendations defined in the Position of the Commission Services on the development of the Partnership Agreement and programmes in SLOVAKIA for the period 2014-2020 (EC Position Paper). The proposed OP R&I actions aim to improve the situation in each area of the knowledge triangle – education, research and innovation<sup>3</sup>, which directly corresponds to the Council's country-specific recommendations<sup>4</sup> under which it is necessary to elaborate plans to support effective knowledge transfer and co-operation between academia, research and business and to improve the quality and relevance of the science base. Slovakia's business environment is characterised by frequent legislative changes<sup>5</sup> which, combined with missing systemic support measures create obstacles to a successful growth of enterprises, especially SMEs. In line with Country specific recommendations<sup>6</sup> OP R&I introduce measures to improve business environment including SMEs and will accept measures to fight corruption and will intensify the effort to improve the efficiency of public procurement. On implementation level of the OP R&I the introduction of the pre-commercial procurement tools and public procurement for support of innovative solutions is assumed.

The OP R&I focus, structure and contents of actions is directly based on an analysis of the needs and development potential, as well as expected results defined in the Partnership Agreement of the SR 2014–2020 (PA SR), and reflects the principles of state policies in the field of education, research, development and innovation, as contained in the National Reform Programme<sup>7</sup>.

The Slovak National Innovation System based on policies for education, research, development,

innovations and support of SMEs is one of the least developed within the European Union (EU) with regard to its performance, management and implementation of synergies, which implies the need for changes. Slovakia ranked 21<sup>st</sup> among moderate innovators in the assessment of the innovation performance of countries.<sup>8</sup>

The concept of the OP R&I is based on a changed approach to the management of listed state policies and a more efficient implementation of related measures and activities seeking to integrate and establish closer links between these policies and their implementation, representing for the first time a common programme document of ministries responsible for the implementation of state policies in the field of education, research and development, innovation and SME support in order to reach synergy effects between the respective areas of the innovation system. The OP R&I is the key implementation tool for the strategy **"Through Knowledge towards Prosperity – Research and Innovation Strategy for Smart Specialisation of the Slovak Republic (RIS3 SK)**<sup>9</sup>. The OP R&I is based on the strengths identified, and reflects not only the existing situation, but also the potential of the SR.

The main objective of the RIS3 SK is to “encourage a structural change in the Slovak economy towards growth based on increased innovation abilities and excellence in Research and Innovations with the aim to promote a sustainable increase in incomes, employment and quality of life”.<sup>10</sup> The OP R&I will contribute to this objective by supporting quality/excellent research as the principal condition for future high-tech innovation within a longer time horizon, experimental development with actual chances for the transfer of acquired knowledge to the building of a competitive business sector (especially SMEs) by supporting the introduction of innovation and active cooperation between enterprises, research and development centres and education. This should lead to the development of innovated and new products and services, technology and knowledge transfer into practice, innovation of processes and building networks for information sharing. Special attention will be dedicated to enterprises and to improving their relations within supply chains in the SR.

Slovakia needs to increase the performance of its economy by supporting the different elements of the national innovation system and its outputs. This was primarily supported through operational programmes implemented by the MoERDS SR<sup>11</sup> and the MoE SR<sup>12</sup> in the period 2007–2013.

### *Links between the OP R&I and RIS3 SK*

The intervention strategy of the OP R&I is fully based on the RIS3 SK, as the OP R&I is its principal implementation tool.<sup>13</sup> The definition of the basic lines of the intervention logics is also derived from successful activities, good practice and experience acquired during the programming period 2007–2013.

The OP R&I does not cover all activities of the RIS3 SK strategy, but only those which are in line with thematic focus of the OP. Other RIS3 SK activities will be implemented using other national instruments and funds.

Regarding global excellence, while taking into consideration local relevance for the purposes of smart specialisation, following areas of specialisation have been identified:

#### **Areas of economic specialisation:**

- Automotive and mechanical engineering industries
- Consumer electronics and electrical equipment
- ICT and Services

- Production and processing of iron and steel

#### **Prospective areas of specialisation:**

- Automation, Robotics and Digital Technology,
- Processing and increasing the value of light metals and their alloys,
- Production and processing of polymers and advanced chemical substances (including smart fertilizations
- Creative industry,
- Increasing the value of domestic raw material
- Progressive chemical technologies for production of modern fertilizers
- Support of the smart technologies in the field of raw materials processing in regions of their occurrence.

#### **Areas of specialisation from the point of view of available scientific and research capacities:**

- Research of materials and nanotechnology,
- Information and communications technology,
- Biomedicine and Biotechnology,
- Environment and agriculture,
- Sustainable energy<sup>14</sup>

These areas of specialisation are complemented by identified key societal priorities: employment of young people, social inclusion and marginalized groups, population aging and quality of life, protection and better use of natural resources, including reducing emissions and eco-innovation.

The RIS 3 SK part concerning support for RD&I will be implemented by means of the OP R&I (PA 1 and 2) through:

- support for actions contributing to the objectives of RIS 3 SK, whereas in case of horizontal measures for the development of an research and/or innovation system, actions that contribute to the accomplishment of the RIS 3 SK objectives will be supported preferentially;
- creation of measures and mutual coordination of interventions with the aim to ensure mutual linkages between different areas of specialisation.

In line with RIS 3 SK, OP R&I will support comprehensive solutions of research and innovative projects.

The RIS 3 SK part concerning SMEs will be implemented by means of the OP R&I (PA 3 and 4) through:

- priority support projects contributing to the implementation of innovations in line with the RIS 3 SK objectives;
- creation of measures and mutual coordination of interventions with the aim to ensure mutual linkages between different areas of specialisation.

#### **1.1.1.1 Main areas of needs identified to deliver the investment strategy of the OP R&I**

The identification of needs for the OP R&I investment strategy is based on the synthesis of relevant documents<sup>15</sup> and internationally comparable statistics<sup>16</sup>, including main shortcomings of the RD&I system in the SR identified in these documents. **The relevant parts of the RIS3 SK<sup>17</sup> and of the PA SR constitute the basis for the identification of the main areas of needs.**



## *Financing of research, development and innovation*

The financing of R&I in the SR is characterised, besides the overall low expenditure<sup>18</sup>, by a low amount of private investments. In 2012, the spending on research and innovation constituted only 0.82% GDP. For comparison, the EU average was 2.06% and that of V4 countries 1.27%. Overall, the share of industry in the financial stimulation of R&I declined from 54% in 2005 to 37.7%, which does not correspond with the trend in the European Union to achieve 3.2 share of private sources in the total funding of R&I of particular Member State. The total value of corporate investments into R&I represented only 0.34% of GDP in 2012.<sup>19</sup> State investments constitute 41.6% and investments from foreign sources 18.7%. As for implementation sectors, most expenditures are reported in the business sector (0.34% of GDP); investments in the government sector reached 0.2% of GDP, and in the university sector 0.28% of GDP. The state budget allocation in R&D reached 1.1% of the total expenditures in 2012 (an increase by only 0.36 percentage points compared to 2005). Slovakia is behind the Czech Republic, occupying the second place among V4 countries. From the geographical point of view, the Bratislava Region invests most in research and development (1.28% of GDP), and the Western Slovak Region invests least (0.36% of GDP). Compared to 2005, the amount of per capita investments in research and development significantly increased compared to 2005: from USD 81 in 2005 to USD 212 in 2012. In spite of that the SR largely lags behind other innovation-intensive countries and also its neighbouring countries. Investments in basic research constitute 0.3% of GDP, which is 36% of all investment. Many OECD countries do not monitor this indicator. Slovakia is in the middle among countries monitoring this indicator; hence, the problem is not high expenditure in basic research, but small overall expenditure. Compared to 2005, the share of the private sector's expenditures financed by the state declined by almost 20%, and currently attains 6.78%, which is approximately the average level of the EU28.

With respect to innovation funding in the SR, venture capital has been scarcely used for the past years due to poor competitiveness of this instrument and its problematic implementation in practice. In 2010, the amount of invested venture capital reached 0.03% of GDP, while venture capital investments within the EU are around six-times higher (0.2%).

By 2020, pursuant to the Europe 2020 strategy, Slovakia plans to increase the share of total expenditures on R&I to at least 1.2% GDP so that the proportion between public and private funds is 1:2.<sup>20</sup> In order to meet this target, it will be necessary, by means of OP R&I actions, to support structural changes in R&I by enhancing cooperation between research centres and businesses, to consolidate and expand the R&I infrastructure through smart specialisation, use indirect motivational tools to promote the business sector, and support better remuneration of work in the field of R&I in Slovakia.

## *R&I infrastructure and cooperation between research institutions and businesses*

No system of support of the research and innovation infrastructure existed in Slovakia before 2007 comparable to other EU countries. Significant changes occurred during the programming period 2007–2013, when research, development and innovation capacities were built mainly through investments from EU structural funds – OP Research and Development<sup>21</sup> in the field of R&D centres and with the participation of all types of organisations (state, public, business and non-profit ones), and OP Competitiveness and Economic Growth providing support to the innovation infrastructure in industry.<sup>22</sup> Targeted actions performed during the programming period 2007–2013 mitigated the technology gap. In spite of that, this period should be considered only

as the first stage of eliminating this problem. It is crucial to follow up on these actions in the programming period 2014–2020. Continued support within the Bratislava Region (BR) is also an important aspect of support to R&I activities).<sup>23</sup>

As far as public R&I infrastructure is concerned, it will be necessary to raise the performance of the state and public sector through the consolidation and integration of the basis formed with the support from the OP Research and Development in the period 2007–2013. It will be important to avoid fragmentation with regard to the number of projects and their content focus and duplicity. It will also be necessary to ensure that the research centres created thanks to the support provided during 2007–2013 are actively involved in the research activities under the programming period 2014–2020 both in the SR and within the European Research Area. Last but not least, it will be necessary to support long-term strategic research in the RIS3 SK priority areas.

The specific areas of concern that prevent achieving higher effectiveness of assistance are mainly the setting up of the current rules that prevent the use of project results for commercial purposes, as well as the use of public R&D infrastructure for practice, which will be addressed by a suitable adjustment of these rules. A more complex systemic approach to corporate innovation was absent in the field of innovation support<sup>24</sup>, which will have to be accelerated also through the OP R&I.

Another key infrastructure need is the support of various forms of inter-sectoral partnerships/clustering/technology platforms. The role of clusters has long been undervalued in the economic development of the SR. Several cluster organisations were created in the past by means of bottom-up activities without any systemic support, thanks to regional self-governments in many cases. In order to achieve synergies in innovation and economic activities, using the potential of research institutions with positive impacts on the economic growth and on increasing employment, it will be necessary to support clusters as such and cluster organisations, as well as their activities leading to innovation, including deeper involvement of R&I organisations in their activities.

The SR achieves under-average results measured by means of a bibliometric analysis also with regard to publication outputs, which is proven by the relative small number of professional scientific publications and an under-average citation index. The performance of Slovak research institutions according to the SCIMAGO Institutions Ranking World Report 2012 can be considered unsatisfactory. This assessment compares the institutions which published at least 100 scientific documents of any type in the Scopus database by Elsevier<sup>25</sup>. Only six Slovak institutions are listed in this report: the Slovak Academy of Sciences as a whole (444th place), and five universities – the Comenius University in Bratislava (789th place), the Slovak University of Technology in Bratislava (1026th place), the Technical University in Košice (1693th place), P. J. Šafárik University in Košice (1695th place), and University of Žilina (2256th place).

One of the reasons why Slovakia has a low number of patents is the fact that enterprises invest little R&D and prefer buying ready-made technology and knowledge.<sup>26</sup> The indicator of revenues from the sale of licenses abroad reaches minimum levels in Slovakia. Revenues from the sale of licenses for patents are directly related to the low patent "production" of domestic research and development. In 2011, 4.35 patent applications per 1 million inhabitants were filed in the SR, while the EU-28 average was 106. In Slovenia, the number of patent applications per million of inhabitants was almost 15 times higher (64.44%) than in Slovakia.<sup>27</sup> The SR largely lags behind the EU average and its neighbouring countries also in the patenting of triadic patent families<sup>28</sup>, reporting an average of only three such patents per year. The situation is similar with respect to the number of patent applications filed under the PCT. In 2011, only about 50 such applications were lodged from the SR, and only 37 patent applications were lodged to the EPO in 2011. Up to 30 of them were the result of cooperation with entities outside the SR.

It is necessary to increase the use of intellectual property protection instruments and to enhance the technology transfer processes under specific activities focused on both the R&D state and public sector and the business sector.

The OP R&I will support activities promoting the creation of a functional system chain – from excellent research (including support of excellent research as a prerequisite for future high-tech innovation in a longer term) up to innovation in line with the RIS3 SK. Quality R&D is the fundamental condition for technically advanced innovation. It is also necessary to continue developing quality RD&I infrastructure, preparing quality human resources, and to create an attractive and motivational environment, including adequate technical facilities, for the third level of education and subsequent work of young scientists in RD&I organisations.

### *R&I capacities*

Only 0.78% of the total number of workers in Slovakia work in the field of R&I<sup>29</sup> (in FTE), though, according to the OECD report, the human potential in the field of research and technological development is considered above-average compared to the average of OECD countries.<sup>30</sup> Yet, the SR largely lags behind as to the proportion of young scientists and researchers in the categories of up to 35 years and 35–44 years.<sup>31</sup> The number of researchers from the total number of workers (in FTE) is 0.66%.

As for research and development capacities, the structure of higher education (university) students is unfavourable, as over 50% of all students are students of humanities. Students of natural and technical sciences constitute only around 30% of all students, though up to 1.79% from the population of 20-29 year olds completes university studies in the field of science and technology. The situation is better with regard to the proportion of doctoral students of scientific and technical disciplines in the total population of 20-29 year olds – 0.55%. The overall proportion of the population with completed university education increased to 26.3% of the total population of 30-34 year olds. This proportion is the second highest within V4 countries (right after Poland).

As for scientific and technical disciplines, most researchers (in FTE) work in technical sciences (6,563) and least in agricultural sciences (1,273). Most scientists (in FTE) work in the higher education sector (10,124), government sector (4,168) and in the business sector (3,790). Most students per scientist are recorded in humanities (17.31), and least in natural sciences (2.11). Most researchers work in the BR, where their share in total employment is 2.53%.

The SR is one of the EU countries with the highest proportion of women in R&D with over 40% in the long term (42.3% in 2011).

The researcher's career is not perceived as an attractive job in Slovakia. In addition to creating adequate technical working conditions through necessary investment in technical infrastructure and consolidation of capacities aimed to optimise the use of existing infrastructure, supported in the programming period 2007–2013, it is necessary to present the researcher's career as an attractive job to the young generation through targeted R&D popularisation and promotion actions. With regard to quality projects supported from the OP R&I, emphasis will be placed on adequate remuneration of mainly top scientists and also young researchers who will participate in the implementation of projects. This refers both to the existing RD&I potential and the attracting of researchers from abroad. The current average hourly earnings for scientific and technical activities in Slovakia (EUR 6.42)<sup>32</sup> does not create adequate incentives compared to certain competing areas (ICT services, finance) or conditions provided to top professionals by competing foreign companies.

## *Participation of the SR in the European Research Area*

When assessing the performance parameters of the RD&I in Slovakia, it is necessary to mention the low extent of internationalisation. The problem is small participation on the key programmes and initiatives of the European Research Area. Slovakia records a small number of participations in projects representing top international quality. Under the 7th EU Framework Programme on Research and Development<sup>33</sup>, the total number of participations in project applications reached 2,590, which resulted in 470 Slovak participations in 376 projects. The total contracted EC contribution is EUR 73.52 million, which places Slovakia on the 25th place among EU countries from the point of view of per capita contribution. The situation is even worse with regard to GDP, where Slovakia occupies the 27th place. The amount of EC contribution per participation is relatively small in the SR (EUR 156,429), which is due not only to the role of Slovak organisations in projects (Slovakia coordinated only 36 projects, six of which were research projects), but also to the salaries of scientists which represent a major part of project budgets. The negative balance of Slovakia's participation in the 7th EU Framework Programme refers to all types of research institutions from the state, public and also private sectors. Relatively small is the involvement in joint initiatives within the ERA. The SR joined a total of 13 initiatives out of 86 ERA-NETs, and in up to eight of them a research organisation acts as a participant, and not a grant agency or a ministry. The SR is represented in only around 36 European Technology Platforms. As for Joint Programming, the SR participates in three out of ten such initiatives.<sup>34</sup>

The most successful organisations are the Slovak Academy of Sciences, the University of Technology in Košice, the Comenius University in Bratislava, and Ardaco, s.r.o.

The support of excellence in research as the basic prerequisite for future high-tech innovation in a longer term is the horizontal priority of the RIS3 SK. Projects within the ERA represents the best European and world quality. Slovakia needs to increase the number of participations in these types of projects with regard to all types of institutions by applying the principles of synergy and complementarity between the OP R&I and ERA and other relevant international programmes, strategies and initiatives.<sup>35</sup>

## *Small and medium enterprises*

The condition of SMEs is an important parameter of the innovation performance of a country, as the Slovak economy is characterised by a predominance of SMEs<sup>36</sup>. They have a share of over 50% in the creation of added value and in incomes and profits. Micro-enterprises have a predominant position among SMEs (entrepreneurs and undertakings employing less than 10 employees and with a turnover under EUR 2 million/year). Micro-enterprises make up 96% of all undertakings in the SR. There are only 14,339 enterprises in the SR with over ten employees and an annual turnover over EUR 2 million.<sup>37</sup> This SME structure combined with the current trend of SME fall into the category of micro-enterprises or of their disappearance<sup>38</sup> is therefore a big obstacle to a major development of innovation in this category of enterprises.

According to the FlashEurobarometer survey of 2012, business represents a career choice for 33% inhabitants of the SR, which is under the EU average. It is necessary to adopt measures to increase motivation for running business and for the creation and development of innovative start-ups. Slovakia has long recorded a high percentage of disappearance of undertakings; according to Eurostat data, the survival rate of enterprises after three years of their establishment reached 41.7% (EU average: 56.1%), due to which the SR ended up at the penultimate place within the EU.

The systemic competitiveness of the SME sector in the SR was mainly due to the following factors:

- Loss of the innovation potential of SMEs as a result of poor cooperation, insufficient development of skills, and poor adoption/introduction of innovation and new trends;
- Limited possibilities of SME funding, especially of those smallest in size (micro-enterprises and small enterprises) due to the conservative approach of traditional commercial providers (banks) and an absence of alternative financing options;
- Low motivation of the population to enter business and the prevalent perception of entrepreneurship as a necessity instead an opportunity;
- Missing motivation/courage of SMEs to expand their business activities beyond conventional products and services;
- Decline in the economic activity of a large number of SMEs as a result of the global economic crisis and obstacles in the business environment, and their fall into the category of micro-enterprises.

To overcome these barriers and address market failures with respect to SMEs, it is necessary to ensure systemic support throughout the life-cycle of undertakings. The practical experience from programmes implemented in the past suggests that SMEs need, in particular during the initial stages of their existence when they do not have sufficient practical experience, comprehensive support combining access to funds with administrative support upon the launch of business activities, and with counselling and expert consultations provided during longer periods of time. Such measures can eliminate the current high rate of disappearance of enterprises and increase the survival rate of new undertakings.

It is also necessary to stimulate the growth of competitiveness in the environment of existing SMEs in order to promote the creation of innovative products and services and implement new business models. The generally perceived need concerning funding should be complemented with the need for the development of skills and competencies, which arises also from the evaluation of the Small Business Act. The measures should focus on a combination of financial support, expert counselling, and on the creation of conditions for the introduction of alternative forms of entrepreneurship and social innovation. It is necessary to focus on generating SMEs with a growth potential which can cooperate with scientific and research institutions, use the results of the R&D process in business practice, integrate into value chains, establish themselves at higher levels of the supply structures of large international corporations, and to adapt to the conditions and challenges of the global economy (internationalisation). These measures will support the growth of SME competitiveness and eliminate the current trend of their falling into the category of micro-enterprises.

### *Territorial aspects of RD&I and SMEs*

Despite the statistically high GDP per capita, the Bratislava Region faces the negative consequences of long-term under-funding of education, research, development and innovation. The educational, R&D and innovation activities in the BR are linked to the economic development of the whole country, and thematically relate to the priority areas of the RIS3 SK. Scientific teams from research institutions in Bratislava cooperate with the business practice, and a large part of them are established outside the region and are of great importance for the Slovak economy as such – whether it is automotive industry, mechanical engineering, energy or others.

During the programming period 2007–2013 the infrastructure started to be restored, and the creation of various types of research centres was supported (centres of excellence, industrial research and development centres, centres of competence, university science parks, research centres of national importance). During the period 2013–2015, fundamental projects will be implemented, launching the building of missing applied research and development infrastructure,

though it still cannot be explicitly declared that the Bratislava Region represents an area with a fully functional eco-system and that it is a relevant partner to the neighbouring regions (Brno, Vienna, etc.). It is therefore necessary to focus on its further development and enhance more intensive links to the business sector.

The allocation from the ERDF for the Bratislava Region during the period 2007–2013 (OP R&D) represented an amount of EUR 326.4 mil. **The total amount, including national co-financing, reached EUR 384 million. The absorption capacity of research organisations in Bratislava is much higher than this allocation. Only around ¼ of all submitted projects was approved, and the respective calls raised big interest** in spite of the fact that many of them defined relatively strict qualitative criteria concerning eligibility.

The educational infrastructure of higher education institutions which forms an inseparable part of the research and innovation infrastructure in practice could not be supported in the current programming period at all, leading to almost an emergency condition of the main faculties of the Comenius University in Bratislava and the Slovak University of Technology in Bratislava, especially in Mlynská dolina. Inadequate spaces are one of the main factors for the departure of students, university researchers and pedagogues abroad – increasingly also to the Czech Republic. **With regard to the education infrastructure and faculty buildings, the Bratislava Region finds itself in a worse situation compared to other Slovak regions.**

During the programming period 2014–2020, it will be necessary to consolidate the supported centres after their quality assessment and integrate them into bigger inter-disciplinary units. As for the BR, support will be granted to projects concerning unique themes that cannot be addressed outside of the Bratislava Region or without the involvement of research teams from the Bratislava Region.

The Bratislava Region is characterised by high business activity, and the concentration of research and development capacities creates suitable conditions for the creation of businesses with a high technological level and knowledge-intensive services<sup>39</sup>. In this regard, the Bratislava Region is a suitable environment for the testing of innovative business concepts and the transfer of results of the research and development process into commercial practice. Such outputs can be subsequently transferred to other Slovak regions via corporate networks, supplier/customer chains, inter-regional contractual cooperation, knowledge transfer, and in other ways.

A significant part of SMEs is concentrated in the Bratislava Region with over 1/5 of the total number of SMEs and up to 1/3 of micro-businesses. More than a half of these enterprises within the region provide business services (53%), followed by transport and information (39.8%), trade (29.5%), accommodation and catering (29.4%), and other services (27.6%). The BR concentrates undertakings with increased generation of added value. The BR runs several activities to promote bilateral and multilateral cooperation of SMEs with adjacent regions and countries within the area of Bratislava – Vienna – Győr – Brno (CENTROPE project). This region also has a high absorption potential for the application of financial instruments.<sup>40</sup>

A systemic support of enterprises in the Bratislava Region is therefore of crucial importance for the development of the innovation potential of this region as a key economic centre of the country and, hence, for ensuring spill-over effects, i.e. transfer/replication of innovation, know-how and of the results of applied research and development produced by institutions and firms within the region to other regions of Slovakia. To ensure effective cooperation between enterprises (especially SMEs) and research and development institutions and to prepare contractual conditions for its expansion to other parts of the SR, it will be crucial to include undertakings (especially SMEs) with their seat in the Bratislava Region into the support framework. With a view to the planned use of innovative financial instruments for the support of SMEs, without including the Bratislava Region in this scheme their economic feasibility under commercial conditions would be very problematic<sup>41</sup>.



Enterprises in the BR show very poor knowledge about progressive approaches to increasing their own innovation performance. It is therefore targeted support that can bring significant progress in perceiving the need for innovation activities of enterprises.

Absence of finances for the BR would represent a big obstacle to the overall economic development of the Slovak Republic with a negative impact on the introduction of knowledge economy elements and on the implementation of international development initiatives, such as the Danube Strategy<sup>42</sup>.

### *Cross-cutting Issues and Social Challenges*

The economic development in Slovakia has recently been characterised by several economic fluctuations. This implies the need to cope with the current social challenges (such as migration, climate changes, population ageing), including reduced employment and the persisting low motivation of socially disadvantaged groups to launch business. It is therefore necessary to develop social innovations with the aim to reduce the risk of poverty, which is perceived very intensively in Slovakia (as proven by the recent Eurobarometer survey<sup>43</sup>). In the field of economic development, the measures address the social needs of socially disadvantaged groups which are not covered by the market, and support should also be provided to the economic activities which create links between social and economic benefits from the point of view of the society's development. These activities contribute to the implementation of the measure Promoting an open and inclusive society under Strategic objective 3 of the RIS3 SK strategy.

The environmental cross-cutting issues, addressed by the OP R&I in compliance with the PA SK and RIS3 SK, include green economy<sup>44</sup>, low-carbon technologies<sup>45</sup> and eco-innovation<sup>46</sup>.

The above-mentioned environmental cross-cutting issues contribute to the implementation of the measure Promoting a Research and Innovation in environmental areas, including climate change adaptation<sup>47</sup> under Strategic Objective 3 of the RIS3 SK strategy.

#### **1.1.1.2 Investment strategy of the Operational Programme Research and Innovation**

The OP R&I will be implemented by means of four thematic priority axes and one priority axis focused on technical assistance, and will contribute to the fulfilment of thematic objective 1 Strengthening research, technological development and innovation and thematic objective 3 Enhancing the competitiveness of SMEs pursuant to Art. 9 of the CPR. The selection of thematic objectives for the OP R&I will result in accomplishing the objectives of the funding priority *"Innovation-friendly business environments"*, as defined in the EC Position Paper<sup>48</sup>, and reflects the main needs of the SR identified in the field of research, development, innovations and increased competitiveness of SMEs.

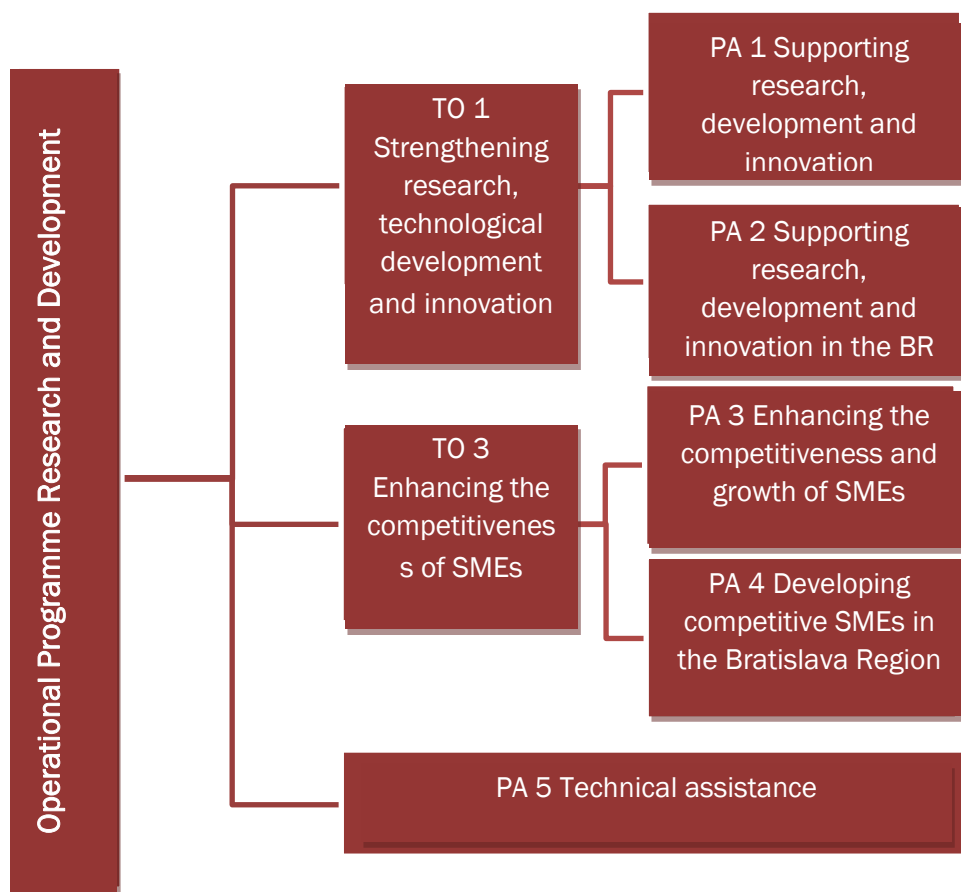


Fig. 1 OP R&I structure by thematic objectives and priority axes

### Thematic objective 1 Strengthening research, technological development and innovation

Thematic objective 1 will be achieved by means of actions performed under Priority Axis 1 “Supporting research, development and innovation” and Priority Axis 2 “Supporting research, development and innovation in the Bratislava Region”.

Both priority axes combine actions aimed to support the innovation, research and development capabilities with an emphasis on increasing the competitiveness of the business sector, and also represent part of the implementation of RIS3 SK measures and activities.

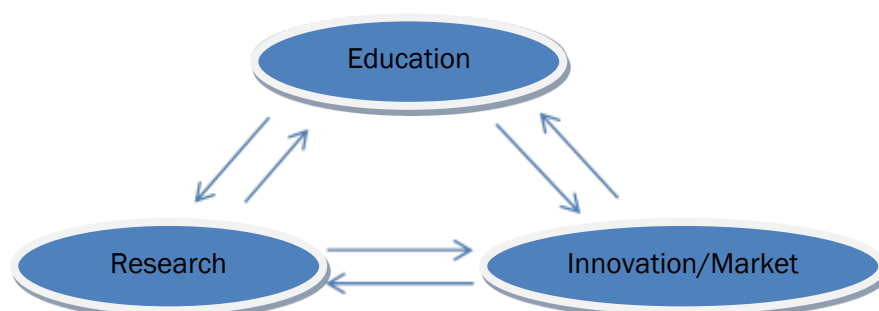


Fig. 2 Intervention logic under PA 1 and PA 2



Actions suitable for being financed from the ESIF were proposed also on the basis of good practice and experience from the programming period 2007–2013 in order to ensure continuity of selected activities that had an impact on economic growth and employment and comply with the RIS3 SK focus<sup>49</sup>.

Further to the identified needs and defined objectives, the implemented activities will substantially strengthen and improve the quality of each element of the knowledge triangle. The high level of education<sup>50</sup>, the development of new skills and the generation of new knowledge are the key elements for further development of research and for stimulating innovation. Research, though, has an irreplaceable role in increasing the level of education and in generating new knowledge as one of the main sources of innovation. Innovation generates further research, and innovation activities and the knowing of the needs of the industry and development have a positive impact on increasing the level of education and on the development of skills.<sup>51</sup>

Under Priority Axes 1 and 2, mutual links will be strengthened not only at the level of specific individual projects, but also at the level of the system and systemic measures with an impact on the entire territory of the Slovak Republic, aiming to increase the performance of the overall system and its effective functioning, and to extend its links to the industrial and social practice in the area of research, development and innovation.

The systemic measures are also expected to lead to a radical change in the attitudes of the general public and of potential customers towards research institutions and researchers and, last but not least, to qualitative changes in the functioning of research institutions as such (Slovak Academy of Sciences, universities and R&D institutions) so that to be able, through generated knowledge and new technology, to provide high-quality services stimulating the development of the region in which they are present. As for the support of research infrastructure, an integrated approach will be supported, inter-linking existing smaller research centres into larger integrated inter-disciplinary units.

The RD&I system in Slovakia will require even more high-quality human resources for its better functioning compared to the present. With regard to university education for the purposes of research and innovation, bigger emphasis will be placed on interlinking quality education with excellent science (crucial condition for future high-tech innovation within a longer time horizon), and targeted support will be provided to technology/research-oriented study programmes thematically linked to the RIS3 SK priority areas, based on the needs of the industry and related to activities under long-term strategic research programmes<sup>52</sup>. In order to ensure qualified and quality human resources in a short term, it will be crucial to attract foreign researchers and to stimulate the return of Slovak researchers who left abroad seeking new job opportunities through scholarships and grant schemes, to actively propagate them and to provide support for the integration of such researchers in research organisations. Slovakia still lags behind other European countries with respect to transparent recruitment under European standards on the basis of the principles of the European Chart and the Code of Conduct for the recruitment of researchers and in the publishing of vacancies in the field of research on the EURAXESS Jobs European portal of which Slovakia is a member.

The basic aim of support during the programming period 2014–2020 will be to consolidate and modernise the use of existing infrastructures and to promote the activities of excellent interdisciplinary research teams to achieve maximum added effect for the society and for the economic practice. Once the projects under the programming period 2007–2013 are completed, international evaluations of supported projects and research centres will be conducted (or preliminary evaluations in the case of projects the activities of which need to continue without interruption), placing emphasis on the quality/content of implemented research and development activities. In the case of a positive evaluation, it will be possible to provide further support. At the same, further support will only be provided to those research centres which will receive positive evaluation and will thematically fall under one or more RIS3 SK priority areas. This approach will also enable the promotion of new centres in the key areas of RIS3 SK. The condition for such support will be the preparation of a quality research and development plan, including business plan of the research centre with specific outputs for practice. As for activities supported under

Priority Axis 1, support will also be provided to the research activities of research-intensive firms within collaborative partnerships with research institutions and SMEs.

As the identified needs suggest, the Slovak Republic is insufficiently involved in the activities of the European Research Area in spite of meeting the prerequisites for greater participation in framework programmes. It is necessary to implement key actions as soon as possible, especially with regard to Horizon 2020 and ESIF. Specifically, it is the need to significantly reduce the administrative burden, enabling researchers to better use their capacity in their participation in international projects. Research organisations which were successful in the initial FP7 calls in 2007 and were awarded grants under the OP Research and Development in the subsequent years did not join next FP7 calls, or were engaged to a smaller degree due to their administrative workload. The second measure is to create complementary and synergy schemes between Horizon 2020, national resources and structural funds in order to mobilise researchers within the research centres supported during the programming period 2007–2013 to engage in international cooperation.

With regard to financing, Slovakia is a country with the lowest expenditures in research and innovation. In terms of financial resources, public spending is prevailing, used primarily for basic research without being tied to the economic performance of the business environment and of the country. The share of private expenditures in research and innovation has long been around 0.25% of GDP, while advanced economies in terms of innovation reach values above 2%.

One of the reasons is the fact that multinational corporations running their activities in Slovakia implement research and development activities mainly in their home countries. Big foreign investors attracted to the SR many supplier companies as part of their value chain. Only a few national companies reached the TIER 1 level within global value chains thanks to their high added value. Businesses at low value chain levels are limited by their customers in their decision-making and planning, which leads to a reduced motivation to make their own innovation. The stimulation of research, development and innovation is one of the possibilities of increasing the added value and of getting to higher levels of the value chain. The implementation of research and development activities is costly, which constitutes a barrier mainly in the under-capitalised segment of micro- and small enterprises. Moreover, this segment often lacks sufficient professional and personal capacities, and considers research to be a costly process with uncertain results. Increased investments into research, development and innovation are an important prerequisite for the growth of competitiveness of the business sector. It is, however, necessary to ensure effective use of costs for the development of innovation capacities. At present, Slovak companies prefer purchasing ready-made technologies, external knowledge or external research and development to spending money on their own research and development. Given the lower level of technological facilities compared to developed countries, it is natural that businesses spend their money mainly by purchasing modern technologies. To ensure sustainable competitiveness of the business sector based on the support of research, development and innovation, it is necessary to increase the promotion of complex activities where investment is an impulse to enhance cooperation with research institutions, develop own research and innovation capacities, produce technological and non-technological innovation, and ensure intellectual property rights.

Regarding the innovation performance of the SR, the situation is unfavourable mainly in the field of intellectual property rights, where Slovakia lags behind the EU average, the neighbouring economies and European innovation leaders, especially with respect to patents. Slovak firms prefer purchasing ready-made technology, external knowledge and external research and development (0.65% of the turnover of Slovak companies vs. 0.56% of the turnover of EU companies) to corporate spending on their own research and development (0.25% in the SR vs. 1.25% in the EU). The indicator of incomes from sale of licences abroad shows the worst results regarding economic effects of innovations, with Slovakia reaching minimum values. The incomes from the sale of patent licences are directly related to the low patent “production” of domestic research and development. Activities should therefore focus not only on the generation, but also on the protection and commercialisation of intellectual property.

The development of clusters has a high potential to contribute to strengthening cooperation between companies and R&D institutions and also serves as an effective tool for enhancing business competitiveness. Despite the high potential identified<sup>53</sup> and the need to develop entrepreneurship at all management and cooperation levels, the issue of clusters and cooperation of entities associated in clusters is currently underdeveloped. The above is demonstrated by the fact that only 14 clusters have been established so far in the SR. Their activities are aimed at promoting cross-sectorial partnerships between businesses, enhancing the skills and capacities of employees through exchange of experience in the use of new technologies, processes and services field<sup>54</sup>. For these reasons, it seems to be necessary to intensify application of measures that will result in increasing cooperation among cluster members, including regional entities, streamlining cooperation between clusters, strengthening their position in the RD&I system domestically as well as internationally in order to increase the competitiveness of Slovak industry. Most attention, besides the general development of clusters and its potential, should be paid to the development of high-tech clusters, clusters operating in less developed regions and internationally established clusters.

The innovation performance is poor also due to the lack of knowledge about global trends, which is reflected in improperly defined strategic objectives and strategic markets for entrepreneurs. The development of enterprises, especially SMEs, is limited by low motivation to run business based on knowledge outputs, by a small potential of own RD&I capacities, and by low awareness about current calls, projects and possibilities of domestic or international cooperation.

The activities under both priority axes aim to enhance the competitiveness of the business sector through increased corporate expenditures on applied research, development and innovation, in particular by means of actions defined in RIS3 SK. The priority includes own research and development, transfer of technology with high added value, and implementation of innovation. Support will be granted to innovation of both technological and non-technological nature, i.e. innovation of products, processes, organisational, analytical and information innovations, as well as marketing, social and environmental innovations. These activities will contribute to the development of cooperation between the different actors of the innovation process. Emphasis will also be placed on supporting innovative technical solutions in line with the Strategic energy technology plan (SET plan), which included the preparation of renewable energy technology with a high competitiveness rate among the key challenges in line with the RIS 3 SK, which identified the sustainable energy sector and energy as one of the areas of specialisation with respect to available science and research capacities.

#### ***Priority axis 1 Supporting research, development and innovation***

The actions under Priority Axis 1 will be implemented within a less developed region, addressing the areas of needs in order to improve the performance of the RD&I system, increase the competitiveness of Slovak research teams, and stimulate the interest of businesses in investing in RD&I. The planned actions under this priority axis will be implemented by means of the following investment priorities and specific objectives:

## **PRIORITY AXIS 1 Supporting research, development and innovation**

**IP 1.1 Enhancing research and innovation (R&I) infrastructure and capacities to develop R&I excellence, and promoting centres of competence, in particular those of European interest**

**SO 1.1.1** Increasing the R&D system performance through horizontal support of technology transfer and ICT

**SO 1.1.2** Promoting the participation of the SR in international cooperation projects

**SO 1.1.3** Enhancing research activity through better coordination and consolidation of the R&D potential of research institutions

**IP 1.2 Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector...**

**SO 1.2.1** Increasing private investments through cooperation between research institutions and the business sector

**SO 1.2.2** Enhancing research, development and innovation capacities in industry and services

## **Priority axis 2 Supporting research, development and innovation in Bratislava region**

The actions under **Priority Axis 2** are based on the existing infrastructure, research institutions and their human capacities in the BR, and constitute the key capacities for the RIS3 SK implementation in several areas. It is necessary to continue in the funding of R&D institutions in the Bratislava Region due to the unique impacts of the support of the Bratislava Region on other Slovak regions beyond Bratislava. Education, research, development and the support of innovation activities within the SR are conducted in close relation with regions outside of Bratislava.

The actions under Priority Axis 2 aim to reinforce the research, development, innovation and business capacities in industry and services in Bratislava, to consolidate and integrate the R&D capacities within research institutions (state, public, non-profit) and industries supported in the programming period 2007-2013, while taking into account the key importance of the BR for further development of these capacities mainly in relation to neighbouring countries, and to enhance the participation of research institutions in selected types of international projects. The actions under Priority Axis 2 seek to address specific challenges of the BR by means of the following investment priorities and specific objectives:

## **PRIORITY AXIS 2 Supporting research, development and innovation in the Bratislava Region**

**IP 2.1 Enhancing research and innovation (R&I) infrastructure and capacities to develop R&I excellence, and promoting centres of competence, in particular those of European interest**

**SO 2.1.1** Enhancing the research activity of the Bratislava Region through revitalisation and fostering of research, education, innovation, and business capacities of research institutions in Bratislava

**IP 2.2 Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector...**

**SO 2.2.1** Increasing private investments by building centres of competence of European importance in Bratislava

**SO 2.2.2** Enhancing research, development and innovation capacities in industry and services in the Bratislava Region

Priority Axis 2 will be financed from the 3% transfer of the SF allocation between categories of regions at the national level under Art. 93 of the General Regulation. Without such procedure, it would not be possible to fully implement the RIS3 SK.

Priority Axes 1 and 2 will use the possibility of a 15% allocation outside of the eligible territory, yet within the EU 15% under Art. 70 of the General Regulation for each specific objective so that the

operation is beneficial for the programming territory. Without this procedure it would not be possible to implement the RIS3 SK in full extent.

### Thematic objective 3 *Enhancing competitiveness of SME's*

**Thematic objective 3** will be ensured in Slovakia through actions under Priority Axis 3 „*Enhancing the competitiveness and growth of SMEs*“ and Priority Axis 4 „*Developing competitive SMEs in the Bratislava Region*“.

According to the Commission's Position Paper on the preparation of the Partnership Agreement and operational programmes in Slovakia for the period 2014–2020, the support of the business sector is on the list of five principal funding priorities. This priority highlights the support of the innovation ability and competitiveness of SMEs with the aim to increase the added value and stimulate growth and job creation, where SMEs are the main source of job creation. Approximately 3.25 million of jobs have been lost as a result of the economic crisis and related bankruptcies. According to the Statistical office of the SR (SO SR) data, the overall employment in SMEs in Slovakia in the period 2008–2012 declined by 46,000 jobs. The year 2012 saw a year-to-year reduction in the number of SMEs for the first time in the history of the SR. It is therefore necessary to stimulate the establishment and development of new enterprises.

The assessment of the Slovak Republic under the Small Business Act suggests that entrepreneurship is not perceived as a preferred alternative to gainful activities in the country. Although paid employment is preferred to running business also at EU level, the overall attitude to entrepreneurship in the EU is much better than in Slovakia. While only 26% of the population of Slovakia would choose running a business (as a career path), the EU average is 45%<sup>55</sup>. Moreover, only 21.7% of the population thinks it is possible at all (it is worth) to start a business. This is due to various existing obstacles, such as lack of financial resources, improper situation for starting a business, lack of assistance for implementing a business idea and for starting a business, etc. Such assessment also indicates a worse position of Slovakia against the EU average in spite of better SME export and import results compared to the EU average. This situation is caused by a missing stable and simple regulatory framework and high administrative demands. It is therefore necessary to develop interconnected measures to help SMEs both in the planning of foreign trade activities, and in the execution of planned actions needed to establish themselves in foreign markets (for example, upon procedures required by foreign administrative authorities).

Slovakia has long reported a high percentage of termination of enterprises, which is one of the highest within the EU (3<sup>rd</sup> place), and is also one of countries with the smallest survival rate of newly created entities after two years from their establishment (5<sup>th</sup> place)<sup>56</sup>. A significantly smaller proportion of women is involved in entrepreneurship (23<sup>rd</sup> place from among EU countries)<sup>57</sup>, and only a small number of representatives of disadvantaged (marginalised) groups in society. The deterioration of business conditions, insufficient preparation, and the lack of support tools discourage many young people, especially school graduates, from choosing the business career. The measure proposed to eliminate these problems seeks to create business centres aimed to support mainly new and as well existing SMEs. Such centres will provide comprehensive support activities, including incubation services. They will cooperate with partners from the academic sphere, using the existing infrastructure (such as scientific and technical parks, universities, the SAS, and research organisations). The aim is to create synergies between the business, academic and R&D sectors for the purposes of systemic SMES support. The centres will be run all over Slovak regions in partnership with regional institutions (e.g. regional self-governments, etc.) as part of the one-stop-shop concept within an inter-linked structure. This concept represents a more complex and economically sustainable model for providing systematic support to new and existing entrepreneurs.

The system of the building of incubators will be based on a single approved concept which will take into account the needs, regional specificities, as well as sectoral focus of the future national network of incubators in all areas. The preparation of this concept will form a part of the activity Business environment monitoring applying the „Think Small First“ principle under specific objective 3.3.1.

Particular attention will be paid to the creative industry area<sup>58</sup>, in which high potential for economic growth has been identified<sup>59</sup>.

In 2010, a total of 20,171 enterprises run their business in the field of creative industries, which represents 3.8% of the total number of enterprises in Slovakia in the given year. The largest category as to the number of enterprises in creative industries is Advertising and marketing (36.3% share). This category is followed by Publishing (17.0% share), and IT, software and computing services (16.9% share), Movies, TV, video, radio and photography (12.6% share), Architecture (9.2% share), Music, scenic and visual art (5.3% share), and Design and fashion design (2.7%)<sup>60</sup>.

The EU Single Market is an environment that enables SMEs' access to 500 million consumers. This market, however, is highly saturated and is characterised by strong competition. The growing globalisation and economic trends in the developing regions outside the EU offers many opportunities for Slovak SMEs to develop their business activities. SMEs, however, fail to fully use these opportunities. This is due to their smaller competitiveness because of insufficient application of innovations, which in conjunction with improper size structure results in small internationalisation of entrepreneurship, where the share of SMEs in foreign trade is only 30%, and their share in trade with non-EU countries is only 20%.<sup>61</sup> The EU Single Market constitutes an environment that enables SMEs' access to 500 million consumers. This market, however, is highly saturated and is characterised by strong competition. The growing globalisation and economic trends in the developing regions outside the EU offers many opportunities for Slovak SMEs to develop their business activities. SMEs, however, fail to fully use these opportunities. This is due to their smaller competitiveness because of insufficient application of innovations, which in conjunction with improper size structure results in small internationalisation of entrepreneurship, where the share of SMEs in foreign trade is only 30%, and their share in trade with non-EU countries is only 20%.<sup>62</sup>

The statistics published in the Commission's document *Internationalisation of European SMEs* suggest that European SMEs prefer focusing on the internal market to non-EU countries. Only 25% of them export their products, and only 13% of them do so outside of the common market. 29% of European SMEs import products, 14% of them also from markets outside of the EU. In addition to that, only 7% of SMEs are involved in technological cooperation with foreign partners, and 7% of them are suppliers of foreign partners. Only 2% of SMEs have a foreign partner as supplier, and only 2% of them are active in direct foreign investment. It is therefore crucial to support the international activities of SMEs especially in third-country markets through alternative business and support platforms.

The Bratislava Region falling in the NUTS 2 category is the only one of the four Slovak regions with per capita GDP exceeding 90% (186%, 2011)<sup>63</sup> of the EU average according to the PPS. The region's performance is due to the location of the capital city, but unlike other metropolitan regions of the EU (e.g. Prague, Berlin, Vienna), the BR also includes three districts with a rural character: Malacky, Pezinok and Senec with a 31%<sup>64</sup> proportion of the population and with an area four-times bigger than the City of Bratislava.

SMEs in the Bratislava Region are affected by several structural deformations which are manifested in their very low profitability. As a result of the global economic crisis, the economic activities of most SMEs have been reduced. In 2011, only 51.8% of SMEs in the region attained profits (including balanced economic results), which was the lowest value from among all Slovak regions<sup>65</sup>. The BR also reports the lowest success rate in loan applications; the share of

successful SMEs in this region only attains 5.1%, while the national average is 9%<sup>66</sup>. In spite of the high concentration of business activities, enterprises focus on standard products and services, their development stagnates, and are not willing to expand. The proportion of women in business is much smaller, and the number of persons from disadvantaged groups of the society is negligible. Though the BSGR disposes of a significant scientific and research potential and a concentration of higher education institutions, the missing support tools prevent major transfer of innovative ideas into practice. The deterioration of the conditions for running business, improper preparation and missing support tools discourage many young people, mainly school graduates, from choosing the business career.

The interventions made under Priority Axes 3 and 4 will contribute to the fulfilment of thematic objective 3. The support focuses on the different phases of the life-cycle of small and medium-sized enterprises so as to ensure continuous growth and increased potential for internationalisation. The initial phases of the life-cycle are supported through specific objective 3.1.1 linked to investment priority 3a. The development phase is supported by activities under specific objective 3.3.1 linked to investment priority 3c. The internationalisation of entrepreneurship as the top phase is supported through specific objective 3.2.1 linked to investment priority 3a. Specific objective 4.1.1 addresses SME support within the Bratislava Region in line with investment priority 3d, with the aim to ensure SME support during all development phases to achieve larger representation of Slovak SMEs in international markets. This will eliminate the current negative trend of stagnation and marginalisation of SMEs, and will create the conditions for the generation of competitive SMEs able to introduce innovations in their products and services and to apply the research and development results in their business activities. This will also result in an expansion of the target group of enterprises to receive support under thematic objective 1.

### Thematic objective 3

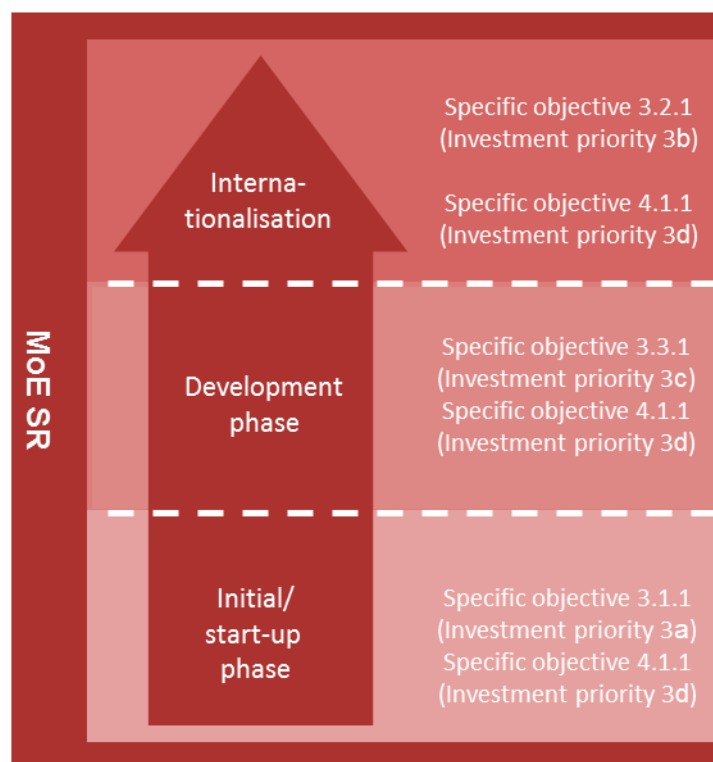


Fig 1.3 Intervention logic under PA 3 and PA4



### *Priority Axis 3 Enhancing the competitiveness and growth of SMEs*

Support under Priority Axis 3 is based on the prevalence of SMEs within the business sector of the Slovak economy. From the total number of 552,223 undertakings,<sup>67</sup> the category of SMEs represents up to 99.9% of enterprises in the SR with 77.2% of jobs in the private sector.

At present, SMEs are threatened by the persisting economic crisis and by on-going changes in the business environment. This situation is accompanied by reduced competitiveness as a result of increased efforts of other countries, Slovakia's stagnation and poor application of instruments presented in the key agenda of the European Commission (Small Business Act and Entrepreneurship Action Plan 2020). This is one of the reasons for a stagnating growth of SMEs and their marginalisation along with the reduction of business activities, declining number of jobs (in 2012, SMEs saw a decline by almost 46,000 employees compared to the pre-crisis year 2008) and a threat to the economic sustainability of companies (according to available data, the number of small enterprises – legal entities in 2012 fell by almost a half compared to the pre-crisis year 2008; the category of entrepreneurs – physical persons also witnesses a continuous declining trend). The motivation of people to enter business is also declining, as demonstrated in the GEM 2012 survey, and there is an absence of systemic tools to develop an entrepreneurial spirit and business as a career choice. The available forms and mechanisms of support from public resources usually do not take into consideration the needs of SMEs, and therefore do not raise much interest among SMEs. This is manifested in the deadweight effect on one hand, which is evident with regard to several measures already implemented. On the other hand, a big financing gap has emerged, failing to ensure the transfer of know-how and competences and introduce innovation in certain categories of SMEs, especially in the category micro-enterprises which makes up 96.6% of all undertakings.

It is therefore crucial to ensure support of specific needs of SMEs.

Given the structure of the Slovak economy and the need to enhance its competitiveness and with a view to the deepening trend of collapsing SMEs, it is necessary to make a complex revision of SME support and to simplify the approach and methods of the financing of such support. The main purpose is to create links and promote a more intensive application of modern competitive products and innovation, as well as to create the prerequisites for cooperation between businesses and the research and development sector in implementing R&D projects.

The system of SME support should be arranged so as to respond to the SMEs' needs at various stages of their life-cycle, from the business idea as such through the establishment of the undertaking, support of the company during the growth phase until its subsequent internationalisation. SMEs should be supported by means of the following three pillars:

- a) creation of a business environment with an emphasis on applying the “think small first” principle and on forming relevant support capacities (incubators, accelerators, etc.);
- b) through repayable forms of financing (micro-loans, credits, venture capital, combined with counselling, for example); and
- c) through non-repayable forms of financing (counselling and information programmes, training programmes, etc.).

Support under the OP R&I will also seek to increase the participation of disadvantaged social groups (women, young people up to 30 years, senior people over 50 years, long-term unemployed, third-country nationals, persons with social or health handicaps) in business. Further to the Strategy of the SR for the Integration of Roma by 2020, approved by the Government of the SR in 2012, special attention will be paid to supporting the entrepreneurship of Roma.

The activities under Priority Axis 3 will stimulate entrepreneurship in less developed Slovak regions, mainly by facilitating the economic use of new ideas, establishing new firms and by increasing their survival on the market, by creating suitable conditions to stimulate growth and innovativeness, developing new business models for micro- small and medium-sized enterprises (“SMEs”) and by internationalisation with the aim to achieve the expected results defined with



regard to each specific objective.

### **PRIORITY AXIS 3 Enhancing the competitiveness and growth of SMEs**

**IP 3.1 Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators**

**SO 3.1.1 Enhancing the growth of new competitive SMEs**

**IP 3.2 Developing and implementing new business models for SMEs, in particular with regard to internationalisation**

**SO 3.2.1 Growing internationalisation of SMEs and increased use of the possibilities offered by the EU Single Market**

**IP 3.3 Supporting the creation and the extension of advanced capacities for product and service development**

**SO 3.3.1 Increasing SME competitiveness at their development phase**

### ***Priority Axis 4 Developing competitive SMEs in the Bratislava Region***

**Priority Axis 4** covers measures under thematic objective 3 implemented in a more developed region – the Bratislava Region in Slovakia. This priority axis combines activities seeking to ensure funding with counselling and support services with the aim to ensure long-term growth of SME competitiveness. These measures will create the conditions for addressing market failures identified in the Bratislava Region (financing gap, high business activity combined with poor innovativeness of business activities). The actions included in this priority axis will enable SMEs to develop their potential and increase their skills and competences, thus creating the prerequisites for the application of innovation in the SME sector and for involving SMEs in activities related to the commercialisation of R&D results under thematic objective 1. It will thus be possible to exploit the potential of the scientific and research sphere concentrated in this region. Priority Axis 4 of the OP R&I also represents part of RIS3 SK implementation activities.

The proposal for activities was also based on good practice, results of the programming period 2007–2013, and recommendations of the Small Business Act and Action Plan for the Support of Entrepreneurship. The main purpose is to ensure long-term development of competitive SMEs in this region in line with RIS3 SK areas.

Only one specific objective has been defined for Priority Axis 4: “Increasing the share of profit-making SMEs in the Bratislava Region”. This specific objective will be achieved through actions carried out within the Bratislava Region and funded from the 3% transfer of SF allocation between categories of regions within Slovakia under Art. 39 of the General Regulation. Without such procedure, it would not be possible to fully implement the RIS3 SK.

Given these specific features of the BR, support should be provided mainly through financial instruments aimed to improve SME access to finances, especially of start-ups created with high intensity. Since support only in the form of financial assistance usually fails to ensure long-term growth and increased competitiveness of SMEs, financial support will be accompanied by counselling, assistance and other support services securing comprehensive and long-term support of mainly new, but also existing SMEs. A business centre will be established for this purpose, run as a one-stop-shop<sup>68</sup> and providing combined services according to the needs of new and existing SMEs. The centre will cooperate with partners from the academic sphere in order to create synergies between the business, the academic sector and the R&D sector.

Priority Axis 4 highlights the support of the innovation ability and competitiveness of SMEs in the BSGR with the aim to increase their added value and stimulate growth to reach more advanced development stages. With regard to the economic structure of SMEs, increased attention should be paid to undertakings in all economic sectors, focusing on local specificities (increased concentration of enterprises in the service sector).

The actions listed above will be implemented by means of the following investment priority and specific objective under Priority Axis 4:

#### **PRIORITY AXIS 4 Developing competitive SMEs in the Bratislava Region**

**IP 4.1 Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes**

**SO 4.1.1 Increasing the share of profit-making SMEs in the Bratislava Region**

#### **Priority Axis 5 Technical Assistance**

The main objective of the Priority Axis 5 is to facilitate the smooth implementation of the operational programme in line with European legislation and with the requirements for the preparation, management, monitoring, evaluation, publicity and communication, networking, complaints handling, control and audit. This kind of assistance will contribute to the support and development of implementation structures and involved administrative capacities responsible for the implementation of the operational programme, support for project preparation, publicity and awareness raising and enhanced exchange of experience to ensure the accomplishment of the set objective and results of the operational programme.

The direction and the provision of support and development of implementation structures by means of technical assistance during the programming period 2014–2020 are based on the outputs and experience acquired during the implementation of technical assistance in the programming period 2007–2013. Activities aimed to enhance and support the administrative capacities have been organised during the programming period 2007–2013 by means of e-learning, language training, as well as the factors identified by the SWOT analysis which aimed to set the objectives of technical assistance. During the programming period 2007–2013 and at present, activities seeking to enhance and support the administrative capacities by means of e-learning, language training and exchange of experience at international level via training courses, seminars and business trips have been carried out. Another area of support in the programming period 2007–2013 has been the implementation of support activities and the focus of support on technical infrastructure development through, for example, specific adjustments of the OP R&D software support – the information and technological monitoring system of structural funds to ensure the improvement and increased efficiency of monitoring activities and subsequent evaluation of the quality and physical progress of implemented projects. It is essential to strengthen systemic approaches in the different areas of support under the technical assistance which appeared to be insufficient during the programming period 2007–2013, and will require improvements in close cooperation with all national authorities responsible for the implementation of the Cohesion Policy..

In connection with the need for a targeted focus of interventions in the field of technical assistance, a SWOT analysis of the background situation has been prepared with the aim to define the areas of intervention of the OP R&I technical assistance. On the basis of this SWOT analysis and of its results, two specific objectives have been defined which specify the areas of support for fulfilling the main objective of the priority axis.

#### **PRIORITY AXIS 5 Technical assistance**

**SO 5.1.1 Supporting an effective implementation of the operational programme**

**SO 5.1.2 Ensuring publicity, information and the support of beneficiaries' administrative capacities in the implementation process**

**1.1.2** A justification for the choice of thematic objectives and corresponding investment priorities having regard to the Partnership Agreement, based on an identification of regional and, where appropriate, national needs including the need to address the challenges identified in relevant country-specific recommendations adopted in accordance with Article 121(2) TFEU and the relevant Council recommendations adopted in accordance with Article 148(4) TFEU, taking into account the ex ante evaluation.

**Table 1** Justification for the selection of thematic objectives and investment priorities

Selected thematic objective	Selected investment priority	Justification for selection
(1) Strengthening research, technological development and innovation	a) Enhancing research and innovation infrastructure and capacities to develop research and innovation excellence, and promoting centres of competence, in particular those of European interest	<p><b>Country-specific Recommendations 2014 (CSR)</b></p> <ul style="list-style-type: none"> <li>- Improve the quality and relevance of the science base and implement plans to foster effective knowledge transfer and co-operation between academia, research and business</li> </ul> <p><b>National Reform Programme 2014 (NRP)</b></p> <ul style="list-style-type: none"> <li>- reform of the system of RDI – measure from RIS3 SK;</li> <li>- to intensify the support of involvement of Slovak organizations in the European networks and programmes such as the Horizon 2020, Danube Strategy, ECSEL, EIT, ESFRI;</li> <li>- setting-up of administrative offices to ensure contact with companies and exchange of information.</li> </ul> <p><b>Europe 2020 strategy:</b></p> <ul style="list-style-type: none"> <li>- quality infrastructure and efficient system of innovation development;</li> <li>- quality human resources;</li> <li>- effective tools for innovation;</li> <li>- providing support for innovative project solutions in line with the smart specialisation strategy with results applicable on the market.</li> </ul> <p><b>EU Strategy for the Danube Region:</b></p> <ul style="list-style-type: none"> <li>- increase the number of patents obtained in the Region by 50%</li> <li>- To reach 20% of academic mobility by 2020.</li> </ul> <p><b>EC Position Paper</b></p> <ul style="list-style-type: none"> <li>- Increase competitiveness of R&amp;I system</li> <li>- Increase the quality of innovation and the capacity for modern technology</li> </ul>
	b) Promoting business investment in research and innovation, and developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting	<p><b>CSR</b></p> <ul style="list-style-type: none"> <li>- Improve the quality and relevance of the science base and implement plans to foster effective knowledge transfer and co-operation</li> </ul> <p><b>NRP</b></p> <ul style="list-style-type: none"> <li>- reform of the system of RDI – measure from RIS3 SK;</li> <li>- establishment of workplaces for the transfer of scientific and technical knowledge;</li> <li>- establishment of technological and prototype centres, testing centres and semi-operations for production of innovative products .</li> </ul>

Selected thematic objective	Selected investment priority	Justification for selection
	technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies	<p><b>Europe 2020 strategy:</b></p> <ul style="list-style-type: none"> <li>- promoting the support for all forms of innovations</li> <li>- introducing financial instruments for the stimulation of private finances into research and innovation</li> <li>- support of Low-carbon technologies</li> <li>- more investments in the research of ICT in order to make them more attractive to SMEs and young researchers</li> <li>- promoting public and private partnerships to prepare joint technological plans from research up to market launch</li> </ul> <p><b>EU Strategy for the Danube Region:</b></p> <ul style="list-style-type: none"> <li>- increase the number of patents obtained in the Region by 50%</li> </ul> <p><b>EC Position Paper</b></p> <ul style="list-style-type: none"> <li>- Improving research and innovation performance, including the quality of higher education, and increasing private R&amp;I investment</li> <li>- Improving performance of research and innovation</li> </ul>
(3) Enhancing the competitiveness of SMEs	a) Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators	<p><b>CSR</b></p> <ul style="list-style-type: none"> <li>- introduce measures to improve business environment including for SMEs</li> </ul> <p><b>NRP - Improving the business environment:</b></p> <ol style="list-style-type: none"> <li>Improve Slovakia's position in the Doing Business ranking by the World Bank by at least 15 places by 2015;</li> <li>Continue in the reduction of AZ businesses so as the SR achieves the average of OECD countries (1.45) with regard to the OECD integrated market regulation indicator by 2015 (PMR – Product Market Regulation indicator).</li> </ol> <p><b>Small Business Act:</b></p> <ul style="list-style-type: none"> <li>- Application of the Small Business Act principles in the SR</li> </ul> <p><b>Entrepreneurship 2020 Action Plan</b></p> <ul style="list-style-type: none"> <li>- AP fulfilment in the SR</li> </ul> <p><b>EC Position Paper</b></p> <ul style="list-style-type: none"> <li>- enhancing business innovation and competitiveness to increase value added and stimulate growth and jobs</li> <li>- promote entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms.</li> </ul>
	b) Developing and implementing new business models for SMEs, in particular with regard to internationalisation	<p><b>CSR</b></p> <ul style="list-style-type: none"> <li>- introduce measures to improve business environment including for SMEs</li> </ul> <p><b>NRP - Improving the business environment:</b></p> <ol style="list-style-type: none"> <li>Improve Slovakia's position in the Doing Business ranking by the World Bank by at least 15 places by 2015;</li> <li>Continue in the reduction of AZ businesses so as the SR achieves the average of OECD countries (1.45) with regard to the OECD integrated market regulation indicator by 2015 (PMR – Product Market Regulation indicator).</li> </ol>

Selected thematic objective	Selected investment priority	Justification for selection
		<p><b>EU Strategy for the Danube Region</b></p> <ul style="list-style-type: none"> <li>- Promote links between institutions dealing with innovation and those supporting entrepreneurship.</li> </ul> <p><b>Small Business Act:</b></p> <ul style="list-style-type: none"> <li>- Application of the Small Business Act principles in the SR</li> </ul> <p><b>Entrepreneurship 2020 Action Plan</b></p> <ul style="list-style-type: none"> <li>- AP fulfilment in the SR</li> </ul> <p><b>EC Position Paper</b></p> <ul style="list-style-type: none"> <li>- Develop new business models for SMEs, in particular for internationalisation</li> </ul>
	<p><b>c) Supporting the creation and the extension of advanced capacities for product and service development</b></p>	<p><b>CSR</b></p> <ul style="list-style-type: none"> <li>- introduce measures to improve business environment including for SMEs</li> </ul> <p><b>NRP - Improving the business environment:</b></p> <ol style="list-style-type: none"> <li>Improve Slovakia's position in the Doing Business ranking by the World Bank by at least 15 places by 2015;</li> <li>Continue in the reduction of AZ businesses so as the SR achieves the average of OECD countries (1.45) with respect to the OECD integrated market regulation indicator by 2015 (PMR – Product Market Regulation indicator).</li> </ol> <p><b>Small Business Act:</b></p> <ul style="list-style-type: none"> <li>- Application of the Small Business Act principles in the SR</li> </ul> <p><b>Entrepreneurship 2020 Action Plan</b></p> <ul style="list-style-type: none"> <li>- AP fulfilment in the SR</li> </ul>
	<p><b>d) Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes</b></p>	<p><b>CSR</b></p> <ul style="list-style-type: none"> <li>- introduce measures to improve business environment including for SMEs</li> </ul> <p><b>NRP - Improving the business environment:</b></p> <ol style="list-style-type: none"> <li>Improve Slovakia's position in the Doing Business ranking by the World Bank by at least 15 places by 2015;</li> <li>Continue in the reduction of AZ businesses so as the SR achieves the average of OECD countries (1.45) with respect to the OECD integrated market regulation indicator by 2015 (PMR – Product Market Regulation indicator).</li> </ol> <p><b>Small Business Act:</b></p> <ul style="list-style-type: none"> <li>- Application of the Small Business Act principles in the SR</li> </ul> <p><b>Entrepreneurship 2020 Action Plan</b></p> <ul style="list-style-type: none"> <li>- AP fulfilment in the SR</li> </ul> <p><b>EC Position Paper</b></p> <ul style="list-style-type: none"> <li>- increase the quality of research, strengthen interaction with business sector, support effective transfer of knowledge and dissemination of research results</li> </ul>

## 1.2 Justification for the financial allocation

The financial allocation for the implementation of the different actions under the priority axes takes into account the importance of the different thematic objectives in order to achieve the objectives of the Europe 2020 strategy, as well as the probability of meeting the individual specific objectives and the use of funds under the activities, as defined in the Position Paper, while considering the needs identified in the strategic part of the OP R&I.

The total OP R&I allocation of Union support is **EUR 2,266,776,537.00**, of which 79,22 % is allocated to thematic objective 1 Fostering research, technological development and innovation, and 17,69% to thematic objective 3 Increasing the competitiveness of SMEs.

The financial allocations to the different thematic areas correspond to their relevance to the fulfilment of the objectives of the Europe 2020 strategy to ensure economic growth and employment. When determining the allocations to concrete investment priorities and specific objectives, emphasis was also placed on the experience in the implementation of the Operational Programme Research and Development and the Operational Programme Competitiveness and Economic Growth implemented in the programming period 2007–2013.

Most funds – EUR 1 795 729 528, which represents 79,22 % of the total allocation, have been earmarked to implement actions linked to thematic objective 1 – Strengthening research, technological development and innovation. The supported activities aim to consolidate the existing RD&I infrastructure and capacities and to extend them, as necessary, in order to develop excellence in research, development and innovation. Part of the activities carried out within thematic objective 1 focus on promoting systemic measures to improve the performance of research, development and innovation in the Slovak Republic and the provision of support services to research institutions and entrepreneurs. Based on the country-specific recommendations of the Commission, a significant part of the allocation within thematic objective 1 is intended to promote cooperation between the academia and the business sector in the field of research, development and innovation, this group of activities has the greatest positive impact on the generation of knowledge and new products and, hence, on the economic growth of the SR. Within this allocation, part of the funds at the amount of 6.37%, which is EUR 144 295 649, is aimed to support RD&I activities within the BR.

The allocation for actions under thematic objective 3 – Enhancing the competitiveness of SMEs - is 17, 69 %, which is EUR 401 047 009. These actions will seek to stimulate entrepreneurship, mainly by facilitating the exploitation of new ideas in the economy, the establishment of new firms, and by increasing their survival rate on the market creating the conditions for promoting growth, innovativeness and development. The relevant activities will focus on creating a comprehensive system of support for SME internationalisation. Within this allocation, part of the funds at the amount of 1.09%, which is EUR 24 632 009, is aimed to support the development of SME competitiveness within the BR.

Activities in the Bratislava region will be funded by a transfer of funds under Article 93 (2) of the CPR and in accordance with the Partnership Agreement<sup>69</sup>

The allocation ensuring the quality of processes related to the management, coordination, implementation, publicity, monitoring and evaluation of support is in the amount of EUR 70,000,000, which is 3.09% of the total allocation to priority axes.

**Table 2** Overview of the programme investment

Priority axis	Fund	Union support (EUR)	Proportion of total Union support for the OP (%)	Thematic objective	Investment priorities	Specific objectives corresponding to the investment priority	Programme-specific result indicators for which a target has been set
1 strengthening research, technological development and innovation	ERDF	1 651 433 879	72,85 %	(4) Strengthening research, technological development and innovation	1.1 Enhancing research and innovation infrastructure and capacities to develop research and innovation excellence, and promoting centres of competence, in particular those of European interest	1.1.1 Increasing the R&D system performance through horizontal support of technology transfer and ICT	Number of lodged patent applications in the SR, except for the Bratislava Region
						1.1.2 Promoting the participation of the SR in international cooperation projects	Number of participations in projects involving international cooperation
						1.1.3 Enhancing research activity through better coordination and consolidation of the R&D potential of research institutions not conducting business operations	Number of publications (all types of documents) by Slovak organisations in the Web of Science Core Collection and SCOPUS databases in the given year
					1.2 Promoting business investment in research and innovation, and developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies	1.2.1 Increasing private investments through cooperation between research institutions and the business sector	Amount of private investments in research and development in the SR, except for the Bratislava Region
						1.2.2 Enhancing research, development and innovation capacities in industry and services	Share of enterprises applying research, development and innovation



Priority axis	Fund	Union support (EUR)	Proportion of total Union support for the OP (%)	Thematic objective	Investment priorities	Specific objectives corresponding to the investment priority	Programme-specific result indicators for which a target has been set
2 Supporting research, development and innovation in the Bratislava Region	ERDF	144 295 649	6,37 %	(1) Strengthening research, technological development and innovation	2.1 Enhancing research and innovation infrastructure and capacities to develop research and innovation excellence, and promoting centres of competence, in particular those of European interest	2.1.1 Enhancing the research activity of the Bratislava Self-Governing Region through revitalisation and fostering of research, education, innovation, and business capacities of research institutions in Bratislava	Number of lodged patent applications in Bratislava region
					2.2 Promoting business investment in research and innovation, and developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies	2.2.1 Increasing private investments by building research and development centres in Bratislava	Amount of private investments in research and development in the BR
						2.2.2 Increasing the research, development and innovation capacities in industry and services in the Bratislava Region	Number of enterprises with innovative activities in the BR
3 Enhancing the competitiveness and growth of SMEs	ERDF	376 415 000	16,61 %	(3) Enhancing the competitiveness of SMEs	3.1 Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators	3.1.1 Enhancing the growth of new competitive SMEs	Rate of survival of new enterprises on the market during two years
					3.2 Developing and implementing new business models for SMEs, in particular with regard to internationalisation	3.2.1 Growing internationalisation of SMEs and increased use of the possibilities offered by the EU Single Market	SME share in export
					3.3 Supporting the creation and the extension of advanced capacities for product and service development	3.3.1 Increasing SME competitiveness at their development phase	Increase of the added value of SMEs



Priority axis	Fund	Union support (EUR)	Proportion of total Union support for the OP (%)	Thematic objective	Investment priorities	Specific objectives corresponding to the investment priority	Programme-specific result indicators for which a target has been set
<b>4</b> Developing competitive SMEs in the Bratislava Region	ERDF	24 632 009	1,09 %	<b>(3)</b> Enhancing the competitiveness of SMEs	<b>4.1</b> Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes	<b>4.1.1</b> Increasing the share of profit-making SMEs in the Bratislava Region	Increase of profit-making SMEs in the Bratislava region
<b>5</b> Technical assistance	ERDF	70 000 000,00	3,09 %	n/a	n/a	n/a	

## 2. A description of priority axes of the Operational Programme Research and Innovation

### 2.1 PRIORITY AXIS 1: Supporting research, development and innovation

ID of the priority axis	1
Title of the priority axis	Supporting research, development and innovation
The entire priority axis will be implemented solely through financial instruments	N/A
The entire priority axis will be implemented solely through financial instruments set up at Union level	N/A
The entire priority axis will be implemented through community-led local development	No

#### 2.1.0 Fund, category of region and calculation basis for Union support

Fund	European regional development fund
Category of region	Less developed region
Calculation basis (total eligible expenditure or eligible public expenditure)	1 651 433 879
Category of region for outermost regions and northern sparsely populated regions (where applicable)	N/A

#### 2.1.1 INVESTMENT PRIORITY 1.1: Enhancing research and innovation infrastructure and capacities to develop research and innovation excellence, and promoting centres of competence, in particular those of European interest

##### 2.1.1.1 Specific objectives corresponding to the investment priority and expected results

ID	1.1.1
Specific objective	Increasing the R&D system performance through horizontal support of technology transfer and ICT
The results that the Member State seeks to achieve with Union support	The key necessities of a systemic nature <sup>70</sup> that require improvement include the protection of intellectual property of research institutions, information and informatics support of research, development and infrastructure for the promotion and popularisation of the results of research and development in the form of science centres, like ( <a href="http://www.experimentarium.dk">www.experimentarium.dk</a> ).

### EXPECTED RESULTS:

This specific objective will support activities of a systemic nature; hence, the expected direct results and benefits of supported activities will also be of a systemic nature, in particular:

- overall increase in the performance of the research and development system through increased use of instruments for the protection of intellectual property (patenting, licensing, producing of spin-off and start-up effects in the state and public research and development sector);
- increased interest of the young generation in the study of technical and natural sciences and in the researcher's career;
- increased number of outputs from activities of public and state R&D institutions for industry and the society as linked to the implementation of activities related to the support of the national technology transfer system.

All these results will have multiplying effects with a positive impact on employment and economic growth.

**Table 3** Programme specific result indicators corresponding to specific objective 1.1.1

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0126	Number of lodged patent applications in SR except Bratislava Region	Number	Less developed region	13	2013	47	EPO ŠÚ SR	Once a year

ID

### 1.1.2

Specific objective

### Promoting the participation of the SR in international cooperation projects

The results that the Member State seeks to achieve with Union support

Specific objective is focused on support of the Slovak participation in the European Research Area projects and initiatives – whether it is Horizon 2020 or specific European activities, such as European Technology Platforms/Joint Technology Initiatives, Eureka, COST, Eurostars2, Era-nets, EÚ Strategy for the Danube Region, etc.

### EXPECTED RESULTS:

This specific objective will support all activities related to the involvement of the Slovak Republic and its organisations in activities of the European Research Area. The activities under this specific objective are expected to:

- enhance the level of excellence of Slovak research;
- increase the overall number of submitted projects involving entities from Slovakia in Horizon 2020 calls;
- increase the number of successful project participations;
- promote involvement in international activities, mainly under international and European programmes,
- increase the overall contribution from EU funds through a higher number of successful projects.

Projects supported within the European Research Area place emphasis on top research, which creates the basis for future unique technology and advanced applications; the participation in such projects will have multiplying effects with a positive impact on employment and economic growth.

**Table 4** Programme specific result indicators corresponding to specific objective 1.1.2

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0042	Number of participations in projects involving international cooperation	Number	Less developed region	45	2012	80	IS VVP	Once a year

**ID**

**1.1.3**

**Specific objective**

**Enhancing research activity through better coordination and consolidation of the R&D potential of research institutions**

**The results that the Member State seeks to achieve with Union support**

Specific objective is focused on continued removal of 'technology' gap as regards facilities in state and public research institutions (laboratory equipment, unique devices, inadequate premises, energy inefficient buildings from the 1960s and 1970s). In this context, the support granted so far should be viewed as the first stage of addressing this problem, to be continued in the forthcoming period.

**EXPECTED RESULTS:**

This specific objective will support the creation high-quality projects dedicated to excellent research within state and public research institutions, and the return of top Slovak scientists. The planned activities will result in:

- increasing the research activities of state and public research institutions;
- better coordination of the research potential of state and public research institutions;
- consolidation and further development of the existing infrastructure in areas identified by the RIS3 SK;
- integration of the new research and development infrastructure;
- creation of a critical mass of infrastructure able to address important assignments from customers, and increased participation in international activities.

Strong interaction with economic practice will also be an important aspect of supported projects.

**Table 5 Programme specific result indicators corresponding to specific objective 1.1.3**

ID	Indicator	Measure ment unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0128	Number of publications by Slovak organisations in the Web of Science Core Collection and SCOPUS databases	Number	Less developed region	10,477	2012	12,500	Web of Science Core Collection (Thomson Reuters); a SCOPUS (Elsevier)	Once a year

## **2.1.2 Action to be supported under the investment priority 1.1**

### **2.1.2.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries under investment priority 1.1**

#### **Examples of actions for specific objective 1.1.1:**

##### **Mobilisation of knowledge and technology transfer from research institutions into practice**

(follow-up on actions from the programming period 2007–2013)

- Coordination, communication and ensuring an effective functioning of local technology transfer centres established within different research and development institutions;
- Coordination of the activities of university science parks and research centres in the area of technology transfer, the building and operation of incubators and other activities related to this area;
- Building of a prototype and verification infrastructure in RIS3 SK priority areas;
- Financial coverage of expert support services of top domestic and foreign experts in technology transfer and assessment of the commercial potential of research and development results, helping research institutions ensure protection of their intellectual property;
- Remuneration to required experts (patent representatives, translators, licence experts) and payment of application and maintenance fees for international patents;
- Financing of events aimed to raise the awareness of the scientific community about the importance of intellectual property protection and about the entire process of technology transfer;
- Search and active promotion abroad of inventions, technology and innovative ideas
- Systematic utilisation of computing and storage capacities and of specialised application software of the SCSTI by research institutions for the purposes of effective implementation of technology transfer processes;
- Raising awareness about the need to protect and commercialise intellectual property and create an expert background for the implementation of technology transfer in Slovakia, mainly through organising quality events and creating space for exchange of opinions and experience in this area.

##### **Research and development information system / access to databases for the purposes of research institutions** (follow-up activity from the programming period 2007–2013)

- Coordinated access to specialised, bibliometric, scientometric and scientific electronic information sources for the purposes of research institutions.

##### **Horizontal ICT support and central infrastructure for research and development institutions** (follow-up activity from the programming period 2007–2013)

- Further development and modernisation/expansion of the content focus of the R&D data centre;
- Central experimental cloud serving for ICT research in the area of cloud applications, system security and other related topics;
- Computing capacities and high-performance computing under research projects
- Complementary consolidation of a wider use of the Slovak infrastructure for high-performance computing (SIHPC) at the level of application and operation SW;
- Ensuring sufficient high-speed data connection between research institutions;
- Completion and further development of an integrated system of services under which the different applications of the data centre and access to them are managed by the scientific community;
- Supporting access to the international networks of similar institutions which gather national research ICT infrastructures.

#### **Supporting the national system for the popularisation of research, development and innovation** (follow-up activity from the programming period 2007–2014)

- Supporting the building of science centres and infrastructure in the RIS3 SK areas of specialisation in selected regions – especially in Košice, Žilina and Nitra, and possibly smaller centres in other geographical areas under the condition of the use of partner institutions' own resources;
- Promoting demonstration activities using modern Technologies in the RIS3 SK areas of specialisation;
- Promoting the implementation of coordinated national festivals of science and technology and expert events on a relationship between science and the society;
- Targeted actions to attract public interest, and especially the young generation, in the researcher's career, or workers for key industrial sectors identified in the RIS3 SK.

Slovakia extremely lags behind other EU countries in this area, lacking any modern infrastructure in the form of centres of sciences similar to those found abroad. The **Experimentarium** in Copenhagen ([www.experimentarium.dk](http://www.experimentarium.dk)), **Technopolis** in Mechelen, Flanders ([www.technopolis.be](http://www.technopolis.be)), the Finnish **Heureka** ([www.heureka.fi](http://www.heureka.fi)) or the French **Cité des Sciences** in Paris ([www.c-sciences.fr](http://www.c-sciences.fr)) are among the most famous ones in Europe.

Science will be popularised through direct involvement of researchers as such. In the next programming period, it will be necessary to build on the popularisation infrastructure developed during the programming period 2007–2013 and to intensively continue with the set popularisation mechanisms and the use of popularisation tools created so far.

The target group of these actions are all types of research institutions, while respecting the state aid rules, and the widest public.

#### ***Examples of actions for specific objective 1.1.2***

**Synergetic and complementary funding of projects approved under Horizon 2020, the EU Strategy for the Danube Region, EITI, Eureka, Eurostars 2, Erasmus+ and other international programmes and initiatives in areas of RIS3 SK specialisation**

The implementation of approved projects under European research/mobility programmes and initiatives may often require further expenditures to accomplish the set project objectives to the maximum extent possible. Complementary financing of approved projects at international level will not make the covering of mandatory funding possible; however, it will enable to cover additional expenditures under approved projects at international level, such as

devices/equipment, resulting in higher quality and better results of approved projects or in extended use of such results/further research. The content evaluation of projects will be performed under international initiatives and programmes; under the OP R&I, the formal aspects of the process will be ensured with regard to applications for complementary financing, finalised by a grant contract.

#### **Financing of shortlisted projects under Horizon 2020 in areas of RIS3 SK specialisation**

The Slovak Republic is among the least successful EU countries as to the number of participations/amount of funds obtained from EU Framework Programmes on Research and Development. One of the causes is poor activity and a small number of filed projects with Slovak participation. The aim of this activity is to mobilise Slovak institutions to engage in Horizon 2020 international consortia and to file applications for excellent research/industrial research and development projects which do not require international partners (e.g. projects of the European Research Council or SME instrument of Horizon 2020). In case projects with Slovak involvement are evaluated as quality projects, but cannot be financed due to lack of EU funds (shortlisted projects), it will be possible to redirect such projects to the OP R&I and finance them under OP R&I rules. With respect to projects with international participation, it will be necessary to define Slovak involvement as a separate unit in term of contents, enabling the implementation of the international project dimension under Annex 12 to the OP R&I. As for contents, the projects will be evaluated under Horizon 2020, which means that they will only go through formal procedures under OP R&I.

#### **Horizontal support of Slovakia's involvement in the European Research Area/internationalisation of research and development of the SR, promotion of the activities of the Slovak liaison office for research and development in Brussels, including intensification of the activities of support structures (national contact points)**

The aim of this activity will be coordinated management of international networking leading to increased participation of Slovak research institutions in international research consortia in RIS3 SK priority areas. The events will be held also within the Slovak Republic, while all types of events will be supported (information days, match-making events) and related evaluation and analytical activities aimed to increase the participation of research institutions of the Slovak Republic within the European Research Area. Events organised by the Slovak liaison office in Brussels will also be supported, in particular networking events seeking to integrate Slovak research institutions into consortia with good chances to be successful in Horizon 2020 projects. The activity will be implemented through the national project.

#### **Supporting participation in other international initiatives, such as ERA-NETs, European Technology Platforms, EURAXESS**

The exact model of synergic financing under other initiatives (beyond concrete projects which are described under the first activity of this objective) will be in line with the European Commission document "Synergies between European Structural and Investment Funds, Horizon 2020 and other EU programmes related to innovation Guide for policy-designers and implementers" at the level of the OP R&I implementation documents.

#### **Promoting the establishment of national technology platforms as a tool for the participation of the Slovak Republic in European Technology Platforms and in Joint Technology Initiatives in areas of RIS3 SK specialisation**

Slovak research institutions are involved to a minimum extent or on an ad-hoc basis in the activities of European Technology Platforms/JTI. The aim of this activity is to identify at national level, through the MoESRS SR, all existing initiatives/platforms within the European Research Area run in RIS3 SK priority areas. The identification of the list of platforms relevant to the Slovak Republic will contribute to the establishment of national technology initiatives/platforms and networking activities ensuring active participation of Slovak institutions in European platforms through their mirror organisations in Slovakia. The activity will be implemented through the national project.

### ***Examples of actions for specific objective 1.1.3***

#### **Modernisation and further development of the infrastructure and technological background of research institutions beyond the business sector in RIS3 SK priority areas**

- supporting high-quality projects dedicated to the integration, optimisation, modernisation and further development of the research infrastructure;
- enhancing scientific and technical cooperation (e.g. teaming, twinning – approved or “shortlisted”) and links to research infrastructure within the European Research Area.

During the programming period 2007–2013, hundreds of different types of research centres and research infrastructures beyond the business sector were supported, such as:

- centres of excellence (smaller projects focused on the modernisation of laboratories);
- projects supporting the educational infrastructure of universities and of the Slovak Academy of Sciences;
- SIHPC – nation-wide project coordinated by the Slovak Academy of Sciences;
- university science parks – concentrated space (area) in the vicinity of higher education institutions or to the SAS (or in the proximity of their research departments) disposing of suitable conditions for excellent research and development and ensuring interaction with practice;
- research centres – less complex than university science parks – a more virtual association of institutions that are not situated in the vicinity of each other; for example, a group of state-of-the-art laboratories built in a specific scientific discipline for the best research institutions.

Under supported projects, the types of research centres/infrastructures listed above and supported in 2007–2013, where the respective organisation is the coordinator or partner, will be upgraded or modernised. The educational infrastructure/facilities of research-oriented study programmes will also be modernised and upgraded for the purposes of the practice. The creation of new infrastructure/new research centres will be possible in segments where no investments in research and development have been made yet, provided that such investment complies with the RIS3 SK areas of specialisation and uses complementary/synergy investments in the research infrastructure made in the programming period 2007–2013, if appropriate and possible. This approach will prevent further fragmentation of the research potential of the Slovak Republic and duplicity in new infrastructure facilities. The strategies will be approved by foreign experts. This action will be implemented in line with the principles defined in Annex No. 9 of the OP R&I, which will be the basis for the Research Infrastructure Roadmap.

A two-round procedure for the selection and evaluation of this type of projects will be applied, using foreign experts as evaluators in the first round. The preparation of a full-fledged project will be subject to a quality project plan submitted under the relevant call. The project plan will have to be based on what was built within the given institution during the programming period 2007–2013, and will have to clearly define the needs for the purposes of modernisation and optimisation of the priority infrastructure<sup>71</sup> of the institution/infrastructure for the entire programming period 2014–2020. The project plan will be approved by foreign experts specialised in R&D infrastructure. On the basis of the approved project plan, a full-fledged project consistent with the project plan can be submitted.

Only institutions of the state, higher education and non-profit research and development sector may be eligible beneficiaries for this type of projects. Business entities and other types of institutions may act as partners of projects supported under this activity. The activity will be implemented through the national project.

**Supporting the return of top Slovak scientists working abroad and attracting top foreign researchers/experts from the application sphere for longer-term work within Slovak research and**



#### development institutions in RIS3 SK priority areas - possibility to combine it with the Marie-Curie Cofund/ERA Chairs

- support the return of quality Slovak researchers or perspective young Slovak scientists from abroad;
- support the participation of top foreign researchers to work within specific research project activities of Slovak research institutions.

Under this action, it is possible to finance equipment/devices and possibly labour costs ensuring sufficient quality background and the conditions for work of such researchers. The supported projects will also entail a requirement for such researchers to have teams of students, doctoral students and young scientists at R1, R2 or R3 qualification level pursuant to the European Qualification Framework, or experienced research workers with a maximum of 15 years of work experience since obtaining the 2<sup>nd</sup> level of university education, working with the foreign scientist on specific research projects.

The state aid scheme(s) will also be used under Priority Axis 1, investment priority 1.1, since entities conducting economic operations will also be eligible beneficiaries or eligible partners in the planned activities.

Under the current legislation, it is planned to enable the involvement of R&D capacities from the Bratislava Region at the level of a part of the operation in actions the implementation of which will be beneficial for regions beyond the Bratislava Region.<sup>72</sup> Partners with a research infrastructure outside of the BR would thus be able to use this infrastructure in the implementation of concrete projects.

With a focus on ensuring maximum synergy and complementarity with Horizon 2020 and stimulation of research and development activities in the business sphere, efforts will be made, following Horizon 2020, to apply to the maximum extent possible equal levels of financing for all stakeholders within the extent defined by the relevant European Union legislation.

#### ***Eligible beneficiaries<sup>73</sup> target groups and target area under investment priority 1.1***

##### ***Beneficiaries***

- Slovak Centre of Scientific and Technical Information (for national projects)
- research and development organisations:
  - state research and development sector;
  - higher education sector;
  - non-profit research and development sector;
  - business research and development sector;
- legal institutions established by law;
- research organisations from EU Member States

##### ***Target group:***

- all types of research organisations – by respecting the State aid rules and public as well

##### ***Target area:***

- less developed regions

In the case of synergies with Horizon 2020, the scope of eligible beneficiaries will be identical to the scope of eligible beneficiaries under Horizon 2020 (i.e. an exception can be made from the list provided in Annex 3 to the OP R&I) in order to prevent the exclusion of projects, due to administrative restrictions, that would otherwise funded under the OP R&I.

These actions will apply the partnership institute under which each institution participating in the project has concrete tasks and funds allocated.

Under Priority Axis 1, investment priority 1.1, research institutions will not be provided with a financial contribution to ICT infrastructure in cases where such infrastructure is available in the SCSTI and the SCSTI is able (in terms of capacity/legislation) cover the needs of research institutions.

### 2.1.2.2 Guiding principles for selection of operations

The key task for the selection of projects is to define clear and objective criteria for the selection of operations enabling an objective assessment and evaluation of the project contribution to the accomplishment of the OP R&I objectives and results.

The following **general principles for selection of operations** will be taken into particular consideration in calls for submission of grant applications for **thematic objective 1**:

- Using the possibility of a two-stage project selection in selected calls anticipating big public interest and/or in calls where the implementation of the system will result in a reduction of administrative and financial burdens for potential applicants based on the principle “project plan – grant application” with the aim to improve the quality of submitted projects, reduce the administrative and financial demands related to the submission of complete grant applications, including limitation of the number of rejected projects due to insufficient amount of funds allocated for the call. The first stage of the selection process will thus ensure that the provider of assistance will be able to allocate in the call for the submission of grant applications certain amounts according to the current possibilities of the OP and demand for assistance shown in the first stage of selection;
- Defining transparent and objective conditions the verification of which is necessary for the funding of national projects along with placing bigger emphasis on quality preparation of such projects;
- projects contributing to the objectives of RIS 3 SK will be supported, whereas projects that contribute to the accomplishment of the RIS 3 SK objectives will be supported preferentially in case of horizontal measures for the development of research and/or an innovation system;
- Emphasis will be placed on the project quality, i.e. on the expert assessment of the level of the given R&D or innovation infrastructure/activity<sup>84</sup>, and on the assessment of the potential project contribution to improving the competitiveness of enterprises within the regional, national and European space and of the probability of achieving the set objectives;
- With respect to support provided to big enterprises, the Managing Authority will ensure that the financial support from the Funds will not affect employment within the Union;
- in case of renovation of buildings priority support will be given to projects going significantly beyond cost-optimal requirements of the Energy Performance of Buildings Directive (EPBD)<sup>x</sup> and priority will be given to those maximising energy savings and investment will be conditioned by the energy audit<sup>74</sup>.

#### Specific principles for selection of operations under investment priority 1.1:

- ensuring a specific selection process for projects or parts of projects in the context of the support of participation in international activities within the European Research Area, including use of the possibility of preliminary deadline for submission of projects and optimisation of the duration of the selection process;
- increased emphasis will be placed on the content side of the projects in line with the following principles:
  - o increased standards for the project selection process on the basis of four groups of criteria:
    - quality of plan – scientific excellence or a contribution thereto;
    - project management quality;
    - potential effect of the project implementation;
    - demonstration of spillover effects within the region and on its value chain;

- more intensive use of the option to use foreign experts in project evaluation;
- regular peer-reviews of the RIS3 SK priority areas by also foreign experts;
- introduction of mid-term and/or final content reviews with the participation of foreign experts;
- for research projects with a budget of over EUR 10 million it will be possible to use during the project plan evaluation (first round) the institute of a public evaluation panel with the participation of professional evaluators, including foreign evaluators, and the entity submitting the project plan, and the panel discussion will be public;
- with regard to projects of cooperation between the academic sector and enterprises, projects involving SMEs will be preferred.

### 2.1.2.3 Planned use of financial instruments

Financial instruments will be used to support the implementation of actions demonstrating a more effective use of the European Structural and Investment Funds (ESIF) funds through this form of support. In economically viable projects assuming return or cost saving, the financial instruments represent a more suitable form of support, which has smaller impact on the distortion of the market. The financial instruments will focus on the support of activities which fail to find funding on the market or which fail to find adequate funding in terms of effective implementation.

The possibility of recurrent use of funds provided to contribute achieving the priority axes objectives belongs to the benefits of using financial instruments. Another advantage of financial instruments is the ability to increase resources for achieving the specific programme's objectives through additional capital mobilizing, which will be based on appropriate setting of these instruments. The additional capital mobilizing is needed also due to insufficient amounts of funds from ESIF to cover all investment needs in the areas concerned. The involvement of private investors can also contribute to improve the implementation of projects, and hence to a more effective overall use of funds. With the use of financial instruments the relevant activities can be supported by suitable financial products (loans, guarantees, venture capital, mezzanine, etc.). The concrete actions, the appropriate amount of funds, and the conditions of implementation of specific financial instruments, including expected multiplication of ESIF allocated funds and their combination with other forms of support, will be based on the results of ex ante assessment for financial instruments, as required under Art. 37, Paragraph 2 on General Regulation for Financial Instruments for the programming period 2014 – 2020.

### 2.1.2.4 Planned use of major projects

At present, it is not planned to implement major projects under investment priority 1.1. There is potential space to implement a major project only under specific objective 1.1.3 Enhancing research activity through better coordination and consolidation of the R&D potential of research institutions. The implementation of a major project will be identified in the national research infrastructure map which is currently at the stage of preparation.

### 2.1.2.5 Output indicators for investment priority 1.1

**Table 6 Common and programme specific output indicators at the level of investment priority 1.1**

ID	Indicator	Measurement unit	Fund	Category of region	Target value (2023)	Source of data	Frequency of reporting
C001	Number of enterprises granted support	Enterprises	ERDF	Less developed region	40	ITMS	Once a year
C002	Number of enterprises receiving grants	Enterprises	ERDF	Less developed region	40	ITMS	Once a year
C005	Number of supported new enterprises (common)	Enterprises	ERDF	Less developed region	20	ITMS	Once a year
C024	Number of new researchers in supported enterprises	FTE	ERDF	Less developed region	250	ITMS	Once a year

ID	Indicator	Measure ment unit	Fund	Category of region	Target value (2023)	Source of data	Frequency of reporting
C025	Number of researchers working in reconstructed facilities of the research infrastructure	FTE	ERDF	Less developed region	4,400	ITMS	Once a year
C027	Private investments with public support in innovation projects and R&D projects (common)	EUR	ERDF	Less developed region	5,000,000	ITMS	Once a year
00069	Number of supported research institutions	Number	ERDF	Less developed region	70	ITMS	Once a year
00070	Number of supported research institutions collaborating with enterprises	Number	ERDF	Less developed region	15	ITMS	Once a year
00071	Number of reconstructed facilities of the research infrastructure	Number	ERDF	Less developed region	70	ITMS	Once a year
00073	Number of lodged patent applications	Number	ERDF	Less developed region	10	ITMS	Once a year
00074	Number of new start-ups and spin-offs	Number	ERDF	Less developed region	20	ITMS	Once a year

**2.1.3 INVESTMENT PRIORITY 1.2 Promoting business investment in research and innovation, and developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies**

#### 2.1.3.1 Specific objectives corresponding to the investment priority and expected results

ID	1.2.1
Specific objective	Increasing private investments through cooperation between research institutions and the business sector
<b>The results that the Member State seeks to achieve with Union support</b>	<p>Specific objective is focused on the support of the joint collaborative research and development, and partnerships between the business sector and research institutions through long-term strategic research collaborative projects of individual R&amp;D centres in the RIS3 SK areas of specialisation. This is the key to increasing the quality of outputs with respect to the contribution of research and development to the economic growth of the SR.</p> <p><b>EXPECTED RESULTS:</b></p> <p>Given the nature of supported projects, i.e. various forms of partnerships between the scientific and research sphere and industry for conducting research and development, the following results are expected:</p> <ul style="list-style-type: none"> <li>• increased amount of private investments into research and development;</li> <li>• project outcomes applicable to technological innovations in industry resulting in new products and services;</li> <li>• establishment of new enterprises, including through incubators within university science parks;</li> <li>• jobs creation within science parks.</li> </ul>

**Table 7 Programme specific result indicators corresponding to specific objective 1.2.1**

ID	Indicator	Measure ment unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0044	Amount of private investments in research and development in the SR	EUR	Less developed region	100,835, 000	2012	150,000,000	SO SR	Once a year

**ID**

**Specific objective**

**The results that the Member State seeks to achieve with Union support**

**1.2.2**

**Enhancing research, development and innovation capacities in industry and services**

This specific objective seeks to promote research, development and innovation activities of businesses with the aim to enhance their competitiveness in the international/global scale. The specific objective will support activities focused on the building and development of research, development and innovation capacities in businesses, as well as projects with an innovation potential. The support will focus both on SMEs and on large enterprises. The support of SMEs is a priority.

**EXPECTED RESULTS:**

- Increased share of enterprises realising research, development and innovation;
- Increased competitiveness of enterprises;
- Decreased unemployment rate in the regions of Slovakia
- Increased use of intellectual property rights by enterprises;
- Increased use of new business models.

**Table 8 Programme specific result indicators corresponding to specific objective 1.2.2**

ID	Indicator	Measure ment unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0046	Share of enterprises implementing research, development and innovation	%	Less developed region	26.02	2013	36	Innovation Union Scoreboard	Once a year

## **2.1.4 Action to be supported under the investment priority 1.2**

**2.1.4.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries under investment priority 1.2**

**Examples of actions for specific objective 1.2.1**

**Promoting research and development within industrial research and development centres (enterprise<sup>75</sup> as direct grant beneficiary) in RIS3 SK priority areas**

Around 60 research centres with industry involvement were supported during the programming period 2007–2013. The company was the coordinator and founder of the research centre, and SMEs and/or research institutions which do not perform business operations pursuant to state aid rules (universities, the Slovak Academy of Sciences, non-profit research and development

organisations) were its partners. The interest of businesses exceeded the available amount of allocation four times.

The participation of foreign top scientists/experts from practice and the return of Slovak scientists from abroad to work in such industrial research and development centres will also be supported, as well as international research and development cooperation with renowned foreign institutions.

The aim is to create long-term partnerships between businesses and quality research institutions.

Within such research centres, a whole range of activities covering excellent research and experimental development under a single project will be supported, as naturally required by the particular project. Activities of pre-competitive nature will also be supported – higher risk research with a high subsequent potential to reach breakthrough/unique results.

This is a collaborative research scheme where the subject of research/development is determined by the enterprise as the owner of the research centre. It will be partner projects, where other enterprises and/or research institutions not engaged in economic activity must be project partners. The aim of each project is to produce concrete results applicable in practice (prototype/patentable intellectual property/new process/method, etc.).

Under the current legislation, it is planned to enable the involvement of R&D capacities from the Bratislava Region at the level of a part of the operation in actions the implementation of which will be beneficial for regions beyond the Bratislava Region.<sup>76</sup> Partners with a research infrastructure outside of the BR would thus be able to use this infrastructure in the implementation of concrete projects.

### **Supporting long-term strategic research (7–10 years) in RIS3 SK priority areas**

RIS3 SK defined priority areas for research and development, as well as key industry areas.<sup>77</sup> For each RIS3 SK priority area, a long-term strategic research programme will be created to specify the topic, covering the entire programming period 2014–2020. A strategic research programme means the specification of the contents of the given area of specialisation within available research and development capacities and perspective areas according to the RIS3 SK (Chapter 4 of RIS3 SK). The strategic research programme will form an annex to the call for grant applications. The preparation and approval of the strategic research programme for the purposes of long-term strategic research projects will be ensured under the RIS3 SK management mechanisms, as defined in the RIS3 SK and in the Action Plan for RIS3 SK implementation. The strategic research programme will not be subject to further changes by the Managing Authority, but will be accepted as an annex to the respective call.

In the case of long-term strategic research projects, direct links to the work programme of similar themes under Horizon 2020 and/or implementation of active international cooperation in science and technology with renowned research institutions within the European Research Area will be preferred. In this context, teaming and twinning projects related to the RIS3 SK areas of specialisation can also be supported under this activity in line with the principles of support of international projects under the OP R&I, as described under investment priority 1.1.

A two-round procedure for the selection of strategic research projects will be applied. A project plan approved by a panel of international experts will be submitted in the first round (the aim is to use experts from the European Commission's database for Horizon 2020). Once the project plan is approved, a full-fledged project can be submitted in the second round.

The projects will be implemented by mixed consortia of industrial entities and research institutions, exploiting the national potential of the best quality institutions and experts in the

given area. Emphasis will also be placed on active involvement of capacities from university science parks and research centres supported under the programming period 2007–2013, and on promoting research and development with actual results for practice (support of human resources, consumables, etc. – the structure of expenditures will be similar to the one in Horizon 2020 projects). Less emphasis will be placed on infrastructure which will be financed to the inevitable extent as an upgrade of existing equipment, i.e. developing unique equipment needed for the purposes of strategic research and non-existing in Slovakia, or existing in improper condition, and justified in terms of capacity (number of researchers to use such equipment).

The state aid scheme(s) will also be used under specific objective 1.2.1, since industrial entities will be eligible beneficiaries or eligible partners in the majority of planned activities.

Under the current legislation, it is planned to enable the involvement of R&D capacities from the Bratislava Region at the level of a part of the operation in actions the implementation of which will be beneficial for regions beyond the Bratislava Region.<sup>78</sup> Partners with a research infrastructure outside of the BR would thus be able to use this infrastructure in the implementation of concrete projects.

### ***Examples of actions for specific objective 1.2.2***

The activities aim at enhancing the competitiveness of the business sector through increased corporate expenditures on applied research, development and innovation, in particular by means of actions defined in RIS3 SK. The priority includes own research and development, protection of intellectual property rights and their commercialisation, transfer of technology with high added value, and implementation of innovation. Support will be granted to innovation of both technological and non-technological nature, i.e. innovation of products, processes, organisational, analytical and information innovations, as well as marketing, social and environmental innovations. These activities will contribute to the development of cooperation between the different actors of the innovation process. Specific objective 1.2.2 will be accomplished by means of the following types of activities:

**Building new and promoting existing research, development and innovation capacities in enterprises and/or groups of enterprises (in particular clusters) with the aim to implement projects with an innovation potential.** The current conditions with regard to the capacities of enterprises are insufficient to effectively implement R&D and innovation activities, irrespective of their size. That means that even large Slovak enterprises lack sufficient expert capacities (in terms of innovation capabilities) to ensure sustainable competitiveness on global markets. The creation of new and the development of existing R&D and innovation capacities of SMEs and large enterprises will therefore be supported. The activities will aim to develop a common infrastructure, which would contribute to a more effective establishment of multinational corporations in the national economy with areas of specialisation defined in the RIS3 SK. This activity will be implemented by means of assistance schemes and financial instruments.

**Supporting research, development and innovation activities (both technological and non-technological ones) in enterprises and/or groups of enterprises (in particular clusters).** The level of investments of enterprises into research, development and innovation projects has long been low in Slovakia, due to which actions promoting the implementation of RD&I projects in Slovak enterprises will receive support. The aim of this activity will be to enable the implementation of such projects at the level of enterprises and cluster organisations. This activity will be implemented by means of assistance schemes and financial instruments.

**Promoting the networking of enterprises, including clusters and technology platforms, involved in research, development and innovation activities.** The activities of enterprises, not only innovation ones, are performed on an individual basis or in the framework of cooperation. The aim of this activity will be to promote the networking of entities mainly through the support of cluster cooperation and development of cluster organisations carrying out activities to the benefit of their members by implementing joint, in particular research, development and innovation projects



aiming to increase the competitiveness of their members. Cooperation with R&D departments will be promoted by building technology platforms. This mechanism will also support the creation and development of clusters in new promising sectors. Such support will stimulate clusters in searching new strategic segments and implementation of development strategies. This activity will be implemented by means of assistance schemes.

**Promoting inter-sectoral partnerships and cooperation between enterprises and research institutions.** The inter-sectoral cooperation of innovation actors has long been inadequate, though the establishment of links between actors of innovation processes is a key challenge for the development of the economy's innovation performance and an important task to be accomplished by the technological agency. The aim of this activity will be to initiate and promote inter-sectoral exchange of knowledge and human resources mainly between the business sector, educational organisations and R&D organisations (e.g. through innovation vouchers). Inter-sectoral partnerships will be supported within the eligible EU territories, for example, by supporting stays of experts from renowned foreign organisations. Activities seeking to bring together schools and enterprises will be supported in order to enhance the quality and the level of mutual transfer of knowledge, thereby contributing to the development of the most promising areas of specialisation in sectors defined in the RIS3 SK and in line with the needs of the practice. This activity will comprise conferences, workshops, matchmaking roadshows, exhibitions, discussion forums, B2B, B2C, fairs and competitions promoting creativity and mutual cooperation of all relevant actors. The creation of innovation platforms and targeted mobilities of actors in research, development and innovation processes focusing on promoting expert knowledge, technical skills and creativity will also be supported with the aim to enhance knowledge transfer between research and practice. The activities will target the needs of enterprises. This action will be implemented by means of a national project or assistance schemes.

**Supporting activities addressing the protection of intellectual property rights.** The protection of intellectual property rights, mainly with regard to the results of creative work in particularly perspective industrial areas and RD&I projects is not used to a sufficient extent. Mechanisms will therefore be set up to raise the general awareness of the society about the need to protect intellectual property rights, as well as direct protection mechanisms within the European Patent Office (EPO). Besides raising awareness and intensifying the knowledge on intellectual property rights, the activities will also target general promotion and implementation of the protection of intellectual property rights on the side of businesses. This activity counts with the involvement of the technological agency and of the Industrial Property Office of the Slovak Republic. The activity will be implemented by means of a national project and assistance schemes.

**Supporting increase of quality and efficiency of production and technological processes by increasing the technological and innovation level of enterprises.** The technological level of enterprises significantly determines their competitiveness. Slovak enterprises, compared to enterprises from advanced economies, still suffer from a technology gap. In order to increase the innovation level of enterprises, support will be granted to activities which would enable the implementation of product and process innovation by reducing the technology gap. This activity will also aim to implement an effective technological transfer in order to raise the technological level of firms and their competitiveness. The acquired technologies will be further developed, adapted or integrated with other technologies or services. Priority support will be provided to technology transfer from R&D organisations into practice. This activity will be implemented by means of assistance schemes and financial instruments.

**Supporting the market launch of innovative products and services.** The results of research, development and innovation processes need to be established on the market. The aim of this activity will be to support the technical conformity of products and solutions and their subsequent commercialisation. This activity will also support the creation of semi-operations, prototypes, pilot activities, pilot testing and diffusion on the market. The activity will be implemented by means of assistance schemes and financial instruments.

**Supporting increase of innovation performance through specialised counselling and technology foresight.** The development of enterprises, especially of SMEs, is limited by the lack of quality and

early information. This condition will be eliminated by targeted foresight of trends mainly with regard to technology development, but also key global challenges and estimation of impacts. Attention will also be paid to social and environmental innovation to reflect upon challenges in these fields. The innovation level of enterprises will be raised by providing information and professional counselling through a network of consultation offices of the technological agency and through the involvement of renowned foreign experts. The experts working within the network of consultation offices will be regularly trained at home and abroad with the aim to provide services with a high added value. Innovation consultations and specialised training courses will also be provided to cluster organisations in order to improve the effectiveness of their activities. The innovation awareness of enterprises will be raised in a targeted way, as well as awareness of the importance of their own innovation activities by means of presentation and promotion activities (e.g. National Days of Innovation and Technology, media campaigns, competitions, discussion forums, conferences, workshops). The activities will be complementary to the promotion of science and research within RD&I organisations. The innovative performance and the needs of the Slovak economy will be regularly evaluated.

The activity will be implemented by means of a national project and assistance schemes.

### ***Eligible beneficiaries<sup>79</sup> target groups and target area under investment priority 1.2***

#### ***- for specific objective 1.2.1:***

<b><i>Beneficiaries</i></b>	<ul style="list-style-type: none"> <li>▪ Slovak Centre of Scientific and Technical Information (for national projects)</li> <li>▪ research and development organisations: <ul style="list-style-type: none"> <li>○ state research and development sector;</li> <li>○ higher education sector;</li> <li>○ non-profit research and development sector;</li> <li>○ business research and development sector;</li> <li>○ legal institutions established by law;</li> </ul> </li> <li>▪ research organisations from EU Member States</li> </ul>
<b><i>Target group:</i></b>	<ul style="list-style-type: none"> <li>▪ business entities, foreign research and development organisations, foreign business entities, self-governments, non-profit sector</li> </ul>
<b><i>Target area:</i></b>	<ul style="list-style-type: none"> <li>▪ less developed regions</li> </ul>

Further to the positive experience from the programming period 2007–2013, the partnership institute will be used for projects supported under specific objective 1.2.1, i.e. the prerequisite for supporting a project is to create consortia of research institutions where each institution involved in the project is assigned specific roles and funds.

#### ***- for specific objective 1.2.2***

<b><i>Beneficiaries</i></b>	<ul style="list-style-type: none"> <li>▪ state budgetary organisations or state contributory organisations within the competence of the MoE SR;</li> <li>▪ natural persons or legal entities entitled to run business;<sup>80</sup></li> <li>▪ associations of natural persons or legal entities;</li> <li>▪ non-profit sector.</li> </ul>
<b><i>Target group:</i></b>	<ul style="list-style-type: none"> <li>▪ business entities, academic research and development organisations, self-governments, non-profit sector</li> </ul>
<b><i>Target area:</i></b>	<ul style="list-style-type: none"> <li>▪ less developed regions</li> </ul>

#### 2.1.4.2 Guiding principles for selection of operations

The key task for the selection of projects is to define clear and objective criteria for the selection of operations enabling an objective assessment and evaluation of the project contribution to the accomplishment of the OP R&I objectives and results. The **general principles for selection of operations for thematic objective 1**, as described in chapter 2.1.2.2, will be taken into consideration in calls for submission of grant applications.

##### **Specific principles for selection of operations under investment priority 1.2:**

The following **specific principles for selection of operations** will apply to the selection of projects **under specific objective 1.2.1:**

- ensuring a specific selection process for projects or parts of projects in the context of the support of participation in international activities within the European Research Area, including use of the possibility of preliminary deadline for submission of projects and optimisation of the duration of the selection process;
- increased emphasis will be placed on the content side of the projects in line with the following principles:
  - increased standards for the project selection process on the basis of four groups of criteria:
    - quality of plan – scientific excellence or a contribution thereto;
    - project management quality;
    - potential effect of the project implementation;
    - demonstration of spillover effects within the region and on its value chain;
  - more intensive use of the option to use foreign experts in project evaluation;
  - regular peer-reviews of the RIS3 SK priority areas by also foreign experts;
  - introduction of mid-term and/or final content reviews with the participation of foreign experts;
- with regard to projects of cooperation between the academic sector and enterprises, projects involving SMEs will be preferred

The following **specific principles for selection of operations** will apply to the selection of projects **under specific objective 1.2.2:**

- with regard to support for the building of new and promotion of existing research, development and innovation capacities and business networking, the selection process will focus on projects ensuring access to the developed infrastructure and activities of clusters for several users on a transparent and non-discriminatory basis and at market prices;
- the horizontal measures aimed at the development of the innovation system must contribute to the accomplishment of the RIS 3 SK objectives
- expert evaluators from different professional areas will be hired for preparing expert opinions to assess the projects quality;
- projects declaring cooperation with the following entities will be favoured:
  - research and development institutions;
  - foreign partners;
  - SMEs;
- also projects with a potential to generate several important outputs will be favoured – more patents, prototypes, etc. (on the basis of the conclusions of expert opinions);
- projects with the aim to introduce products new on the market will be favoured;
- as for projects seeking to reduce the technological gap, in addition to the level of innovation of the production process in the enterprise (on the basis of the conclusions of expert opinions), the following will also be taken into consideration:
  - price of the new job created in direct relation to the project implementation;
  - price of the new job for disadvantaged groups created in direct relation to the project

- implementation;
    - o projects implemented in regions in worse socio-economic situation compared to the general socio-economic situation of the SR will be favoured<sup>81</sup>;
- with respect to assistance scheme, projects aimed to acquiring top technology for the purpose and with the perspective of ensuring further innovation in line with the RIS3 SK will be financed in particular;
- micro-enterprises, small and medium-sized enterprises will be favoured in particular.

#### 2.1.4.3 Planned use of financial instruments

Financial instruments may be used to support the implementation of those activities where the efficient use of funds from the European Structural and Investment Funds (ESIF), and this particular form of aid, will be demonstrated. In the case of economically-viable projects, where the return on investments or cost savings are expected, financial instruments represent a more appropriate form of support, avoiding market distortion. The financial instruments will focus on the support of those activities, which do not find financing on the market or do not find adequate financing upon which their implementation would be efficient.

The possibility of using revolving funds, while contributing to the objectives of the priority axes, belongs to the benefits of the use of financial instruments. The other benefits of the use of financial instruments include the opportunity to increase financial resources to achieve the specific objectives of the programme by the means of attracting additional capital based on an appropriate setting of these instruments. Attracting additional capital is necessary also with respect to the insufficient amount of funds from the ESIF to cover all investment needs in the areas concerned. Participation by private investors may also contribute towards quality improvement of project implementation, and thus additionally contribute to more efficient use of funds. With the use of financial instruments, it will be possible to support the relevant activities with appropriate financial products (loans, guarantees, capital contributions, mezzanine funds and other). Specific activities, appropriate amount of funds and the conditions for implementing specific financial instruments, including the expected leverage of allocated ESI Funds as well as combinations with other forms of support, will be based on the ex-ante assessment of financial instruments, required under Article 37(2) of the CPR for financial instruments in the 2014 – 2020 programming period.

#### 2.1.4.4 Planned use of major projects

At present, it is not planned to implement major projects under investment priority 1.2. There is, however, potential space to implement major projects only under the specific objectives of investment priority 1.2.

#### 2.1.4.5 Output indicators for investment priority 1.2

**Table 9 Common and programme specific output indicators at the level of investment priority 1.2**

ID	Indicator	Measurement unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
CO01	Number of enterprises granted support (common)	Enterprises	ERDF	Less developed region	1,830	ITMS	Once a year
CO02	Number of enterprises receiving grants (common)	Enterprises	ERDF	Less developed region	1,500	ITMS	Once a year
CO03	Number of enterprises receiving financial support other than grants (common)	Enterprises	ERDF	Less developed region	120	ITMS	Once a year
CO04	Number of enterprises receiving non-financial support (common)	Enterprises	ERDF	Less developed region	1,000	ITMS	Once a year
CO05	Number of supported new enterprises (common)	Enterprises	ERDF	Less developed region	130	ITMS	Once a year

ID	Indicator	Measure ment unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
C008	Growth of employment in supported enterprises (common)	FTE	ERDF	Less developed region	3,200	ITMS	Once a year
C024	Number of new researchers in supported enterprises (common)	Number	ERDF	Less developed region	720	ITMS	Once a year
C025	Number of researchers working in reconstructed facilities of the research infrastructure (common)	Number	ERDF	Less developed region	6,600	ITMS	Once a year
C026	Number of enterprises cooperating with research institutions (common)	Enterpri ses	ERDF	Less developed region	540	ITMS	Once a year
C027	Private investments connected with public support in innovation projects and R&D projects (common)	EUR	ERDF	Less developed region	571 800 000	ITMS	Once a year
C028	Number of enterprises receiving support to present products new on the market (common)	Enterpri ses	ERDF	Less developed region	800	ITMS	Once a year
C029	Number of enterprises receiving support with to present products new for the enterprise (common)	Enterpri ses	ERDF	Less developed region	1 400	ITMS	Once a year
00069	Number of supported research institutions (specific)	Number	ERDF	Less developed region	100	ITMS	Once a year
00070	Number of supported research institutions cooperating with enterprises (specific)	Number	ERDF	Less developed region	24	ITMS	Once a year
00072	Number of applications for registration of intellectual property (specific)	Number	ERDF	Less developed region	530	ITMS	Once a year
00073	Number of lodged patent applications (specific)	Number	ERDF	Less developed region	10	ITMS	Once a year
00074	Number of new start-ups and spin-offs (specific)	Number	ERDF	Less developed region	110	ITMS	Once a year
00076	Number of participants to consulting and educational programmes (specific)	Number	ERDF	Less developed region	30	ITMS	Once a year

## 2.1.5 Performance framework

Table 10 Performance framework of Priority Axis 1

Priority axis	Indicator type	ID	Indicator or key implementation step	Measurement unit	Fund	Category of region	Milestone for 2018	Final target 2023	Source of data	Explanation of relevance of indicator, where appropriate
1 Podpora výskumu, vývoja a inovácií	Financial indicator	F0002	Total amount of eligible expenditures after their certification by Certifying Authority	EUR	ERDF	Less developed region	709,351,762	2,707,987,632	ITMS	
	Key implementation step	K0003	Number of contracted research institutions	Number	ERDF	Less developed region	120	170	ITMS	Since the target and milestone values refer to completed operations and the expected duration of project implementation is 3–5 years, no completed operations or just a minimum number of them are foreseen as to 31 December 2018, due to which the key implementing step has been chosen, covering a 51.89 % of the priority axis allocation.
	Output indicator	O0069	Number of supported research institutions	Number	ERDF	Less developed region	0	170	ITMS	Most activities under this priority axis refer to the support of research institutions.

### 2.1.5.1 Estimated financial progress under Priority Axis 1

The estimate of the OP R&I financial progress under Priority Axis 1 is primarily based on the development of spending during the programming period 2007–2013 under the OP C&EG and OP R&D with the MoE SR and the MoESRS SR as the managing authorities.

Priority axis 1	Non-cumulative data		Cumulative data	
	ERDF	National co-financing (indicative)*	ERDF	National co-financing (indicative)*
2014	0	0	0	0
2015	2 500 000	441 177	2 500 000	441 177
2016	34 724 493	16 214 799	37 224 493	16 655 976
2017	194 576 735	128 693 746	231 801 228	145 349 722
2018	235 210 947	145 024 007	467 012 175	290 373 729
2019	268 990 952	172 937 175	736 003 127	463 310 904
2020	255 214 430	160 991 275	991 217 557	624 302 179
2021	243 729 445	157 614 274	1 234 947 002	781 916 453
2022	223 356 500	150 924 454	1 458 303 502	932 840 907
2023	193 130 377	123 712 846	1 651 433 879	1 056 553 753
Total 2014-2024	1 651 433 879	1 056 553 753	-	-

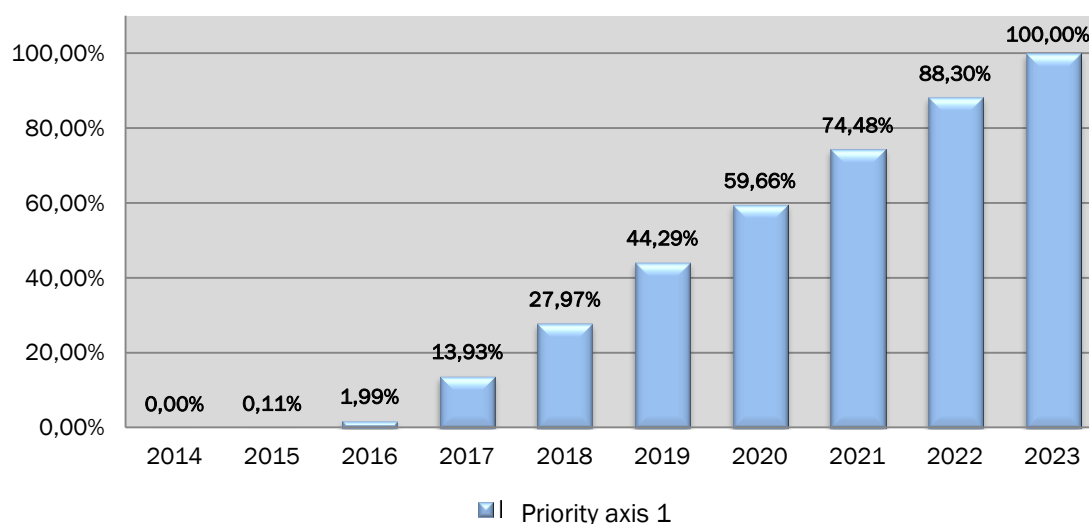
\* With respect to the ERDF funds, the national co-financing is provided as an indicative amount on the basis of estimated contracting by types of beneficiaries.

The impacts of excluding the performance reserve on the value of the partial objective in 2018 were calculated on the basis of the following mathematic algorithm:

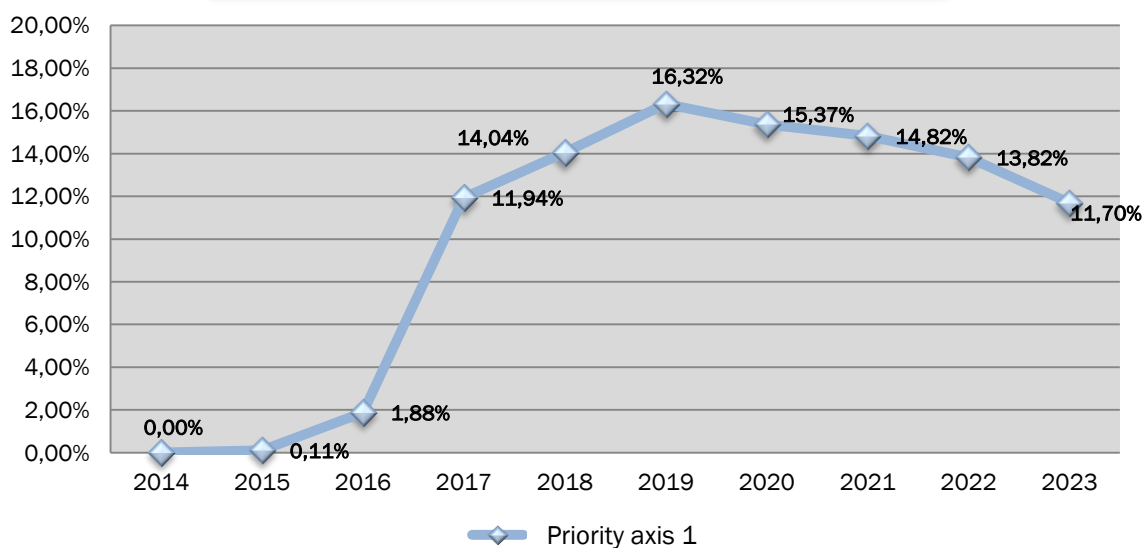
$$\frac{[\text{cumulative rate of funds drawing}_{2018} \times (\text{allocation to priority axis} - \text{performance reserve})]}{\text{allocation to priority axis}}$$

Union support & national counterpart	ERDF	National co-financing (indicative)
709 351 762	437 393 814	271 957 948

**Estimated progress of funds use under Priority Axis 1 (OP R&I) - cumulative**



**Estimated progress of funds use under Priority Axis 1 (OP R&I) – non-cumulative**





As for financial progress under Priority Axis 1, the highest annual increase in spending is expected in the sixth year of the programming period 2014–2020. The spending with regard to total eligible expenditure in 2018 is expected to reach EUR 757 385 904 (EUR 467 012 175 of ERDF funds, and EUR 290 373 729 represents indicative national co-financing).

Upon considering the performance reserve from the allocation to Priority Axis 1, the spending is expected to reach **EUR 709 351 762** (EUR 437 393 814 of ERDF funds and EUR 271 957 948 of indicative national co-financing).

### 2.1.6 Categories of interventions<sup>82</sup>

Dimension 1 – Intervention field		
Fund	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
Supporting research, development and innovation	001	86 357 301,00
	002	121 559 826,00
	004	7 984 984,00
	056	192 679 454,00
	057	139 028 425,00
	058	282 589 727,00
	059	101 291 681,00
	060	140 843 485,00
	061	144 489 630,00
	062	147 963 273,00
	063	48 068 385,00
	064	124 101 857,00
	065	6 229 981,00
	066	47 000 000,00
	067	10 005 000,00
	069	51 240 870,00

Dimension 2 – Form of finance		
Fund	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
1 Supporting research, development and innovation	01	1 629 788 908,00
	03	5 411 243,00
	04	10 822 485,00
	05	2 164 497,00
	06	3 246 746,00

Dimension 3 – Territory type	
Fond	ERDF
Category of region	Less developed

Priority axis	Code	Amount (EUR)
1 Supporting research, development and innovation	01	1,129,040,976.00
	02	336,187,026.00
	03	143,359,135.00
	04	17,138,697.00
	05	25,708,045.00

Dimension 4 – Territorial delivery mechanisms		
Fond	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
1 Supporting research, development and innovation	07	1,651,433,879.00

### 2.1.7 Summary of the planned use of technical assistance, including actions to reinforce the administrative capacity of authorities and beneficiaries under Priority Axis 1

Technical assistance will be used for specific activities under Priority Axis 1 related to the process of approval of grant applications involving foreign experts. For the purposes of an effective set-up of activities under projects of systemic nature, feasibility studies and evaluations will be conducted with the involvement of experts from relevant fields of support aimed to assess whether the activities started in the programming period 2007–2013 should continue in the future.

## 2.2 PRIORITY AXIS 2: Supporting research, development and innovation in the Bratislava Region

ID of the priority axis	2
Title of the priority axis	Supporting research, development and innovation in Bratislava region
The entire priority axis will be implemented solely through financial instruments	N/A
The entire priority axis will be implemented solely through financial instruments set up at Union level	N/A
The entire priority axis will be implemented through community-led local development	No

### 2.2.1 Fund, category of region and calculation basis for Union support

Fund	European regional development fund
------	------------------------------------

Category of region

More developed region

Calculation basis (total eligible expenditure or eligible public expenditure)

144 295 649

Category of region for outermost regions and northern sparsely populated regions (where applicable)

N/A

## 2.2.2 INVESTMENT PRIORITY 2.1: Enhancing research and innovation infrastructure and capacities to develop research and innovation excellence, and promoting centres of competence, in particular those of European interest

### 2.2.2.1 Specific objectives corresponding to the investment priority and expected results

ID

2.1.1

Specific objective

Enhancing the research activity of the Bratislava Self-Governing Region through revitalisation and fostering of research, education, innovation, and business capacities of research institutions in Bratislava

The results that the Member State seeks to achieve with Union support

Specific objective is focused on revitalisation of education and R&I capacities of the major research universities, the SAS and other research institutions established in the BR so as to make them more involved in international cooperation and in the cooperation with the business sphere in the RIS3 SK areas of specialisation.

#### EXPECTED RESULTS:

The implementation of the activities under specific objective 2.1.1 will, in a systemic way:

- increase the research activity of research-oriented universities in Bratislava;
- increase the research activity of the institutes of the Slovak Academy of Sciences established in Bratislava;
- increase the research and development potential of the Bratislava Region, accompanied by higher quality of education;
- increase the intensity/extent of business activities emerging in a university environment;
- enhance participation in international activities, mainly in international and European programmes.

Table 11 Programme specific result indicators corresponding to specific objective 2.1.1

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0127	Number of lodged patent applications in Bratislava Region	Number	More developed region	16	2013	63	EPO SO SR	Once a year

## 2.2.3 Action to be supported under the investment priority 2.1

### 2.2.3.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of

## **main target groups, specific territories targeted and types of beneficiaries under investment priority 2.1**

### ***Examples of actions for specific objective 2.1.1:***

#### **Consolidation and optimisation of research, education and innovation capacities of research institutions in Bratislava**

During the programming period 2007–2013, dozens of various types of research infrastructure including central infrastructure were supported within research institutions. The following types of research centres received support in particular:

- centres of excellence (smaller projects focused on the modernisation of individual laboratories);
- university science parks – concentrated space (area) in the vicinity of higher education institutions or to the SAS (or in the proximity of their research departments) disposing of suitable conditions for excellent research and development and ensuring interaction with practice;
- research centres – less complex than university science parks – a more virtual association of institutions that are not situated in the proximity of each other; for example, a group of state-of-the-art laboratories built in a specific research discipline for the best research institutions.

During the programming period 2014–2020, it will be necessary to ensure in a coordinated way further modernisation and crucial development of the research institutions' infrastructure in the RIS3 SK priority areas.

The projects will have to be based on what was built within the given institution during the programming period 2007–2013, and will have to clearly define the needs for the purposes of modernisation and optimisation of the priority infrastructure<sup>83</sup> of the institution for the entire programming period 2014–2020. The project plan will be assessed by foreign experts specialised in R&D infrastructure. On the basis of the approved project design, a full-fledged project consistent with the project plan can subsequently be submitted. Under supported projects, all research centres where the respective organisation is the coordinator or the partner will be upgraded or modernised, as well as educational infrastructure/facilities of research-oriented study programmes for the purposes of practice. This approach will prevent further fragmentation of the research potential of the Slovak Republic and duplicity in new infrastructure facilities.

This activity will also support a common large project of the two biggest Slovak research universities – the Comenius University in Bratislava and the Slovak University of Technology in Bratislava. Both universities have a strong education, research and innovation potential that has not been exploited yet. Both universities have dozens of internal research centres from the programming period 2007–2013 which caused internal fragmentation of both institutions in many areas. At the same time, a big problem persists with regard to the general education and research infrastructure – in particular in Mlynská dolina and partly in the centre of Bratislava – without the solving of which universities cannot create adequate conditions for researchers and students corresponding to the current needs and thematic areas covered by the universities and representing RIS3 SK priority areas. The priority at the level of the RIS3 SK – with the involvement of foreign experts – will be to ensure coordinated management of modernisation and further development of these two universities, also in partnership with other relevant eligible institutions. The activity can be implemented through the national project.

#### **Supporting synergies and complementary financing of Horizon 2020 projects ensuring wider participation of new Member States ("widening participation" instruments of Horizon 2020)**

Horizon 2020 set out instruments that could help increase the participation of Member States with a poor participation rate, including the Slovak Republic. These instruments include, for example, teaming, ERA Chairs, etc. Although the Bratislava Region represents the majority of all

The state aid scheme(s) will also be used under Priority Axis 2, investment priority 2.1, since entities performing economic operations will also be eligible beneficiaries or eligible partners in most planned activities.

## Beneficiaries

- Target group:**

- Target area:**

### 2.2.3.2 Guiding principles for selection of operations

Projects under investment priority 2.1 will also be subject to the specific principles for selection of operations under investment priority 1.1, as defined in chapter 2.1.2.2.

Financial instruments may be used to support the implementation of those activities where the efficient use of funds from the European Structural and Investment Funds (ESIF), and this particular form of aid, will be demonstrated. In the case of economically-viable projects, where the return on investments or cost savings are expected, financial instruments represent a more appropriate form of support, avoiding market distortion. The financial instruments will focus on the support of those activities, which do not find financing on the market or do not find adequate financing upon which their implementation would be efficient.

59

specific objectives of the programme by the means of attracting additional capital based on an appropriate setting of these instruments. Attracting additional capital is necessary also with respect to the insufficient amount of funds from the ESIF to cover all investment needs in the areas concerned. Participation by private investors may also contribute towards quality improvement of project implementation, and thus additionally contribute to more efficient use of funds. With the use of financial instruments, it will be possible to support the relevant activities with appropriate financial products (loans, guarantees, capital contributions, mezzanine funds and other). Specific activities, appropriate amount of funds and the conditions for implementing specific financial instruments, including the expected leverage of allocated ESI Funds as well as combinations with other forms of support, will be based on the ex-ante assessment of financial instruments, required under Article 37(2) of the CPR for financial instruments in the 2014 – 2020 programming period.

#### 2.2.3.4 Planned use of major projects

The following type of major project is planned under specific objective 2.1.1:

- joint project of the Comenius University in Bratislava and the Slovak University of Technology in Bratislava;

#### 2.2.3.5 Output indicators for investment priority 2.1

**Table 12 Common and programme specific output indicators at the level of investment priority 2.1**

ID	Indicator	Measure ment unit	Fund	Category of region	Target value (2023)	Source of data	Frequency of reporting
C001	Number of enterprises granted support (common)	Enterpri ses	ERDF	More developed region	10	ITMS	Once a year
C002	Number of enterprises receiving grants (common)	Enterpri ses	ERDF	More developed region	10	ITMS	Once a year
C005	Number of supported new enterprises (common)	Enterpri ses	ERDF	More developed region	5	ITMS	Once a year
C024	Number of new researchers in supported enterprises (common)	FTE	ERDF	More developed region	60	ITMS	Once a year
C025	Number of researchers working in reconstructed facilities of the research infrastructure (common)	FTE	ERDF	More developed region	2,360	ITMS	Once a year
C026	Number of enterprises cooperating with research institutions (common)	Enterpri ses	ERDF	More developed region	10	ITMS	Once a year
C027	Private investments with public support in innovation projects and R&D projects (common)	EUR	ERDF	More developed region	1,300,000	ITMS	Once a year
C032	Decreased annual consumption of primary energy in public buildings	kWh/ year	ERDF	More developed region	18 400000	ITMS	Once a year
C034	Estimated annual decrease of GHG emissions	t equiv. CO2	ERDF	More developed region	4 900	ITMS	Once a year
00069	Number of supported research institutions (specific)	Number	ERDF	More developed region	26	ITMS	Once a year
00070	Počet podporených výskumných inštitúcií spolupracujúcich s podnikmi (špecifický)	Number	ERDF	More developed region	10	ITMS	Once a year
00071	Number of reconstructed facilities of the research infrastructure (specific)	Number	ERDF	More developed region	20	ITMS	Once a year
00073	Number of lodged patent applications (specific)	Number	ERDF	More developed region	10	ITMS	Once a year
00074	Number of new start-ups and spin-offs (specific)	Number	ERDF	More developed region	5	ITMS	Once a year
00180	Number of public buildings at low-energy or ultra-low or with nearly zero-energy	Number	ERDF	More developed region	3	ITMS	Once a year
00183	Floor area of buildings recovered beyond the framework of minimum requirements	m <sup>2</sup>	ERDF	More developed region	80 000	ITMS	Once a year

**2.2.4 INVESTMENT PRIORITY 2.2 Promoting business investment in research and innovation, and developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies**

**2.2.4.1 Specific objectives of the investment priority and expected results**

<b>ID</b>	<b>2.1.1</b>
<b>Specific objective</b>	<b>Increasing private investments by building research and development centres in Bratislava</b>
<b>The results that the Member State seeks to achieve with Union support</b>	<p>With regard to promoting the contribution of research and development to the economic development of the Slovak Republic, this specific objective seeks to increase private investments in research and development in the Bratislava Region through joint inter-disciplinary projects of the R&amp;D community and industry with links to customers and with a focus on the RIS3 SK priority areas.</p> <p><i>EXPECTED RESULTS:</i></p> <p>Given the nature of supported projects, the following results are expected:</p> <ul style="list-style-type: none"> <li>• increased private investments in research and development in the Bratislava Region;</li> <li>• utilisation of project outputs in technological innovation in industry, resulting in new products and services;</li> <li>• creation of new firms through incubators within university science parks;</li> <li>• creation of new jobs in science parks</li> </ul>

**Table 13 Programme specific result indicators corresponding to specific objective 2.2.1**

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0045	Amount of private investments in research and development in Bratislava Region	EUR	More developed region	119,829,000	2012	270,000,000	SO SR	Once a year



**ID****2.2.2****Specific objective****Enhancing research, development and innovation capacities in industry and services in the Bratislava Region****The results that the Member State seeks to achieve with Union support**

This specific objective aims to enhance the competitiveness of the business sector by increasing the costs of applied research, development and innovation through the implementation of measures defined in the RIS3 SK. The priority is own research and development, technology transfer with a high added value, and innovation. The support will target SMEs and large enterprises. The support of SMEs is a priority.

**EXPECTED RESULTS:**

- Increased share of enterprises applying research, development and innovation;
- Increased competitiveness of enterprises;
- Reduced unemployment rate in Bratislava region

**Table 14 Programme specific result indicators corresponding to specific objective 2.2.2**

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0047.	Number of enterprises with innovation activities in the Bratislava region	%	More developed region	40.83	2010	50	SO SR	2016 2018 2020 2023

**2.2.4 Action to be supported under the investment priority 2.2****2.2.4.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries under investment priority 2.2****Examples of actions for specific objective 2.2.1.**

**Promotion of research and development within individual industrial research and development centres (industrial entity as direct grant beneficiary) in RIS3 SK priority areas in the Bratislava Region**

These activities will seek to support selected industrial research and development centres with an international dimension and a potential to produce breakthrough unique results at international level. The research centre will be coordinated and founded by an enterprise disposing of research and/or development capacities, with international experience in projects under EU Framework Programmes on Research and Development. The category of partners will include entities from the business sector and excellent research institutions not conducting economic activities (universities, the Slovak Academy of Sciences, departmental research institutions, non-profit research and development organisations with relevant experience in research activities and projects). Support will refer to the 2<sup>nd</sup> stage of development of research centres supported in the period 2007–2013 (in case they showed viable and generated quality results) or new research centres.

Within such research centres, a whole range of activities covering excellent research and experimental development will be supported. Activities of pre-competitive nature will also receive support – higher risk research with a high subsequent potential to reach unique results.

This is a collaborative research scheme where the subject of research/development is determined by the enterprise as the owner of the research centre. The research centre is not an autonomous legal entity, but is established on the basis of a partnership agreement between project participants. From the point of view of research and development, the aim is to produce concrete results exploitable in practice (prototype/patentable intellectual property/new process/method, etc.).

The state aid scheme(s) will also be used under investment priority 2.2, since entities conducting economic activities will also be eligible beneficiaries or eligible partners in the planned activities.

#### ***Examples of actions for specific objective 2.2.2.***

**Supporting the increase of innovation potential of enterprises within the BR.** The aim of this activity is to support the creation of new and the accelerated development of existing R&I capacities and activities in enterprises (including associations of enterprises) in the BR in order to increase the involvement of local businesses in global value chains. Support will be provided to increase the innovation performance of firms, the intensity of industrial research and experimental development, and the exploitation of its results, as well as to raise the intensity of cooperation between businesses and R&D organisations (e.g. through innovation vouchers). This activity will also promote the networking of enterprises with an innovation potential through targeted support of mainly cluster cooperation and the development of cluster organisations for the implementation of joint research and development projects seeking to raise the competitiveness of businesses. This activity will be implemented by means of assistance schemes and financial instruments.

**Promoting inter-sectoral partnerships and cooperation between enterprises and research institutions.** Support will be provided to the inter-sectoral exchange of knowledge and human resources mainly between the business sector, educational organisations and R&D organisations. This activity will comprise conferences, workshops, matchmaking roadshows, exhibitions, discussion forums, B2B, B2C, fairs and competitions. Targeted mobilities of actors in research, development and innovation processes focusing on promoting expert knowledge, technical skills and creativity will also be supported with the aim to enhance knowledge transfer between research and practice. Inter-sectoral partnerships will be supported within eligible EU territories, for example, by supporting the stays of experts in renowned organisations abroad. This action will be implemented by means of a national project or assistance schemes.

**Supporting activities addressing the protection of intellectual property rights.** Support will be provided to raise awareness about the protection of intellectual property rights and to promote and commercialise the execution of such rights by the private sector. The protection of intellectual property rights, mainly with regard to the results of creative work in particularly perspective industrial areas and RD&I projects is not used to a sufficient extent. Mechanisms will therefore be set up to raise the general awareness of the society about the need to protect intellectual property rights, as well as direct protection mechanisms within the European Patent Office (EPO). Besides raising awareness and intensifying the knowledge on intellectual property rights, the activities will also focus on the general promotion and implementation of the protection of intellectual property rights on the side of businesses (e.g. information days, seminars, counselling, campaigns, training courses). This activity counts with special involvement of the technological agency and of the Industrial Property Office of the Slovak Republic. The commercialisation of the results of industrial research, experimental development and innovation activities will also be supported, which will positively influence the competitiveness of businesses on domestic and international markets. This action will be implemented by means of a national project or assistance schemes.

**Supporting increase of innovation performance of business in the BR through specialised services and counselling.** A professional counselling office SIEA will be established to improve the current condition and provide targeted counselling on RD&I to businesses in the BR. Qualified experts will provide information and counselling to enterprises on technology transfer, promotion of R&I, active search of partners, and on the possibilities of joining international networks and organisations, and will also present expert and prognostic studies, technology foresight,

specialised counselling on enhancing innovation performance, etc. The new office will also serve as a contact point to help the involvement of businesses in international activities with the aim to assist in the implementation of Europe 2020 and the Danube Strategy. Targeted support will be provided to raise the innovation awareness of enterprises within the BR and their awareness of the importance of innovation activities by means of presentation and promotion activities (National Days of Innovation and Technology, media campaigns, competitions, discussion forums). At the same time, the office will represent a basic platform for the implementation of other projects of the SIEA as a technological agency. This action will be implemented by means of a national project or assistance schemes.

#### ***Eligible beneficiaries<sup>85</sup> target groups and target area under investment priority 2.1***

##### ***- for specific objective 2.2.1:***

<b><i>Beneficiaries</i></b>	<ul style="list-style-type: none"> <li>▪ Slovak Centre of Scientific and Technical Information (for national projects)</li> <li>▪ research and development organisations: <ul style="list-style-type: none"> <li>○ state research and development sector;</li> <li>○ higher education sector;</li> <li>○ non-profit research and development sector;</li> <li>○ business research and development sector;</li> </ul> </li> <li>▪ legal institutions established by law;</li> <li>▪ research organisations from EU Member States</li> </ul>
<b><i>Target group:</i></b>	<ul style="list-style-type: none"> <li>▪ business entities, foreign research and development organisations, foreign business entities, self-governments, non-profit sector</li> </ul>
<b><i>Target area:</i></b>	<ul style="list-style-type: none"> <li>▪ more developed region</li> </ul>

Further to the positive experience from the programming period 2007–2013, the partnership institute will be used for activities under specific objectives 2.2.1; i.e. the prerequisite for supporting a project is the creation of a consortium of research institutions where each institution involved in the project is assigned specific roles and funds.

##### ***- for specific objective 2.2.2***

<b><i>Beneficiaries</i></b>	<ul style="list-style-type: none"> <li>▪ state budgetary and contributory organisations under the competence of the MoE SR;</li> <li>▪ natural persons and legal entities entitled to run business;<sup>86</sup></li> <li>▪ associations of physical persons or legal entities;</li> <li>▪ non-profit sector</li> </ul>
<b><i>Target group:</i></b>	<ul style="list-style-type: none"> <li>▪ business entities, research and development institutions, self-governments, non-profit sector</li> </ul>
<b><i>Target area:</i></b>	<ul style="list-style-type: none"> <li>▪ more developed region</li> </ul>

#### **2.2.4.2 Guiding principles for selection of operations**

The general principles of project selection under thematic objective 1, as defined in chapter 2.1.2.2, will apply to the selection of projects under investment priority 2.2.

Projects under investment priority 2.2 will also be subject to the specific principles for selection of operations under investment priority 1.2, as defined in chapter 2.1.4.2. The specific principles for selection of operations under specific objective 2.2.1 correspond to the specific principles for selection of projects under specific objective 1.2.1, and the specific principles for selection of project under specific objective 2.2.2 correspond to the specific principle for selection of projects

under specific objective 1.2.2. with the exception of principles referring to the reduction of the technological gap which is not supported under specific objective 2.2.2.

#### 2.2.4.3 Planned use of financial instruments

Financial instruments may be used to support the implementation of those activities where the efficient use of funds from the European Structural and Investment Funds (ESIF), and this particular form of aid, will be demonstrated. In the case of economically-viable projects, where the return on investments or cost savings are expected, financial instruments represent a more appropriate form of support, avoiding market distortion. The financial instruments will focus on the support of those activities, which do not find financing on the market or do not find adequate financing upon which their implementation would be efficient.

The possibility of using revolving funds, while contributing to the objectives of the priority axes, belongs to the benefits of the use of financial instruments. The other benefits of the use of financial instruments include the opportunity to increase financial resources to achieve the specific objectives of the programme by the means of attracting additional capital based on an appropriate setting of these instruments. Attracting additional capital is necessary also with respect to the insufficient amount of funds from the ESIF to cover all investment needs in the areas concerned. Participation by private investors may also contribute towards quality improvement of project implementation, and thus additionally contribute to more efficient use of funds. With the use of financial instruments, it will be possible to support the relevant activities with appropriate financial products (loans, guarantees, capital contributions, mezzanine funds and other). Specific activities, appropriate amount of funds and the conditions for implementing specific financial instruments, including the expected leverage of allocated ESI Funds as well as combinations with other forms of support, will be based on the ex-ante assessment of financial instruments, required under Article 37(2) of the CPR for financial instruments in the 2014 – 2020 programming period.

#### 2.2.4.4 Planned use of major projects

At present, it is not planned to implement major projects under investment priority 2.2. There is, however, potential space to implement major projects only under the specific objectives of investment priority 2.2.

#### 2.2.4.5 Output indicators for investment priority 2.2

**Table 15 Common and programme specific result indicators at the level of investment priority 2.2**

ID	Indicator	Measure ment unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
C001	Number of enterprises granted support (common)	Enterpri ses	ERDF	More developed region	380	ITMS	Once a year
C002	Number of enterprises receiving grants (common)	Enterpri ses	ERDF	More developed region	310	ITMS	Once a year
C003	Number of enterprises receiving financial support other than grants (common)	Enterpri ses	ERDF	More developed region	10	ITMS	Once a year
C004	Number of enterprises receiving non-financial support (common)	Enterpri ses	ERDF	More developed region	310	ITMS	Once a year
C005	Number of supported new enterprises (common)	Enterpri ses	ERDF	More developed region	35	ITMS	Once a year
C008	Private investments corresponding to public support to enterprises (grants) (common)	FTE	ERDF	More developed region	70	ITMS	Once a year
C024	Number of new researchers in supported enterprises (common)	Number	ERDF	More developed region	40	ITMS	Once a year
C025	Number of researchers working in reconstructed facilities of the research infrastructure (common)	Number	ERDF	More developed region	390	ITMS	Once a year

ID	Indicator	Measure ment unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
C026	Number of enterprises cooperating with research institutions (common)	Enterpri ses	ERDF	More developed region	130	ITMS	Once a year
C027	Private investments with public support in innovation projects and R&D projects (common)	EUR	ERDF	More developed region	31,100,000	ITMS	Once a year
C028	Number of enterprises receiving support to launch products new for the market (common)	Enterpri ses	ERDF	More developed region	190	ITMS	Once a year
C029	Number of enterprises receiving support to launch products new for the enterprise (common)	Enterpri ses	ERDF	More developed region	300	ITMS	Once a year
00069	Number of supported research institutions (specific)	Number	ERDF	More developed region	5	ITMS	Once a year
00070	Number of supported research institutions cooperating with enterprises (specific)	Number	ERDF	More developed region	5	ITMS	Once a year
00072	Number of applications for registration of intellectual property rights (specific)	Number	ERDF	More developed region	17	ITMS	Once a year
00073	Number of lodged patent applications (specific)	Number	ERDF	More developed region	2	ITMS	Once a year
00074	Number of new start-ups and spin-offs (specific)	Number	ERDF	More developed region	27	ITMS	Once a year
00076	Number of supported cluster organisations (specific)	Number	ERDF	More developed region	10	ITMS	Once a year

## 2.2.5 Performance framework

Table 16 Performance framework for Priority Axis 2

Priority axis	Indicator type	ID	Indicator or key implementation step	Measurement unit	Fund	Category of region	Milestone for 2018	Final target 2023	Source of data	Explanation of relevance of indicator, where appropriate
2 Supporting research, development and innovation in the Bratislava Region	Financial indicator	F0002	Total amount of eligible expenditures after their certification by Certifying Authority	EUR	ERDF	More developed region	80,906,674	300,187,244	ITMS	
	Key implementation step	K0003	Number of contracted research institutions	Number	ERDF	More developed region	20	30	ITMS	Since the target and milestone values refer to completed operations and the expected duration of project implementation is 3–5 years, no completed operations or just a minimum number of them are foreseen as to 31 December 2018, due to which the key implementing step has been chosen, covering 72.15% of the priority axis allocation.
	Output indicator	O0069	Number of supported research institutions	Number	ERDF	More developed region	0	30	ITMS	Most activities under this priority axis refer to the support of research institutions.

### Estimated financial progress developed under Priority Axis 2

The estimate of the OP R&I financial progress under Priority Axis 2 is primarily based on the development of spending during the programming period 2007–2013 under the OP C&EG and OP R&D with the MoE SR and the MoESRS SR as the managing authorities.

Priority axis 2	Non-cumulative data		Cumulative data	
	ERDF	National co-financing (indicative)*	ERDF	National co-financing (indicative)*
2014	0	0	0	0
2015	0	0	0	0
2016	1 224 411	1 407 726	1 224 411	1 407 726

2017	14 097 846	15 939 212	15 322 257	17 346 938
2018	25 214 993	28 318 076	40 537 250	45 665 014
2019	25 893 727	28 810 395	66 430 977	74 475 409
2020	24 170 758	26 642 272	90 601 735	101 117 681
2021	19 377 185	20 457 185	109 978 920	121 574 866
2022	17 577 185	17 577 185	127 556 105	139 152 051
2023	16 739 544	16 739 544	144 295 649	155 891 595
Total 2014-2024	144 295 649	155 891 595	-	-

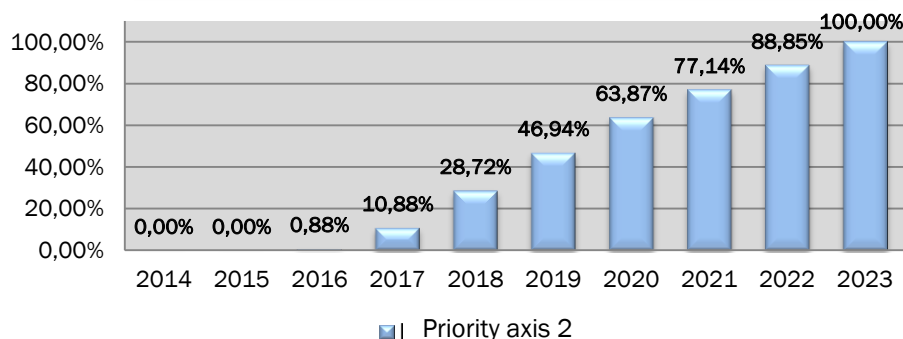
\* With respect to the ERDF funds, the national co-financing is provided as an indicative amount on the basis of estimated contracting by types of beneficiaries.

The impacts of excluding the performance reserve on the value of the partial objective in 2018 were calculated on the basis of the following mathematic algorithm:

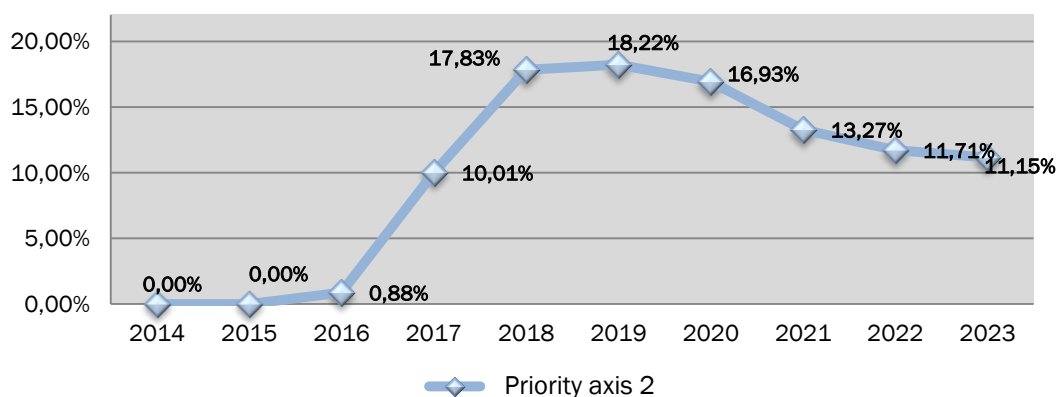
$$\frac{[\text{cumulative rate of funds drawing}_{2018} \times (\text{allocation to priority axis} - \text{performance reserve})]}{\text{allocation to priority axis}}$$

Union support & national counterpart	ERDF	National co-financing (indicative)
80 906 674,00	38 046 960,00	42 859 714,00

**Estimated financial progress developed under Priority Axis 2 - cumulative**



**Estimated financial progress developed under Priority Axis 2 non- cumulative**





As for financial progress under Priority Axis 2, the highest annual increase in spending is expected in the sixth year of the programming period 2014–2020. The spending with regard to total eligible expenditure in 2018 is expected to reach EUR 86 202 264 (EUR 40 537 250 of ERDF funds, and EUR 45 665 014 represents indicative co-financing).

Upon considering the performance reserve from the allocation to Priority Axis 2, the spending is expected to reach **EUR 80 906 674** (EUR 38 046 960 of ERDF funds and **EUR 42 859 714** of indicative national co-financing).

## 2.2.6 Categories of interventions<sup>87</sup>

Dimension 1 – Intervention field		
Fund	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
2 Supporting research, development and innovation in the Bratislava Region	001	1 998 000,00
	002	1 002 000,00
	056	12 120 660,00
	057	8 478 858,00
	058	59 069 656,00
	059	4 436 576,00
	060	35 727 200,00
	061	5 957 716,00
	062	2 957 716,00
	063	4 000 000,00
	064	5 000 000,00
	065	2 128 360,00
	069	1 418 907,00

Dimension 2 – Form of finance		
Fund	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
2 Supporting research, development and innovation in the Bratislava Region	01	143 719 977,00
	03	143 918,00
	04	287 836,00
	05	57 567,00
	06	86 351,00

Dimension 3 – Territory type		
Fund	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
2 Supporting	01	119 617 726,00

research, development and innovation in the Bratislava Region	02	14 355 167,00
	03	5 117 427,00
	04	2 082 132,00
	05	3 123 197,00

Dimension 4 – Territorial delivery mechanisms		
Fund	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
2 Supporting research, development and innovation in the Bratislava Region	07	144 295 649,00

### 2.2.7 Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries under Priority Axis 2

Technical assistance will be used for specific activities under Priority Axis 2 related to the process of approval of grant applications involving foreign experts. For the purposes of an effective set-up of activities under projects of systemic nature, feasibility studies and evaluations will be conducted with the involvement of experts from relevant fields of support aimed to assess whether the activities started in the programming period 2007–2013 should continue in the future.

## 2.3 PRIORITY AXIS 3: Enhancing the competitiveness and growth of SMEs

ID of the priority axis	3
Title of the priority axis	Enhancing the competitiveness and growth of SMEs
The entire priority axis will be implemented solely through financial instruments	N/A
The entire priority axis will be implemented solely through financial instruments set up at Union level	N/A
The entire priority axis will be implemented through community-led local development	No

### 2.3.1 Fund, category of region and calculation basis for Union support

Fund	European regional development fund
Category of region	Less developed region

Calculation basis (total eligible expenditure or eligible public expenditure)

376 415 000

Category of region for outermost regions and northern sparsely populated regions (where applicable)

N/A

## 2.3.2 INVESTMENT PRIORITY 3.1: Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators

### 2.3.2.1 Specific objectives corresponding to the investment priority and expected results

ID

3.1.1

Specific objective

Enhancing the growth of new competitive SMEs

The results that the Member State seeks to achieve with Union support

The specific objective focuses on comprehensive solutions supporting the establishment of new SMEs and the acceleration of recently founded SMEs, as well as start-ups and spin-offs. The related measures will ensure systemic support during the initial business stages, and the creation of appropriate conditions for the growth of competitiveness of SMEs and for reducing the extent of their disappearance (e.g. creative industry).

#### EXPECTED RESULTS:

- Increase in the creation and development of innovative technological firms, including start-ups and spin-offs all over Slovak regions;
- Improved access to finance and venture capital for new SMEs;
- Reduced unemployment rate through job creation in Slovak regions;
- Increased number of competitive enterprises founded by disadvantaged groups.

Table 17 Programme specific result indicators corresponding to specific objective 3.1.1

ID	Ukazovateľ	Merná jednotka	Kategória regiónu	Východisková hodnota	Východiskový rok	Cieľová hodnota (2023)	Zdroj údajov	Frekvencia podávania správ
R0048	Survival rate of new enterprises on the market after two years	%	Less developed region	41.7	2010	52	SBA	Once a year

## 2.3.3 Action to be supported under the investment priority 3.1

### 2.3.3.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of

**main target groups, specific territories targeted and types of beneficiaries under investment priority 3.1**

***Examples of actions for specific objective 3.1.1:***

**Support for new SMEs and start-ups through grants and financial instruments (loan programme to support new SMEs and start-ups, venture capital fund for start-ups at seed and start-up stages) focusing also on the promotion of industry and services, including knowledge-intensive services (KIS) and new, progressive sectors.** The successful measures implemented in the previous period (micro-loan programmes of the SBA and SZRB) resulted in the need to support, by means of specific financial instruments, new enterprises which represent a gap in the commercial funding market. This activity is designed to address the problem of limited access to funds which threatens the viability of new SMEs and start-ups. This activity also creates conditions for sustainable performance of SMEs. The financial instruments represent a suitable complement to the portfolio of other measures (support for the networking of informal investors, non-financial support through activities of business centres, provision of counselling services etc.). The financial schemes can be combined with a grant component (tied to the fulfilment of certain conditions). This will create the possibility to support SMEs without a business history, as they represent the major risk from the point of view of the commercial sector, and hence, the biggest market failures. These financial instruments are characterised by a combination of financial assistance (loan, entry of capital) and long-term counselling. The proposed financial instruments aim to promote business development also with respect to social innovation, i.e. the support of disadvantaged social groups of people (women, young people under 30 years, senior people over 50 years, long-term unemployed, third-country nationals, handicapped people, the Roma, etc.) and support of business entities operating in the social economy.

The aim of this activity is to

- improve access to funds for new SMEs and start-ups;
- help and support the launch and development of business;
- apply innovative business systems, methods, and instruments;
- support the transfer of personal experience and expert knowledge upon start of business;
- make funds accessible to SMEs through loans under favourable conditions with minimum distortion impacts on the market.

This action will be implemented by means of assistance schemes and financial instruments.

**Promotion of informal investors' networking in financing the initial stages of a business cycle.** In the initial stages of business activities, entrepreneurs find themselves in the 'death valley' where the risk of success/failure of a business plan is so high that they are not able to obtain funds from commercial banks or from institutional investors in venture capital. In these cases, funding is provided by informal investors – crowd-funding or business angels. Business angels are individual investors using equity finance to fund SMEs with a strong growth potential. They fill the gap between business financing from own resources or from resources of family members, and financing by formal actors (venture capital funds or banks). The public sector plays an irreplaceable role in the setting up of this type of networks, since such entities are almost always dependent on public support or on other forms of sponsorship. This activity is proposed on the basis of the successful pilot project of business angels pilot networking named Slovak Business Angels Club which was implemented by the SBA in cooperation with the Association of Young Entrepreneurs of Slovakia in 2011–2012. Business angels networks successfully operate in several EU countries (e.g. Germany) where they are involved in the identification and support of new innovative SMEs in the initial stages of their growth.

This activity aims to

- promote the development of the venture financing market in Slovakia;
- encourage the motivation of individual investors to invest in start-ups;
- stimulate the interest of start-ups in this kind of financing;
- create networks bringing together informal investors for the purposes of financing start-ups and new SMEs;

- ensure support activities needed to set up and ensure the functioning of the informal venture capital market.

This action will be implemented by means of assistance schemes.

**Promotion of activities and development of business centres in Slovak regions (one-stop-shops) with the aim to establish institutions for SMEs, as well as those interested in running a business using the existing infrastructure.** No systemic support was provided to new enterprises in the previous period, and the system of support was fragmented and uncoordinated. This activity aims to create a network of seven business centres all over Slovak regions. It will be complex one-stop-shop centres where people interested in entering business (including disadvantaged social groups) or already established SMEs can obtain information, advice, support, space for their growth, or cooperation, funding possibilities, etc. The services of the centres will have several basic forms, such as accelerator services, incubator services, co-working services, etc., including existing support tools currently implemented by SBA. The business centres in the different Slovak regions will be established following the example of the National Business Centre (NBC) in Bratislava. The NBC in Bratislava covering the entire Bratislava Region will be implemented under PA4 of OP R&I as a model or pilot project of the future network allocated in other Slovak regions. The NBC Bratislava pilot stage was launched during the programming period 2007–2013 together with the SBA and the SCSTI, while services will start to be provided in full in the programming period 2014–2020. On the basis of the experience of the NBC in Bratislava and cooperation with the SBA and the SCSTI, business centres in other Slovak regions will be established. The regional centres will be identified on the basis of the mapping of the area and of regional actors in order to define a suitable model for each region. It is not the intention to build new infrastructure, but to create centres using the existing infrastructure and involving various partners, such as regional and local self-governments, the academia, R&D capacities, business organisations, etc. The primary activities offered by NBCs include:

- creating infrastructure to support new enterprises (offices and operation premises, technological equipment);
- individual business advising;
- organising expert events – seminars, webinars, lectures, discussion forums, workshops, conferences, B2B, B2G events, cooperation events, etc.;
- training events and education programmes on preparation for entrepreneurship, specific training courses for incubated and start-up entrepreneurs, training programmes for external SMEs;
- mediation of financing – micro-loans, credits, venture capital, business angels, innovation vouchers, etc.
- online platforms and demand services (connection to the Enterprise Europe Network and other networks), searching in databases of projects, partners and offers for cooperation, documents sharing, blogs, etc.); this activity is a follow-up of the national project Electronic services of the Ministry of Economy of the SR;
- promotion of networking and cooperation with organisations from the R&D, academic and business sectors;
- internships in foreign hi-tech centres and parks;
- support for internationalisation and establishment on the global market.

This action will be implemented by means of a national project and assistance schemes.

**Support for successful business practice and encouraging entrepreneurial spirit.** No specific measures aiming to increase business motivation were implemented in the previous period, which resulted in a reduced motivation of individuals to enter business and in a missing positive social perception of entrepreneurship. The aim of this activity is to promote the setting up of new SMEs, present entrepreneurship as a career choice, and raise public confidence in the benefits of a business status.

This activity will be implemented through:

- a variety of presentation and promotion actions (e.g. road shows, publishing of stories, media series),
- traditional events, such as competitions (businesswoman of the year, start-up weekend, etc.), internship programmes, summer schools, etc.
- presentation of examples of successful policies of business support and of the experience of successful entrepreneurs;
- events aimed to stimulate business ambition, the development of the business potential and the business skills of potential entrepreneurs.

This action will be implemented by means of a national project.

**Provision of long-term counselling services.** This activity seeks to provide systematic professional help to new entrepreneurs in order to increase the survival rate of new SMEs during the first three years of business (the survival rate of SMEs in Slovakia is significantly below EU average). This activity is a follow-up of the support programmes of short-term counselling implemented during the previous period. Another incentive to launch this activity is the EU Network of Female Entrepreneurship Ambassadors project implemented by the SBA in 2009–2011 which created a network of female ambassadors – mentors for women launching business. Long-term systematic support and mentoring will be provided to start-ups and people interested in entering business:

- advising at the stage preceding the establishment of an enterprise during the preparation and definition of a business plan and analysis of its potential;
- advising at the stage of the launch of business, establishment and starting up of an enterprise;
- advising at the stage of initial business activities of SMEs throughout a maximum three-year start-up period.

Advising/mentoring services will be provided to different target groups of new SMEs, such as innovative and technology-oriented start-ups, SMEs in various traditional industrial and manufacturing sectors, etc. Likewise, this activity will be specifically designed for disadvantaged social groups (women, young people under 30 years of age, senior people over 50 years, long-term unemployed, third-country nationals handicapped people, Roma).

This action will be implemented by means of a national project and assistance schemes.

**Support for the exploitation of new ideas in the economy – SBIR scheme** (Small Business Innovation Research). This activity is proposed on the basis of a successful international concept which was presented and discussed during the previous period, but has not been implemented in Slovakia yet. It is a tool to finance projects aimed at product and technological innovation, as well as services applicable in the market. The aim of this activity is to strengthen business activities in high-tech sectors and knowledge-intensive services, and to promote knowledge transfer from theory to practice. This activity will contribute to the establishment of new innovative SMEs, especially start-ups and spin-offs. It is a support scheme implemented through several successive stages:

- phase 1 represents preparatory technical feasibility studies on innovation in industry and services;
- phase 2 represents projects implementing innovative designs with prototype creation/pilot solution and preparation of a business plan;
- phase 3 focuses on product commercialisation by means of market commercialisation projects.

This action will be implemented by means of assistance schemes.

**Identification and use of social innovations for business and job creation, especially for disadvantaged social groups (women, young people under 30 years of age, senior people over 50 years of age, long-term unemployed, third-country nationals, handicapped people, Roma).** This activity is based on the need to engage all social groups in business. The SBA implemented several projects aimed to support women's entrepreneurship in the previous period. At present, the SBA is running the project Support of migrant entrepreneurship aimed to overcome the obstacles in the business activities of migrants from third countries in the SR. This activity is

a follow-up on the previous projects. It aims to encourage and promote the creation of new SMEs by disadvantaged social groups, to eliminate social and cultural barriers affecting the business opportunities of disadvantaged social groups, and to increase the proportion of these groups in business in the total number of entrepreneurs, placing special emphasis on the entrepreneurship of women. Another area of actions is the support of business entities providing social services and development of the social economy. This activity envisages cooperation with public authorities.

The activity will be implemented through:

- provision of information and expert counselling (e.g. business plan preparation, facilitation of access to seed capital);
- short-term and long-term courses with module structure curricula tailored to the needs and specific features of target groups and target enterprises;
- provision of incentives for entrepreneurs engaged in services oriented on disadvantaged social groups,
- support of the national institutional platform to promote women's entrepreneurship;
- support of specialised structures focused on encouraging the entrepreneurship of other disadvantaged social groups;
- professional events, presentations, seminars, etc.

This action will be implemented by means of a national project and assistance schemes.

### ***Eligible beneficiaries<sup>88</sup> target groups and target area under investment priority 3.1***

<b>Beneficiaries</b>	<ul style="list-style-type: none"> <li>▪ natural persons or legal entities entitled to run business and meeting the SME definition;</li> <li>▪ non-profit sector;</li> <li>▪ Slovak Business Agency;</li> <li>▪ state budgetary organisations or state contributory organisations within the competence of the MoE SR;</li> <li>▪ public institutions established by law;</li> <li>▪ self-government entities;</li> <li>▪ Slovak Centre of Scientific and Technical Information (in the case of a national project on business centres development)</li> </ul>
<b>Target group:</b>	<ul style="list-style-type: none"> <li>▪ SMEs, individuals interested in running business, including disadvantaged social groups</li> </ul>
<b>Target area:</b>	<ul style="list-style-type: none"> <li>▪ less developed region</li> </ul>

#### **2.3.3.2 Guiding principles for selection of operations**

The following **general principles for selection of projects under thematic objective 3** will be taken into particular consideration in calls for submission of grant applications:

- definition of transparent and objective conditions the verification of which is necessary for the funding of national projects along with a bigger emphasis on quality preparation of such projects
- the possibility of a two-stage project selection in selected calls anticipating big public interest and/or in calls where the implementation of the system will result in a reduction of administrative and financial burdens for potential applicants;
- projects contributing the implementation of innovations in line with the objectives RIS 3 SK objectives will be supported preferentially;
- professional evaluators from the different professional areas will be selected for the preparation of expert opinions to assess the quality of projects;
- preference of micro- and small enterprises.



### **Specific principles for project selection under investment priority 3.1:**

The following **specific principles for project selection** will apply under **specific objective 3.1.1:**

- with respect to the support of new SMEs and start-ups, enterprises younger than five years at the time of filing the grant application will be subject to selection;
- emphasis will be placed on the quality of projects, i.e. on the professional assessment of the potential survival rate of the enterprise, the extent of innovation of the production process/product/service, and on the impacts of the project implementation on improving the competitiveness of the enterprise within the regional, national and European area and the probability of achieving the set objectives;
- start-up and spin-off projects will be preferred (alternatively, a separate call will be launched for these categories of projects);
- with regard to non-repayable forms of support, commercial tourism facilities will not be supported;
- projects supporting development of knowledge economy focused either on high/ medium high technology industries, or knowledge intensive services<sup>89</sup> will be favoured;
- projects with the aim to introduce products new on the market will be favoured;
- projects declaring the implementation of activities resulting in cooperation within local production systems will be preferred;
- projects filed by applicants owned individuals from disadvantaged groups will be preferred;
- projects creating new jobs will be preferred, depending on the following criteria:
  - o price per job created in direct relation to the project implementation;
  - o price per job for individuals from disadvantaged groups created in direct relation to the project implementation.

#### **Regional aspects of assistance**

- projects implemented in regions with a deteriorated social and economic situation compared to the overall social and economic situation of the SR will be preferred.

### **2.3.3.3 Planned use of financial instruments**

Financial instruments may be used to support the implementation of those activities where the efficient use of funds from the European Structural and Investment Funds (ESIF), and this particular form of aid, will be demonstrated. In the case of economically-viable projects, where the return on investments or cost savings are expected, financial instruments represent a more appropriate form of support, avoiding market distortion. The financial instruments will focus on the support of those activities, which do not find financing on the market or do not find adequate financing upon which their implementation would be efficient.

The possibility of using revolving funds, while contributing to the objectives of the priority axes, belongs to the benefits of the use of financial instruments. The other benefits of the use of financial instruments include the opportunity to increase financial resources to achieve the specific objectives of the programme by the means of attracting additional capital based on an appropriate setting of these instruments. Attracting additional capital is necessary also with respect to the insufficient amount of funds from the ESIF to cover all investment needs in the areas concerned. Participation by private investors may also contribute towards quality improvement of project implementation, and thus additionally contribute to more efficient use of funds. With the use of financial instruments, it will be possible to support the relevant activities with appropriate financial products (loans, guarantees, capital contributions, mezzanine funds and other). Specific activities, appropriate amount of funds and the conditions for implementing specific financial instruments, including the expected leverage of allocated ESI Funds as well as combinations with other forms of support, will be based on the ex-ante assessment of financial

instruments, required under Article 37(2) of the CPR for financial instruments in the 2014 – 2020 programming period.

#### 2.3.3.4 Planned use of major projects

It is not planned to implement major projects under specific objective 3.1.1.

#### 2.3.3.5 Output indicators for investment priority 3.1

**Table 18 Common and programme specific result indicators at the level of investment priority 3.1**

ID	Ukazovateľ	Merná jednotka	Fond	Kategória regiónu	Cieľová hodnota (2023)	Zdroj údajov	Frekvencia podávania správ
C001	Number of enterprises granted support (common)	Enterprises	ERDF	Less developed region	4,160	ITMS	Once a year
C002	Number of enterprises receiving grants (common)	Enterprises	ERDF	Less developed region	300	ITMS	Once a year
C003	Number of enterprises receiving financial support other than grants (common)	Enterprises	ERDF	Less developed region	20	ITMS	Once a year
C004	Number of enterprises receiving non-financial support (common)	Enterprises	ERDF	Less developed region	3,840	ITMS	Once a year
C005	Number of supported new enterprises (common)	Enterprises	ERDF	Less developed region	4,000	ITMS	Once a year
C006	Private investments with public support in innovation projects or R&D projects (common)	EUR	ERDF	Less developed region	48,000,000	ITMS	Once a year
C007	Private investments with public support in innovation projects or R&D projects (other than grants) (common)	EUR	ERDF	Less developed region	53,200,000	ITMS	Once a year
C008	Growth of employment in supported enterprises (common)	FTE	ERDF	Less developed region	240	ITMS	Once a year
C028	Number of enterprises receiving support to launch products new for the market (common)	Enterprises	ERDF	Less developed region	1,890	ITMS	Once a year
C029	Number of enterprises receiving support to launch products new for the enterprise (common)	Enterprises	ERDF	Less developed region	3,030	ITMS	Once a year
O0072	Number of applications for registration of intellectual property (specific)	Number	ERDF	Less developed region	30	ITMS	Once a year
O0074	Number of new start-ups and spin-offs (specific)	Number	ERDF	Less developed region	1,200	ITMS	Once a year
O0075	Number of participants in counselling and training programmes (specific)	Number	ERDF	Less developed region	7,100	ITMS	Once a year
O0077	Number of enterprises supported through SME counselling centres (specific)	Number	ERDF	Less developed region	3,200	ITMS	Once a year
O0078	Number of new SMEs established by individuals from disadvantaged social groups (specific)	Number	ERDF	Less developed region	370	ITMS	Once a year

### 2.3.4 INVESTMENT PRIORITY 3.2: Developing and implementing new business models for SMEs, in particular with regard to internationalisation

#### 2.3.4.1 Specific objectives corresponding to the investment priority and expected results

**ID** **3.2.1**

## Specific objective

### Growing internationalisation of SMEs and increased use of the possibilities offered by the EU Single Market

The results that the Member State seeks to achieve with Union support

This specific objective will focus on developing a comprehensive system of support for the internationalisation of SMEs. The proposed instruments are complementary to the existing ones (international business support network – EEN) and together constitute a complex framework to support the penetration of Slovak SMEs to foreign markets, including markets in countries outside the EU.

#### EXPECTED RESULTS:

- Increased use of the export potential of SMEs;
- Maintaining of the existing and creation of new jobs all over Slovak regions under the impact of SMEs' internationalisation;
- Improved links between domestic SMEs and suppliers of large multi-national corporations;
- Creation of conditions for increasing the innovation potential and competitiveness of SMEs, in particular of industrial sectors with high and medium high-tech manufacturing (HMHTM) and knowledge-intensive services (KIS) for the implementation of activities on the common market.

Table 19 Programme specific result indicators corresponding to specific objective 3.2.1

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0049	SME share in export	%	Less developed region	30.4	2012	35	SO SR	Once a year

## 2.3.5 Action to be supported under the investment priority 3.2

### 2.3.5.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries under investment priority 3.2

#### Examples of actions for specific objective 3.2.1.:

#### Participation of Slovak enterprises in presentation events

The aim of this activity is to save the costs of SMEs in the context of their efforts to penetrate and succeed in foreign markets. This activity will focus on the following:

- creation of presentation products and materials of SMEs intended for foreign markets;
- participation in fairs, exhibitions, cooperation meetings, missions aimed to establish international cooperation for SMEs;
- the covering of one-time advisory and consultancy services provided in relation to the promotion of marketing, trading and investment activities of SMEs;
- production of industry-specific presentation materials and presentations abroad;

- organisation of cooperation events (business forums, cooperation exchanges, cooperation expert seminars) focused on export-oriented and investment-friendly presentations of individual industries;
- development of cooperation with foreign partners in Slovakia and abroad, etc.

This action will be implemented by means of a national project and assistance schemes.

**Creation of specific capacities and activities to support the internationalisation of SMEs in Slovakia.** There is a lack of specific instruments aimed to support SMEs within the process of internationalisation, especially smaller categories of enterprises. The existing forms of support are limited, uncoordinated and hardly to use for most SMEs. The aim of this activity is to create a comprehensive system of support of the internationalisation of SMEs in order to contribute to the elimination of existing barriers (high costs, lack of knowledge of the market, regulatory burdens, insufficient capacity, etc.). This activity aims to provide:

- comprehensive information and services (for example, the seeking of business and technology partners, partner cooperation events and trade missions,
- support for negotiations and conclusion of business contracts;
- preparation of business and technology profiles;
- development of professional capacities through specialised counselling for exporters;
- up-to-date and transparent information on the support of foreign expansion and internationalisation of SMEs using the infrastructure of the project Electronic services of the Ministry of Economy of the SR implemented during the programming period 2007–2013.

This action will be implemented by means of a national project and assistance schemes.

**Creation of alternative business and support platforms.** Due to fragmentation and lack of cooperation among different organisations, the SME structure in the SR prevents an efficient involvement in international trade exchange. The aim of this activity is to create a tool for competitive and innovative SMEs to increase their export potential and stimulate their mutual cooperation in order to expand in the international market, with an emphasis on third markets. Alternative business platforms (ABP) should represent a bridge between private investors, including business angels, enterprises and their customers at foreign markets. This type of measures has not been implemented in Slovakia so far, but some past experience exists with mechanisms of coordination of international trade exchange. This activity has been proposed on the basis of experiences from other EU countries (UK) and recommendations from domestic entities (University of Technology in Žilina) as a measure aimed to enhance the export potential of SMEs. This activity aims to support the creation of ABPs as entities for capital investment in SMEs in order to support their growth and expansion. Support platforms (export consortia) are forms of strategic cooperation between undertakings and serve to provide services mediating access to foreign markets, whether it is:

- basic administrative functions, organisational assistance, help with translations;
- market surveys
- assistance in the preparation of a general export strategy;
- coordination of the joint purchase of inputs;
- legal assistance and counselling;
- creation of a common brand alliance, and other marketing services.

Support will be provided to establish and operate platforms for the funding of start-up costs, research and marketing services, as well as operating expenses during the period until the platform reaches a profit point. Another form of support would be financial incentives for private investors in SMEs involved in ABPs. The activity will be implemented by means of a national project and assistance schemes.

**Engaging SMEs in EU programmes.** EU programmes, such as Horizon 2020, COSME, and other EU programmes, focus on the integration of EU policies through the implementation of projects promoting and expanding cooperation between the EU member and candidate countries in the

long term. No effective form of SME support existed in the previous period, as a result of which the engagement of Slovak SMEs in such programmes was poor. The activity aims to facilitate the obtaining of funds for SMEs under EU programmes. The purpose is to involve SMEs in the largest possible number of projects, while ensuring the quality of submitted projects. This activity will comprise the following:

- providing information on the possibilities of support from various EU programmes;
- presentation of SMEs with successful projects within EU programmes;
- support in the search of partners and projects for the purposes of cooperation, using EEN databases;
- financial support through grants for the preparation of projects or certain parts of project documentation for EU programmes;
- expert counselling and assessment of draft project plans.

The activity will be implemented by means of a national project and assistance schemes.

### ***Eligible beneficiaries<sup>90</sup> target groups and target area under investment priority 3.2***

#### ***Beneficiaries***

- natural persons or legal entities entitled to run business and meeting the SME definition;
- non-profit sector;
- associations of natural persons or legal entities;
- Slovak Business Agency;
- state budgetary organisations or state contributory organisations within the competence of the MoE SR;
- public institutions established by law;

#### ***Target group:***

- SMEs,

#### ***Target area:***

- less developed regions

### **2.3.5.2 Guiding principles for selection of operations**

The calls for grant applications will be subject to the **general principles for project selection under thematic objective 3**, as defined in chapter 2.3.3.2.

#### **Specific principles for selection of operations under investment priority 3.2:**

The following **specific principles for selection of operations** will apply to the selection of projects under specific objective 3.2.1:

- projects with the aim to introduce products new on the market will be favoured;
- Professional project assessment:
  - with respect to the participation of Slovak enterprises in presentation events, the assessment will focus on the following:
    - suitability and the number of planned participations of enterprises in presentation events;
    - potential impact of such participation on improving the position of the enterprise and of the growth of its business opportunities in the respective market;
    - the probability of achieving the set objectives;
  - with respect to alternative platforms, the professional assessment will focus on:
    - the strategy of investing investors' funds in engaged SMEs;
    - the principles of selection of engaged SMEs;
    - the needs and the purpose of financial incentives for investors;

- the potential of the impacts of investments in SMEs on their expansion and establishment in the international market;
- the probability of achieving the set objectives
- with respect to SMEs involvement in community programmes, the professional assessment will focus on:
  - the suitability of the planned project;
  - the probability to succeed in international competition.

### 2.3.5.3 Planned use of financial instruments

Financial instruments may be used to support the implementation of those activities where the efficient use of funds from the European Structural and Investment Funds (ESIF), and this particular form of aid, will be demonstrated. In the case of economically-viable projects, where the return on investments or cost savings are expected, financial instruments represent a more appropriate form of support, avoiding market distortion. The financial instruments will focus on the support of those activities, which do not find financing on the market or do not find adequate financing upon which their implementation would be efficient.

The possibility of using revolving funds, while contributing to the objectives of the priority axes, belongs to the benefits of the use of financial instruments. The other benefits of the use of financial instruments include the opportunity to increase financial resources to achieve the specific objectives of the programme by the means of attracting additional capital based on an appropriate setting of these instruments. Attracting additional capital is necessary also with respect to the insufficient amount of funds from the ESIF to cover all investment needs in the areas concerned. Participation by private investors may also contribute towards quality improvement of project implementation, and thus additionally contribute to more efficient use of funds. With the use of financial instruments, it will be possible to support the relevant activities with appropriate financial products (loans, guarantees, capital contributions, mezzanine funds and other). Specific activities, appropriate amount of funds and the conditions for implementing specific financial instruments, including the expected leverage of allocated ESI Funds as well as combinations with other forms of support, will be based on the ex-ante assessment of financial instruments, required under Article 37(2) of the CPR for financial instruments in the 2014 – 2020 programming period.

### 2.3.5.4 Planned use of major projects

It is not planned to implement major projects under specific objective 3.2.1.

### 2.3.5.5 Output indicators for investment priority 3.2

**Table 20 Common and programme specific result indicators at the level of investment priority 3.2**

ID	Indicator	Measure ment unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
C001	Number of enterprises providing support (common)	Enterpri ses	ERDF	Less developed region	1,080	ITMS	Once a year
C002	Number of enterprises receiving grants (common)	Enterpri ses	ERDF	Less developed region	200	ITMS	Once a year
C004	Number of enterprises receiving non-financial support (common)	Enterpri ses	ERDF	Less developed region	1,020	ITMS	Once a year
C006	Private investments corresponding to public support for enterprises (grants) (common)	EUR	ERDF	Less developed region	41,700,000	ITMS	Once a year
C028	Number of enterprises receiving support to launch products new for the market (common)	Enterpri ses	ERDF	Less developed region	500	ITMS	Once a year
C029	Number of enterprises receiving support to launch products new for the enterprise (common)	Enterpri ses	ERDF	Less developed region	140	ITMS	Once a year



ID	Indicator	Measure ment unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
00072	Number of applications for registration of intellectual property (specific)	Number	ERDF	Less developed region	25	ITMS	Once a year
00075	Number of participants to consulting and training programmes (specific)	Number	ERDF	Less developed region	2 020	ITMS	Once a year
00080	Number of participations of SMEs at fairs and exhibitions abroad (specific)	Number	ERDF	Less developed region	200	ITMS	Once a year
00081	Number of supported business and support platforms (specific)	Number	ERDF	Less developed region	10	ITMS	Once a year
00082	Number of SMEs engaged in EU programmes (specific)	Number	ERDF	Less developed region	180	ITMS	Once a year

## 2.3.6 INVESTMENT PRIORITY 3.3 Supporting the creation and the extension of advanced capacities for product and service development

### 2.3.6.1 Specific objectives corresponding to the investment priority and expected results

<b>ID</b>	<b>3.3.1</b>
<b>Specific objective</b>	<b>Increasing SME competitiveness at their development phase</b>
<b>The results that the Member State seeks to achieve with Union support</b>	<p>This specific objective aims to encourage the growth and innovation of established SMEs at their development phase. These activities will increase the added value and productivity within the value chains, clusters, and cooperation of SMEs with large enterprises. These activities will also involve a special approach to disadvantaged social groups and the implementation of socially oriented measures.</p> <p>Under specific objective 3.3.1, state assistance and de minimis assistance schemes will also be applied (including implementation of financial engineering instruments).</p> <p><b>EXPECTED RESULTS:</b></p> <ul style="list-style-type: none"> <li>Increased number of competitive SMEs all over Slovak regions;</li> <li>Creation of conditions for the growth by 5% of domestic added value in total exports by 2020 compared to the present;</li> <li>Improved access to finance for SMEs at their growth phase</li> <li>Support the introduction of various types of innovations in practice for the society;</li> <li>Improved cooperation and better links between domestic SMEs and suppliers of large multi-national corporations.</li> </ul>

**Table 21** Programme specific result indicators corresponding to specific objective 3.3.1

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0050	Share of SMEs on creation of added value in private sector	%	Less developed region	54.5	2013	59	SO SR	Once a year



## 2.3.7 Action to be supported under the investment priority 3.3

### 2.3.7.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries under investment priority 3.3

#### *Examples of actions for specific objective 3.3.1:*

**Development of existing SMEs through grants and financial instruments (loan programmes for various SME segments and various thematic areas, venture capital fund for developing SMEs).** In the previous period, enterprises were mostly supported through non-repayable financial contributions. The experience from the previous period shows that the grant form of support is not optimal for all types of activities and for all forms of enterprises. Diversified financial products are therefore proposed. These financial products are designed for various target groups of SMEs and aim to create the prerequisites for continuous operations of SMEs in the market and for their further growth and development. The proposed financial instruments represent a suitable complement to the portfolio of non-financial services for existing SMEs. Besides repayable forms of support, the activity also includes support for SMEs through non-repayable financial contributions to encourage cooperation between SMEs within local production systems and large domestic and multi-national corporations, whereas support is provided to cover the costs of creating this type of cooperation (e.g. setting up of local production systems, meeting of required technical standards, SME audits before entry into cooperation with large enterprises, etc.).

The aim of this activity is to:

- ensure access of existing SMEs at their development stage to capital;
- ensure various forms of SME funding;
- address the problem of limited access of some categories of SMEs to capital;
- create the conditions for successful cooperation between SMEs and large domestic and multi-national corporations.

The different products and forms of support can be combined (e.g. grant support and loan schemes), divided and specialised according to the type of the SME (micro-, small and medium-sized enterprises). The proposed instruments will also support the entrepreneurship of disadvantaged social groups (women, young people up to 30 years, senior people over 50 years, long-term unemployed, third-country nationals, handicapped people, Roma). This activity will be implemented by means of assistance schemes and financial instruments.

**Provision of information and counselling for SME development.** No counselling programmes were implemented under the OP C&EG and other structural funds programme during the previous programming period. A limited extent of support was provided by state programmes. The mastering of certain skills and competences is the key factor for the development of SMEs competitiveness. This activity aims to promote the development of existing SMEs with a development potential through expert counselling in person and in electronic form. The activity will be implemented by means of information and professional counselling services, specialised advising accompanied by the seeking of suitable business ideas, professional advisory services with a 'higher added value' for knowledge and smart specialisation based businesses, etc. This activity will form part of the business centres concept described under specific objective 3.1.1. The primary activities offered by business centres under specific objective 3.3.1 include:

- special counselling to enhance business skills and other competencies;
- special counselling to enhance skills by introducing quality standards, e.g. quality management systems, process management, accreditation<sup>91</sup> and certification, REACH, EMAS, ISO 14001, etc.;
- seminars/workshops;
- creating databases of specialised counselling, including networking;

- competitions aimed to promote examples of good business practice;
- training focused on raising the quality of business counselling;
- marketing communication of new business trends and topics.

This activity will be implemented by means of a national project and assistance schemes.

**Use of e-business tools by SMEs.** The internet and the internet economy represent a unique opportunity for Slovakia to exploit the potential of global trends (mobile technology, cloud, social networking), to promote the export of Slovak products and services, increase economic growth in the years to come, and create jobs. Slovakia does have the potential, but its overall capacity for modern technological solutions, especially in the SME sector, is poor. However, no specific measures to support electronic entrepreneurship within the SME environment have been implemented so far. The aim of this activity is to stimulate the use of electronic business possibilities (e-commerce, e-business) within small and medium-sized enterprises. The aim is to motivate SMEs, mainly in the categories of micro-enterprises and small enterprises which have not had any experience in on-line business, to introduce and develop digital technology in their business activities. This activity comprises several measures:

- provision of information on the possibilities and advantages of electronic business for SMEs;
- advising on the different forms of electronic business;
- development of the knowledge and skills of SMEs in the field of electronic business;
- technical support for the creation of corporate websites, e-shops, etc. by producing generic applications;
- financial support for producing electronic business applications.

This activity does not include state electronic services for entrepreneurs which are supported under the Operational Programme Integrated Infrastructure. This activity will be implemented by means of a national project and assistance scheme.

**Supporting the development of alternative forms of entrepreneurship.** In terms of contents, this activity is based on the studies of alternative forms of entrepreneurship (e.g. family business, simplified joint stock company) prepared during the previous period, which showed the need of alternative forms of entrepreneurship with respect to some types of business activities (agricultural activities, crafts, capital investments). This measure will seek to create favourable conditions for the entrepreneurship of disadvantaged social groups (women, young people under 30 years, senior people over 50 years, long-term unemployed, third-country nationals, handicapped people) and also to favour forms of entrepreneurship specialised on support of social economy and for specific forms of entrepreneurship. The activity will comprise:

- analysis of the legislative environment;
- preparation of draft legislation to define the legal status of alternative business models;
- definition of systemic support mechanisms and incentives for the support and stabilisation of alternatives forms of entrepreneurship;
- promotion of specialised structures aimed to stimulate the entrepreneurship of women and other disadvantaged social groups;
- pilot projects for the testing of the proposed alternative forms of entrepreneurship, support mechanisms and measures;
- awareness-raising, development of the skills and competences of entrepreneurs from disadvantaged social groups;
- support for the creation of marketable products and services of entrepreneurs from disadvantaged social groups.

This activity envisages social innovation. The activity will be implemented by means of a national project and assistance schemes.

**Creation of new creative industry business models.** Creative industry is a fast-developing sector with a big development potential. This activity will seek to support the development of this sector through the provision of targeted counselling, training and other support activities, including those focusing on inter-sectoral cooperation and internationalisation. It will also support activities

enhancing the growth of development capacities and their networking for the purposes of making the creative process more effective and to commercialise the results of creative work of firms active in the creative industry sector. Activities promoting creative industry and market development activities will also be supported. The activity will be implemented by means of a national project and assistance schemes.

**Supporting increase of SMEs´ performance and functioning standards, including green economy.**

This activity is a follow-up of the successful measure under OP C&EG (measure 1.3). It seeks to keep the competitiveness of SMEs through the compensation of costs incurred to SMEs in relation to the fulfilment of conditions of specific EU regulations (e.g. European legislation with regard to personal data processing, REACH directive, payment services directive, specific regulations concerning delivery of certain products or services). The support will focus on the following areas:

- preparation and development of quality management systems;
- implementation of an external certification process related to the introduction of arrangements compatible with requirements arising from the relevant EU regulation;
- implementation of pre-certification audit to check the condition of the enterprise;
- introduction of technical standards in production and services;
- introduction of systems and standards in line with the EU requirements and/ or international standards.

The activity will be implemented by means of a national project and assistance schemes.

**Monitoring of the business environment in line with the “Think Small First” principle.** This activity complements the other activities addressing direct forms of support of SMEs. The aim of this activity is to create favourable conditions for SMEs´ in line with principles of Small Business Act initiative with the aim to enhance their growth and innovativeness. During the previous period, the SBA monitored the business environment with partial support from a state programme. In connection with the activities of the SME Envoy, the need to identify the barriers and needs of SMEs with respect to the *Think Small First* principle and others Small Business Act principles gained on importance. This activity will therefore seek to ensure the preparation of background documents for the SME Envoy, for the Ministry of Economy of the SR and for other ministries. The purpose is to take the *Think Small First* principle and other Small Business Act Initiative principles into account when preparing draft legislation, measures and policies aimed to improve the business environment and to address the problem of SME entrepreneurship. This activity will ensure:

- continuous monitoring of the business environment,
- preparation of analyses and surveys, creation and maintenance of databases of SME indicators;
- mapping of the actual conditions and situation of SMEs from the view of implementation of Small Business Act Initiative principles;
- identification and analyses of barriers to the development of SME business;
- comparing of the situation in Slovakia to the conditions for running a business in other countries (in particular neighbouring countries of the EU)

The activity will be implemented by means of a national project.

**Eligible beneficiaries<sup>92</sup> target groups and target area under investment priority 3.3**

**Beneficiaries**

- natural persons or legal entities entitled to run business and meeting the SME definition;
- associations of natural persons or legal entities
- non-profit sector;
- Slovak Business Agency;
- state budgetary organisations or state contributory organisations within the competence of the MoE SR;

**Target group:**

**Target area:**

- public institutions established by law;
  - self-government entities;
  - Ministry of Economy of the SR
  - Slovak Centre of Scientific and Technical Information (in the case of a national project on business centres development)
- 
- SMEs
  - less developed regions

### 2.3.7.2 Guiding principles for selection of operations

The calls for grant applications will be subject to the **general principles for project selection under thematic objective 3**, as defined in chapter 2.3.3.2.

#### Specific principles for selection of operations under investment priority 3.3:

The specific principles for selection of operations referring to specific objective 3.3.1 correspond to the specific principles for selection of operations under specific objective 3.1.1, with the exception of the first three specific principles, including the following principle:

- during the selection of projects, emphasis will be placed on the project quality, i.e. on the professional assessment of compliance with specific EU regulations, extent of innovation of the production process/product/service, and the impacts of the project implementation on improving the competitiveness of the enterprise within the regional, national and European area and the probability of achieving the set objectives.

### 2.3.7.3 Planned use of financial instruments

Financial instruments may be used to support the implementation of those activities where the efficient use of funds from the European Structural and Investment Funds (ESIF), and this particular form of aid, will be demonstrated. In the case of economically-viable projects, where the return on investments or cost savings are expected, financial instruments represent a more appropriate form of support, avoiding market distortion. The financial instruments will focus on the support of those activities, which do not find financing on the market or do not find adequate financing upon which their implementation would be efficient.

The possibility of using revolving funds, while contributing to the objectives of the priority axes, belongs to the benefits of the use of financial instruments. The other benefits of the use of financial instruments include the opportunity to increase financial resources to achieve the specific objectives of the programme by the means of attracting additional capital based on an appropriate setting of these instruments. Attracting additional capital is necessary also with respect to the insufficient amount of funds from the ESIF to cover all investment needs in the areas concerned. Participation by private investors may also contribute towards quality improvement of project implementation, and thus additionally contribute to more efficient use of funds. With the use of financial instruments, it will be possible to support the relevant activities with appropriate financial products (loans, guarantees, capital contributions, mezzanine funds and other). Specific activities, appropriate amount of funds and the conditions for implementing specific financial instruments, including the expected leverage of allocated ESI Funds as well as combinations with other forms of support, will be based on the ex-ante assessment of financial instruments, required under Article 37(2) of the CPR for financial instruments in the 2014 – 2020 programming period.

### 2.3.7.4 Planned use of major projects

It is not planned to implement major projects under specific objective 3.3.1.

### 2.3.7.5 Output indicators for investment priority 3.3

**Table 22 Common and programme specific output indicators at the level of investment priority 3.3**

ID	Indicator	Measurement unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
C001	Number of enterprises receiving support (common)	Enterprises	ERDF	Less developed region	2,390	ITMS	Once a year
C002	Number of enterprises receiving grants (common)	Enterprises	ERDF	Less developed region	290	ITMS	Once a year
C003	Number of enterprises receiving financial support other than grants (common)	Enterprises	ERDF	Less developed region	90	ITMS	Once a year
C004	Number of enterprises receiving non-financial support (common)	Enterprises	ERDF	Less developed region	2,390	ITMS	Once a year
C006	Private investments corresponding to public support of SMEs (grants) (common)	EUR	ERDF	Less developed region	52,900,000	ITMS	Once a year
C007	Private investments corresponding to public support of enterprises (other than grants) (common)	EUR	ERDF	Less developed region	67,500,000	ITMS	Once a year
C008	Employment growth in supported enterprises (common)	FTE	ERDF	Less developed region	560	ITMS	Once a year
C028	Number of enterprises supported to launch products new for the market (common)	Enterprises	ERDF	Less developed region	1,090	ITMS	Once a year
C029	Number of enterprises supported to launch products new for enterprise (common)	Enterprises	ERDF	Less developed region	1,700	ITMS	Once a year
00072	Number of applications for the registration of intellectual property rights (specific)	Number	ERDF	Less developed region	60	ITMS	Once a year
00075	Number participants to counselling and training programmes (specific)	Number	ERDF	Less developed region	7,000	ITMS	Once a year
00083	Number of enterprises receiving non-financial support by means of information, counselling and mentoring services for SME development (specific)	Number	ERDF	Less developed region	1,030	ITMS	Once a year
00084	Number of enterprises receiving non-financial support to create new business models in creative industry (specific)	Number	ERDF	Less developed region	1,160	ITMS	Once a year

## 2.3.8 Performance framework

Table 23 Performance framework for Priority Axis 3

Priority axis	Indicator type	ID	Indicator or key implementation step	Measurement unit	Fund	Category of region	Milestone for 2018	Final target 2023	Source of data	Explanation of relevance of indicator, where appropriate
3 Enhancing the competitiveness and growth of SMEs	Financial indicator	F0002	Total amount of eligible expenditures after their certification by Certifying Authority	EUR	ERDF	Less developed region	143,835,276	565,429,599	ITMS	
	Key implementation step	K0001	Number of enterprises supported through counselling centres for SMEs	Number	ERDF	Less developed region	900	3,200	ITMS	Share in the priority axis allocation. 5.05%, preliminary results monitored by means of a national project implemented throughout the programming period
	Output indicator	O0077	Number of enterprises supported through counselling centres for SMEs	Number	ERDF	Less developed region	0	3,200	ITMS	Target of the key implementation step, share in the priority axis allocation 5.05 %
	Key implementation step	K0004	Number of enterprises receiving non-financial support by means of information, counselling and mentoring services for SME development	Number	ERDF	Less developed region	290	1,030	ITMS	Share in the priority axis allocation: 4.27%, preliminary results monitored by means of a national project implemented throughout the programming period
	Output indicator	O00083	Number of enterprises receiving non-financial support by means of information, counselling and mentoring services for SME development	Number	ERDF	Less developed region	0	1,030	ITMS	Target of the key implementation step, share in the priority axis allocation 4.27%.

Priority axis	Indicator type	ID	Indicator or key implementation step	Measurement unit	Fund	Category of region	Milestone for 2018	Final target 2023	Source of data	Explanation of relevance of indicator, where appropriate
	Key implementation step	K0005	Number of enterprises receiving non-financial support through the creation of new business models in creative industry	Number	ERDF	Less developed region	330	1,160	ITMS	Share in the priority axis allocation. 5.31%, preliminary results monitored by means of a national project implemented throughout the programming period
	Output indicator	O0084	Number of enterprises receiving non-financial support through the creation of new business models in creative industry	Number	ERDF	Less developed region	0	1,160	ITMS	Target of the key implementation step, share in the priority axis allocation 5.31%
	Output indicator	C002	Number of enterprises receiving grants	Enterprises	ERDF	Less developed region	80	300	ITMS	Share in the priority axis allocation: 39.55%

### Estimated financial progress developed under Priority Axis 3

The estimate of the OP R&I financial progress under Priority Axis 3 is primarily based on the development of spending during the programming period 2007–2013 under the OP C&EG and OP R&D with the MoE SR and the MoESRS SR as the managing authorities.

Priority Axis 3	Non-cumulative data		Cumulative data	
	ERDF	National co financing (indicative)*	ERDF	National cofinancing (indicative)*
2014	0	0	0	0
2015	0	0	0	0
2016	3 525 424	1 770 271	3 525 424	1 770 271
2017	49 355 936	24 783 796	52 881 360	26 554 067
2018	49 355 936	24 783 796	102 237 296	51 337 863
2019	63 385 304	31 828 561	165 622 600	83 166 424
2020	56 462 250	28 352 190	222 084 850	111 518 614
2021	56 462 250	28 352 189	278 547 100	139 870 803
2022	56 462 250	28 352 190	335 009 350	168 222 993
2023	41 405 650	20 791 606	376 415 000	189 014 599
Total 2014-2024	376 415 000,00	189 014 598,82	-	-

\* With respect to the ERDF funds, the national co-financing is provided as an indicative amount on the basis of estimated contracting by types of beneficiaries.

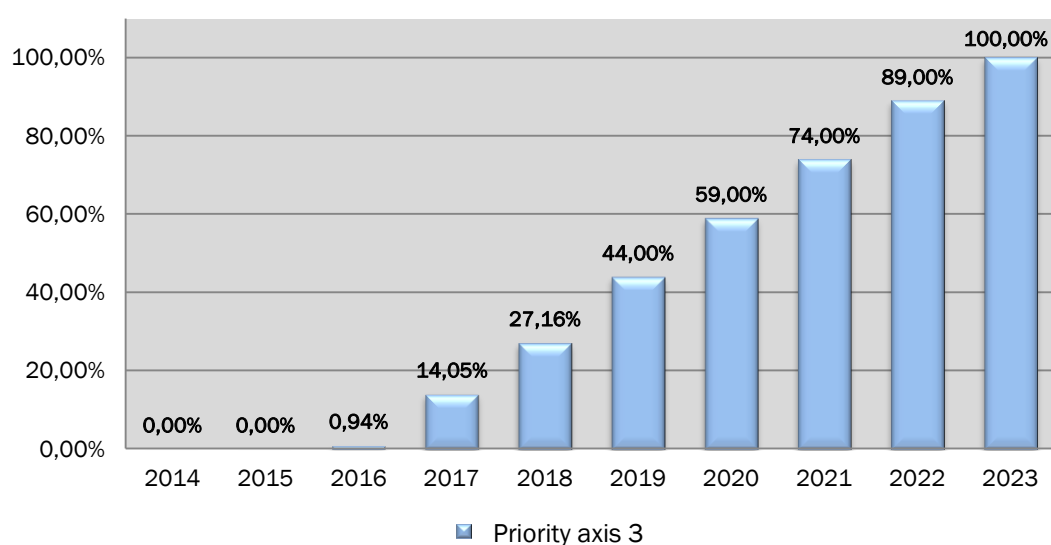


The impacts of excluding the performance reserve on the value of the partial objective in 2018 were calculated on the basis of the following mathematic algorithm:

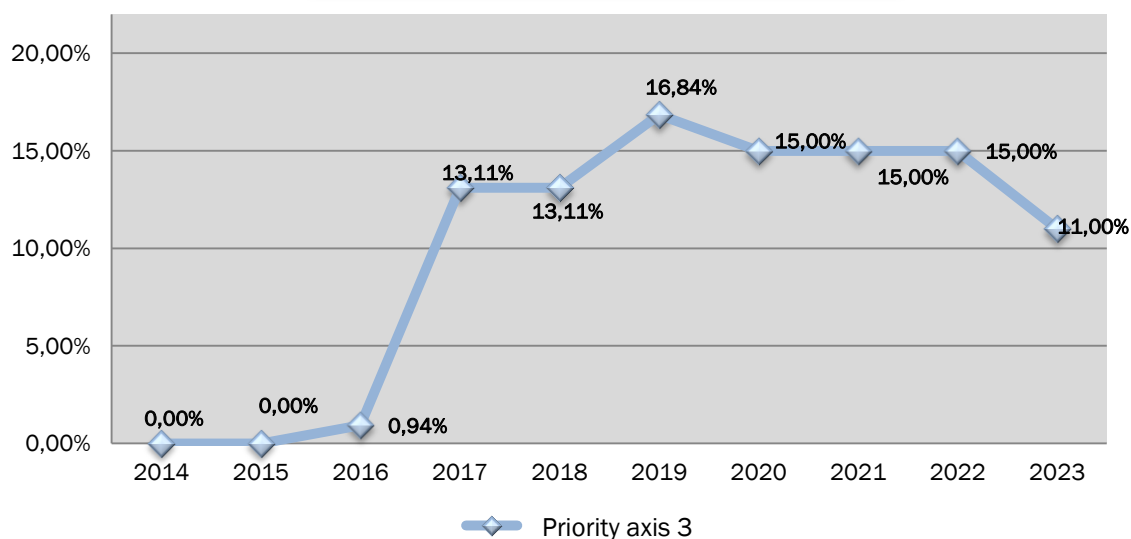
$$\text{Coefficient of the impact of leaving out a performance reserve for the milestone} = \frac{[\text{cumulative rate of funds drawing}_{2018} \times (\text{allocation to priority axis} - \text{performance reserve})]}{\text{allocation to priority axis}}$$

Union support & national counterpart	ERDF	National co-financing (indicative)
143 835 276	95 753 309	48 081 967

**Estimated financial progress developed under Priority Axis 3 - cumulative**



**Estimated financial progress developed under Priority Axis 3 - non-cumulative**



As for financial progress under Priority Axis 3, the highest annual increase in spending is expected in the sixth year of the programming period 2014–2020. The spending with regard to total eligible expenditure in 2018 is expected to reach EUR 153 575 159 (EUR 102 237 296 of ERDF funds, and EUR 51 337 863 represents indicative co-financing).

Upon considering the performance reserve from the allocation to Priority Axis 3, the spending is expected to reach **EUR 143 835 276** (EUR 95 753 309 of ERDF funds and EUR 48 081 967 of indicative national co-financing).

### 2.3.9 Categories of interventions<sup>93</sup>

Dimension 1 – Intervention field		
Fond	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
<b>3 Enhancing the competitiveness and growth of SMEs</b>	001	105 551 395,00
	056	12 900 000,00
	063	12 657 370,00
	064	12 170 000,00
	066	97 890 420,00
	067	78 645 815,00
	068	2 500 000,00
	069	21 900 000,00
	073	5 600 000,00
	076	10 000 000,00
	077	10 000 000,00
	082	6 600 000,00

Dimension 2 – Form of finance		
Fund	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
<b>3 Enhancing the competitiveness and growth of SMEs</b>	01	256 243 685,00
	03	30 734 263,00
	04	41 368 526,00
	05	32 701 395,00
	06	15 367 131,00

Dimension 3 – Territory type		
Fond	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
<b>3 Enhancing the competitiveness and growth of SMEs</b>	01	149 815 000,00
	02	140 180 000,00
	03	86 420 000,00

Dimension 4 – Territorial delivery mechanisms		
---	--	--

Fond	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
3 Enhancing the competitiveness and growth of SMEs	07	376 415 000,00

### 2.3.10 Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries under Priority Axis 3

n/a

## 2.4 PRIORITY AXIS 4: Developing competitive SMEs in the Bratislava Region

ID of the priority axis	4
Title of the priority axis	Developing competitive SMEs in the Bratislava Region
The entire priority axis will be implemented solely through financial instruments	N/A
The entire priority axis will be implemented solely through financial instruments set up at Union level	N/A
The entire priority axis will be implemented through community-led local development	No

### 2.4.1 Fund, category of region and calculation basis for Union support

Fund	European regional development fund
Category of region	More developed region
Calculation basis (total eligible expenditure or eligible public expenditure)	24 632 009
Category of region for outermost regions and northern sparsely populated regions (where applicable)	N/A

### 2.4.2 INVESTMENT PRIORITY 4.1: Supporting the capacity of SMEs to grow in regional, national and international markets, and to engage in innovation processes

#### 2.4.2.1 Specific objective corresponding to the investment priority and expected results

ID	4.1.1
Specific objective	Increasing the share of profit-making SMEs in the Bratislava region

**The results that the Member State seeks to achieve with Union support**

This specific objective will focus on complex solutions supporting the establishment and development of new perspective SMEs in the Bratislava Region (BR), including start-ups and spin-offs, and their acceleration to enter the next phases of their life-cycle. Systemic support will be provided during all business stages, and the activity will also ensure the creation of appropriate conditions for the growth of competitiveness of SMEs and for reducing the extent of their disappearance. The activity will also support the development of new sectors (e.g. creative industry).

**EXPECTED RESULTS:**

- Increased survival rate of new enterprises in the Bratislava Region;
- Increased creation and development of innovative technological firms, including start-ups, spin-offs and creative enterprises in the Bratislava Region;
- Improved access to finance and venture capital for new and existing SMEs;
- Increased number of SMEs in the Bratislava Region carrying out innovation activities;
- Increase in the number of competitive enterprises;
- Creation of the conditions for the application of social innovation and entrepreneurship of disadvantaged groups.

**Table 24 Programme specific result indicators corresponding to specific objective 4.1.1**

ID	Indicator	Measurement unit	Category of region	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0130	Share of profit-making SMEs in the Bratislava Region	%	More developed region	51.8	2011	57	Register of financial statements	Once a year

### 2.4.3 Action to be supported under the investment priority 4.1

#### 2.4.3.1 Description of the type and examples of actions to be supported and their expected contribution to the specific objectives including, where appropriate, the identification of main target groups, specific territories targeted and types of beneficiaries under investment priority 4.1

**Examples of actions for specific objective 4.1.1:**

Support for new SMEs and start-ups through financial instruments (loan programme to support new SMEs and start-ups, venture capital fund for start-ups at seed and start-up stages) and grants focusing also on the promotion of industry and services, in particular knowledge-intensive services (KIS) and new, progressive sectors. The successful measures implemented in the previous period (micro-loan programmes of the SBA and SZRB) resulted in the need to support by means of specific financial instruments, new enterprises and a part of established enterprises which represent a gap in the commercial funding market. This activity is designed to address the problem of limited access to funds which threatens the viability of new SMEs and start-ups in the BR. This activity also creates conditions for sustainable performance of SMEs. The financial

instruments represent a suitable complement to the portfolio of non-financial measures implemented by the business centre. The financial schemes can be combined with a grant element (tied to the fulfilment of certain conditions). This will create the possibility to support SMEs without a business history, as they represent the major risk from the point of view of the commercial sector, and hence, the biggest market failures. These financial instruments are characterised by a combination of financial assistance (loan, entry of capital) and long-term counselling. The proposed instruments seek to support the development of entrepreneurship also within social innovation, i.e. the support of disadvantaged social groups (women, young people up to 30 years, seniors over 50 years, long-term unemployed, third-country nationals, handicapped people, Roma).

The aim of this activity is to

- improve access to funds for new SMEs and start-ups;
- help and support the launch and development of business;
- support the transfer of personal experience and expert knowledge upon start of business;
- provide financial support combined with expert counselling;
- make funds accessible to SMEs through loans under favourable conditions with minimum distortion impacts on the market
- make funds accessible to entrepreneurs from socially disadvantage environment under favourable conditions.

This activity will be implemented by means of financial instruments.

**Promotion of activities and development of a business centre in the Bratislava Region (National Business Centre NBC in Bratislava) with the aim to establish a support institution for SMEs and for those interested in entering business.** No systemic support was provided to SMEs in the BR during the previous period due to the fact that the Bratislava region was excluded from most support measured financed from structural funds. The public support system was fragmented, uncoordinated, and lacking a systemic nature. This activity aims to create a functional structure for providing systemic support to SMEs. Such structure would form the basis for developing a concept of complex one-stop-shop centres where individuals interested in entering business (including disadvantaged social groups), new or already established SMEs can obtain information, advice, support, space for their growth, or cooperation, funding possibilities, etc. The services of such centres will have several basic forms, such as accelerator services, incubator services, co-working services, etc., including existing support tools currently implemented by SBA. The concept of business centres envisages the establishment of the National Business Centre (NBC) in Bratislava as a model for the creation of future centres in other Slovak regions. The centres will work in close cooperation and concurrence to ensure availability and quality of services provided to SMEs. The NBC in Bratislava covering the BR will be implemented as a model or pilot project for the future network throughout Slovak regions. The NBC Bratislava pilot stage was launched in cooperation with the SBA and the SCSTI during the programming period 2007–2013, and its services will start to be provided in full in the programming period 2014–2020. On the basis of the experience of the NBC in Bratislava, business centres in other Slovak regions will subsequently be initiated in cooperation with the SBA and the SCSTI. It is not the intention to build new infrastructure, but to create centres using the existing infrastructure and involving various partners, such as regional and local self-governments, the academia, R&D capacities, business organisations, etc. The primary activities offered by NBCs include:

- creating infrastructure to support new enterprises (offices and operation premises, technological equipment);
- individual business counselling;
- expert counselling for entrepreneurs from socially disadvantaged environment and for enterprises providing social services;
- expert counselling aimed to enhance business skills and competencies by introducing quality standards, e.g. quality management system, process management, accreditation and certification, REACH, EMAS, ISO 14001, etc.;
- organising expert events – seminars, webinars, lectures, discussion forums, workshops, conferences, B2B, B2G events, cooperation events, etc.;

- training events and education programmes preparing for entrepreneurship, specific training courses for incubated and start-up entrepreneurs, training programmes for external SMEs;
  - mediation of financing – micro-loans, credits, venture capital, business angels, innovation vouchers, etc.
  - online platforms and demand services (connection to the Enterprise Europe Network and other networks), searching in databases of projects, partners and offers for cooperation, documents sharing, blogs, etc.); this activity is a follow-up of the national project Electronic services of the Ministry of Economy of the SR;
  - internships in foreign hi-tech centres and parks;
  - support for internationalisation and establishment on the global market;
  - presentation of successful entrepreneurs and examples of good business practice;
  - competitions and popularisation events for secondary schools and higher education institutions and the general public aimed at increasing the motivation to run business;
  - providing information on the possibilities of receiving support from EU community programmes;
  - counselling on the preparation of applications for support from EU community programmes;
  - assistance in seeking partners for the purposes of EU community programmes;
  - collection of data on the business environment/conducting surveys;
  - making of analyses of business environment segments and on trends in SME business;
  - monitoring of the impact of administrative rules and legislative norms, preparation of draft legislation to improve the conditions of SMEs;
  - identification of market failures, monitoring and evaluation of the efficiency of support programmes, preparation of proposals for measures/programmes supporting SMEs;
  - monitoring of the application of the Small Business Act principles in the SR
- The activity will be implemented by means of a national project and assistance schemes.

**Promoting creative industry within the BSGR.** Creative industry defined as one of the priority development areas of the RIS3 SK shows an above-average concentration of business entities in the BSGR from the perspective of the Slovak Republic. According to the SIEA findings, over 20,000 undertakings conducted their activities in the most perspective cultural and creative sectors, and more than a half of them were situated within the BR. Support will therefore be provided, apart from enterprises as such, to the creation and development of local creative clusters and to building ties to other perspective sectors. To increase the potential of enterprises, training and counselling activities tailored to these industries will be organised with the aim to stimulate their economic growth through the creation and implementation of new business models by enhancing creativity. The internationalisation of creative industry within eligible EU territories will also be supported. Assistance will be also provided to raise awareness about the creative industry activities and its potential in order to create links between this industry and other industries and sectors supported in a targeted way. The development of the creative industry will be enhanced through the building of the local and also national Slovak market. The activity will be implemented by means of a national project and assistance schemes.

***Eligible beneficiaries<sup>94</sup> target groups and target area under investment priority 4.1***

***Beneficiaries***

- natural persons or legal entities entitled to run business and meeting the SME definition;
- Slovak Business Agency;
- state budgetary organisations or state contributory organisations within the competence of the MoE SR;
- public institutions established by law;
- self-government entities;
- Slovak Centre of Scientific and Technical Information (in the case of a national project on business centres development)

**Target group:**

**Target area:**

- SMEs, individuals interested in running business, including disadvantaged social groups
- more developed region

#### 2.4.3.2 Guiding principles for selection of operations

The calls for grant applications will be subject to the **general principles for project selection under thematic objective 3**, as defined in chapter 2.3.3.2.

#### Specific principles for selection of operations under investment priority 4.1:

The specific principles for selection of operations referring to specific objective 4.1.1 correspond to the specific principles for selection of operations under specific objective 3.1.1, with the exception of the principles referring to the regional aspect.

#### 2.4.3.3 Planned use of financial instruments

Financial instruments may be used to support the implementation of those activities where the efficient use of funds from the European Structural and Investment Funds (ESIF), and this particular form of aid, will be demonstrated. In the case of economically-viable projects, where the return on investments or cost savings are expected, financial instruments represent a more appropriate form of support, avoiding market distortion. The financial instruments will focus on the support of those activities, which do not find financing on the market or do not find adequate financing upon which their implementation would be efficient.

The possibility of using revolving funds, while contributing to the objectives of the priority axes, belongs to the benefits of the use of financial instruments. The other benefits of the use of financial instruments include the opportunity to increase financial resources to achieve the specific objectives of the programme by the means of attracting additional capital based on an appropriate setting of these instruments. Attracting additional capital is necessary also with respect to the insufficient amount of funds from the ESIF to cover all investment needs in the areas concerned. Participation by private investors may also contribute towards quality improvement of project implementation, and thus additionally contribute to more efficient use of funds. With the use of financial instruments, it will be possible to support the relevant activities with appropriate financial products (loans, guarantees, capital contributions, mezzanine funds and other). Specific activities, appropriate amount of funds and the conditions for implementing specific financial instruments, including the expected leverage of allocated ESI Funds as well as combinations with other forms of support, will be based on the ex-ante assessment of financial instruments, required under Article 37(2) of the CPR for financial instruments in the 2014 – 2020 programming period.

#### 2.4.3.4 Planned use of major projects

It is not planned to implement major projects under specific objective 4.1.1.

#### 2.4.3.5 Output indicators for investment priority 4.1

**Table 25 Common and programme specific output indicators at the level of investment priority 4.1**

ID	Indicator	Measure ment unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
C001	Number of enterprises receiving support (common)	Enterpri ses	ERDF	More developed region	2,900	ITMS	Once a year
C003	Number of enterprises receiving financial support other than grants (common)	Enterpri ses	ERDF	More developed region	200	ITMS	Once a year



ID	Indicator	Measure ment unit	Fond	Category of region	Target value (2023)	Source of data	Frequency of reporting
C004	Number of enterprises receiving non-financial support (common)	Enterpri ses	ERDF	More developed region	2,800	ITMS	Once a year
C005	Number of supported new enterprises (common)	Enterpri ses	ERDF	More developed region	900	ITMS	Once a year
C007	Private investments corresponding to public support for enterprises (other than grants) (common)	EUR	ERDF	More developed region	9,900,000	ITMS	Once a year
C008	Employment growth in supported enterprises (common)	FTE	ERDF	More developed region	50	ITMS	Once a year
C028	Number of enterprises supported to launch products new for the market (common)	Enterpri ses	ERDF	More developed region	110	ITMS	Once a year
C029	Number of enterprises supported to launch products new for enterprise (common)	Enterpri ses	ERDF	More developed region	180	ITMS	Once a year
00072	Number of applications for the registration of intellectual property rights (specific)	Number	ERDF	More developed region	18	ITMS	Once a year
00075	Number participants to counselling and training programmes (specific)	Number	ERDF	More developed region	3,300	ITMS	Once a year
00077	Number of enterprises supported through counselling centres for SMEs (specific)	Number	ERDF	More developed region	2,670	ITMS	Once a year
00079	Number of supported SMEs run by persons from disadvantaged social groups (specific)	Number	ERDF	More developed region	300	ITMS	Once a year
00082	Number of SMEs involved in EU programmes (specific)	Number	ERDF	More developed region	130	ITMS	Once a year

## 2.4.4 Performance framework

Table 26 Performance framework for Priority Axis 4

Priority axis	Indicator type	ID	Indicator or key implementation step	Measurement unit	Fund	Category of region	Milestone for 2018	Final target 2023	Source of data	Explanation of relevance of indicator, where appropriate
4 Developing competitive SMEs in the Bratislava Region	Financial indicator	F0002	Total amount of eligible expenditures after their certification by Certifying Authority	EUR	ERDF	More developed region	12,585,172	49,264,018	ITMS	
	Key implementation step	K0001	Number of enterprises supported through counselling centres for SMEs	Number	ERDF	More developed region	800	2,670	ITMS	Share in the priority axis allocation: 52.24%, preliminary results monitored by means of a national project implemented throughout the programming period
	Output indicator	O0077	Number of enterprises supported through counselling centres for SMEs	Number	ERDF	More developed region	0	2,670	ITMS	Target of the key implementation step, share in the priority axis allocation 52,24 %

### Estimated financial progress developed under Priority Axis 4

The estimate of the OP R&I financial progress under Priority Axis 4 is primarily based on the development of spending during the programming period 2007–2013 under the OP C&EG and OP R&D with the MoE SR and the MoESRS SR as the managing authorities.

Priority Axis 3	Non-cumulative data		Cumulative data	
	ERDF	National co-financing (indicative)*	ERDF	National co-financing (indicative)*
2014	0	0	0	0
2015	0	0	0	0
2016	231 188	231 188	231 188	231 188
2017	3 236 634	3 236 634	3 467 822	3 467 822
2018	3 236 634	3 236 634	6 704 456	6 704 456
2019	4 133 628	4 133 628	10 838 084	10 838 084
2020	3 694 801	3 694 801	14 532 885	14 532 885
2021	3 694 801	3 694 801	18 227 686	18 227 686
2022	3 694 801	3 694 801	21 922 487	21 922 487
2023	2 709 522	2 709 522	24 632 009	24 632 009
Total 2014-2024	24 632 009	24 632 009	-	-

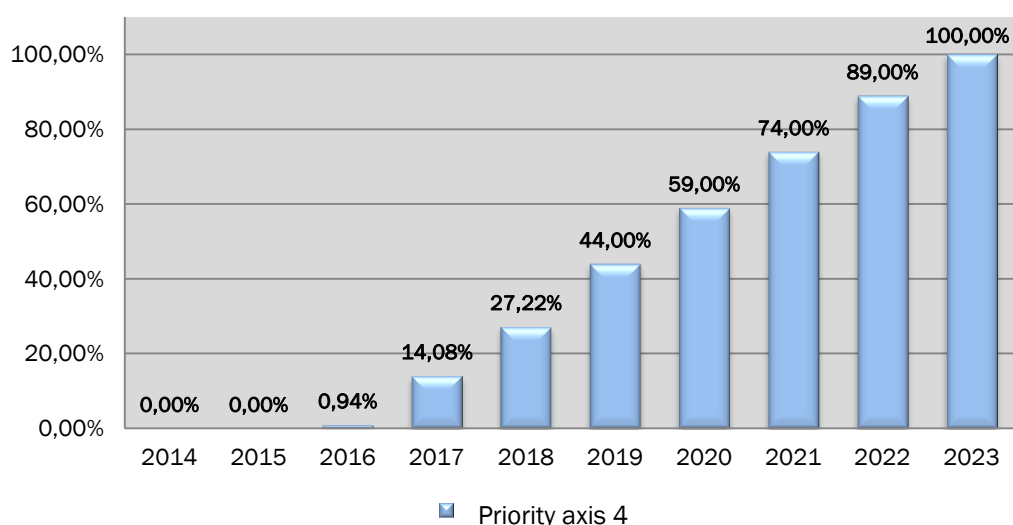
\* With respect to the ERDF funds, the national co-financing is provided as an indicative amount on the basis of estimated contracting by types of beneficiaries.

The impacts of excluding the performance reserve on the value of the partial objective in 2018 were calculated on the basis of the following mathematic algorithm:

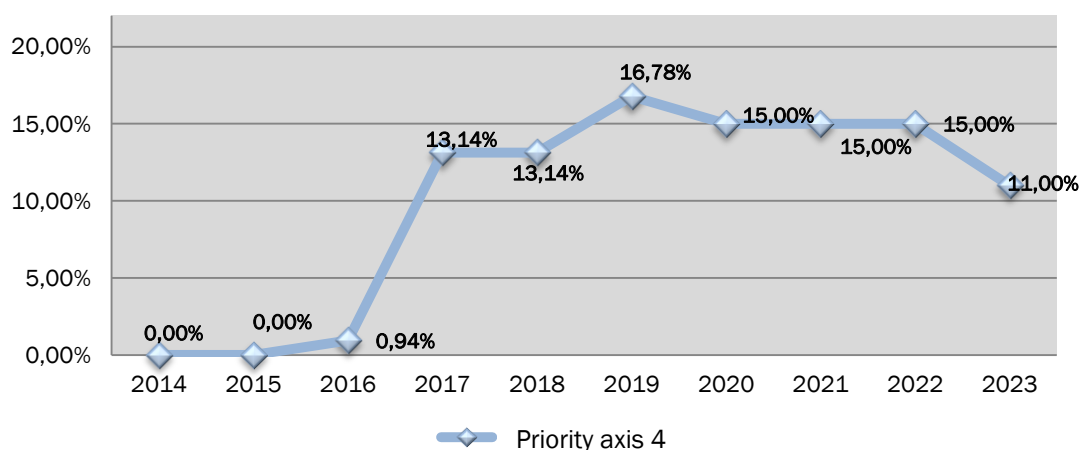
$$\text{Coefficient of the impact of leaving out a performance reserve for the milestone} = \frac{[\text{cumulative rate of funds drawing}_{2018} \times (\text{allocation to priority axis} - \text{performance reserve})]}{\text{allocation to priority axis}}$$

Union support & national counterpart	ERDF	National co-financing (indicative)
12 585 172	6 279 252	6 305 920

#### Estimated financial progress developed under Priority Axis 4 - cumulative



#### Estimated financial progress developed under Priority Axis 4 - non cumulative



As for financial progress under Priority Axis 4, the highest annual increase in spending is expected in the sixth year of the programming period 2014–2020. The spending with regard to total eligible expenditure in 2018 is expected to reach EUR 13 408 910 (EUR 6 690 248 of ERDF funds, and EUR 6 718 662 represents indicative co-financing).

Upon considering the performance reserve from the allocation to Priority Axis 4, the spending is expected to reach **EUR 12 585 172** (EUR 6 279 252 of **ERDF funds** and **EUR 6 305 920** of indicative national co-financing).

#### 2.4.5 Categories of interventions<sup>95</sup>

Dimension 1 – Intervention field		
Fond	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
4 Developing competitive SMEs in the Bratislava Region	001	4 941 310,00
	056	988 262,00
	066	7 076 723,00
	067	7 766 570,00
	069	1 976 524,00
	076	941 310,00
	077	941 310,00

Dimension 2 – Form of finance		
Fond	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
4 Developing competitive SMEs in the Bratislava Region	01	14 749 389,00
	03	2 964 786,00
	04	2 964 786,00
	05	2 470 655,00
	06	1 482 393,00

Dimension 3 – Territory type		
Fund	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
4 Developing competitive SMEs in the Bratislava Region	01	15 887 557,00
	02	6 246 038,00
	03	2 498 414,00

Dimension 4 – Territorial delivery mechanisms		
Fond	ERDF	
Category of region	More developed	
Priority axis	Code	Amount (EUR)
4 Developing competitive SMEs in the Bratislava Region	07	24 632 009,00

#### 2.4.6 Summary of the planned use of technical assistance including, where necessary, actions to reinforce the administrative capacity of authorities involved in the management and control of the programmes and beneficiaries under Priority Axis 4

n/a

### 2.5 PRIORITY AXIS 5: Technical Assistance

ID of the priority axis	5
Title of the priority axis	Technical Assistance

#### 2.5.1 Fund, category of region and calculation basis for Union support

Fund	European regional development fund
Category of region	Less developed More developed region
Calculation basis (total eligible expenditure or eligible public expenditure)	70 000 000
Category of region for outermost regions and northern sparsely populated regions (where applicable)	N/A

#### 2.5.2 Specific objectives and expected results

ID	5.1.1
Specific objective	Supporting an effective implementation of the operational programme

**The results that the Member State seeks to achieve with Union support**

Specific objective 5.1.1 focuses on supporting and ensuring an effective management and implementation of the OP R&I. This specific objective pursues the ambition of achieving and maintaining a stable internal environment, while ensuring well-processed outputs and documents. The support for an effective implementation of the operational programme will be ensured not only by means of high-quality, motivated and morally stabilised administrative capacities in introducing systemic approaches to their training, evaluation and remuneration, but also by providing material and technical support and meeting professional and legal requirements for the support of implementation structures.

##### **EXPECTED RESULTS:**

- stabilised, qualified and cooperating administrative capacities with a professional potential for quality management and for the operational programme implementation process;
- effective processes of the implementation structures ensured by modern material and technical conditions and support services.

**Table 27 Programme specific result indicators corresponding to specific objective 5.1.1**

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0117	Administrative capacities' turnover rate	%	12.93	2013	11.00	MA, IB	Once a year
R0116	Rate of compliance with time limits for payments reimbursement to beneficiaries	%	15.76	2014	85.00	ITMS	Once a year

**ID**

**5.1.2**

**Specific objective**

**Ensuring publicity, information and the support of beneficiaries' administrative capacities in the implementation process**

**The results that the Member State seeks to achieve with Union support**

Specific objective 5.1.2 seeks to provide support for the information and communication processes, including the implementation of processes related to the enhancement of the beneficiaries' administrative capacities. The focus of the support in this field will be ensured through increased availability of information and counselling to the public and the beneficiaries' administrative capacities, by facilitating the preparation of background documents related to the project implementation, and by ensuring a training system for beneficiaries about the conditions of the ESIF implementation.

**EXPECTED RESULTS:**

- High-quality and professionally prepared outputs and documents on the side of beneficiaries' administrative capacities for a smooth and proper implementation of the operational programme;
- Communication in the field of information, publicity and awareness-raising;

**Table 28 Programme specific result indicators corresponding to specific objective 5.1.2**

ID	Indicator	Measurement unit	Baseline value	Baseline year	Target value (2023)	Source of data	Frequency of reporting
R0119	Properly completed projects rate	%	86.12	2014	90.00	ITMS	Once a year
R0025	Awareness rate of support opportunities from the OP	%					31.12.2023

## 2.5.3 Actions to be supported and their expected contribution to the specific objectives

### 2.5.3.1A description of actions to be supported and their expected contribution to the specific objectives

*Examples of actions for specific objective 5.1.1<sup>96</sup>:*

**Financing of administrative capacities, including introduction and implementation of a system of evaluation of their performance with links to a fair motivational system of remuneration;**

The basic prerequisite for stabilised administrative capacities in addition to providing funding of salaries is also the introduction and implementation of a fair motivational system of

remuneration, including a quality and transparent system of evaluation of the MA and IBMA staff's performance on the basis of acquired knowledge, its practical application within the operational programme implementation and quality of work performed for an effective management of the OP R&I and preparation of a new programming period after 2020<sup>97</sup>.

**Internal and external training of administrative capacities and exchange of experience at national and international level (seminars, training, courses, mobility, domestic and foreign business trips, etc.).**

The prerequisite for high-quality and stabilised administrative capacities focused on results is the introduction of systems and tools for their training and exchange of experience. The activities will target training in specific fields, as required by the different work positions. The respective areas of training will be closely linked to the specific features of project management and implementation in the field of research and innovations.

**Material and technical support for processes related to the OP R&I preparation, management, monitoring, evaluation, information and communication, networking, complaint handling, control and audit; support for improving the work environment and work conditions and improvement of procedures.**

Through the implementation of these activities, the MA will ensure adequate material, operational and technical support, including overhead activities for eligible entities involved in the OP R&I management, implementation, control and audit, so that to create appropriate work conditions for the staff of eligible entities. The performance of these activities will also ensure the building of modern technical infrastructures. By executing specific adjustments of information systems and creation of databases for the purposes of the OP R&I, the MA will strengthen an effective processing and delivery of information upon the management, implementation and fulfilment of the set OP R&I objectives.<sup>98</sup>

**Internal and external expert services and activities related to the OP R&I preparation, management, monitoring, evaluation, information and communication, networking, complaint handling, control and audit.**

Through the execution of these activities, the MA will ensure smooth implementation of the OP R&I with the aim to ensure an effective use of funds allocated to each priority axis. The activities will be defined so as to provide for maximum support to the processes of OP R&I management, implementation, control and audit and minimise the administrative burden on the side of the MA, the IBMA and beneficiaries.

The support activities in this field will also target anti-corruption and anti-fraud activities<sup>99</sup>, in particular a ban on the conflict of interests of persons involved in the implementation process, extending the possibilities for demanding remedies in the event of non-approval of applications for support, as well as a more effective involvement of partners supervising the process of approval, including the enhancement of their capacities related to the oversight of the transparency and objectivity of the implementation process. More detailed measures in this field are prepared at the level of the ESIF Management System for the Programming Period 2014–2020 as a set.<sup>100</sup>

The internal and external capacities will be used in the preparation and updating of strategic and methodological documents, plans, manuals, analyses, monitoring of the implementation of strategies (e.g. RIS3 SK), evaluations, benchmarks, expert opinions and consultations relevant to the different areas of the OP R&I management, implementation, control and audit processes, preparation of the new programming period after 2020, including organisation and provision of technical support for the meetings of working groups, commissions and committees. The support for activities aimed to ensure internal and external experts, and the implementation of feasibility studies including evaluation and monitoring of the fulfilment of RIS3 SK objectives will seek to assess whether the project activities have been effectively set under projects of systemic nature, as well as the further development and focus of activities launched during the programming period 2007–2013.



Activities related to the preparation of the next programming period after 2020.

**Examples of actions for specific objective 5.1.2:**

**Activities related to the enhancement of beneficiaries' administrative capacities for a smooth and proper implementation of the operational programme;<sup>101</sup>**

The implementation of these activities will seek to increase the availability of information and counselling for the beneficiaries' administrative capacities; modify the implementation system of national projects and major projects, while placing emphasis on active cooperation between the MA and beneficiaries in the project preparation; and facilitate the preparation of background documents related to the project implementation and the system of training for beneficiaries on the conditions of the ESIF implementation.<sup>102</sup>

**Communication concerning provision of information, publicity and awareness raising:**

By using information and communication tools, the MA will ensure promotion with the aim to highlight the European Union's messages and enhance transparency in the granting of funds from ESIF, while putting emphasis on obtaining feedbacks from beneficiaries.

**Table 29 Output indicators expected to contribute to results under Priority Axis 5**

ID	Ukazovateľ	Merná jednotka	Cieľová hodnota (2023)	Frekvencia podávania správ
00175	Number of administrative capacities financed from the Technical assistance	FTE	399	MA, IB
00163	Number of implemented educational activities	Number	50	MA, IB
00182	Share of administrative capacities with material and technical equipment financed from the Technical assistance	%	100	MA, IB
00181	Number of conducted evaluations, analyses and studies	Number	30	MA, IB
00048	Number of measures taken to reduce administrative burden	Number	16	MA, IB
00178	Number of implemented information activities	Number	2 500	MA, IB

**2.5.4 Categories of interventions<sup>103</sup>**

Dimension 1 – Intervention field		
Fund	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
Priority Axis 5	121	47 309 501
	122	12 846 766
	123	7 428 733

Dimension 2 – Form of finance		
Fund	ERDF	
Category of region	Less developed	
Priority axis	Code	Amount (EUR)
Priority Axis 5	01	67 585 000

Dimension 3 – Territory type		
Fund	ERDF	
Category of region	Less developed	
<b>Priority Axis</b>	<b>Code</b>	<b>Amount (EUR)</b>
Priority axis 5	07	67 585 000

Dimension 1 – Intervention field		
Fund	ERDF	
Category of region	More developed	
<b>Priority axis</b>	<b>Code</b>	<b>Amount (EUR)</b>
Priority Axis 5	121	1 690 499
	122	453 234
	123	271 267

Dimension 2 – Form of finance		
Fund	ERDF	
Category of region	More developed	
<b>Priority axis</b>	<b>Code</b>	<b>Amount (EUR)</b>
Priority Axis 5	01	2 415 000

Dimension 3 – Territory type		
Fund	ERDF	
Category of region	More developed	
<b>Priority Axis</b>	<b>Code</b>	<b>Amount (EUR)</b>
Priority axis 5	07	2 415 000

### 3. Financing plan of the operational programme

#### 3.1 Financial appropriation from each fund and amounts for performance reserve

Table 30 Financial appropriation from each fund by years

Fund	Category of region	2014		2015		2016		2017		2018		2019		2020		Total	
		Main allocation	Performance reserve	Main allocation	Performance reserve	Main allocation	Performance reserve	Main allocation	Performance reserve	Main allocation	Performance reserve	Main allocation	Performance reserve	Main allocation	Performance reserve	Main allocation	Performance reserve
ERDF	Less developed	244 145 538	15 964 352	256 315 361	16 760 121	268 647 009	17 566 471	280 807 094	18 361 602	293 823 696	19 212 742	307 763 158	20 124 224	315 323 900	20 618 611	1 966 825 756	128 608 123
ERDF	More developed	19 980 876	1 288 189	20 976 856	1 352 400	21 986 079	1 417 465	22 981 259	1 481 626	24 046 538	1 550 306	25 187 346	1 623 854	25 806 115	1 663 749	160 965 069	10 377 589
<b>Total</b>		<b>264 126 414</b>	<b>17 252 541</b>	<b>277 292 217</b>	<b>18 112 521</b>	<b>290 633 088</b>	<b>18 983 936</b>	<b>303 788 353</b>	<b>19 843 228</b>	<b>317 870 234</b>	<b>20 763 048</b>	<b>332 950 504</b>	<b>21 748 078</b>	<b>341 130 015</b>	<b>22 282 360</b>	<b>2 127 790 825</b>	<b>138 985 712</b>

#### 3.2 Total financial appropriation by fund and national co-financing (EUR)

Table 31 Financing plan of the operational programme

Priority axis	Fund	Category of region	Basis for calculation of Union support (Total eligible cost or public eligible cost)	Union support EUR	National counterpart	Indicative breakdown of national counterpart		Total funding	Co-financing rate	EIB contribution	Main allocation (total funding less performance reserve)		Performance reserve		Performance reserve amount as proportion of total Union support
						National public funding	National private funding				Union support	National counterpart	Union support	National counterpart	
				(a)	(b) = (c) + (d)	(c)	(d)	(e) = (a) + (b)	(f) = (a)/(e)	(g)	(h)=(a)-(j)	(i) = (b) - (k)	(j)	(k)= (b) * ((j)/(a))	(l) =(j)/(a) *100
1	ERDF	Less developed	2 707 987 632	1 651 433 879	1 056 553 753	97 463 058	959 088 695	2 707 987 632	60,98%	-	1 546 698 356	989 546 099	104 735 523	67 007 654	6,34%
2	ERDF	More developed	300 187 244	144 295 649	155 891 595	101 547 927	54 343 668	300 187 244	48,07%	-	135 431 257	146 314 839	8 864 392	9 576 756	6,14%
3	ERDF	Less developed	565 429 599	376 415 000	189 014 599	40 157 229	148 857 370	565 429 599	66,57%	-	352 542 400	177 027 112	23 872 600	11 987 487	6,34%
4	ERDF	More developed	49 264 018	24 632 009	24 632 009	24 632 009	0	49 264 018	50,00%	-	23 118 812	23 118 812	1 513 197	1 513 197	6,14%
5	ERDF	Less developed	79 511 765	67 585 000	11 926 765	11 926 765	0	79 511 765	85,00%	-	67 585 000	11 926 765	0	0	0,00%
5	ERDF	More developed	4 830 000	2 415 000	2 415 000	2 415 000	0	4 830 000	50,00%	-	2 415 000	2 415 000	0	0	0,00%
Total	ERDF	Less developed	<b>3 352 928 996</b>	<b>2 095 433 879</b>	<b>1 257 495 117</b>	<b>149 549 052</b>	<b>1 107 946 065</b>	<b>3 352 928 996</b>	<b>62,50%</b>	<b>-</b>	<b>1 966 825 756</b>	<b>1 178 499 976</b>	<b>128 608 123</b>	<b>78 995 141</b>	<b>6,14%</b>

Total	ERDF	More developed	354 281 262	171 342 658	182 938 604	128 594 936	54 343 668	354 281 262	48,36%	-	160 965 069	171 848 651	10 377 589	11 089 953	6,06%
<b>Total</b>			<b>3 707 210 258</b>	<b>2 266 776 537</b>	<b>1 440 433 721</b>	<b>278 143 988</b>	<b>1 162 289 733</b>	<b>3 707 210 258</b>	<b>61,15%</b>	<b>-</b>	<b>2 127 790 825</b>	<b>1 350 348 627</b>	<b>138 985 712</b>	<b>90 085 094</b>	<b>6,13%</b>

**Table 32 Breakdown of the financial plan of the operational programme by priority axis, fund, category of regions and thematic objective**

Priority axis	Fund	Category of region	Thematic objective	Union support	National counterpart	Total funding
Priority axis 1	ERDF	Less developed	01 – Enhancing research, technological development and innovation	1 651 433 879,00	1 056 553 753,00	2 707 957 632,00
Priority axis 2	ERDF	More developed	01 – Enhancing research, technological development and innovation	144 295 649,00	155 891 595,00	300 187 244,00
Priority axis 3	ERDF	Less developed	03 – Increasing SME competitiveness	376 415 000,00	189 014 599,00	565 429 599,00
Priority axis 4	ERDF	More developed	03 – Increasing SME competitiveness	24 632 009,00	24 632 009,00	49 264 018,00
Priority axis 5	ERDF	Less developed	N/A	67 585 000	11 926 765	79 511 765
Priority axis 5	ERDF	More developed	N/A	2 415 000	2 415 000	4 830 000
<b>Total</b>				<b>2 266 776 537</b>	<b>1 440 433 721</b>	<b>3 707 210 258</b>

**Table 33 Indicative amount of support to be used for climate change objectives**

Priority axis	Indicative amount of support to be used for climate change objectives (EUR)	Share of the total allocation to the operational programme (%)
Priority axis 1	26 726 329,00	1,18
Priority axis 2	2 695 922,80	0,12
Priority axis 3	11 260 000,00	0,50
Priority axis 4	790 609,60	0,03
<b>Celkom</b>	<b>41 472 861,40</b>	<b>1,83</b>

## **4. Integrated approach to territorial development**

### **4.1 Community-led local development (CLLD)**

The OP R&I will not apply the “community-led local development” instrument.<sup>104</sup>

### **4.2 Integrated sustainable urban development measure**

The OP R&I will not apply the integrated sustainable urban development measure.<sup>105</sup>

### **4.3 Integrated territorial investments (ITI)**

The OP R&I will not apply the “integrated territorial investments” instrument.<sup>106</sup>

### **4.4 Measures for international and transnational actions under the operational programme the beneficiaries of which are present in at least one other country**

International and transnational actions planned under the operational programme are closely tied to measures implemented under the OP R&I specific objective *“Increasing the participation of the Slovak Republic in international cooperation projects”*<sup>107</sup>. All planned activities<sup>108</sup> under this specific objectives focus on involving the SR in international and transnational cooperation by, *inter alia*, creating consortia with foreign. A similar principle applies to the support of synergetic and complementary funding of Horizon 2020 projects ensuring the expansion of the participation of new Member States planned under specific objective 2.1.1 of the OP R&I<sup>109</sup>.

The complementarity of the OP R&I to cross-border, inter-regional and transnational cooperation programmes is described in annex no. 13 of the OP R&I separate chapter.<sup>110</sup>

### **4.5 Contribution of the planned activities under the programme for macro-regional and sea-basin strategies subject to the needs of programme area as identified by the Member State**

The contribution of the activities planned under the OP R&I will be manifested mainly with regard to the EU Strategy for the Danube Region by contributing to the fulfilment of the objectives of the strategy’s priority areas *“To develop the knowledge society through research, education and information technologies”* and *“To support the competitiveness of enterprises, including cluster development”*, and secondarily to the priority area *“To invest in people and skills”*, as well as *contribute to the fulfillment of the measures defined in the Action Plan which is Accompanying document to European Union Strategy for the Danube region.*

The EU Strategy for the Danube Region will be partly implemented through common projects within the European Research Area/Horizon 2020. The synergies with the European Research Area and Horizon 2020 described in annex no. 13 of the OP R&I<sup>111</sup> will also ensure synergies with the EU Strategy for the Danube Region. The contribution of projects with a research nature to the fulfilment of the objectives of the EU Strategy for the Danube Region will be also taken into consideration in the OP R&I process of approval.

## **5. Specific needs of geographical areas most affected by poverty or of target groups most threatened by discrimination or social exclusion**

### **5.1 Geographical areas most affected by poverty/target groups most threatened by discrimination or social exclusion**

In OP R&I it is planned to support socially disadvantaged groups of population in the form of increasing motivation for entering business and also to support economic activities of established enterprises focused on the social needs of these target groups, including social entrepreneurship. The aim is achieve profitable form of companies through social entrepreneurship whose main business model meets one of the existing open social needs of the society or enterprise, which is using social processes to meet its business model.

Social needs which are the subject of social entrepreneurship are mostly marginal social needs. They require either highly specialized involvement and are highly challenging in relation to work intensity (e.g. care for severely physically and mentally disabled, inclusion of drug addicts into employment, etc..), or they cover only a very narrow part of the social needs and therefore not profitable institutions or public institutions are not able to build infrastructure for satisfying them. It is therefore necessary to implement social innovation to ensure that the invested labour inputs (labour, material inputs, capital) are able to generate profits in addition to the positive social externalities.

### **5.2 Strategy for solution of specific needs of geographical areas most affected by poverty/target groups most threatened by discrimination or social exclusion**

Within specific objectives 3.1.1, 3.3.1 and 4.1.1 are designed several activities focused on financial support of businesses operating in the social economy, improving skills and conditions for business. There will be will also by using social innovation implemented measures to promote entry into the business of candidates from disadvantaged groups, ensuring the growth of existing businesses operated by disadvantaged groups connected with job creation, building of specialized support structures and providing of expert advice for entrepreneurs from socially disadvantaged environment as well as for businesses providing social services.

## **6 Specific needs of geographical areas with severe and permanent natural or demographical handicaps**

The OP R&I is irrelevant to addressing the specific needs of geographical areas with severe and permanent natural or demographical handicaps.

## **7. Authorities and bodies responsible for management, control and audit, and the role of relevant partners**

### **7.1 Relevant authorities and bodies**

The structure of operational programmes implementation during the programming period 2014–2020 was defined by Government Resolution No. 139/2013 of 20 March 2013 on the proposal of the structure of operational programmes financed from European Structural and Investment Funds for the programming period 2014–2020. According to the approved operational programmes structure, the Ministry of Education, Science, Research and Sports of the SR

executes the function of the Managing Authority for the Operational Programme Research and Innovation . And The Ministry of Economy of the SR and Agency for EU SF at MoESRS SR execute the function of the Intermediate Body under Managing Authority.

The function of the Central Coordination Body responsible for the preparation of the Partnership Agreement of the SR for the period 2014–2020 and for the coordination of the preparation and implementation of operational programmes and ESIF programmes during the programming period 2014–2020 is executed by the Government Office of the SR.

Under Government Resolution No. 318/2013 of 19 June 2013 on the proposal to appoint the certifying authority and audit authority for the operational programmes of the programming period 2014–2020, the role of the certifying authority and audit authority for the operational programmes and ESIF programmes during the programming period 2014–2020 is executed by the Ministry of Finance of the SR.

Further to this Government Resolution, the OP R&I implementation structure is as follows:

**Table 34 Relevant authorities and bodies**

Authority/body	Name of authority/body and department or unit	Head of authority/body (position or post)
Managing authority	Ministry of Education, Science, Research and Sports of the SR	Minister of Education, Science, Research and Sports of the SR
Central Coordinating Body	Government Office of the SR	Head of Government Office of the SR
Certifying authority	Ministry of Finance of the SR /European Funds Section	Ministry of Finance of the SR
Audit authority	Ministry of Finance of the SR /Audits and Control Section	Ministry of Finance of the SR
Body to which Commission will make payments	Ministry of Finance of the SR	Ministry of Finance of the SR

## 7.2 Involvement of relevant partners

### 7.2.1 Measures adopted to involve relevant partners in the preparation of operational programme and the role of partners at implementation, monitoring and evaluation of the operational programme

The OP R&I is a programme document prepared by the MoESRS SR and the MoE SR, taking into consideration the principle of partnership under Art. 5 of the General Regulation and in line with the Code of Conduct for Partnership and Methodological Guideline of the CCA on the preparation of the operational programme for the programming period 2014–2020.

#### 7.2.1.1 Preparation of the OP R&I

Under closer partnership, the ministries cooperate with relevant authorities of the central state administration, in particular with the Government Office of the SR (CCA) and relevant ministries influencing the preparation of the OP R&I through their competences, and with the expert working group for the preparation of the RIS3 SK. The needs were identified and the measures related to the support and development of the research and innovation system through the OP R&I from the European Regional Development Fund were proposed on the basis of analyses and evaluations at the level of the sections of both ministries implementing structural funds during the programming period 2007–2013, reflecting the analytical inputs from RIS 3 concerning the state of research, development and innovations in the SR, as well as the objectives and priorities arising from the EU and SR documents – Europe 2020 Strategy, Council’s country recommendations, and the National Reform Programme.



In the wider context of the partnership principle, the OP R&I has been also prepared by representatives of territorial self-governments, other relevant central state administration authorities, economic and social partners including the scientific and research sector, interest groups, and civil society organisations through the Working Group for the Preparation of the Operational Programme Research and Development. The members of the working group were selected on the basis of objectively assessable and verifiable criteria comprising relevance to the general contents of the OP, representativeness of the entity, experience and active participation in areas relevant to the OP R&I. The list of members is provided in Chapter 12.3 of OP R&I.

Cooperation with partners is also developed in the form of working group meetings and individual consultations on specific topics and partners' requests, and in electronic form. Meeting structure had several levels. The Base was working group, but the base communicated with working group RIS3 SK at the same time. Final round of discussion with partners took place during interministry comment procedures, to which sent their opinion other ministries and relevant partners as well. Subsequently, bilateral negotiations were conducted with all relevant partners on the final version of the OP R&I. After incorporating of all opinions of all partners, the Government discussed and approved OP R&I. Comments were submitted by the partners on various version of OP R&I. Comments were thematically aimed at linking OP R&I with RIS SK, activities focused on cooperation between academic sector and business sector a definition of eligible beneficiaries. The final version of the OP R&I is the result of communication and discussion with partners.

Emphasis on the partnership principle is also placed upon the fulfilment of relevant ex-ante conditionalities. Regarding the preparation of the RIS3 SK, thematic working groups were created, focused on selected areas of research, and each working group has representatives from the industrial sector, the Slovak Academic of Sciences and the university sector. A separate working group for the national smart specialisation strategy was also set up. During the OP R&I implementation, the thematic working groups will be responsible for the channelling of support from the OP R&I according to the different areas of specialisation from the point of view of available scientific and research capacities.

The following working groups were established under relevant ministries responsible for the fulfilment of ex-ante conditionalities:

- Working group of the MoESRS SR for the fulfilment of ex-ante conditionalities under thematic objective 1 *Fostering research, technological development and innovation*;
- Working group of the MoE SR for the programming period of the European Union's Cohesion Policy 2014–2020.

The fulfilment of the relevant ex-ante conditionalities for the OP R&I is monitored in close concurrence with relevant authorities responsible for the fulfilment of the ex-ante conditionalities, as defined in Government Resolution No. 156/2014 on the application of ex-ante conditionalities in the preparation of the EU Cohesion Policy implementation mechanism in Slovakia after 2013.

#### **7.2.1.2 Implementation, monitoring and evaluation of the OP R&I**

The partnership principle will also be applied in the process of implementation, monitoring and evaluation of the OP R&I, through the membership in the Monitoring Committee for the OP R&I.

The implementation structure of the OP R&I will be directly linked to the implementation structure of the RIS3 SK, as defined in chapter 5.2 Institutional structure for the implementation of the Smart Specialisation Strategy, and chapter 5.3 Procedural rules for ensuring the institutional structure of the RIS3 SK implementation<sup>112</sup> and also to the clarification of this structure through Action plans of RIS3 SK implementation. The Managing Authority/Intermediate Body will be responsible for ensuring the compliance of calls with the RIS3 SK. As for the content focus of calls in the field of research specialisation, the Managing Authority will take over the details of the

areas of specialisation within the five research and development areas V from the scientific board of the Research Agency MoESRS SR.

## **8. Coordination between the Funds, the EAFRD and other Union and national funding instruments, and with the EIB**

During the programming period 2007–2013, the implementation of the OP Research and Development and OP Competitiveness and Economic Growth was relatively isolated both from the state policies on science and technology and from national grant schemes, as well as from the 7th EU Framework Programme for research and development.

Based on this experience, synergies and complementarities are top priorities for the planning of the principles of support of research and development from ESIF funds in the period 2014–2020. Coordination between the ESIF and individual Union and national funding instruments is the key factor for the use and stimulation of the development potential in this field and for an effective use of funds. The coordination mechanisms at national level are described in the PA SR<sup>113</sup>.

At the OP R&I level, the coordination will be ensured via communication between central state authorities responsible for the implementation of operational programmes and cross-border cooperation programmes, as well as national coordinators of European programmes (Horizon 2020, Danube Programme, Interreg EUROPE Programme, etc.) by means of permanent and ad-hoc platforms. The platforms will serve for the exchange of information about planned calls, since the synergies and complementarities between the OP under Objective 1 *Investing in growth and employment*, Community programmes, programmes under Objective 2 of the European Territorial Cooperation, and other European programmes require, in particular, harmonisation of the publishing of calls in terms of content and time between the OP R&I and other relevant programmes to the largest extent possible, while taking into account the specific implementation mechanisms.

Another solution to ensure coordination is to regard selected specific aspects of the individual programmes in the selection of projects under the process of approval by, for example, the incorporation of these specific aspects in the evaluation and selection criteria.

Further to the planned actions, complementarities and synergies can be identified between the OP R&I and the following operational programmes:

### **Operational Programme Human Resources**

The synergies and complementarities with the OP HR are based, among other things, on the specific Council recommendations with regard to their focus on result-oriented higher education with the aim to meet the labour market needs. Further to this focus, synergies and complementarities were identified in the planned support of master's degree study programmes in the areas of RIS3 SK specialisation, occupation-oriented bachelor's study programmes, and in the support of doctoral students, as well as in vocational (occupational) training aimed at enhancing the skills of those involved in life-long learning. The support of new programmes will particularly target planned strategic long-term research projects under the OP R&I with direct involvement of businesses. The support of doctoral students under the OP R&I will mainly focus on promoting the mobility and exchange of doctoral students between SAS institutes, universities and research institutions within Slovakia and abroad. The enhancement of mobility between research and development organisations and businesses in order to improve the content and the process of education will form an essential part of the activities under the OP HR. The OP R&I activities will aim to increase the business skills of SMEs, including business incentives, and to promote cross-sectoral partnerships and experts' mobility (e.g. innovation platforms, matchmaking roadshows, etc.).

The dividing lines related to employment and the development of entrepreneurship is defined as

follows:

***OP R&I actions focus on:***

- improving the entrepreneurial skills (sale, marketing, motivation, market development estimation, implementation of changes and innovations, etc.) of small and medium-sized entrepreneurs;
- increasing the motivation to run business and ensuring a successful start of business activities by individuals interested in launching business from the category of disadvantaged social groups; these actions will be performed by means of exchange of practical experience through long-term counselling aimed to develop business skills and the presentation of successful business examples;
- the category of individuals interested in launching business with the aim to increase their motivation to open business and to ensure a successful launch of their activities;
- increasing the motivation to run business and ensuring a successful start of business by individuals interested in launching business from among young people.

These actions will be performed by means of exchange of practical experience through long-term or specific counselling, counselling aimed to develop business skills and the presentation of successful business examples.

***The OP HR actions focus on:***

- vocational (occupational) training aimed to increase the professional qualifications of employees and entrepreneurs;
- enhancement of work habits and active job search in relation to these social groups; with regard to the support for the creation of businesses (trades), advisory services on basic administrative competences will be provided (legislation concerning business and the background for setting up business plans);
- increasing the opportunities for young people to succeed on the labour market through employment or self-employment; with regard to the support for the creation of businesses, advisory services on basic administrative competences will be provided (legislation concerning business and the background for setting up business plans).

**Integrated Regional Operational Programme**

The dividing lines are defined as follows:

***The OP R&I actions focus on:***

- the category of individuals interested in running business and new entrepreneurs; the aim is to increase their motivation to open business and to ensure successful launch of business;
- enhancing business skills (sale, marketing, motivation, market development estimation, implementation of changes and innovations, etc.) of established small and medium-sized entrepreneurs.

In these two points will be implemented advisory and support activities will be implemented under the OP R&I for all sectors, with the exception of cases resulting from decisions of local action groups (LAG) and tied to the implementation of local strategies. Regarding the procurement of tangible assets, the dividing line will be determined by supporting one project from one operational programme

- implementing the concept of one-stop-shop type of complex centres in which individuals interested in running business and entrepreneurs can get information, advice, technical and financial support and space for their own growth and possibly cooperation. The support activities will also include incubation services. The services of business centres will be available to all SMEs;
- the creative industry with private businesses as the target group. These activities will focus on the following areas: advertising and marketing, architecture, design, fashion design, and ICT. From the point of view of individual activities, it is mainly specialised counselling to increase the creativity of creative industries, promote cultural and creative industries at national level (market building and raising of awareness about cultural and creative industries), promote creative

industries at regional level, support creative industries, ensure internationalisation of creative industries, promote the building of clusters in creative industries, and interconnect actors in creative industries with other industries.

***The IROP actions focus on:***

- procurement of tangible assets by self-employed, micro- and small enterprises, creation of small diversified enterprises suitable for employing disadvantaged groups, support of community forms of entrepreneurship, networking and technical support to businesses, transfer of information and knowledge tied to decisions of local action groups (LAS) and related to the implementation of local strategies;
- support to graduates from secondary vocational schools in launching business; the target group of entrepreneurs will be restricted to graduates of the given centre for vocational training and preparation (CVTP) and other secondary vocational schools in an industry/sector corresponding to the respective CVTP;
- cultural and creative industries with business entities as target groups in the following areas of the cultural industry:<sup>132</sup> in areas<sup>133</sup> film; TV; video; radio and photography; visual art; multimedia and animation; publishing houses; literature and book market; music and performing arts; traditional, folk and urban culture crafts; the art market. As for creative industry, the activities will target natural persons – non-entrepreneurs, and natural persons – entrepreneurs under special regulations (liberal professions). The individual activities supporting cultural and creative industry include the building of specialised infrastructure (creative centres), counselling and financial support for the development of entrepreneurship and enhancing creativity, including international cooperation, bringing together actors working in creative centres and the public sector, promotion of activities carried out within creative centres at local and regional level, and internationalisation of supported target groups.

**Rural Development Programme**

The dividing lines are defined as follows:

***The OP R&I activities focus on:***

- support research and development capacities in competence of MoESRS SR in agriculture, food industry and forestry, which are areas of RIS3 SK specialisation;
- support of research, development and innovation capacities in industry and services, including support of clusters, except for clusters aiming to develop activities in agriculture, food industry and forestry;
- support of new SMEs and start-ups (refers to actions under PA3 and PA4 of the OP R&I) through grants and financial instruments will target new entrepreneurs from all sectors, except for activities in agriculture, food industry and forestry;
- the counselling activities (NBC activities – information and advising services, supporting successful business practice, provision of long-term counselling services, identification and use of social innovation in business) will target the category of individuals interested in running business and new entrepreneurs. Under these activities, counselling and support services will be provided, with the exception of counselling concerning specific business conditions in agriculture, food industry and forestry, available to all SMEs;
- the development of existing SMEs (PA3 and PA4 of OP R&I) through grants and financial instruments will focus on established entrepreneurs from all sectors, except for agriculture, food industry and forestry;
- the counselling activities (information and advising on SME development, use of e-business instruments, increasing the performance and operation standards of SMEs, identification and use of social innovation in business) will target established undertakings (SMEs). These activities will include advising and support activities, with the exception of counselling concerning specific business conditions in agriculture, food industry and forestry.
- projects of beneficiaries supporting the same types of activities through the LAG strategy - LEADER/CLLD approach – will not be eligible under the OP R&I.

***The RDP activities focus on the following areas:***

- the actions related to investments in tangible assets, transfer of knowledge and skills,

counselling services, and development of agricultural companies and business will target new enterprises in the field of agriculture, food industry and forestry;

- the actions related to investments in tangible assets, transfer of knowledge and skills, counselling services, development of agricultural companies and business, and cooperation will target enterprises from the agriculture, food industry and forestry sectors;

- the RDP will also support the diversification of agricultural and forestry activities of enterprises which can also touch the support of activities in sectors which fall under the OP R&I.

In order to prevent duplicated funding of costs of projects supported under the RDP and the OP R&I, a control mechanism will be implemented based on mutual exchange of relevant information on projects supported under the OP R&I and the RDP.

### **Operational programme Technical Assistance**

The dividing lines are defined as follows:

- information and monitoring system – the OP TA will ensure the horizontal adjustment and development of the information and monitoring system for the implementation of the programming period 2014–2020 at national level. The possible specific requirements for the adjustment of the system for the OP R&I will be consulted ex ante with the Central Coordination Authority with -ante with a possible subsequent implementation of this specific adjustment under the OP R&I technical assistance;

- training – the OP TA will provide for a proposal and implementation of the training system for ESIF staff at national level, creating and ensuring standardised training and education for standardised posts within the ESIF management and implementation system. The possible specific requirements for the education and training of the OP R&I administrative capacities will be fulfilled from the OP R&I technical assistance (training on project management, the building act, etc.);

- fight against corruption and fraud – the OP TA will present a proposal for more detailed measures in this area of the ESIF implementation at the level of the ESIF Management System for the Programming Period 2014–2020 as a set. The OP R&I will ensure the incorporation of the proposed measures into its internal procedures.

### **Operational Programme Integrated Infrastructure**

Complementarities with the Operational Programme Integrated Infrastructure can be identified mainly in the field of support of ICT. The Operational Programme Integrated Infrastructure will implement projects targeting the development of an information society that raise demand for innovation in the field of ICT, whereas the OP R&I will be a tool to implement research, development and innovation and for the financing of research and development in the field of ICT.

### **Operational Programme Quality of Environment**

OP R&I aims to promote research and development of innovative technologies as well as in the areas of environment and energy identified in RIS3 SK. Application of innovative technologies in the field of environmental infrastructure will be supported from the OP QoE if this technology meets the eligibility criteria of the OP QoE<sup>114</sup>.

### **Operational Programme Effective Public Administration**

Synergies between the OP R&I and the Operational Programme Effective Public Administration (OP EPA) can be observed at horizontal level given the focus and aims of the OP EPA mainly in relation to specific objective 1.2 Developing human resources in public administration and enhancing analytical capacities with a view to the public administration reform, and 1.3 Integration and optimisation of public administration processes and structure. The development of human resources, the enhancement of analytical capacities, and the integration and optimisation of public administration processes are expected to have a positive impact also on the OP R&I management and implementation processes.

Annex No. 13 to the OP R&I contains a detailed description of complementarities, synergies and division lines with selected EU programmes and programmes of European Territorial Cooperation.

## 9. Ex-ante conditionalities

### 9.1 Identification of ex-ante conditionalities and assessment of their fulfilment

Table 35 Identification of ex-ante conditionalities and assessment of their fulfilment

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
1.1. Research and innovations: Existence of a national or regional smart specialisation strategy which complies with the National Reform Programme aimed to obtain private finances for research and innovations, meeting the criteria for national or regional systems of research and innovations with excellent results	PA 1 PA 2	Partially	<p>1. A national or regional smart specialisation strategy has been introduced which:</p> <ul style="list-style-type: none"> <li>– is based on SWOT analysis or a similar analysis aimed to concentrate funds into a limited number of priorities in the field of research and innovations;</li> <li>– describes the measures supporting private investments in research and development;</li> <li>– includes a monitoring mechanism.</li> </ul> <p>2. A framework has been adopted describing the</p>	<p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p>	<p><a href="http://www.rokovanie.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=23039">http://www.rokovanie.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=23039</a></p> <p><a href="https://www.vedatechnika.sk/SK/VedaATechnikaVSR/Stranky/Ramcova-koncepcia-a-struktura-strategie-inteligentnej-specializacie-S3-v-SR.aspx">https://www.vedatechnika.sk/SK/VedaATechnikaVSR/Stranky/Ramcova-koncepcia-a-struktura-strategie-inteligentnej-specializacie-S3-v-SR.aspx</a></p>	<p>Research and Innovation Strategy for Smart Specialisation of the SR (RIS3) was approved by Government Resolution No 665/2013 of 13. November 2013.</p> <p>RIS3 was consulted with EC experts and revised in line with their comments and recommendations.</p> <p>RIS 3 will be implemented through the Action plans. First one covers the period 2014 – 2016. The most important areas and activities for a successful implementation and fulfilment of all criteria under the thematic objective, in particular:</p> <ul style="list-style-type: none"> <li>- completion of financial frameworks with indicative allocations by individual measures, sources of funding and types of financial Instruments ,</li> <li>- completion of the monitoring system for compliance with RIS 3 objectives and with measurable indicators (the monitoring system is being prepared and will be designed to provide early identification of the need to make necessary adjustments, if any, to objectives and actions set under RIS3 so that they could better reflect</li> </ul>

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
			available budget resources for research and innovations.			<p>the current needs and developments), completion of the links between the proposed specialisation areas,</p> <p>- SK Roadmap for research infrastructure of the SRI which will identify the existing national facilities of infrastructure suitable for participation in the ESFRI, including a critical analysis (which R&amp;D centres, centres of competence and centres of excellence are sustainable in the long term and have the potential to be beneficial to the areas of specialisation of the RIS3 SK). The basis for the SK Roadmap is the Annex 9 in the OP R&amp;I.</p> <p><b>Implementing Action plan for RIS3 covering period 2014-2016 will be submitted to the Government of the SR for approval procedure by 30 November 2014.</b></p>



Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
1.2. Research and innovation infrastructure. Existence of a multi-annual plan for budget preparation and classification of investments by priority	PA 1 PA 2	Partially	An indicative multi-annual plan for the budget preparation and classification of investments related to EU priorities and to the European Strategic Forum for Research Infrastructures (ESFRI) by priority.	No		Investment prioritisation is included in the RIS3. The indicative multi-annual plan for budgeting as well as a list of investments will be included into the RIS3 Action Plan: Action plan RIS3 will include Road map for research infrastructure of the SR.
3.1. Specific actions were carried out to promote entrepreneurship with regard to the „Small Business Act“ (SBA) initiative.	PA 3 PO4	Partially	<p>The following specific actions were performed:</p> <p>1. Measures implemented with the aim to reduce the time and costs needed to establish an undertaking in view of the SBA objectives;</p>	Yes	<p>Act No. 547/2011 Coll. changing and amending Act No. 431/2002 Coll. on Accounting, as amended, and on changes and amendments to some acts</p> <p><a href="http://www.zakonypreludi.sk/zz/2011-547">http://www.zakonypreludi.sk/zz/2011-547</a></p> <p>Act No. 357/2013 Coll. changing and amending Act No. 513/1991 Coll. Commercial Code as amended and changing and amending some other acts</p> <p><a href="http://www.zakonypreludi.sk/zz">http://www.zakonypreludi.sk/zz</a></p>	<p>Measure</p> <ul style="list-style-type: none"> <li>- to reduce the time needed to establish a company, as identified in the requirement for reducing the period for registration or rejection of entry – reduction from 5 to 2 working days</li> <li>- to reduce the costs of establishing a company – <b>fulfilled</b> by publishing standardised templates for SMEs in case the company is established by a sole partner or shareholder</li> </ul> <p>The special fees for the provision of services upon</p>

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
			2. Measures introduced with the aim to reduce the time needed to obtain licences and permits to start and perform certain activities, in view of the SBA objectives;	Yes	<p><a href="#">/2013-357</a></p> <p>Draft government policy to improve the business environment in the SR</p> <p>- <a href="http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=19987">http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=19987</a></p> <p>Draft government act on trading in defence industry products and on changes and amendments to some acts  <a href="http://www.nrsr.sk/web/Default.aspx?sid=zakony/zakon&amp;ZakZborID=13&amp;CisObdobia=5&amp;CPT=456">http://www.nrsr.sk/web/Default.aspx?sid=zakony/zakon&amp;ZakZborID=13&amp;CisObdobia=5&amp;CPT=456</a></p>	<p>procurement of services related to obtaining a business licence through the Trade Licensing Office were <b>cancelled</b>.</p> <p>With respect to electronic registration:</p> <ul style="list-style-type: none"> <li>- The administrative fees for the following services were <b>cancelled</b>: notifying a free trade, requests for extracts from the public part of the Trade register and requests for issuing an overview; notifications of changes in the data entered in the Trade Register (natural persons and legal entities which are not entered in the Companies Register), requests for documents confirming that the Trade Register does not contain any entry; and requests for issuing a document confirming that the provision of services on the basis of a trade license is not restricted or banned;</li> <li>- the administrative fee for notifying a craft or regulated trade was <b>reduced by half</b></li> </ul> <p>etc.</p> <p>By adopting Act No. 392/2011 Coll. on Trading in Defence Industry Products and on changes and amendments to some acts, which amended Act No. 455/1991 Coll. on Trade Licensing, the period for issuing a trade license was reduced from 5 to 3 days,</p>

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
			3. Mechanism introduced to monitor the implementation of SBA measures and to assess impacts on SMEs.	No	<p>Analysis of the situation of SMEs  <a href="http://hsr.rokovania.sk/15282013%E2%80%93931000/">http://hsr.rokovania.sk/15282013%E2%80%93931000/</a></p>	<p>and the functionality of contact points was extended. Single contact points (SCP) enable individuals interested in launching business to perform all steps needed to being issued a trade licence, i.e. steps related to establishing a company at a single place.</p> <p>The functionality of electronic SCP was fully launched on 01 January 2012, i.e. the possibility to open a trade electronically, including changes and filing of proposals for entries in the Companies Register, as well as payments for court and administrative fees.</p> <p>By Government Resolution No. 153/2013, tasks to ensure higher effectiveness in the use of SCP services and the expansion of their functionality were adopted.</p> <p>The expansion of SCP services will also affect other special regulations concerning IT communication and modification of information systems.</p> <p>The MoE SR as the central state administration authority responsible for SME support created a Working Group for SBA issues, composed of representatives of public administration and business organisations. This working group will ensure the monitoring and evaluation of progress made upon the SBA implementation, participate in the dissemination of information concerning policies for SMEs and the exchange of best examples in this field. Its aim will be to propose recommendations for improving the implementation of the SBA and its individual principles within the SR, and thus to help SMEs in their business</p>

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
						activities and to continuously create the conditions for improving the business environment. The most important task of the working group in 2014 is the introduction of the SME test in the Slovak legislation. In this regard, a new strategy for SMEs is under preparation under the Slovak Business Agency; the first part of this document – Analysis of the Situation of SMEs – was approved by the Economic and Social Council of the SR. Works are also being performed to prepare the Act on SME support and guidelines for practical implementation of SME tests.

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
1. Non-discrimination The existence of administrative capacity for the implementation and application of Union anti-discrimination law and policy in the field of ESI Funds.		No	Arrangements in accordance with the institutional and legal framework of Member States for the involvement of bodies responsible for the promotion of equal treatment of all persons throughout the preparation and implementation of programmes, including the provision of advice on equality in ESI fund-related activities.	No	<p>Act No 575/2001 Coll on the organisation of activities of the government and on the organisation of the central state administration as amended by later regulations</p> <p><a href="http://www.epi.sk/Main/Default.aspx?Template=~%2FMain%2FTArticles.ascx&amp;LngID=0&amp;zsrlnk_id=4654186&amp;phContent=~%2FZzSR%2FShowRule.ascx&amp;RuleId=14927&amp;pa=13597">http://www.epi.sk/Main/Default.aspx?Template=~%2FMain%2FTArticles.ascx&amp;LngID=0&amp;zsrlnk_id=4654186&amp;phContent=~%2FZzSR%2FShowRule.ascx&amp;RuleId=14927&amp;pa=13597</a></p> <p>Anti-Discrimination Act (Act No 365/2004 Coll on Equal Treatment in Certain Areas and Protection against Discrimination)</p> <p><a href="http://www.gender.gov.sk/?page_id=72">http://www.gender.gov.sk/?page_id=72</a></p>	<p>The Department of Gender Equality and Equal Opportunities (DGEEO) is the executive body for the implementation of programmes,</p> <p>DGEEO participated in the preparation of operational programmes and will be involved in the implementation and monitoring through membership in the monitoring committee and providing of advice (training).</p> <p>Administrative capacities of Department were increased until 1 July 2014.</p> <p>the provision of advice is the responsibility of the Slovak National Centre for Human Rights (SNCHR).</p> <p>Representation of the principal NGOs and experts on discrimination, gender equality and disability in the preparation and implementation of operational programmes is ensured through their participation in the working group of HP coordinator.</p>
			Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union anti-	No	<p>A list and directory of cooperating non-governmental organisations in Slovakia dedicated to women's rights and gender equality</p> <p><a href="http://www.gender.gov.sk/?page_id=347">http://www.gender.gov.sk/?page_id=347</a></p> <p>National Gender Equality</p>	

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
			discrimination law and policy.		Strategy for 2009 - 2013 <a href="http://www.gender.gov.sk/?page_id=294">http://www.gender.gov.sk/?page_id=294</a>	
2. Gender equality  The existence of administrative capacity for the implementation and application of Union gender equality law and policy in the field of ESI Funds		No	Arrangements in accordance with the institutional and legal framework of Member States for the involvement of bodies responsible for gender equality throughout the preparation and implementation of programmes, including the provision of advice on gender equality in ESI Fund-related activities.	No	A list and directory of cooperating non-governmental organisations in Slovakia dedicated to women's rights and gender equality <a href="http://www.gender.gov.sk/?page_id=347">http://www.gender.gov.sk/?page_id=347</a> National Gender Equality Strategy for 2009 - 2013 <a href="http://www.gender.gov.sk/?page_id=294">http://www.gender.gov.sk/?page_id=294</a>	The Department of Gender Equality and Equal Opportunities (DGEEO) is the executive body for the implementation of programmes,  DGEEO participated in the preparation of operational programmes and will be involved in the implementation and monitoring through membership in the monitoring committee and providing of advice (training).  Representation of the principal NGOs and experts on discrimination, gender equality and health disability in the preparation and implementation of operational programmes is ensured through their participation in the working group of HP coordinator.  The new strategy of gender equality for the period 2014 - 2020 is prepared based on an assessment of current National Strategy of gender equality for the years 2009 - 2013. The new strategy will be ready in November 2014.
			Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union gender equality law and policy as well as on gender	No		

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
			mainstreaming.			
<b>3. Disability</b>  The existence of administrative capacity for the implementation and application of the United Nations Convention on the rights of persons with disabilities (UNCRPD) in the field of ESI Funds in accordance with Council Decision 2010/48/EC		No	Arrangements in accordance with the institutional and legal framework of Member States for the consultation and involvement of bodies in charge of protection of rights of persons with disabilities or representative organisations of persons with disabilities and other relevant stakeholders throughout the preparation and implementation of programmes.	No	National Programme for the Development of Living Conditions of Persons with Disabilities for 2014 - 2020. <a href="http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=23180">http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=23180</a>	The Department of Gender Equality and Equal Opportunities (DGEEO) is the executive body for the implementation of programmes,  DGEEO participated in the preparation of operational programmes and will be involved in the implementation and monitoring through membership in the monitoring committee and providing of advice (training).  Representation of the principal NGOs and experts on discrimination, gender equality and health disability in the preparation and implementation of operational programmes is ensured through their participation in the working group of HP coordinator.
			Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of applicable Union and national disability law and policy, including accessibility and the practical application of the UNCRPD as reflected in Union and	No		



Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
			national legislation, as appropriate.			
			Arrangements to ensure monitoring of the implementation of Article 9 of the UNCRPD in relation to the ESI Funds throughout the preparation and the implementation of the programmes.	No		Implementation of Article 9 of the UN Convention on the Rights of Persons with Disabilities is provided through the <i>National Programme</i> , which addresses special chapter of availability and relevant measures. Measures relating to this article are focused mainly on disabled access in buildings and in transport and accessibility of goods, services and information.
4. Public procurement  The existence of arrangements for the effective application of Union public procurement law in the field of the ESI Funds.		No	Arrangements for the effective application of Union public procurement rules through appropriate mechanisms.	No	Act No 25/2006 Coll. on public procurement  <a href="http://www.uvo.gov.sk/legislativa/-/document_library_display/74gW/view/706651?_110_INSTANCE_74gW_redirect=http%3A%2F%2Fwww.uvo.gov.sk%2Flegislative%3Fp_id%3D110_INSTANCE_74gW%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_count%3D1">http://www.uvo.gov.sk/legislativa/-/document_library_display/74gW/view/706651?_110_INSTANCE_74gW_redirect=http%3A%2F%2Fwww.uvo.gov.sk%2Flegislative%3Fp_id%3D110_INSTANCE_74gW%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_count%3D1</a>  Act No 95/2013 Coll. (amendment to Act No 25/2006 Coll.)	Planned measures:  - Electronic public procurement; - Increased support from PPO bodies carrying out inspections of procurement under the Agreement for cooperation; - Introduction of risk analysis; - Preparation of model documents; - Development of checklists for MA control at the level of management system; - Preparation of uniform rules and requirements for the public procurement and procurement documentation; - The introduction of price maps, benchmarks and limits for cost-effectiveness assessment; - The introduction of mandatory ex ante control; - Establishment of cooperation with the Antimonopoly Office of the SR.  Measures for the major types of specific weaknesses identified by EK that are planned are as follows: - Conflict of interest; - Insufficient competition; - Discriminatory conditions of competition.

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
					<a href="http://www.upsvar.sk/buxus/docs/urady/VK/vo/13-z095.pdf">http://www.upsvar.sk/buxus/docs/urady/VK/vo/13-z095.pdf</a>	
			Arrangements which ensure transparent contract award procedures.	No		The area of contract awarding not subject to the relevant EU directives on PP ( <b>below-threshold contracts</b> ) is covered by the PP Act itself in Slovak legislation. This provides for the obligation to proceed according to this Act in the procurement of works, goods and services for contracting authorities, contracting entities as well as individuals who are beneficiaries of grants. The procedures for these contracts are based on the basic principles of public procurement referred to in the relevant EU directives, thus ensuring transparent public procurement procedures even for contracts not falling under EU directives on public procurement. The public procurement procedures for this type of contracts will be covered by the same measures as specified, under criterion 1. <i>Arrangement adopted partially</i>
			Arrangements for training and dissemination of information for staff involved in the implementation of the ESI Funds.	No	In accordance with Government Resolution No 21/2013, the Public Procurement Office prepares in cooperation with each managing authority a report on the results of public procurement controls and audits on a semi-annual basis which is published at: <a href="http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=21941">http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=21941</a> (e.g. <a href="http://www.opzp.sk/dokumenty/projektove-">http://www.opzp.sk/dokumenty/projektove-</a>	Planned measures:  Introduction of a uniform employee training system under the ESI Funds control and management system. The MA will be required to provide regular training and seminars for all staff involved in the implementation of the funds, while making participation in this training compulsory for this staff.  A proposal has also been made to establish a Coordinating Committee for Cooperation In Public Procurement. This committee of experts, primarily from the CCA, PPO, CA, AA, MAs, will ensure a joint approach to the application of public procurement rules (cooperating in issuing methodology

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
					dokumenty/rozhodnutia-uvo-sr-v-procesoch-vo-v-ramci-projektov-op-zp-v-programovom-obdobi-2007-2013/)  or <a href="http://www.uvo.gov.sk/za-obdobie-od-1.1.2013-do-30.6.2013">http://www.uvo.gov.sk/za-obdobie-od-1.1.2013-do-30.6.2013</a>	interpretations, instructions and guidelines adjusted to the needs of EU funds implementation). A clear advantage of constituting this body will be the instant identification of any serious misconduct (system-level irregularities) in MA/IBMA procedures in PP control and effective opportunities to take appropriate corrective measures to eliminate them.
			Arrangements to ensure administrative capacity for implementation and application of Union public procurement rules.	No	<i>Public Procurement Office</i> <a href="http://www.uvo.gov.sk/domov">http://www.uvo.gov.sk/domov</a>  <i>Methodological guidelines (PPO)</i>  <a href="http://www.uvo.gov.sk/metodické-usmernenia">http://www.uvo.gov.sk/metodické-usmernenia</a>	Using technical assistance within cooperation with the PPO to refund wage costs of employees delivering support activities for MAs, IBMAs, AA and CA under the cooperation agreement. <i>Arrangement to be taken</i>  Using technical assistance within cooperation with the PPO to refund costs of expert appraisals and expert opinions that will be necessary for delivering support activities for MAs, IBMAs, AA and CA under the cooperation agreement. <i>Arrangement to be taken</i>  Technical assistance for cooperation with the Antimonopoly Office of the SR – <i>Arrangement to be taken</i>  Technical assistance for beneficiaris training. Training will be focused on beneficiaris or applicants – <i>Arrangement to be taken</i> .
5.State aid The existence of arrangements for the effective application of Union		Partially	Arrangements for the effective application of Union State aid rules.	No		A central IT register for State aid will be set up, having the scope and structure to be defined by a new GBER , as well as by the relevant EC guidelines.
			Arrangements to ensure training and	Yes		The relevant training courses for staff on the application of EU state aid rules at all relevant levels

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
State aid rules in the field of the ESI Funds.			informing of administrative capacity involved in the ESI Funds implementation			(i.e. the relevant departments) have either already taken place or have been scheduled.
			Arrangements to ensure administrative capacity for implementation and application of Union State aid rules	No		<p>The quantification of the need to reinforce the administrative capacity of the state aid coordinator with respect to the implementation of the ex-ante conditionality "State aid" as well as the establishment of methodological centres required by the EC was laid down with DG Competition representatives.</p> <p>OP Technical Assistance takes into account increased administrative capacity of the MF SR as state aid coordinator.</p>
6.The existence of arrangements for the effective application of Union environmental legislation related to EIA and SEA.		Partially	Arrangements for the effective application of Directive 2011/92/EU of the European Parliament and of the Council (EIA) and of Directive 2001/42/EC of the European Parliament and of the Council (SEA)	No	<p>Act No 24/2006 Coll. on environmental impact assessment and on amendments to certain acts as amended</p> <p>The Act is published on the web page <a href="http://iaspi.justice.gov.sk">http://iaspi.justice.gov.sk</a></p> <p>Proposal for the Act amendment: <a href="http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=23688">http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?idMaterial=23688</a></p> <p>Propoasal fot the Act amendment is approval process in the National Council since 16.</p>	<p>The infringement procedure was commenced for transposition deficit in relation to Directive No 2011/92/EU (EIA) by a letter dated on 21 March 2013.</p> <p>On 12 July 2013, the SR sent the final response to the formal notice of the Commission. The Slovak Republic therein declares executing respective legislative amendments and methodological guidance in order to eliminate the transposition deficit.</p> <p>With regard to the measures for the direct application of EIA Directive, coordination meeting was held on 7 May 2014, with the participation of representatives of the CCA, MoE SR and MoTCRR SR. Best practice in the field of the re-assessment and re-permitting of projects at the MoTCRR SR were taken into account when the proposals were formulated.</p>

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
					July 2014.	
			Arrangements for training and dissemination of information for staff involved in the implementation of the EIA and SEA Directives	No	Training and communication strategy for employees involved in implementing EIA and SEA Directives including draft measures for its realisation adopted at the 7th management meeting of the MoE SR held on 7 March 2013.  <a href="http://www.sazp.sk/public/index/go.php?id=81&amp;prm3=686">http://www.sazp.sk/public/index/go.php?id=81&amp;prm3=686</a>	Trainings will mainly consist of lectures, workshops, seminars and conferences. Due to the fact that the infringement procedure was commenced for transposition deficit in relation to Directive 2011/92/EU (EIA), update of the training strategy is necessary to reflect the need for methodological guidance in the “transitory” period and the relevant legislative amendments.
			Arrangements to ensure sufficient administrative capacity.	Yes	Analysis of administrative capacity in the area of environmental impact assessment (implementation of EIA and SEA Directives), including a proposal for measures to ensure that the capacity is sufficient, was approved at the 3rd Men SR Council meeting held on 24 January 2013.	Conclusions of the Analysis show that the current status of administrative capacities in environmental impact assessment is sufficient. At present, there is no need to revise the relevant analysis or update it on the basis of comments raised in relation to the proposal of legislative changes in Act No 24/2006 Coll.
7. Statistical systems and result indicators  The existence of a statistical basis necessary to undertake evaluations to assess the	PA 1 PA 2 PA 3 PA 4 PA 5	No	Arrangements for timely collection and aggregation of statistical data with the following elements are in place: – the identification of sources and mechanisms to	No		MESRS SR together with MoE SR are elaborating Monitoring and Evaluation System of the OP R&I. The system describes the measurable result and output indicators as well as how the indicators for the performance framework were selected .  The system contains result and output indicators at program level including definition, justification for choice of indicator, the calculation method, measurement unit, the target value (year 2023), source and frequency of monitoring. The monitoring

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
<p>effectiveness and impact of the programmes.</p> <p>The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.</p>			<p>ensure statistical validation; – arrangements for publication and public availability of aggregated data.</p> <p>An effective system of result indicators including: – the selection of result indicators for each programme providing information on what motivates the selection of policy actions financed by the programme; – the establishment of targets for these indicators; – the consistency of each indicator</p>	No		<p>system is based on experience with fulfilment of indicators in programming period 2007 - 2013 under OP R&amp;D and OP C&amp;EG and on identified main drawbacks of the monitoring system.</p> <p>It contains also information on the performance framework including definitions, justification for selecting the indicators and explanation how milestones and target were set.</p> <p>The system will be further developed to the project level as well as the system of evaluation and data collection.</p> <p>Within the system of monitoring and evaluation were defined result indicators with indicated definition, justification for indicator selection, the calculation method, unit of measure, the target value (year 2023), source and monitoring frequency. The exception is the result indicator "awareness rate about support possibility from the OP" to which an action plan has been drawn up as at the time of preparation of the OP R&amp;I were not the necessary data for identification of baseline and the benchmark indicator of the measurable result at disposal.</p>

Ex-ante conditionality	Priority axis to which the ex-ante conditionality applies	Ex-ante conditionality fulfilled Yes/No/Partially	Criteria	Criteria fulfilled: Yes/No	Reference	Explanations
			<p>with the following requisites: robustness and statistical validation, clarity of normative interpretation, responsiveness to policy, timely collection of data;</p> <p>Procedures in place to ensure that all operations financed by the programme adopt an effective system of indicators.</p>	No		<p>For the fulfilment of this criterion is necessary to complete the Monitoring and Evaluation System and include also project indicators and the evaluation plans. The Monitoring will include also output indicators on project level linked with following expected results:</p> <ul style="list-style-type: none"> <li>- Increasing young generation included in technical and scientific studies;</li> <li>- Increasing number of top Slovak and foreign researchers working abroad returning to Slovakia and participating on research projects in SR;</li> <li>- jobs created in university science parks;</li> <li>- Increasing of new business models using;</li> <li>- Improving the links between domestic SME and suppliers for large multinational companies.</li> </ul> <p>Indicators related to building energy-efficiency monitoring will be part of the system of indicators.</p>

## 9.2 Actions to fulfil general and thematic ex-ante conditionalities

**Table 36** Actions to fulfil applicable general ex-ante conditionalities

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
1. Anti-discrimination The existence of administrative capacity for the implementation and application of Union anti-discrimination law and policy in the field of the ESI Funds.	Arrangements in accordance with the institutional and legal framework of Member States for the involvement of bodies responsible for the promotion of equal treatment of all persons throughout the preparation and implementation of programmes, including the provision of advice on equality in ESI fund-related activities.	<b>Reinforcing the administrative capacity of the Department of Gender Equality and Equal Opportunities at the MLSAF SR.</b> An independent entity for the coordination of horizontal principles will be set up, with 7 new job positions planned to be created, plus one assistant.  <b>Increasing the administrative capacity of the Department of Gender Equality and Equal Opportunities at the MLSAF SR.</b>  <b>Engagement of the Slovak National Centre for Human Rights as amended as an "equality body".</b>  <b>National action plan for the prevention and elimination of discrimination</b>  Submission to Government of the SR  <a href="http://www.radavladyp.gov.sk/po-rokovani-rady-vlady-pre-ludske-prava-narodnostne-mensiny-a-rodovu-rovnost/">http://www.radavladyp.gov.sk/po-rokovani-rady-vlady-pre-ludske-prava-narodnostne-mensiny-a-rodovu-rovnost/</a>	1 November 2014   30 December 2014   30 Juny 2015   31 December 2014	MLSAF SR
		Elaboration of a strategy for training and dissemination of information for staff involved in the implementation of the funds and the subsequent submission of a project under the OP TA to finance the training. Deadline for strategy submission to the Government of the SR  <a href="http://www.radavladyp.gov.sk/po-rokovani-rady-vlady-pre-ludske-prava-narodnostne-mensiny-a-rodovu-rovnost/">http://www.radavladyp.gov.sk/po-rokovani-rady-vlady-pre-ludske-prava-narodnostne-mensiny-a-rodovu-rovnost/</a> :	31 December 2014	



General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
	Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union anti-discrimination law and policy.			
2. Gender equality The existence of administrative capacity for the implementation and application of Union gender equality law and policy in the field of the ESI Funds.	Arrangements in accordance with the institutional and legal framework of Member States for the involvement of bodies responsible for gender equality throughout the preparation and implementation of programmes, including the provision of advice on gender equality in ESI Fund-related activities.	<b>Reinforcing the administrative capacity of the Department of Gender Equality and Equal Opportunities at the MLSAF SR</b> An institutional mechanism for HP coordination will be developed with the focus on methodology guidance, publicity, training and educational activities, evaluation and selection process, as well as monitoring and control.	1 November 2014	MLSAF SR
		<b>The National Gender Equality Strategy for 2014 – 2020</b> Submission to Government of the SR	30 November 2014	
		<b>Nation-wide strategy on the protection and promotion of human rights in the SR</b> Submission to Government of the SR	31 December 2014	
	Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of Union gender equality law and policy as well as on gender mainstreaming.	<b>Elaboration of a strategy for training and dissemination of information for staff involved in the implementation of the funds and the subsequent submission of a project under the OP TA to finance the training.</b>  Training and education activities (courses, seminars, training, and dissemination of information to the staff involved in the use of the funds; conferences, publications and promotional printed materials, publication of reports in the national and regional/local mass media, etc., will be carried out by the lead authority for the HP  Initial trainign for MA  Trainings on gender equality in public administration and e-learnig trainig on gender equality were accredited by the Ministry of Education, Science, Research and Sport of the SR, under supervision of the DGEE0. Trainings are already	1 November 2014          30 Juny 2015	

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
		provided for various public administration bodies and are available for the management of ESI funds.  <a href="http://www.institutrr.sk/elearning/">http://www.institutrr.sk/elearning/</a> <a href="http://isdv.fri.uniza.sk/CourseDetail.aspx?moduleId=26750">http://isdv.fri.uniza.sk/CourseDetail.aspx?moduleId=26750</a> <a href="http://isdv.fri.uniza.sk/CourseDetail.aspx?moduleId=26746">http://isdv.fri.uniza.sk/CourseDetail.aspx?moduleId=26746</a>		
<p>3. Disability</p> <p>The existence of administrative capacity for the implementation and application of the United Nations Convention on the rights of persons with disabilities (UNCRPD) in the field of the ESI</p> <p>Funds in accordance with Council Decision 2010/48/EC.</p>	<p>Arrangements in accordance with the institutional and legal framework of Member States for the consultation and involvement of bodies in charge of protection of rights of persons with disabilities or representative organisations of persons with disabilities and other relevant stakeholders throughout the preparation and implementation of programmes.</p>	<p><b>Reinforcing administrative capacities of the bodies responsible for the implementation of the UN convention</b></p> <p>Slovakia is currently working on a <b>Nation-wide strategy on the protection and promotion of human rights in the SR</b> which should also define the tasks in the field of guaranteeing the rights of people with disabilities.</p> <p>Submission to Government of the SR</p>	<p>30 November 2014</p> <p>31 December 2014</p>	MLSAF SR
	<p>Arrangements for training for staff of the authorities involved in the management and control of the ESI Funds in the fields of applicable Union and national disability law and policy, including accessibility and the practical application of the UNCRPD as reflected in Union and national legislation, as appropriate.</p>	<p>Elaboration of a strategy for training and dissemination of information for staff involved in the implementation of the funds and the subsequent submission of a project under the OP TA to finance the training.</p> <p>Elaboration of a strategy:</p> <p>Training Implementation of initial education of MA</p>	<p>1 November 2014</p> <p>30 Juny 2015</p>	
	<p>Arrangements to ensure monitoring of the implementation of Article 9</p>	<p>The process of monitoring the fulfilment of horizontal principles will be monitored at the project level by means of monitoring reports that will include a separate document</p>	<p>31 October 2014</p>	

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
	of the UNCRPD in relation to the ESI Funds throughout the preparation and the implementation of the programmes.	<p>containing information about horizontal principles (i.e. description of the activities carried out, their outcomes and assessment of how they contributed to the achievement of the set objectives of horizontal principles), as well as on-the-spot controls of the implementation of projects and, subsequently, evaluation of their contribution to the objectives of horizontal principles. This separate document containing information on the application of the horizontal principles will form a basis for the process of assessment of the contribution of ESI Funds to the objectives identified in the national strategic document.</p> <p>Incorporation into managing documentation, process of application in assessment, monitoring and control, preration of assessment grid.</p>	<p>30 July 2014 - incorporating Article 9 of the UN Convention in all OPs</p> <p>31 December 2014 – preparation of document on implementation system including monitoring of horizontal principles</p> <p>30 April 2015 – following incorporation in the OP managing documents, application process with respect to evaluation, monitoring and control, preparation of the assessment grid.</p>	
<p>4. Public procurement</p> <p>The existence of arrangements for the effective application of Union public procurement law in the field of the ESI Funds.</p>	Arrangements for the effective application of Union public procurement rules through appropriate mechanisms.	<p>As general measures to solution to the deficiencies identified during controls will be in place the following measures:</p> <ul style="list-style-type: none"> <li>- Increased support from PPO bodies carrying out inspections of procurement under the Agreement for cooperation;</li> <li>- Introduction of risk analysis;</li> <li>- Preparation of model documents;</li> <li>- Development of checklists for MA control at the level of management system;</li> <li>- Preparation of uniform rules and requirements for the public procurement and procurement documentation;</li> <li>- Introduction of price maps, benchmarks and limits for cost-effectiveness assessment;</li> </ul>	<p>30 November 2014</p> <p>30 November 2014</p> <p>31 August 2016</p> <p>30 November 2014</p> <p>30 June 2015</p> <p>30 November 2014</p> <p>30 November 2014</p>	.PPO, CCA

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
		<ul style="list-style-type: none"> <li>- Introduction of mandatory ex ante control;</li> <li>- Establishment of cooperation with the Antimonopoly Office of the SR.</li> <li>- Electronic public procurement;</li> </ul> <p>Assessment of measures efficiency within criteria 1-4</p>	<p>30 November 2014</p> <p>18 April 2016</p> <p>Deadline: Within time limits set in EP and Council Directives 2014/23/EU, 2014/24/EU, 2014/25/EU</p> <p>30 June 2015</p>	
	Arrangements which ensure transparent contract award procedures.	The area of contract awarding not subject to the relevant EU directives on PP ( <b>below-threshold contracts</b> ) is covered by the PP Act itself in Slovak legislation. This provides for the obligation to proceed according to this Act in the procurement of works, goods and services for contracting authorities, contracting entities as well as individuals who are beneficiaries of grants.	30 June 2015	The public procurement procedures for this type of contracts will be covered by the same measures as specified, under criterion 1.
	Arrangements for training and dissemination of information for staff involved in the implementation of the ESI Funds.	CCA will provide training to procedures of administrative control of PP within the managing system and presenting the most common deficiencies identified in PP controls.	30 June 2015	CCA in cooperation with relevant organizational body of Government Office of the SR and PPO and AMO
	Arrangements to ensure administrative capacity for implementation and application of Union public procurement rules.	In order to intensify cooperation between government agencies participating in PP and competition control, this cooperation will be reinforced between the PPO and the Antimonopoly Office and at the level of ensuring administrative capacity for these bodies through technical assistance.	30 June 2015	OP TA in cooperation with CCA and AMO
5. State aid  The existence of arrangements for the effective application of	Arrangements for the effective application of Union State aid rules.	<p>An amendment to Act No 231/1999 Coll. on State aid as amended, intended to:</p> <ul style="list-style-type: none"> <li>- strengthen the role of a State aid coordinator to make its statements and positions binding and to require each State aid provider to submit, prior to granting State aid, an</li> </ul>	31 December 2015	MF SR

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
Union State aid rules in the field of the ESI Funds.		<p>application for State aid to the State aid coordinator (under Government Resolution No 156 of 9 April 2014, statements and position issued by the State aid coordinators are already binding for all MAs and IBMAs);</p> <p>- set up a legislative framework for the establishment of a central IT register for State aid which should cover individual aid and aid subject to general block exemption;</p> <p>- establish a central IT register for State aid having the scope and structure to be defined by a new GBER, due to come into force on 1 July 2014, and relevant Commission guidelines.</p>	31. 12. 2015	
	Arrangements to ensure administrative capacity for implementation and application of Union State aid rules	<p>Reinforcing administrative capacity of the State aid coordinator by 10 to 15 job positions (an increase of 100-150 %).</p> <p>The State aid coordinator unit will also fulfil the role a knowledge centre to provide necessary guidance on State aid.</p>	31 December 2014	MF SR
6. Environmental legislation relating to Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA)	Arrangements for the effective application of Directive 2011/92/EU of the European Parliament and of the Council (EIA) and of Directive 2001/42/EC of the European Parliament and of the Council (SEA)	<p>Draft act supplementing act No. 24/2006</p> <p>- Planned effective date of the legislative amendment</p>	1 December 2014	MEn SR in cooperation with Central Coordination Body and central bodies of public administration
		<p>Checking material, technical and personal resources for implementing supplementing act 30 June 2015.</p> <p>Methodological guidance for competent authorities regarding the impact assessment in the "transition" period (until the amended legislative is adopted and becomes</p>	30 September 2014	

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
The existence of arrangements for the effective application of Union environmental legislation related to EIA and SEA.		<p>effective):</p> <ul style="list-style-type: none"> <li>- written form to respective state administrative bodies acting in the field of environmental impact assessment specifying proper use of selection criteria for the screening procedure (Annex III of the EIA directive, reflected within Annex 10 of the EIA Act),</li> <li>- written form to respective state administrative bodies acting in the field of environmental impact assessment specifying sound procedure for rationalisation of decisions based on screening procedure by providing information on how the standpoints of bodies and municipalities concerned were taken into account,</li> <li>- written form to the permission authority on how to publish the information on launching the permitting procedure, including the right on access to the complete permission request.</li> </ul> <p>Methodological guidance will be released on <a href="http://www.enviroportal.sk">www.enviroportal.sk</a>. Note: MoE SR already provides for methodological guidance, particularly</p>		
		Adoption of a measure to support the application of the EIA Directive: Within an application procedure - in the case of applications for which a final assessment document was issued before the effective date of the amendment to the Act on Environmental Impact Assessment, compliance of the submitted project with the subject-matter of assessment will be examined. In cases where changes in the project occurred, re-assessment will be performed and, if necessary, re-permitting, as well.	31 December 2014	
	Arrangements for training and dissemination of information for staff involved in the implementation of the EIA and SEA Directives	Delivery of trainings reflecting the legislative amendments.	31 December 2014	
7. Statistical systems and result indicators  The existence of a	Established measures to ensure early collection and consolidation of statistical data with elements:	Monitoring and Evaluation System of the OP R & I will be complete to the level of project indicators as well as system of evaluation and data collection.	15 Novemeber 2014	Ministry of Education, Science, Research and Sports of the SR Ministry of Economy of the

General ex-ante conditionality	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
<p>statistical basis necessary to undertake evaluations to assess the effectiveness and impact of the programmes.</p> <p>The existence of a system of result indicators necessary to select actions, which most effectively contribute to desired results, to monitor progress towards results and to undertake impact evaluation.</p>	<ul style="list-style-type: none"> <li>- Identification of sources and mechanisms to ensure statistical data validation</li> <li>- Arrangements for consolidated data publication and their availability to the public</li> </ul> <p>An effective system of result indicators including:</p> <ul style="list-style-type: none"> <li>- Selection of result indicators for each programme. Indicators provide information on what motivates the choice of political arrangements financed by the programme;</li> <li>- the establishment of targets for these indicators;</li> </ul> <p>Compliance of each indicator with following particulars: resistance and statistical validation, clear normative interpretation, sensitivity to politics, timely data collection</p> <p>Procedures in place to ensure that all operations financed by the programme adopt an effective system of indicators.</p>	<p>Identification of baseline and target value of indicator of result "awareness rate about support possibility from the OP" will take following steps:</p> <ul style="list-style-type: none"> <li>- Methodology development for sampling, collection, processing and data evaluation;</li> <li>- Public opinion survey implementation</li> <li>- Synthesis of collected data from public opinion survey with identifying of indicator baseline and target value.</li> </ul> <p>Completion of indicator system to the project level will be linked with following expected results: Increasing young generation included in technical and scientific studies;</p> <ul style="list-style-type: none"> <li>- Encourage the young generation to study technical and natural science and careers of researcher;</li> <li>- Increasing the number of foreign excellent researchers participating in research projects in Slovakia;</li> <li>- Increasing number of top Slovak researchers working abroad participating on research projects in SR;</li> <li>- jobs created in university science parks;</li> <li>- Increasing the use of new business models;</li> <li>- Improving the links between domestic SME and suppliers for large multinational companies.</li> </ul> <p>Indicators related to building energy-efficiency monitoring will be part of the system of indicators.</p>	<p>15 February 2015</p> <p>31 August 2015</p> <p>15 September 2015</p> <p>15 November 2014</p>	SR

Table 37 Planned actions to fulfil applicable ex-ante conditionalities

<b>Thematic ex-ante conditionality – not fulfilled or partially fulfilled</b>	<b>Criteria not fulfilled</b>	<b>Actions to be taken</b>	<b>Deadline (date)</b>	<b>Bodies responsible</b>
1.1. Research and innovation: Existence of a national and/or regional smart specialisation strategy complying with the national reform programme for obtaining private funds for research and development meeting the criteria for national and regional research and innovation systems with excellent results.	National or regional smart specialisation strategy is introduced which:  – contains a monitoring mechanism;  – a framework was introduced describing available budget funds for research and innovation.	Preparation of Action Plan for RIS3 implementation in 2014 – 2016, complementing RIS3, which will include: - completion of financial frameworks with indicative allocations by individual measures, sources of funding and types of financial Instruments;  - completion of the monitoring system for compliance with RIS 3 objectives and with measurable indicators;  - Completion of links between areas of specialization R&D and areas of industrial specialization;  Road map for research infrastructure of the SR;  Submission of the draft of Action Plan for RIS3 implementation in 2014 – 2016 to inter-ministerial comments procedure;  Submission of the draft of Action Plan for RIS3 implementation in 2014 – 2016 to government meeting;	10 November 2014          27 November 2014       30December 2014	Ministry of Education, Science, Research and Sports of the SR  Ministry of Economy of the SR



Thematic ex-ante conditionality – not fulfilled or partially fulfilled	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
		Assumed approve of the Action Plan for RIS3 implementation in 2014 – 2016.		
1.2. Research and innovation infrastructure. Existence of a multi-annual plan for the set-up of budgets and prioritising of investments	An indicative multi-annual plan was adopted to set up a budget and prioritise investments related to EU priorities to the European Strategic Forum on Research Infrastructures (ESFRI), if needed	<p>Preparation of an Action Plan for RIS3 implementation in 2014 – 2016, complementing RIS3 and will include also Roadmap for research infrastructure of the SR and indicative multi-annual plan for budgeting and investments list</p> <p>Submission of the draft of Action Plan for RIS3 implementation in 2014 – 2016 to inter-ministerial comments procedure</p> <p>Submission of the draft of Action Plan for RIS3 implementation in 2014 – 2016 to government meeting</p> <p>Assumed approve of the Action Plan for RIS3 implementation in 2014 – 2016</p>	<p>10 November 2014</p> <p>27 November 2014</p> <p>30 December 2014</p>	Ministry of Education, Science, Research and Sports of the SR Ministry of Economy of the SR
3.1. Concrete actions were performed to promote entrepreneurship, in view of the Small Business Act (SBA) initiative.	3. Mechanism introduced for the purposes of monitoring of the implementation of SBA measures and assessment of impacts on SMEs	<p>1) <i>Act on Support of SMEs</i></p> <p>The need for adoption of the Law on Support of the SME was among the outcomes resulting from the Analysis of the Small and Medium</p>		Ministry of Economy of the SR Slovak Business Agency

Thematic ex-ante conditionality – not fulfilled or partially fulfilled	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
		<p>Entrepreneurship and the Strategy for Development of SMEs in Slovakia. It represents the historically first legal norm specifically addressing support towards SMEs. The aim of the law is to create systematic framework for support of SMEs. One of the targeted areas is the development of the mechanism to monitor the implementation of the measures of the SBA which have been put in place and assess the impact on SMEs.</p> <p>The new act will govern the testing of regulatory impacts on SMEs (SME test) and regular monitoring of the implementation of SBA measures.</p> <p>Submission of the draft act to inter-ministerial comments procedure</p> <p>Submission of the draft act to government meeting</p> <p>Approval of the act by the National Council of the SR</p> <p>Mechanism to monitor the implementation of the SBA and</p>	<p>30 September 2014</p> <p>31. October 2014</p> <p>31. December 2014</p> <p>1 January 2015</p>	

Thematic ex-ante conditionality – not fulfilled or partially fulfilled	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
		assess the impact on SMEs in place		
		<p>2) <i>Methodology for application of the SME test</i></p> <p>Development of the methodology for application of the SME test relates to the expected introduction of the mechanism for assessment of impacts of regulations on SME outlined in the Law on Support of the SME and at the same time methodology is envisaged by the Strategy for Development of SMEs in Slovakia. SME test represents the process of comprehensive assessment of impacts of both prepared and existing regulations on SMEs. The objective of the methodology is to integrate the rules and procedures for application of the SME test into Single Methodology for Assessment of Selected Impacts and thus to ensure their use in legal practice.</p>		Ministry of Economy of the SR Slovak Business Agency
		Draft of the methodology	31 August 2014 (fulfilled)	
		Submission of the draft methodology to the consultation process between ministries	30 September 2014	
		Submission of the methodology to the Government of the SR	31 October 2014	

Thematic ex-ante conditionality – not fulfilled or partially fulfilled	Criteria not fulfilled	Actions to be taken	Deadline (date)	Bodies responsible
		<i>Methodology for application of the SME test in place</i>	1 January 2015	

## 10. Actions to reduce the administrative burden for applicants/beneficiaries

### 10.1 Assessment of the administrative burden for grant applicants and beneficiaries in the programming period 2007–2013

The following activities extending the individual parts of the approval and implementation process were identified on the basis of the experience from the programming period 2007–2013:

- submission of grant applications and applications for payment both in electronic and paper form;
- submission of annexes to grant applications and applications for payment in paper form;
- submission of documents in several copies;
- repeated submission of documents which were previously presented by applicants/beneficiaries;
- submission of documents certifying facts that are commonly known or are available on the internet or which have been issued or approved by the MA/IBMA or the central state administration authority of which the MA/IB MA is part;
- mandatory submission of documents in paper form also in case they are submitted electronically;
- the mandatory written communication and the waiting for delivery extends the time for the processing or approval of grant applications, applications for payment or change of contract, etc. – the longer the communication periods, the slower the approval and implementation of projects.

### 10.2 Actions planned to reduce the administrative burden under OP R&I

Besides the areas where there is a potential to reduce the administrative burden identified in the PA SR<sup>115</sup>, the following actions have been identified to have a potential<sup>138</sup> to reduce the administrative burden related to the OP R&I implementation:

Actions	Indicative timetable
Gradual switch to an exclusively electronic form of communication between applicants/beneficiaries and MA/IB MA – the MA/IB MA internal procedures need to be modified accordingly	1Q2015
The applicant/beneficiary will submit to the MA/IB MA only those documents that have not been presented yet, or only changes or consolidated texts of relevant documents – where possible, only the electronic version of scans of documents will be submitted; for this purpose, a data storage centre for document needs to be created at the MA/IB MA or at least at the MA or IBMA, unless such storage centre has been created for all OPs at the CCA level	2Q2015
ŽThe applicant/beneficiary would not be required to submit documents certifying facts which are publicly available, for example, on its web site (statutes, instruments of incorporation), public registers (business register, trade register, cadastre portal, list of research institutions, registers of organisations, NGOs, foundations, registers of SO SR) or which have already been submitted to a state administration authority	2Q2015

(tax return, statement of finances), or have been issued by a state administration authority (extract from criminal records), or would only present a web link where the given data is available	
Ensuring protected electronic communication which completely eliminate the submission of documentation by beneficiaries in the case of grant applications, as the beneficiary would set up an administrator's position; in the case of grant applications, the beneficiary would only send to the MA the access code in a sealed envelope for the checking of the documentation which would in fact be the beneficiary's grant application, thanks to which the beneficiary would not have to submit or scan the documents, as it would guarantee compliance of the electronically shared document with the paper copy ready for archiving in the event of on-site control, audit, etc. The beneficiary's employees would continuously enter in the beneficiary's shared directory (separate part of the website) the documents needed for submitting the grant application.	4Q2015
Setting up of expert positions for persons trained by the MA to provide information and assist with the project implementation and preparation of applications for payment within the beneficiary's headquarters (or it can be an expert providing such services to 3 or 4 beneficiaries within the region with similar project contents)	1Q2015
Organising of seminars for applicants/beneficiaries in the target regions and making them highly interactive	1Q2015
More extensive use of the possibilities of electronic communication instead of formalised bureaucratic communication with regard to the preparation of written calls for clarification	1Q2015
It is considered to introduce the use of flat-rates under the OP R&I, which is considered the most effective way of reducing the administrative burden, as well as harmonisation of the rules of projects preparation and implementation with Horizon 2020.	2Q2015
With respect to beneficiaries from the public research and development sector, non-governmental R&D sector, and private R&D sector that are required to ensure co-financing of projects, it is necessary to introduce a less rigid way of co-financing of projects (enabling in-kind co-financing; and in the case of public higher schools cancel the impossibility to co-finance projects from funds designed for the institution's operation and the obligation to co-finance each and every expenditure item separately). In this context, the possibilities of co-financing should be extended by state budget funds that the respective public institution receives in the form of normative financing. The restrictions applying to the co-financing of major projects causes real problems in project implementation in higher education institutions and other organisations. Such funds are allocated to higher education institutions as non-purpose-bound performance subsidies. It should therefore be possible to use such funds also as a source of co-financing	2Q2015
Setting up of a single electronic system for the submission of interim and cumulative monthly work reports by beneficiaries for OPs with relevant visibility – the beneficiary would not have to report on activities through various types of work report forms or cumulative reports created by the MA, and the number of required copies would be	2Q2015

reduced by one, since there would be a single system. (It is the responsibility of the MoESRS SR to prepare the electronic system for the submission of interim and cumulative monthly reports by beneficiaries and to initiate the involvement of all MAs/IBMAs for all OPs in such system, since the ITMS does not check the overlapping time of the execution of project works under various OPs or MAs/IBMAs.)	
Preparing an agreement between relevant providers of assistance in the same field with exact rules for the eligibility of costs. The common problem of OP R&D is the financing of travel costs (and hence, personnel costs) from various funds (SF, KEGA, SRDA, etc.), where the beneficiary often fails or is not able to demonstrate the share of costs financed from various funds.	1Q2015

## 11. Horizontal principles

### 11.1 Sustainable development

The main objective of the horizontal principle Sustainable development is to ensure environmental, economic and social sustainability of growth. This definition fully corresponds to the priorities of the Europe 2020 strategy – a sustainable, smart and inclusive growth. Given the fact that the interventions will be cross-sectional and will affect several operational programmes, the fulfilment of the HP SD objective will be monitored and evaluated at the level of the ESIF 2014–2020 system so that the final effect supports all its aspects in a synergetic way including climate change adaptation and mitigation.

In order to reduce negative impacts on the climate, reduce the pollution of air and other parts of the environment, and with regard to energy efficiency, the projects funded from the ESIs will apply the green procurement principle<sup>116</sup>. In addition to environmental benefits (e.g. reduced energy consumption, reduced water consumption, reduced consumption of raw materials from unsustainable sources, reduced amounts of hazardous substances released to the environment, reduced production of pollutants, protection of air, soil and water, higher utilisation of renewable energy sources, environmental waste management, reduced impacts on biodiversity, etc.), green procurement can also bring social and health benefits (improved quality of life, healthier work environment, health protection) and economic benefits (cost savings related to electricity, water, waste disposal, etc.).

At national level, the analytical, evaluation, strategic and methodological activities related to the sustainable development horizontal principle will be ensured by the Government Office of the SR to make it effectively managed with respect to all operational programmes

In order to ensure an effective implementation of the sustainable development horizontal principle, its main objective will be defined under process of evaluation and selection of applications for support as a disqualifying criterion under the OP priority axes.<sup>117</sup> The main criterion of the project's contribution to the sustainable development horizontal principle will be compliance with any of the three aspects listed above. Extra points will be awarded to projects comprising relevant indicators approved by the operational programmes managing authorities. This will strengthen the overall delivery of the ESIF. The monitoring of the sustainable development horizontal principle at the level of the SR will be ensured through a set of indicators forming part of the HP SD Implementation System and guidance documentation for the different operational programmes. Its implementation will be separately monitored by means of annual reports and the final report on the implementation of the sustainable development horizontal principle. The institutional coordinator responsible for the HP SD implementation is represented

in the working group on the preparation of the OP R&I, and will also be represented in the OP R&I Monitoring Committee.

## **11.2 Equal opportunities and non-discrimination**

The main objective of the HP Equal opportunities and non-discrimination is to ensure equal opportunities on the labour market due to reasons arising from the Anti-Discrimination Act and in access to and use of infrastructure and services.

Non-discrimination is a strategic goal based on developing conditions to ensure equal access for all people to a particular social environment (e.g. access to employment, education, healthcare, etc.), or to ensure equal access to public services and resources. The aim is to eliminate and prevent discrimination and eliminate barriers that lead to isolation and exclusion of people from public, social and work life due to sex/gender, age, disability, race, ethnicity, religion or faith, sexual orientation, etc. The principles of EU support concerning ESIF define the obligation to take appropriate steps to prevent any discrimination on the basis of those categories.

A disqualifying criterion will be set in the process of evaluation and selection of applications for non/repayable financial contributions in order to ensure an effective implementation of the HP Equal opportunities and non-discrimination. The process of monitoring of horizontal principles will be monitored at project level by means of monitoring reports, containing information on the horizontal principles (i.e. description of the activities carried out, their results and evaluation of their contribution to the achievement of the objectives of the horizontal principles), as well as on-site control of projects and subsequent evaluation of the contribution to the objectives of horizontal principles. A separate output containing information on the application of horizontal principles will form the basis for the process of assessing the contribution of the OP R&I to the objectives identified in the national strategic document. A report on the achieved level of performance related to the objectives set in the national strategic document, including a proposal for corrective measures and recommendations to achieve them, will be submitted to the Government of the SR on an annual basis.

The MA for the OP R&I will submit to the body responsible for the application of the HP Equal opportunities and non-discrimination regular information on their fulfilment on the basis of the evaluation of monitoring reports and on-site controls performed at regular intervals. The analytical, evaluation, strategic and legislative activities related to the implementation of the HP Equality of opportunities and non-discrimination at national level will be ensured by the Ministry of Labour, Social Affairs and Family of the SR (MoLSAF SR) which is responsible for the state policy in this area. This ministry will also organise training activities on the implementation of this horizontal priority for organisations involved in the implementation of ESIF and for relevant socio-economic partners.

For the purposes of an efficient and effective implementation of the HP Equality of opportunities and non-discrimination, it will be necessary, at the level of the OP R&I, to increase or optimise the number of employees who will ensure the activities listed above.

The representatives of the MoLSAF SR responsible for the implementation of the HP Equality of opportunities and non-discrimination will be represented in the Monitoring Committee for the OP R&I.

## **11.3 Equality between men and women**

The support of equality between men and women and respecting equal opportunities and non-discrimination are applied as horizontal principles (HP) in the programming period 2014–2020 and will be implemented according to their relevance to the given areas of support subject to ESIF interventions.<sup>118</sup>



The main objectives for the HP Equality between men and women are defined on the basis of the priority axes, investment priorities and specific objectives. The main objective is to ensure equality between men and women on the labour market and in the preparation for the labour market, and to reduce horizontal and vertical gender segregation of occupations and industries.

For the purposes of respecting equal opportunities, preventing discrimination and promoting gender equality, these principles will apply a dual approach based on the gender mainstreaming strategy in decision-making and management processes at all stages of preparation and implementation of the programme, including monitoring and evaluation, in order to take into account equal treatment and support of women to be able to equally benefit from structural and investment funds as men (e.g. through balanced representation in managing and monitoring bodies). This approach will be integrated in the operational programme through process management and guidance documentation.

The second part of the dual approach is HP support through the implementation of temporary balancing measures and activities aimed to support disadvantaged groups as defined in the anti-Discrimination Act. A disqualifying criterion will be applied in the project selection process with regard to the HP. At project level, the process of HP implementation will be monitored by means of monitoring reports (through a description of performed activities, results and evaluation of their contribution to the achievement of the HP objectives), as well as on-the-spot controls.

The Managing Authority for the OP R&I will provide to the authority responsible for the HP application in the given field regular information on the implementation of the two HPs by evaluating the monitoring reports and on-the-spot controls.

The HP coordination at national level will be ensured by the Ministry of Labour, Social Affairs and Family of the SR which is responsible for state policy in both areas and will also ensure conceptual, strategic and legislative works related to HP coordination.

An effective and efficient management of the HP Equality between men and women at the OP R&I level requires increasing or optimising the number of employees ensuring the activities described above.

The competent representatives of the MoLSAF SR responsible for the HP Equal opportunities and non-discrimination will be represented in the Monitoring Committee for the OP R&I.

## 12. Separate elements

### 12.1 List of major projects

**Table 38** List of major projects

Project	Planned notification/ submission date (year, quarter)	Planned start of implementation (year, quarter)	Planned completion date (year, quarter)	Investment priority	Priority axis
Advancing University Research and Development Capacities and Competencies in Smart Specialisation Areas	2015, 2Q	2016, 2Q	2022, 4Q	2.1	2

## 12.2 Performance framework of operational programme

**Table 39** Performance framework of operational programme

Priority axis	Key implementation step, financial indicator, result indicator	Measurement unit	Milestone for 2018	Final target 2023
Priority Axis 1	<b>Financial indicator:</b> Total amount of eligible expenditures after their certification by Certifying Authority	EUR	709,351,762	2,707,987,632
	<b>Key implementation step:</b> Number of contracted research institutions	Number	120	170
	<b>Output indicator:</b> Number of supported research institutions	Number	0	170
Priority Axis 2	<b>Financial indicator:</b> Progress in use of funds	EUR	80,906,674	300,187,244
	<b>Key implementation step:</b> Number of supported research institutions	Number	20	30
	<b>Output indicator:</b> Number of supported research institutions	Number	0	30
Priority Axis 3	<b>Financial indicator:</b> Total amount of eligible expenditures after their certification by Certifying Authority	EUR	143,835,276	565,429,599
	<b>Key implementation step:</b> Number of enterprises supported through counselling centres for SMEs	Number	900	3,200
	<b>Output indicator:</b> Number of enterprises supported through counselling centres for SMEs	Number	0	3,200
	<b>Key implementation step:</b> Number of enterprises receiving non-financial support in the framework of the provision of information, counselling and mentoring services for SME development	Number	290	1,030
	<b>Output indicator:</b> Number of enterprises receiving non-financial support in the framework of the provision of information, counselling and mentoring services for SME development	Number	0	1,030
	<b>Key implementation step:</b> Number of enterprises receiving non-financial support in the framework of the creation of new business models in the creative industry	Number	330	1,160
	<b>Output indicator:</b> Number of enterprises receiving non-financial support in the framework of the creation of new business models in the creative industry	Number	0	1,160
	<b>Output indicator:</b> Number of enterprises receiving grants	Enterprises	80	300
Priority Axis 4	<b>Financial indicator:</b> Total amount of eligible expenditures after their certification by Certifying Authority	EUR	12,585,172	49,264,018
	<b>Key implementation step:</b> Number of enterprises supported through counselling centres for SMEs	Number	800	2,670
	<b>Output indicator:</b> Number of enterprises supported through counselling centres for SMEs	Number	0	2,670

### 12.3 List of partners involved in preparation of programme

Involved partners	Members
Ministry of Education, Science, Research and Sports of the SR	4
Agency for EU SF at MoESRS SR	1
Ministry of Economy of the SR	4
Central Coordination Authority	1
Ministry of Finance of the SR	3
Ministry of Environment of the SR	1
Ministry of Agriculture and Rural Development of the SR	1
Ministry of Foreign and European Affairs of the SR	1
Ministry of Labour, Social Affairs and Family of the SR	1
Ministry of Transport, Construction and Regional Development of the SR	1
Ministry of Interior of the SR	1
Ministry of Justice of the SR	1
Ministry of Defence SR	1
Ministry of Healthcare of the SR	1
Public Procurement Office	1
Office of the Plenipotentiary for Roma Communities at Government of the SR	1
Office of the Plenipotentiary for Civil Society Development at Government of the SR	1
Office of the Bratislava Self-Governing Region	1
Office of the Trnava Self-Governing Region	1
Office of the Nitra Self-Governing Region	1
Office of the Trenčín Self-Governing Region	1
Office of the Banská Bystrica Self-Governing Region	1
Office of the Žilina Self-Governing Region	1
Office of the Košice Self-Governing Region	1
Office of the Prešov Self-Governing Region	1
Slovak Academy of Sciences	1
Slovak Rectors' Conference	1
Universities' Council of the SR	1
Slovak Academy of Agricultural Sciences	1
The Association of Slovak Scientific and Technological Societies	1
The Association of Industrial, Research and Development Organisations	1
Union of Slovak Towns	1
Union of Towns and Municipalities of Slovakia	1
Club 500	1
Business Alliance of Slovakia	1
Federation of Employers' Associations of the SR	1
National Union of Employers	1
Slovak Investment and Trade Development Agency	1
Slovak Chamber of Commerce and Industry	1
Security and Defence Industry Association of the SR	1

Engineering Industry Association of the Slovak Republic	1
Car Industry Association of the Slovak Republic	1
Slovak Academic and Information Agency	1
Government Council of the SR for Non-Governmental Organisations	1
Entrepreneurs' Association of Slovakia	1
Statistical Office of the SR	1
Trade Unions Confederation	1
Slovak Electromechanic Association	1
Slovak Chamber of Trades	1
Slovak Trades Association	1
Association of Metallurgy, Mining Industry and Geology of the SR	1
Association of Construction Entrepreneurs of Slovakia	1
Coordinator of the horizontal priority Sustainable Development	1
Coordinator of the horizontal priority Equality of Opportunities	1
Association of Research and Technology Oriented Universities of the SR	2
Chairman of the Council of Chairmen for Research and Development Priorities	1
National delegate of the Slovak Republic to the European Research Council	1
National delegate of the Slovak Republic for research infrastructures	1
National delegate of the Slovak Republic for the specific programme Cooperation of the EU's 7th Framework Programme for Research and Development	1
Slovak Innovation and Energy Agency	1
National Agency for Development of Small and Medium Enterprises	1
Association of Industrial Ecology in Slovakia	1
IT Association of Slovakia	1
Rural Parliament of the SR	1
Clusters' Union of Slovakia	1

## 13. Annexes to operational programme

Annex 1	List of abbreviations
Annex 2	Glossary of terms
Annex 3	List of eligible beneficiaries
Annex 4	Areas of specialisation according to the RIS3 SK
Annex 5	OP R&I intervention lines with respect to the RIS3 SK
Annex 6	Experience from the programming period 2007–2013
Annex 7	Description of the basic differences between the programming period 2007–2013 and the programming period 2014–2020
Annex 8	Overview of national projects supported under the OP R&D
Annex 9	Basic principles for research infrastructure development in the programming period 2014–2020
Annex 10	Basic principles of OP R&I monitoring and implementation
Annex 11	Statistics
Annex 12	Concept of the application of the partnership principle in research projects
Annex 13	OP R&I complementarities and synergies with other EU programmes and Programmes of European Territorial Cooperation
Annex 14	Reports on OP R&I ex-ante assessment
Annex 15	Opinion on the environmental impacts assessment of the OP R&I
Annex 16	Extended evaluation of general ex-ante conditionalities

<sup>1</sup> SLOVSTAT.

<sup>2</sup> Although the Slovak Republic defined this target as 1% of GDP in line with EU 2020, it was changed to 1.2% of GDP during the preparation of the RIS3 SK.

<sup>3</sup> Part 2.1 of the Position Paper - [http://ec.europa.eu/regional\\_policy/what/future/pdf/partnership/sk\\_position\\_paper\\_sk.pdf](http://ec.europa.eu/regional_policy/what/future/pdf/partnership/sk_position_paper_sk.pdf).

<sup>4</sup> Council recommendations concerning the National Reform Programme of the Slovak Republic 2014 (Recommendation No. 4).

<sup>5</sup> Key business Regulation - The Trades Licensing Act (No. 455/1991) was amended 100 times

<sup>6</sup> Council recommendations concerning the National Reform Programme of the Slovak Republic 2014 (Recommendation No. 6).

<sup>7</sup> The National Reform Programme of the Slovak Republic 2014 was approved by the Government of the SR on 23 April 2014:

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?IdMaterial=22344>.

<sup>8</sup> Page 5, Innovation Union Scoreboard [http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014\\_en.pdf](http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014_en.pdf)

<sup>9</sup> The RIS3 SK was approved by Government Resolution No. 665/2013 of 13 November 2013.

<http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?IdMaterial=23039>

<sup>10</sup> Page 5 of RIS 3 SK.

<sup>11</sup> Operational Programme Research and Development.

<sup>12</sup> Operational Programme Competitiveness and Economic Growth.

<sup>13</sup> The OP R&I is not the only implementation tool for the RIS3 SK. Other relevant operational programmes can also contribute directly or indirectly to its implementation, mainly those focusing on human resources, education, informatisation and other related areas relevant to the RIS3 SK.

<sup>14</sup> This will also include intensified research and innovations in the energy sector by mobilising the required critical amount of activities and actors in line with the SET-Plan (Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - A European strategic energy technology plan (SET-plan) COM(2007) 723 final)

<sup>15</sup> Europe 2020 Strategy [http://ec.europa.eu/regional\\_policy/what/europe2020/index\\_en.cfm](http://ec.europa.eu/regional_policy/what/europe2020/index_en.cfm); Country-specific recommendations for the SR; National Reform Programme of the Slovak Republic 2013; Stability Programme of the Slovak Republic 2013–16 [http://ec.europa.eu/europe2020/europe-2020-in-your-country/slovensko/index\\_en.htm](http://ec.europa.eu/europe2020/europe-2020-in-your-country/slovensko/index_en.htm); Report on the State of University Education; internal analyses of the MoESRS SR on Slovakia's involvement in the European Research Area and on the support of research and development under the Operational Programme Research and Development 2007–2013; internal analyses of the MoE SR on innovations and support of SMEs; and Strategic evaluation of the OP C&EG 2007–2013 [http://www.mhsr.sk/ext\\_dok-strategicke-hodnotenie-op-kahr/140055c?ext=orig](http://www.mhsr.sk/ext_dok-strategicke-hodnotenie-op-kahr/140055c?ext=orig;); RIS 3 SK <http://www.rokovania.sk/Rokovanie.aspx/BodRokovaniaDetail?IdMaterial=23039>.

<sup>16</sup> Eurostat 2012 – [http://epp.eurostat.ec.europa.eu/portal/page/portal/science\\_technology\\_innovation/data/database](http://epp.eurostat.ec.europa.eu/portal/page/portal/science_technology_innovation/data/database); OECD MSTI Database ako aj OECD Science, Technology and Industry Scoreboard. Innovation for Growth - <http://www.oecd.org/sti/scoreboard.htm> a Innovatoin Union Scoreboard - [http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014\\_en.pdf](http://ec.europa.eu/enterprise/policies/innovation/files/ius/ius-2014_en.pdf)

<sup>17</sup> Page 7 and Chapter 2 of the RIS3 SK analysis.

<sup>18</sup> Eurostat and Slovstat.

<sup>19</sup> Eurostat.

<sup>20</sup> Although the Slovak Republic defined this target as 1% of GDP in line with the EU 2020 strategy, it was changed to 1.2% of GDP during the preparation of the RIS3 SK.

<sup>21</sup> All projects supported under the OP R&D are relevant with regard to R&I (around 500 projects). The positive effects include the building of basic public infrastructure, reduction of the long-term modernisation debt, and increased potential for entering in international R&D projects. A bottom-up process of identification of the strong thematic directions of the Slovak science and

- technology was launched in line with the needs of the industrial sector, the priorities have been clarified and scientific teams started to be brought together, which enabled universities and the SAS to launch the process of building scientific parks and research centres of national importance.
- <sup>22</sup> Priority Axis 1 Innovation and growth of competitiveness forms the basis for the OP C&EG with regard to R&I. a total of 456 projects have been supported so far under this priority axis, including 83 new enterprises across Slovakia.
- <sup>23</sup> Page 38, Chapter 2.5.6. of RIS3 SK.
- <sup>24</sup> Typical examples include the replacement of an old production line with a new one, or public lighting renovation that do not bring the required effect in the form of an added value and sustainable jobs without other structural reforms.
- <sup>25</sup> In 2010, no other institution, university, research institution or enterprise published more than 100 works in international scientific magazines listed in SCOPUS databases. The first three institutions with the highest performance are from Bratislava, though not all outputs come from the capital city. Around 75% of publications are from the BR, which suggests significant asymmetry as to the publication performance of Slovak scientific institutions. Over 50% personal and technical research capacities are currently allocated in Bratislava.
- <sup>26</sup> Slovak enterprises prefer buying ready-made technology (under the OP Competitiveness and Economic Growth or OP Bratislava Region, it is mostly support granted to the acquisition of a CNC transfer machine), external knowledge or external research and development (0.65% of the turnover of Slovak companies vs. 0.56% of the turnover of companies within the EU) to corporate spending on own research and development (0.234% in the SR vs. 1.23% in the EU).
- <sup>27</sup> Eurostat.
- <sup>28</sup> Refers to patents filed simultaneously in the EPO, USPTO and JPO.
- <sup>29</sup> Eurostat.
- <sup>30</sup> OECD Science, Technology and Industry Outlook 2010, <http://www.oecd.org/sti/inno/41559370.pdf>
- <sup>31</sup> Annual data on HRST and sub-groups, by sex and age[hrst\_st\_ncat], Eurostat
- <sup>32</sup> Page 32 of RIS3 SK.
- <sup>33</sup> The situation is even worse in international programmes concerning innovation – in the Competitiveness and Innovation Framework Programme (CIP) Slovakia has no project participations.
- <sup>34</sup> E-corda 21 February 2014.
- <sup>35</sup> For example, EU Strategy for the Danube Region.
- <sup>36</sup> An undertaking with up to 250 employees and a turnover < EUR 50mil. / year or a balance < EUR 43 mil. / year.
- <sup>37</sup> As of 31 December 2012, source: SO SR
- <sup>38</sup> The number of enterprises with over 9 employees declined by 51% between 2008 and 2012. Source: SO SR.
- <sup>39</sup> In 2012, a half of the total number of enterprises with a high technological level and knowledge intensive services was created in the BSGR. The economic structure of the Bratislava Region has good conditions for exploiting its intellectual potential.
- <sup>40</sup> According to the financial gap analysis conducted by NADSME in 2012, the absorption potential for a loan facility for SMEs in the Bratislava Region represents EUR 144.2 mil. With the inclusion of this region, the absorption potential of the loan facility would increase by up to 20.7%. In the case of medium-sized enterprises, the absorption potential would grow by up to 31%.
- <sup>41</sup> This fact is particularly important with regard to venture capital instruments, as the Slovak market, without a history and functional instruments of capital financing, is highly underdeveloped in this field, which in combination with an unfavourable size structure and poor capitalisation off SMEs poses big obstacles to the economic feasibility of products. In case the Bratislava Region with the potential of generating innovative business projects is not included in this scheme, it would be little probable that these products can be effectively implemented, as shown by the current problematic preparation of venture capital instruments under the JEREMIE initiative.
- <sup>42</sup> The BSGR runs several activities to promote bilateral and multilateral cooperation of SMEs with adjacent regions and countries within the area of Bratislava – Vienna – Győr – Brno (CENTROPE project). The region has good conditions to exploit the potential of Europe's multi-modal transport system along the Danube River and to fulfil the **Danube Strategy objectives** in the field of commercial transport (priority areas 1A, 1B) and socio-economic development (priority areas 7 and 8, while priority area 7 is coordinated by Slovakia).
- At present, a regional branch of the European Alliance for Innovation launched its activities within the Slovak University of Technology as the first branch of this organisation within the Central and Eastern European region. This alliance aims to support the establishment of innovative start-ups and spin-offs on the basis of knowledge obtained from academic researches and the creation of partnerships between businesses and scientific and research institutions for research and innovation purposes.
- <sup>43</sup> Standard EB 81
- <sup>44</sup> Green economy development is one of developing trends in the areas of economic specialisation within the RIS3 SK strategy.
- <sup>45</sup> RIS3 SK strategy in its SWOT analysis identifies the use of green and low-carbon technologies under opportunities in the field of innovation
- <sup>46</sup> These are innovations leading to the sustainable development goal by reducing environmental impacts, increasing resistance to pressure on the environment/environmental adaptation or achieving a more efficient and responsible use of natural resources.
- <sup>47</sup> This measure supports research and innovative solutions in area of ecology, environmental problems, climate change adaptation, emissions reduction, waste use with the aim to create dynamic, open and inclusive innovative society.
- <sup>48</sup> Page 18 and further of the Position Paper.
- <sup>49</sup> Annex 5 OP R&I intervention lines with respect to the RIS3 SK.
- <sup>50</sup> Education will also be supported through activities under the Operational Programme Human Resources. These activities will aim at creating new study programmes.
- <sup>51</sup> Page 5, EIT – Catalysing innovation in the knowledge triangle
- <sup>52</sup> See actions under specific 1.2.1 Increasing private investments through cooperation between research institutions and businesses .
- <sup>53</sup> Innovation Strategy of the SR 2007-2013, regional innovation strategies and other initiatives consider clustering of SMEs an important tool for sustainable development. This is called "bottom-up" initiative widely supported by regional actors, who play a key role in defining the clusters, determining their focus, and especially potential.
- <sup>54</sup> Source: SIEA
- <sup>55</sup> Overview of basic facts on Small Business Act initiative 2012, Slovakia, European Commission, Business and Industry.
- <sup>56</sup> Source: Eurostat, 2010.
- <sup>57</sup> Source: Eurostat, 2012.
- <sup>58</sup> In the RIS3 SK, creative industry was identified as one of the promising areas of specialization (RIS3 SK p. 53, Sec. 4 Identification of areas of specialization of the SR).



- <sup>59</sup> The starting point for the analysis of the creative economy in the Slovak Republic was the classification of creative industries of the English Department of Culture, Media and Sports (DCMS) in 2013. DCMS identified industries on the basis of the share of creative occupations in employment in the sector and grouped them into 7 categories according to their relatedness.
- <sup>60</sup> Possibilities for the development of creative industries in Slovakia. Authors: Miroslav Balog and colleagues, 2013
- <sup>61</sup> Source: The position of small and medium-sized enterprises in the foreign trade of the SR in 2011, NADSME.
- <sup>62</sup> The position of small and medium-sized enterprises in the foreign trade of the SR in 2011, NADSME.
- <sup>63</sup> Eurostat.
- <sup>64</sup> Regional database of the SO SR, 2012.
- <sup>65</sup> Datacentrum, 2011
- <sup>66</sup> NADSME, 2013, Financing of micro-enterprises and start-ups.
- <sup>67</sup> Registered business entities by the end of 2012.
- <sup>68</sup> For a more detailed description of the business centre activities see the description of the respective activity.
- <sup>69</sup> p. 116, chapter 1.7, PA SR
- <sup>70</sup> Annex 8 Overview of national projects implemented under the OP R&D
- <sup>71</sup> This approach will be based on the fact that it will be priority infrastructure projects of applicant institutions. The modernisation of existing or acquisition of new infrastructure will also be possible under other OP R&I activities – part Research.
- <sup>72</sup> Annex 12 to OP R&I – Concept of the Use of the Partnership Institute in Research Projects.
- <sup>73</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>74</sup> Definition of innovation is part of the Annex 2 of the OP R&I Glossary of Terms
- <sup>74</sup> Directive 2002/91/EC of the European Parliament and of the Council of 16 December 2002 on the energy performance of buildings - Any investment will be conditioned by an energy audit, which identifies the most suitable measures and will be in line with principles as agreed under T04 of the OP Quality of Environment.
- <sup>75</sup> All types of enterprises conducting activities in the field of research, development and innovation.
- <sup>76</sup> Annex 12 to OP R&I – Concept of the Use of the Partnership Institute in Research Projects.
- <sup>77</sup> Annex 4 to OP R&I – List of areas of specialisation according to the RIS3 SK.
- <sup>78</sup> Annex 12 to OP R&I – Concept of the use of the partnership institute in research projects.
- <sup>79</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>80</sup> Support will also be granted to large enterprises, while respecting the following two principles of SME preference: a) lower funding of large enterprises compared to SMEs; b) proving the involvement of a SME and/or public authority.
- <sup>81</sup> The prerequisite for the evaluation of the criterion will be the registered unemployment rate in the region at the time of the selection
- <sup>82</sup> Commission Implementing Regulation (EU) No. 215/2014.
- <sup>83</sup> This approach will be based on the fact that it will be priority infrastructure projects of applicant institutions. The modernisation of existing or acquisition of new infrastructure will also be possible under other OP R&I activities – part Research.
- <sup>84</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>85</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>86</sup> Large enterprises will be supported under the condition that the following two principles of SME preference are complied with: a) lower financing for large enterprises compared to SMEs; b) proving involvement of a SME and/or public authority.
- <sup>87</sup> Commission Implementing Regulation (EU) No. 215/2014.
- <sup>88</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>89</sup> The areas of a high/medium high level technology manufacturing production and knowledge intensive services refer to the division defined by Eurostat, see: [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/High-tech\\_statistics](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/High-tech_statistics)
- <sup>90</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>91</sup> Act No. 505/2009 Coll. on the accreditation of authorities for assessment of compliance and on changes and amendments to some acts, as amended.
- <sup>92</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>93</sup> Commission Implementing Regulation (EU) No. 215/2014
- <sup>94</sup> A detailed list of eligible beneficiaries under the OP R&I is provided in Annex 3 to the OP R&I.
- <sup>95</sup> Commission Implementing Regulation (EU) No. 215/2014
- <sup>96</sup> Specific objective 5.1.1 will also be accomplished through specific support activities listed in sub-sections 2.1.5 and 2.2.5 of the OP R&I, as well as support activities to reduce the administrative burden under the OP R&I, as detailed in section 10.2 of the OP R&I.
- <sup>97</sup> Further to the results of the analysis of administrative capacities and effectiveness of entities responsible for the ESIF and beneficiaries’ administrative capacities, a comprehensive strategy for AC strengthening and management by the CCA at national level is planned to be approved. The measures implemented under this strategy will focus, in particular, on increasing the quality of AC with a special focus on specific areas (see PA, Chapter 2.5).
- <sup>98</sup> The systemic approach to the development of the technical infrastructure and equipment will be ensured in close cooperation with national entities responsible for the implementation of the Cohesion Policy (in particular the Operational Programme Technical Assistance and Operational Programme Effective Public Administration) to overcome the organisational, technical or semantic obstacles upon the introduction of “Electronic public administration” related to the Benefits for the EU society arising from information and communication technologies under the main initiative “Digital Programme for Europe” of the priority of the Europe 2020 strategy – Smart growth – an economy based on knowledge and innovations. The demarcation lines are described in section 8 of the OP R&I.
- <sup>99</sup> Due attention is paid to anti-corruption and anti-fraud activities in Slovakia. The approval of the “Strategic Plan of Fight against Corruption in the SR” created the space for a conceptual approach to the fight against corruption and fraud, and highlights Slovakia’s commitment to continue taking effective measures in this field. The “Strategic Plan of Fight against Corruption in the SR” was adopted by the Slovak Government on 10 August 2011, and the evaluation of the measures taken was taken into account on 02 April 2014.
- <sup>100</sup> Partnership Agreement with Slovakia for the period 2014–2020, Chapter 2.5, p. 262.
- <sup>101</sup> These areas will be followed by activities aimed to reduce the administrative burden within the OP R&I, as specified in section 10.2 of the OP R&I, as well as activities related to the setting of the project implementation processes and requirements for administration with respect to beneficiaries (in particular, available, quality and comprehensible information in a form enabling simple work with such information; verification of information about beneficiaries and projects via direct communication with relevant state authorities without requesting it from beneficiaries, etc.). Besides these areas, measures are proposed with the aim to reduce the administrative burden of beneficiaries (see PD, section 2.6, page 267).
- <sup>102</sup> Chapter 2.5, PA SR
- <sup>103</sup> Commission Implementing Regulation (EU) No. 215/2014

- 
- <sup>104</sup> Page 233 and further of PA SR, Chapter 3.1.1 Community-led local development (CLLD)
- <sup>105</sup> Page 237 and further of PA SR, Chapter 3.1.3 Sustainable urban development
- <sup>106</sup> Page 236 and further of PA SR, Chapter 3.1.2 Integrated territorial investments
- <sup>107</sup> Page 31, OP R&I.
- <sup>108</sup> Pages 35-36, OP R&I, examples of activities under specific objective 1.1.2.
- <sup>109</sup> Page 55, Increasing the research activity of the Bratislava Region through revitalisation and fostering of research, education, innovation, and business capacities of research institutions in Bratislava.
- <sup>110</sup> Page 118 and further, OP R&I, Chapter 8 Coordination between funds, EAFRD and other European and national financing instruments and with EIB.
- <sup>111</sup> Page 108 and further, OP R&I, Chapter 8 Coordination between funds, EAFRD and other European and national financing instruments and with EIB
- <sup>112</sup> p. 57 and further of RIS3 SK.
- <sup>113</sup> p. 118 and further, chapter 2.1, PA SR
- <sup>112</sup> Definition from Economy of Culture (2006), KEA
- <sup>133</sup> Definition from Economy of Culture (2006), KEA
- <sup>114</sup> In the field of environmental infrastructure supported by the OP QE, the innovation aspect of technologies going beyond existing European standards will be taken into account in the selection process – where applicable under existing rules. Alternatively, the projects allowing approximation or early adaptation of the most ambitious EU standards - in case European legislation defines the range of mandatory standards - will be favoured in the selection process.
- <sup>115</sup> Page 266 of PA SR, Chapter 2.6 Summary of planned actions, including indicative timetable, to reduce the administrative burden for beneficiaries.
- <sup>138</sup> The actual implementation of proposed measures is dependent on the conditions of donate grants under the Act on the support from the European Structural and Investment Funds and management system and financial managment system of ESIF at the national level ESI.
- <sup>116</sup> [http://www.rokovania.sk/File.aspx/ViewDocumentHtml/Mater-Dokum-141217?prefixFile=m\\_](http://www.rokovania.sk/File.aspx/ViewDocumentHtml/Mater-Dokum-141217?prefixFile=m_)
- <sup>117</sup> Page 102, PA SR, Chapter 1.5.3 Sustainable development.
- <sup>118</sup> Page 99, PA SR, Chapter 1.5.2 Supporting equality between men and women, non-discrimination and availability – describes the basic directions and principles of complying with the horizontal principle of equality between men and women under European Structural and Investment Funds at national level.