
Ministry of Education, Science, Research and Sports of the Slovak Republic and Ministry of Economy of the Slovak Republic

Action Plan for the Implementation of the Research and Innovation Strategy for Smart Specialisation of the Slovak Republic 2014–2016

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of the Action Plan for the Implementation of the Research and Innovation Strategy for Smart Specialisation of the Slovak Republic 2014–2016

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1 Background

The strategy “*Through Knowledge to Prosperity – Research and Innovation Strategy for Smart Specialisation of the Slovak Republic*” (“RIS3”) was approved by Government Resolution No. 665 of 13 November 2013.

The RIS3 aims to create links between research, development and innovation and the immediate needs of the practice. The basic principle of such connection is a shift from the policy of prevailing support for basic research and from a research and innovation system that is poorly linked to the support for a practice-oriented policy to a condition where the share of public funds allocated to basic research is approximately 30% and the prevailing part of public and private funds is available in mutual combination, while respecting the demand criteria by the business sphere and customers. This principle requires the focusing of finances on the areas defined in the RIS3.

The demanding nature of such shift requires two systemic changes. The first one is the need to set up an effective system of research, development and innovation management while optimising the existing management structures, and the second one is to focus the content of supported projects and financial allocations to clearly defined priority areas.

In this respect, the first *Action Plan for the Implementation of the RIS3 2015–2016* (hereinafter referred to as the “Action Plan” or “AP”) focuses specifically on the key priorities and measures underlying a successful implementation of the RIS3, while taking into account the criteria for meeting the thematic ex-ante conditionality¹ to fulfil thematic objective 1 Strengthening research, technological development and innovation² and the implementation of relevant investment priorities³ for the programming period 2014–2020. The AP RIS3 reflects the actions for the RIS3 implementation, as specified in Government Resolution No. 665/2013 on the document *Through Knowledge to Prosperity – Research and Innovation Strategy for Smart Specialisation of the Slovak Republic*⁴, and the appointment of the Government Plenipotentiary for Research and Innovation under Government Resolution No. 28/2015.

State research, development and innovation policies can become the fundamental development policies of the country only if the priority tasks in the following basic areas are accomplished in line with the RIS3:

- a. Integrated institutional management of research, development and innovation as an essential tool to overcome its fragmentation;
- b. Continuous development of links between the areas of specialisation defined in the RIS3 both on the demand and the supply side

¹ Pursuant to Art. 19 and Annex XI of Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006 (hereinafter referred to as the “General Regulation”).

² Art. 9 of the General Regulation

³ Art. 5(1)(a) and (b) of Regulation No 1303/2013 of the European Parliament and of the Council on the European Regional Development Fund and on specific provisions concerning the Investment and jobs goal and repealing Regulation (EC) No 1080/2006.

⁴ Page 81, RIS3

- c. Financial management and its compliance with the RIS3 priorities and objectives
- d. Monitoring and evaluation of the accomplishment of RIS3 objectives;
- e. Strategic approach to the use of research infrastructures in line with the best principles and practice at EU level.

The AP details the RIS3 provisions so that to comply with the legislation governing European Structural and Investment Funds (“ESIF”) and other regulations and to fully preserve the reform principles and plans contained in the RIS3.

In the next period, the RIS3 will be implemented by means of two-year rolling RIS3 Implementation Action Plans defining concrete tasks for the relevant years. The evaluation of the fulfilment of the RIS3 objectives in line with the Europe 2020 strategy objectives will form an inseparable part of the Action Plans.

2 Integrated institutional management of research, development and innovation (RD&I Management System)

In accordance with the RIS3 and Slovakia's commitments towards the EU arising from the Partnership Agreement for Slovakia 2014–2020, as well as related rules and documents, the RD&I Management System must use a single system of strategic planning as a result of coordinated actions by the different parts of the system and a feedback based on the system of monitoring of the RIS3 implementation. This will be ensured through the application of the following principles:

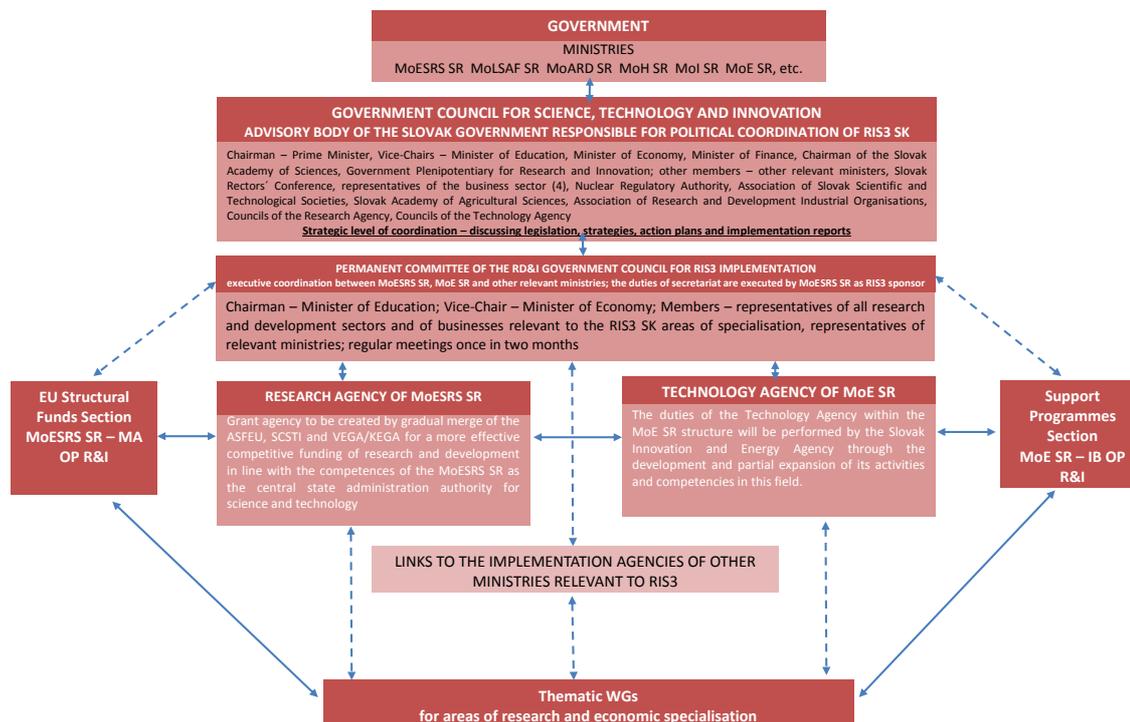
- A. Optimisation and concentration of the existing elements and resources of the RD&I Management System to enable strategic planning and effective implementation of the RIS3, including creating an appropriate level of complementarity with similar management and coordination structures in the field of RD&I at EU level, thus providing for mutual interactions which are absent at present. The new approach to the RD&I Management System will be able to dynamically determine the areas in which further financial assistance or change of content focus are needed;
- B. Strengthening of complementarity and coherence between different tools (programmes) at EU level and at national and regional levels;
- C. Close mutual cooperation of institutions (central state administration bodies) responsible for the management of relevant policies on one hand and organisations (research and development organisations, Slovak Academy of Sciences, higher education institutions, businesses, etc.) which are directly subject to the implementation of these policies and the activities of which have a direct impact on the success of such policies.

Description of the different parts of the RIS3 management system

The RIS3 implementation in the period 2014–2020 is a complex process, combining in a complementary way the competences of the different ministries and reaching beyond the competences and interests of regional and municipal self-governments, civil associations and the business sphere. Its effect is based on the integration of science with innovation and of research institutions with the economic practice, especially industry, by creating optimum conditions within the regional and sectoral space.

For the purposes of institutional coverage of the RIS3 measures, the current managing structure of research, development and innovation will be transformed and optimised according to the RIS3 proposals, and will clearly define and entail a political level of management and coordination, an inter-ministerial and inter-sectoral executive level of coordination, and integrated professional management of processes at the level of key ministries and their corresponding state policies. At the same time, the principle of not increasing the number of management levels will be respected, and duplicated processes in management will be prevented so as to make the entire process more flexible and able to dynamically respond to the current needs. The detailed basic organisational scheme of the institutional management of the RIS3 implementation is shown in Figure 1.

Scheme 1: Scheme of the RD&I Management System



Source: MoESRS SR



GOVERNMENT COUNCIL FOR SCIENCE, TECHNOLOGY AND INNOVATION (GCSTI)

1. is the supreme coordination, expert, supervisory, advisory and initiative body of the RIS3 in Slovakia created on the basis of the partnership principle (represented by ministries, the academic sector – universities, SAS, sectoral research; the private sector, employers' unions and associations);
2. is the expert government body for research, development and innovation;
3. the tasks of the GCSTI Secretariat are carried out by the organisational department (Secretariat) of the Government Plenipotentiary for Research and Innovation.

Tasks of the GCSTI

1. Monitors legal regulations, documents, decisions, action plans concerning support for research, development and innovation and related areas relevant to RIS3;
2. Presents to the Slovak Government proposals, recommendations concerning RIS3 implementation and evaluation, recommendations to ensure a sustainable growth of research, development, innovation and related areas relevant to the RIS3 in Slovakia, including recommendations for R&D funding frameworks, and ensures the prioritisation of research and innovation in Slovakia;

3. Ensures the preparation and submits to the Slovak Government proposals for overall expenditures in research, development and innovation per budget chapters;
4. Through the PC GCSTI RIS3, observes step-by-step compliance of the programme focus of national projects and RIS3 detailed action plans with the RIS3 Strategy;
5. Discusses the monitoring of the implementation of the RIS3 and its action plans in two-year rolling cycles, and monitors their fulfilment;
6. Assesses the state of integration of Slovak institutions in the European Research and Innovation Area mainly through the European Innovation and Technology Institute, European Technology Platforms, EU programmes and initiatives, such as HORIZON 2020, Entrepreneurship 2020 Action Plan, Digital Agenda for Europe, Enterprise and Industry, Steel Action Plan, CARS 2020, as well as other new initiatives relevant to research and innovation;
7. Approves the Statute of the PC GCSTI RIS3 and its rules of procedure.

In order to apply the partnership principles in managing the RIS implementation, as approved in the RIS3 and detailed in this AP, it was necessary to **update the Statute and the Rules of Procedure of the GCSTI**, as available in [Annex No. 1](#) to this document. The updated parts of the Statute concern changes in the composition of the GCSTI members in order to ensure representation of all relevant institutions, as well as introduction of the RIS3 basic principles and the key tasks relevant to the GCSTI.

PERMANENT COMMITTEE OF THE GCSTI FOR RIS3 IMPLEMENTATION (PC GCSTI RIS3)

1. is a cross-sectional coordination body which identifies the state of RIS3 implementation for the GCSTI and prepares recommendations for the GCSTI;
2. is chaired by the Minister of Education and vice-chaired by the Minister of Economy and Government Plenipotentiary for Research and Innovation;
3. is composed, by decision of the Minister of Education, Science, Research and Sports and of the Minister of Economy, of members appointed on the basis of the partnership principle:
 - i. Ministry of Education, Science, Research and Sports of the SR (MoESRS SR), the Ministry of Economy of the SR (MoE SR) (where at least one member is representative of the Managing Authority and of the Intermediate Body);
 - ii. Research Agency;
 - iii. Technological Agency;
 - iv. other organisations within the founding competence of the MoESRS SR;
 - v. other organisations within the founding competence of the MoE SR (including organisations in which the MoE SR exercises its decision-making powers);
 - vi. selected higher education institutions conducting research;
 - vii. the Slovak Academy of Sciences
 - viii. other research institutions (e.g. sectoral research institutions, university hospitals, non-profit research and development institutions);
 - ix. the business sector;
 - x. representative of regional self-governments (SK8);
 - xi. other persons according to the decision of the Chair of the Research Agency Board;

- xii. other persons according to the decision of the Chair of the Technological Agency Board;
4. every relevant Managing Authority (ESIF) has one representative in the PC GCSTI RIS3 (OP EPA, IROP, OP HR, OP EQ, OP II, PRV);
5. the members of the PC GCSTI RIS3 are appointed jointly by the Minister of Education, Science, Research and Sports and the Minister of Economy;
6. the tasks of the PC GCSTI RIS3 Secretariat are carried out by an organisational department of the Ministry of Education, Science, Research and Sports of the Slovak Republic (EU Structural Funds Section);
7. meets at least once in two months.

Tasks of PC GCSTI RIS3

1. Monitors the RIS3 implementation and the fulfilment of the action plans for the RIS3 implementation in relevant areas, while using available analytical capacities of central state administration authorities;
2. Gives opinions on the linkages, timing and financial coverage of the calls under relevant operational programmes with respect to their contribution to the fulfilment of the RIS3 objectives;
3. Gives opinions on the linkages, timing and financial coverage of the calls for projects to be funded from the state budget, which are relevant to the RIS3 implementation, and informs the GCSTI about any irregularities;
4. Evaluates the RIS3 implementation by means of monitoring reports, and proposes measures to improve its implementation and submits them to the GCSTI;
5. Ensures the preparation of evaluation reports on the current state of the areas of economic specialisation, promising areas of specialisation, and areas of specialisation on the basis of available scientific and research capacities (hereinafter referred to as the “areas of research specialisation”);
6. Coordinates the detailing of the Slovak Government’s decisions and regulations and laws related to science, research and innovation in Slovakia;
7. Coordinates the monitoring of the state of:
 - i. integration of Slovak science in the European Research and Innovation Area;
 - ii. involvement of the industry-oriented Slovak science in the innovation programmes of multinational groups running their activities in Slovakia;
 - iii. excellent and industrial research in Slovakia;
8. Coordinates the monitoring of the state of investments in public R&D infrastructure to ensure the effectiveness of the funds spent in order to prevent duplicated investments in infrastructure;
9. Gives opinion on the specialisation of public scientific and research institutions, and proposes to the GCSTI recommendations in this field.

The principles of management of the RIS3 implementation as an integrated system

The building of personal and material links between the Boards of the Research Agency and Technological Agency constitutes a fundamental integrating element in terms of timing, material aspects and financial effectiveness.

The Research Agency and the Technological Agency will contribute to the shaping of the strategic long-term research system according to the requirements of the economic practice and businesses and major society-wide needs so that financial support is given to research and innovation projects resulting in specific activities in line with the RIS3 and to the benefit of the society and regions.

Both agencies will be fully responsible for the interlinked content of research and innovation in compliance with the RI3 objectives in order to ensure complementarity with relevant EU programmes and initiatives.

Expert working groups composed of the representatives of all relevant partners will be responsible for detailing the content focus of the individual areas of specialisation. The outputs of the working groups will be presented to the Research Agency Board and to the Technological Agency Board for approval and will also serve to other central state administration bodies.

RESEARCH AGENCY

The Research Agency will be the managing, communication and coordination institution in the field of education, research and development. The founder of the Research Agency will be the MoESRS SR. Within the MoESRS SR, the duties of the Research Agency as a grant agency will be ensured by gradual merge of the grant funding processes of higher education institutions, science and research. The Research Agency will be a directly managed organisation of the Ministry of Education, and is expected to allocate public funds and ESIF funds to support research and development in a competitive manner. The Research Agency will be a state budgetary organisation with legal personality that will be connected to the state budget by a chapter of the Ministry of Education.

Tasks of the Research Agency

1. To set up a well-working system of coordination for the promotion of research and development in the field of education with links to practical needs with the aim to meet the RIS3 objectives;
2. To support the priorities of the areas of research specialisation for the purposes of the economic practice and social sciences so as to reflect the principles of sustainable economic development in line with the RIS3;
3. To support the building, use and development of scientific and research infrastructures on the basis of the principles of use and development of research infrastructures in line with the RIS3 priorities;
4. To develop the areas of R&D support, creation of standards and supervision of coordinated development in the field of education to meet the needs related to the development of society;
5. To create the conditions to enhance the involvement of research teams (public sector, university sector, Slovak Academy of Sciences, industrial and non-profit sectors) in the

- European Research and Innovation Area, in particular through the ESFRI, EITI, National Technology Platforms with links to the EUROPE 2020 programme and to the HORIZON 2020 Community programme, as well as other initiatives and programmes of international nature;
6. To coordinate interventions with other programmes, tools or entities within Slovakia with the aim to meet the RIS3 objectives, in particular with the Technological Agency;
 7. To ensure the coordination of financial instruments for concentrated support of RIS3 objectives by defining complementarities and common content parameters between the different calls concerning support for research and development financed from various resources;
 8. To participate in the RIS3 administration and in the preparation of documents for the PC GCSTI RIS3 and for the GCSTI (preparation of action plans, monitoring plans, monitoring reports, evaluation reports, etc.);
 9. To implement and administer the OP R&I measures concerning the fulfilment of the RIS3 objectives.

The principles of management, coordination and partnership within the Research Agency

1. A Board will be set up within the Research Agency, which will also act as the advisory Council of the Minister of Education;
2. The Research Agency Board is chaired by the statutory representative of the Ministry of Education or by a person appointed by the statutory representative, and vice-chaired by the statutory representative of the MoE SR or by a person appointed by such statutory representative;
3. The members of the Research Agency Board are appointed by the Board Chair on the basis of the principle of partnership between the public and the private sectors at a 50:50 proportion, where at least 1/3 of the members are also members of the Technological Agency Board. The members of the Research Agency Board are representatives of the following institutions and organisations appointed by the Board Chair:
 - i. MoESRS SR, MoE SR (where at least one member is a representative of the MA and IB);
 - ii. Technological Agency;
 - iii. Department of the Government Plenipotentiary for Research and Innovation;
 - iv. other organisations within the founding competencies of the MoESRS SR;
 - v. selected higher education institutions conducting research;
 - vi. the Slovak Academy of Sciences;
 - vii. other research institutions (e.g. sectoral research institutions, university hospitals, non-profit research and development institutions);
 - viii. the business sector;
 - ix. other persons by decision of the Chair of the Research Agency Board.

The RESEARCH AGENCY BOARD gives opinion on:

- A. the schedule of calls specifying the facts, timing and resources, the content of draft calls prepared by the Managing Authority in line with the rules defined in the OP Research and Innovation or the rules of ESIF implementation;
- B. the factual implementation, timing and resources, and the content of interventions under other tools and programmes implemented by the Research Agency and the MoESRS SR and contributing to the fulfilment of the RIS3 objectives.

In addition, the RESEARCH AGENCY:

- 1. Provides concurrence and, in particular, submits to the PC GCSTI RIS3 reference documents for the preparation of recommendations for the GCSTI to assess the fulfilment of the RIS3 objectives;
- 2. Ensures the conditions for the operation of research networks in Slovakia in line with the RIS3, in particular in cooperation with the Technological Agency with the aim to coordinate the implementation of the RIS3 objectives;
- 3. Cooperates with scientific and research platforms created at EU level and in Slovakia;
- 4. Provides for professional cooperation and consultations with other entities responsible for the implementation of programmes and instruments for the fulfilment of the RIS3 objectives in areas with direct or indirect impacts on innovation, industrial research and development, etc.

TECHNOLOGICAL AGENCY

The Technological Agency will be an agency for the funding of industrial research, experimental development and innovation, and will create, as a public administration entity, the conditions for the support of innovation within industrial enterprises. The founder of the Technological Agency will be the MoE SR. Within the organisational structure of the MoE SR as the IB for the OP R&I, the duties of the Technological Agency will be carried out by the Slovak Innovation and Energy Agency (“SIEA”) – a contributory organisation of the MoE SR through the transformation of its competencies (specifically, through the development and partial expansion of its activities and competencies in this field). The SIEA is founded for the fulfilment of tasks in the field of energy and innovation, and since 01 January 2014 it has exercised the function of the only implementation agency of the MoE SR for structural funds. Since June 2014, the SIEA has been member of the important international organisation of innovation and technology agencies TAFTie, and closely cooperates with the Technological Agency of the Czech Republic. In the field of energy, the Agency performs important tasks for the MoE SR and other institutions.

Tasks of the Technological Agency

- 1. To set up a well-working system of coordination of the development of technological and non-technological innovation to meet the RIS3 objectives and enhance the competitiveness of enterprises;

2. To develop the areas of the definition of innovation, set up standards and supervise the coordinated development in the field of innovation and industrial research and development for the purposes of the economic practice and social sciences;
3. To perform professional activities in the field of innovation (in particular technology innovation) and industrial research and development to increase the innovation level of enterprises;
4. To coordinate interventions with other programmes, instruments and entities in Slovakia with the aim to achieve the RIS3 objectives, in particular with the Research Agency;
5. To develop the forecasting of trends mainly in the field of technology development, as well as key calls, including global ones, and the forecasting of impacts;
6. To evaluate the innovation performance and needs of the Slovak economy;
7. To participate in the RIS3 administration and to prepare reference documents for the GCSTI (preparation of action plans, monitoring plans, monitoring reports, evaluation reports, etc.);
8. To implement and administer the OP R&I measures related to the fulfilment of the RIS3 objectives.

The principles of management, coordination and partnership within the Technological Agency

1. A Board will be set up within the Technological Agency, which will at the same time act as the advisory council of the Minister of Economy;
2. The Technological Agency Board is chaired by the statutory representative of the Ministry of Economy or by a person appointed by the statutory representative, and vice-chaired by the statutory representative of the MoESRS SR or by a person appointed by such statutory representative;
3. The members of the Technological Agency Board are appointed by the Board Chair on the basis of the principle of partnership between the public and the private sectors at a 50:50 proportion, where at least 1/3 of the members are also members of the Research Agency Board. The members of the Technological Agency Board are representatives of the following institutions and organisations appointed by the Board Chair:
 - i. MoE SR, MoESRS SR (where at least one member is a representative of the MA and IB);
 - ii. Research Agency;
 - iii. Department of the Government Plenipotentiary for Research and Innovation;
 - iv. other organisations within the founding competencies of the MoE SR;
 - v. organisations within the decision-making powers of the MoE SR
 - vi. the Slovak Academy of Sciences;
 - vii. other research institutions (e.g. higher education institutions, sectoral research institutions, university hospitals, non-profit research and development institutions);
 - viii. the business sector;
 - ix. other persons according to the decision of the Chair of the Technological Agency Board.

The TECHNOLOGICAL AGENCY BOARD gives opinions on:

- A. the schedule of calls specifying the facts, timing and resources, the content of draft calls prepared by the Intermediate Body in line with the rules defined in the OP Research and Innovation or the rules of ESIF implementation;
- B. the factual implementation, timing and resources and content of interventions under other instruments and programmes implemented by the Technological Agency, the MoE SR and its organisations contributing to the fulfilment of the RIS3 objectives.

In addition, the TECHNOLOGICAL AGENCY:

1. Provides concurrence and, in particular, submits to the PC GCSTI RIS3 reference documents for the preparation of recommendations for the GCSTI to assess the fulfilment of the RIS3 objectives;
2. Provides for professional cooperation with the Research Agency to coordinate the implementation of the RIS3 objectives.
3. Provides for professional cooperation and consultations with other entities responsible for the implementation of programmes and instruments for the fulfilment of RIS3 objectives in areas with direct or indirect impacts on innovation, industrial research and development, business support, etc.

3 Measures for the implementation of the smart specialisation priorities

The definition of the different areas of specialisation approved under the RIS3 SK is based on available analyses and partial reference documents, as well as discussions with all stakeholders from different fields and sectors, while special emphasis was put on discussions with the business sector under the *entrepreneurial discovery process* as a basic principle under the Commission's methodology for the smart specialisation process of the European Union Member States.

Four strategic objectives and fourteen partial objectives as policy mixes were defined to produce a structural change in the Slovak economy towards growth based on increasing innovativeness and excellence in research and innovation to enhance sustainable growth, employment and quality of Slovak citizens.⁵ **To achieve these objectives, three basic specialisation priorities were identified and approved by the Slovak Government:**⁶

- *Sectors of the Slovak economy*⁷ based on traditional, well-established economic sectors with the potential to significantly influence the fulfilment of the RIS3 strategic objectives;
- *Prospective economic areas*⁸ which are fast-growing and show a high development potential for the Slovak economy;
- *Areas in which Slovakia disposes of scientific and research capacities, but currently without appropriate conditions for their economic capitalisation.*⁹

The entrepreneurial discovery process accompanied by other analytical processes will continue so as to also ensure the continuation of further prioritisation and specification of the different areas of specialisation, including clearer definition of their mutual synergies and links. Strong emphasis will be placed on a dialogue with the business sector under the entrepreneurial discovery process – either directly within the RIS3 SK Management System in which the business sector is strongly represented, or through various forms of researches and questionnaire surveys by the representatives of specific business entities.

A proposal for the use of the entrepreneurial discovery process will be submitted to the GC STI, and the external and internal changes influencing the accomplishment of the RIS3 objectives will be analysed, including proposals for recommendations.

⁵ Chapters 6 and 7 of the RIS3, pages 63–77.

⁶ Chapter 4 of the RIS3, pages 53–55.

⁷ Automotive and mechanical engineering industries; consumer electronics and electrical equipment; information and communication products and services; production and processing of iron and steel.

⁸ Automation, robotics and digital technology; processing and increasing the value of light metals and their alloys; production and processing of polymers and progressive chemical substances (including smart fertilizations); creative industry; exploitation of the domestic raw materials base; support of smart technology in the processing of raw materials and waste in the region of their occurrence.

⁹ Research of materials and nanotechnology; information and communication technology; biotechnology and biomedicine; agriculture and environment, including modern environment-friendly chemical technology; sustainable energy; including development trends, where the support of the priority areas identified is expected to have a positive effect in addressing topics of national concern.

3.1 Basic measures

The first phase of the RIS3 implementation in 2015 and 2016 will require a targeted approach to concentrate mainly human and financial resources to create the conditions for enhancing smart specialisation of research and innovation in Slovakia. The method of management of the areas of specialisation is closely linked to monitoring processes (see Section 5), and is also based on the feedback principle as an early warning system for adjusting and modifying the RIS3 implementation processes. The process of management of the areas of specialisation will also include the evaluation of their contribution or of the contribution of the RIS3 as a whole to GDP growth.

With regard to instruments covered from public resources and in line with the monitoring processes and the set of indicators described in Chapter 5, the three categories of specialisation priorities (sectors of the Slovak economy, prospective economic areas, and the current critical mass of the scientific and research potential) will be identified by means of retrospective progress evaluation in the following areas:

*For the “**industrial sector**” area of specialisation priority:*

- growth of sales in the given sector, in particular export growth;
- employment;
- share of high-tech products.

*For the “**prospective economic areas**” area of specialisation priority:*

- number of businesses implementing research and/or innovation solutions;
- share of high-tech products.

*For the “**critical mass of scientific and research potential**” area of specialisation priority:*

- number of implemented patents and utility models;
- number of businesses implementing the research results.

This multi-disciplinary approach of interlinked criteria characterising the areas of specialisation aims to eliminate the incompleteness of the research and innovation tasks being fulfilled, enhance the importance of an effective application of also partial research results in actual innovation practice, while preserving the long created critical mass of the research and innovation potential in Slovakia. This approach also aims to eliminate the fragmentation of the research basis created in the past, and the ineffective duplicated building of research and innovation infrastructures. To this end, the **following measures will be undertaken:**

A. Systemic measures

A continuous process of analytical work with specialisation priorities based on the entrepreneurial discovery principles will be ensured. This process will seek to ensure clear links between the individual areas of economic and research specialisation, and to gradually eliminate those areas in which the practice of the next years and the evaluation process shows non-existence of desired links and of a development potential. In addition, given the current development of the economy, the international situation and the current situation concerning available scientific and research capacities, new areas of specialisation requiring support can be defined.

The specific analytical works in this area, which take into consideration the conclusions and recommendations from the RIS3 peer review in Dublin¹⁰, form part of planned evaluations¹¹ listed in the Evaluations Plan in [Annex No. 3](#) to this Action Plan. In 2015–2016, a detailed analytical evaluation of the state and needs of the three specialisation priorities will be undertaken. This process will also include methods which could not be utilised in the creation of the RIS3 SK – in particular, the use of a peer-review process by means of renowned foreign experts, as well as modern methods of technological forecasting, including comparative analysis of the areas of specialisation of the V4 or Danube Strategy countries.

On the basis of the evaluation process, the Slovak Government will adopt a decision in the 1st half of 2017 on updating the areas of specialisation. A similar process will again be conducted at the end of the programming period.

B. Identified contribution to RIS3 areas of specialisation

When evaluating research projects on the basis of evaluation criteria, the minimum requirement for a clearly identifiable contribution of every supported research task to the relevant sectors of the Slovak economy and/or prospective economic areas identified in the RIS3 will apply, including contribution to addressing society-wide challenges.

C. Continuous peer reviews of research and development projects in place

In order to ensure on-going and continuous compatibility of the research projects in place with the specialisation priorities, the projects will be consistently subject to peer-reviews at the level of the process of implementation of long-term R&D projects. This will also serve for reviewing the research and development focus in projects supported under the Operational Programme Research and Innovation, including with regard to the above-mentioned processes of content updates of the individual areas of specialisation.

D. Supporting a multi-disciplinary approach

From among supported research projects, preference (bonus points in the selection process) will be given to those projects which have a multi-disciplinary nature and which interconnect through their research activities several scientific fields and several areas of economic specialisation.

E. Integration of available scientific and research capacities and their contribution to the development of specialisation priorities

The supported research tasks must have a positive impact on addressing topics of society-wide concern, as identified in the RIS3. Wherever appropriate and necessary, social sciences and humanities will ensure the practical aspects of supported projects with regard to the applicability of research and development results in practice – either from the point of view of their economic

¹⁰ Peer Review Workshop (Commission Platform for Smart Specialisation) on RIS3-SK organised by the DG Regio, DG R&D and the Joint Research Centre of the European Commission (JRC) in July 2014.

¹¹ “Analytical assessment of the four areas of economic specialisation – the current state and the perspectives of development in Slovakia, and of the prospective areas of specialisation” and “Foreign peer-reviews of the current state and of the development potential of the areas of specialisation with regard to available scientific and research capacities”

benefits/impacts, while considering the legislation in place or under preparation, or from the point of view of relevant ethical issues related to the applicability of the results of specific researches, etc.

4 Preliminary financial framework for the implementation of RIS3 measures

From a long-term perspective, it is necessary to provide for multi-source funding for enhancing competitiveness and for increasing spending on research, development and innovation in the Slovak economy. In the previous period, the basis for financing of these areas was constituted by Structural Funds in the form of a non-repayable financial contribution and, to a smaller extent, financial instruments.

In the programming period 2014–2020, investing into research, development and innovation for fostering the competitiveness of the Slovak economy must be more balanced with respect to national resources, creating incentives for engaging the business sector to the widest extent possible.

4.1 Expenses from European Structural and Investment Funds

The expenses from European Structural and Investment Funds (“ESIF”) are based on the operational programmes approved by the European Commission. The highest allocation with respect to the fulfilment of the RIS3 objectives is that of the Operational Programme Research and Innovation, which is the main implementation tool of the RIS3. The overview of expenses in research, development and innovation also includes resources from other operational programmes, as they also contribute to the accomplishment of the RIS3 objectives given their focus and identified synergies and complementarities with the Operational Programme Research and Innovation.

Table 1: Expenses from European Structural and Investment Funds

Institutions – operational programme	SOURCE	Total preliminary allocation 2014 – 2020	Budget proposal 2015	Budget proposal 2016	Budget proposal 2017
Ministry of Education, Science, Research and Sports of the SR – Operational Programme Research and Innovation	FUND: ERDF – non-repayable assistance	961,041,427	2,500,000	28,131,391	99,229,388
	State budget incl. other public resources	170,735,259	441,177	3,630,387	15,437,276
	Own private resources	284,964,905	0	6,903,024	29,948,067
Ministry of Economy of the SR – Operational Programme Research and Innovation	FUND: ERDF – non-repayable assistance	834,603,732	7,000,000	7,816,723	109,434,130
	State budget	23,180,977	1,235,294	217,205	3,040,885
	Own private resources	714,739,798	0	6,694,103	93,717,443

Ministry of Environment of the SR - Operational Programme Environmental Quality	FUND: CF – non-repayable form of assistance - PA1	35,500,000	1,168,556	1,383,013	1,759,554
	FUND: ERDF – non-repayable form of assistance - PA4	33,100,000	3,904,000	5,012,000	6,012,000
	FUND: ERDF – non-repayable assistance - PA3	6,500,000	130,000	520,000	915,000
	State budget	4,117,647	441,176	617,647	794,118
	Own private resources	14,155,556	1,840,224	1,981,779	1,981,779
Ministry of Labour, Social Affairs and Family of the SR – Operational Programme Human Resources	FUND: ESF – non-repayable form of assistance	14,996,400	3,694,570	4,756,330	4,580,700
	State budget	666,776	58,089	134,675	115,482
	Own private resources	0	0	0	0
Ministry of Education, Science, Research and Sports of the SR – Operational Programme Human Resources	FUND: ESF – non-repayable assistance	39,198,107.19	0	391,981.07	1,567,924.29
	State budget	8,266,982.54	0	82,669.83	330,679.30
Ministry of Interior of the SR – Operational Programme Effective Public Administration	FUND: ESF – non-repayable assistance	6,545,000	200,000	1,500,000	1,500,000
	State budget	1,155,000	35,294	264,706	264,706
	Own private resources	0	0	0	0
Ministry of Agriculture and Rural Development – Integrated Regional Operational Programme	FUND: ERDF – repayable assistance	5,000,000	0	300,000	550,000
	FUND: ERDF – non-repayable assistance	268,775,000	0	16,126,500	29,565,250
	State budget	65,900,000	0	3,954,000	7,249,000
	Own private resources	2,785,000	0	167,100	306,350

Source: MoESRS SR

One of the prerequisites for a successful implementation of the strategy is the allocation of adequate amounts of funds per measure. The proposal for the allocation of expenses from European Structural and Investment Funds per measure was prepared on the basis of an expert review by the representatives of relevant operational programmes. The proposed financial framework is a preliminary one, and will be regularly reviewed in terms of financial coverage in the framework of the evaluation of the fulfilment of the RIS3 objectives and measures.

Table 2: Financial plan with respect to RIS3 measures financed from ESIF funds

Measure	in mil. EUR					
	OP R&I		ESF	ERDF		ESF
	MoE	MoESRS	OPHR	EQ	IROP	EPA
1.1. Development of innovative capacities through cooperation between enterprises and research institutions	195.8					
1.2. Technological upgrade for structural changes in industry	223.7			9.8		
1.3. Support for building research and innovation capacities in Slovak enterprises	139.8					
2.1. Fostering excellence of research		119.9				
2.2. Development of research and development infrastructures		299.7				
2.3. Linking universities, the Academy of Sciences and industry partners	15.0	399.3				
2.4. Systematic support and stimulation of international cooperation in science and technology	1.7	77.0				
3.1. Stimulating KIBS, knowledge-oriented services and creative industry	23.4				194.3	
3.2. Supporting research and innovation in environmental areas	11.7			42.0		
3.3. Research and innovation in addressing major societal challenges in Slovakia	11.7	39.1	13.1			
3.4. Supporting an open and inclusive society	23.4		1.9			
3.5. Supporting a dynamic business environment favourable to innovation	116.8					6.5
3.6. Protection and utilisation of intellectual property	46.8	19.5				
4.1. Improving the quality of secondary education					79.5	
4.2. Improving the quality of higher education						
4.3. Improving business involvement in education	20.0		13.0			
4.4. Improving the quality of life-long education	5.0		13.0	23.3		
4.5. Increasing emphasis on education in fields relevant to the RIS3 priority areas			13.0			
4.6. Supporting the mobility of highly skilled workers		6.5				
ESIF funds	834.6	961.0	54.0	75.1	273.8	6.5

Source: MoESRS SR

4.2 The financing of research, development and innovation from national sources

In general, the recent assessment of expenses from the state budget implies the following basic findings:

- A. The preliminary amount of state budget expenses in research, development and innovation for current budget years of the period 2015–2017, based on an analysis of the period 2012–2013 and in line with programme budgeting, is EUR 0.36 billion in average, whereas the use of these national sources does not cover the fulfilment of the RIS3 strategic objectives and will not be enough to implement the measures defined in the RIS3¹² and in EU2020;
- B. According to the Statistical Office of the SR, the total aggregate expenses in research and innovation as a percentage of the GDP reach 0.85% of GDP. This suggests that in order to accomplish the RIS3 objectives, it is necessary to increase the expenses by 50% over the next seven years, by which Slovakia would meet its commitment to invest 1.2% of GDP in research, development and innovation;¹³
- C. There are no systemic links between the content focus of the state budget funds per ministries and the RIS3 measures;
- D. The current methodology of the reporting of expenses in research, development and innovation per ministries does not allow for an exact differentiation of the expenses by their nature so that to be able to differentiate between the minimum wage expenses and infrastructure expenses related to research or innovation or split by institutions and projects and thus linked to the fulfilment of the RIS3 objectives;
- E. Slovakia's commitment to reach a 1:2 proportion (public sources : private sources) of statistically recorded expenses on research and development by 2020.

The total expenses in research and development are composed of:

- a. expenses in research and development from the state budget;
- b. expenses in research and development from private business resources,
- c. expenses in research and development from the resources of private non-profit organisations and from foreign resources.

In order to accomplish the objectives and priorities specified in the RIS3 SK, it will be necessary to ensure an **increase of the total expenses in R&D to 1.2% of GDP in 2020**, where state budget resources would represent 1/3 and private resources 2/3 of the total expenses in R&D in 2020.

STATE BUDGET

The aim to enhance the development of research and development and ensure its contribution to the accomplishment of the RIS3 SK objectives requires an adjustment of the current philosophy of financing of research and development in Slovakia and a clear reporting of public expenses in research, development and innovation. Transparent and clear reporting requires an audit of the expenses of the public administration's budget for research, development and innovation in Slovakia

¹² Page 64, RIS3, Partial objectives and measures

¹³ Page 66, RIS3, Partial objectives and measures

and, on the basis of its findings, to prepare a new methodology for the reporting of expenses in research, development and innovation in concurrence with relevant institutions (MoF SR, MoESRS SR, MoE SR, Statistical Office of the SR and other).

In order to ensure an increase in R&D expenses within the state budget, one of the partial objectives is to introduce state budget expenses in research and development as a **binding indicator** defining the percentage share of expenses in research in GDP. This binding indicator would comprise the expenses in research and development of individual entities (ministries, central state authorities, the Slovak Academy of Sciences, and higher education institutions). This would ensure the coordination of state budget funds spent in research and development per budget chapters and a transparent overview of expenses in research and development.

The public expenses in R&D budgeted for 2015 amount to 0.35% of GDP. Over the next years, this share of expenses in research, development and innovation to the GDP is proposed to increase by 0.04% of GDP each year. In such case, the financing of research, development and innovation would reach in 2017 the same level as in 2013, and would rise to 0.50 of GDP in 2020. Increased financing of research, development and innovation from the state budget is crucial in order to fulfil the RIS3 objectives and measures, and the growth in expenses in research, development and innovation would be tied to ensuring sustainability and further development of investment projects financed from the funds of the Operational Programme Research and Development during the programming period 2007–2013.

The expenses in international cooperation in science and technology (bilateral mobility projects and joint research projects) will be followed separately by the Research Agency. The minimum share of institutional funding will be defined in order to give equal status to the systems of funding of academic, university and sectoral research.

The overall changes in the system of support of research and development in Slovakia with regard to the RIS3 SK are expected to contribute to a gradual increase in the financing of research and development by means of grants (competitive funding). The share of competitive funding is less than 10% today, and the aim is to increase it significantly as soon as possible. The precise planned extent of such increase will be based on the overall evaluation of the expenses in RD&I (task 4 in Chapter 7 Schedule of Tasks). The priority is to support inter-sectoral research and cooperation leading to the application of research and development results in economic and social practice.

With regard to the state sector (SAS and ministerial research institutes) and the sector of higher education institutions, the aim is to ensure their contribution to the RIS3 implementation, which requires an adjustment of the current institutional financing of these institutions through gradual increase in project funding by means of their systems of grants from allocated institutional funds.

As for the Research Agency, emphasis should be placed on the programmes of the agency, which should take into account the RIS3 objectives and priorities. The proportion between the general calls of the agency related to the state budget and the agency programmes should be 1:2.

The funds allocated to the implementation of state research and development programmes and incentives for research and development should be used to support the RIS3 SK priorities through

research and development and in a competitive way. The share of funds from these instruments supporting applied research should reach 50% with direct focus on the economic practice.

EXPENSES IN RD&I FROM BUSINESS RESOURCES

In order to achieve 1.2% of GDP of the total expenses in RD&I in Slovakia in 2020, it will also be necessary to ensure **growth in the share of business resources in the support of research, development and innovation**. The business sector's expenses in RD&I in Slovakia are expected to reach 0.63% of GDP in 2017.

Given the current low share of private investments in research and development, it is necessary, apart from part-funding of R&D projects (state budget – out-of-budget sources), to introduce indirect support instruments, such as motivating factors for the private sector to invest in research and development.

The business sector's investments in R&D activities are expected to grow from 0.31% of GDP in 2012 to 0.8% of GDP in 2020. To this end, it will be necessary to apply direct financial instruments, such as innovation vouchers, loan programmes and venture capital, as well as indirect financial instruments, such as tax reliefs for businesses.

When considering available sources for the RIS3 SK, it is also desired to take into account the use of the newly prepared system for an effective use of loan and venture capital instruments in research and innovation through the Slovak Investment Holding, and the connections to financial institutions providing venture capital for research, development and innovation. These instruments can effectively support the development of innovative enterprises in the future, and should not be therefore duplicated by standard grant funding.

PLANNED ACTIVITIES WITH REGARD TO THE REFORM OF THE SYSTEM OF RD&I FUNDING

The structure of the financial plan and the budgeting of expenses in research, development and innovation will be adjusted according to the planned activities and tasks detailed in Chapter 7.

For an effective accomplishment of the RIS3 objectives and proposed measures, it will be necessary to reform the system of RD&I funding in Slovakia, which is accompanied by the following measures:

- transformation of agencies to increase the effectiveness of spent funds;
- support for excellent research mainly by increasing the volume of grant/project funding of RD&I;
- setting up of an integrated system of tools for RD&I support;
- introduction of indirect tools for R&D support;
- support for involvement in research activities financed from non-budgetary resources (e.g. EU framework programmes);
- linking the research and development expenses to RIS3 measures.

The RD&I funding must respect the innovation cycle, and the instruments proposed under the funding system must be interlinked so as to be able to provide an effective support in each stage of the cycle.

5 RIS3 monitoring and evaluation system

A transparent monitoring and evaluation system is crucial for the monitoring and evaluation of the fulfilment of the RIS3 objectives and, hence, of the Europe 2020 Strategy. The RIS3 monitoring system is composed of a mix of:

- a. context indicators linked to the RIS3 strategic objectives;
- b. result indicators which take into account the RIS3 strategic objectives;
- c. output indicators based on the proposed RIS3 measures and activities.

The definition of the mix of indicators is based on available data both at the level of national statistics and at the level of the monitoring system of the Operational Programme Research and Innovation, as well as indicators proposed under other operational programmes which will partially contribute to the fulfilment of the RIS3 objectives. The measurable indicators are listed in [Annex 2](#).

As part of the evaluation system, the fulfilment of the objectives and proposed measures (or activities) in relation to the actual activities under the operational programmes and other applied instruments for the support of research, development and innovation at national level will also be evaluated in terms of quality by analysing the different instruments used.

The fulfilment of the RIS3 objectives and measures will be regularly monitored by means of annual RIS3 implementation reports (hereinafter referred to as “reports”), submitted to the GCSTI. The reports will be prepared by the MoESRS SR in cooperation with the MoE SR and other relevant entities involved in the RIS3 implementation. The reports will serve as reference documents for the preparation of action plans for the RIS3 implementation for the relevant year.

For the purpose of setting up an effective RIS3 evaluation system, the following evaluations will be carried out:

1. **Evaluation of the RIS3 implementation and of the fulfilment of its objectives** – to be carried out at least three times throughout the period of the RIS3 implementation until 2023; this evaluation will comprise an overall assessment of the functioning of the system of support for research, development and innovation from the point of view of institutional structure and content focus (fulfilment of objectives, implementation of RIS3 measures and activities), and of the need to revise the set system.
2. **Thematic evaluations** – to be carried out with respect to the individual areas of specialisation defined in the RIS3.

In the framework of the monitoring and evaluation system, a new analytical approach and the implementation of research, development and innovation policies based on actual data and facts (evidence-based policy) will constitute an integral part of the management of the RIS3 implementation. Under this approach, analytical studies mapping the initial state of the individual areas of specialisation will be conducted, including forecasting of the future possible state using standard methods of technological forecasting and peer-review approaches and engaging experts in these fields. The evaluations plan will form a part of action plans for RIS3 implementation for the relevant year. The evaluations plan of RIS implementation is described in [Annex 3](#).

6 The principles of use and development of research infrastructures

Research infrastructures are the driving force of innovation. The term “research infrastructures” refers to facilities, resources, systems and related services used by research institutions to conduct top-level research in their respective fields. It can be large-scale scientific facilities or a set of equipment; knowledge base sources, such as collections, archives or structured scientific information; ICT-based e-infrastructures (networks, computing sources, software, and data storages) for research and education; and any other entity of a unique nature which is crucial for achieving and enabling research excellence. Research infrastructures can be “one-sited” or “distributed” (as a network of sources).

The use and further development of research infrastructures must be strategically planned, and must provide a high value added, including financial and non-financial support services for the business sphere and the economic practice, and its further development must prevent duplication in investments into similar infrastructures which already exist or are under construction in a nearby region or locality.

The MoESRS SR in cooperation with all relevant partners, using the data and capacities of the Research Agency and Technological Agency, will prepare a document **National Road Map for Research Infrastructure**. The document will be discussed by the GCSTI so that to ensure support for the areas of specialisation under the RIS3 in the programming period 2014–2020. The preparation and implementation of the road map will involve cooperation by the authorities responsible for the national and regional smart specialisation strategies. The document will, in particular, seek to improve access to existing and new infrastructures, including personal capacities, for users from established and prospective economic sectors, and to set common principles for the management of state and public research infrastructures.

7 Schedule of tasks

7.1 Institutional changes

1. To set up the Research Agency and the Board of the Research Agency in line with the institutional structure for the implementation of the smart specialisation strategy defined in this action plan.

Deadline: 30 September 2015

Responsible: Minister of Education, Science, Research and Sports

2. To ensure the procedures on the side of the Slovak Innovation and Energy Agency and its founder (MoE SR) in order to fulfil the tasks of the Technological Agency and the setting up of the Board of the Technological Agency in line with the institutional structure for the implementation of the smart specialisation strategy defined in this action plan.

Deadline: 30 September 2015

Responsible: Minister of Economy

3. To set up expert working groups for the areas of specialisation.

Deadline: 30 September 2015

Responsible: Minister of Education, Science, Research and Sports
Minister of Economy

4. To prepare, on the basis of the audit results, a proposal for a new methodology of the reporting of expenses in research, development and innovation for the next budget periods. The methodology will also apply to an exact differentiation of expenses according to their character between wage and infrastructure expenses related to research or innovation and split by institutions and projects.

Deadline: 30 June 2016

Responsible: Deputy Prime Minister and Minister of Finance
Minister of Education, Science, Research and Sports
Minister of Economy
Chair of the Statistical Office

5. To prepare a comprehensive system of tools for the support of RD&I based on the evaluation of existing RD&I tools financed from national and EU funds.

Deadline: 30 September 2016

Responsible: Minister of Education, Science, Research and Sports
Minister of Economy

6. To prepare guidelines for the preparation of annual reports on the state of RIS3 implementation and for the reporting of measurable indicators defined in the AP RIS3 and of links to the currently developed Code List of Measurable Indicators at national level with respect to relevant operational programmes.

Deadline: 31 November 2015

Responsible: Minister of Education, Science, Research and Sports
Minister of Economy

7. With the aim to enhance a strategic approach to the building of research infrastructures in Slovakia, a **National Road Map for Research Infrastructure** will be prepared, and the following tasks will be fulfilled in the framework of the system of RIS3 implementation management:

- a) A temporary working group will be set up for the creation of the principles of use and development of research infrastructures in the Slovak Republic, composed of representatives of academic institutions, the business sector and selected foreign experts with a task to prepare an analysis mapping Slovakia's potential to join ESFRI activities, including an analysis of costs and benefits for Slovakia, as well as preparation of basic standards for the management and use of infrastructures built from public resources. The working group will act as an expert group of the Board of the Research Agency and Board of the Technological Agency.

Deadline: 30 October 2015

- b) To conduct an analysis of Slovakia's potential for the most appropriate way of involvement in international infrastructures with a special emphasis on ESFRI activities, and to submit it to the Board of the Research Agency and the Board of the Technological Agency.

Deadline: 31 January 2016

- c) To prepare basic standards for professional management and use of research infrastructures built from public resources, and to submit them to the Board of the Research Agency and the Board of the Technological Agency.

Deadline: 31 January 2016

- d) The decision on the extent and way of involvement in ESFRI initiatives and related programmes/instruments will be made by the Research Agency Board and the Technological Agency Board.

Deadline: 31 March 2016

- e) To create the first version of the on-line register of research infrastructures, to be updated on an annual basis, which will serve as a tool to prevent duplications in the future, for offering cooperation between the academic sphere and the business sectors, and for the acceleration of international cooperation. Regarding public research infrastructures supported from EU Structural Funds, the register will also contain an overview of equipment.

Deadline: 31 December 2015

- f) To conduct a peer-review of the evaluation of completed projects of university science parks and research centres under the Operational Programme Research and Development with the involvement of foreign experts; this peer-review will serve as a basis for the granting of further funds under the OP Research and Innovation for institutions involved in these projects. The peer-review conclusions will be discussed by the Research Agency Board and will serve as a basis for defining the next prospective focus of research and development activities of parks and centres. The peer-review conclusions will also be presented to the GCSTI.

Deadline: 30 June 2016 or depending on the actual state of implementation of these projects (phasing)

- g) To adjust the rules for the OP Research and Development and OP Research and Innovation so that the research infrastructures built under national projects and in non-business entities can also be used for the purposes of cooperation with the business sector (direct and indirect cooperation, including generation of income financing the sustainability of research infrastructures).

Deadline: 31 December 2015

Responsible: Minister of Education, Science, Research and Sports
Minister of Economy

Cooperation by: Government Plenipotentiary for Research and Innovation, Chair of the Slovak Academy of Sciences, President of the Slovak Rectors' Conference, representatives of sectoral research institutions, representatives of the business sector.

8. To submit to the meeting of the GCSTI binding rules for the utilisation of the entrepreneurial discovery process; during RIS3 implementation, analyse the external and internal changes influencing the fulfilment of the RIS3 objectives, including proposals for recommendations; in addition to that, to effectively use foreign expert sources, including information ones.

Deadline: 31 December 2015

Responsible: Minister of Economy

7.2 Changes to existing legislation

To ensure a single procedure, all proposed changes to the Slovak legislation will undergo the following process:

- The GCSTI will approve the content focus of future legislative changes in the context of the RIS3; the GCSTI's opinion will be the condition for submitting the changes to the Slovak Government.

a.) Amendment to Act No. 172/2005 Coll. on the organisation of the state support for research and development and on amendments to Act No. 575/2001 Coll. on the organisation of government activities and on the organisation of the central state administration, as amended

- incorporation of innovation into legislation (either by means of an amendment or as a separate law);
- increasing the effectiveness of state budget expenses in R&I;
- simplification of the granting of state support for R&D (with inevitable changes to legislation);
- 2015 (preparation)
- 2016 (effect)

b.) New Act on public research institutions

- definition of a new type of entity sui generis which the Slovak legislation has not defined so far;
- this act will transform the ministerial budgetary and contributory research organisations into public research institutions, and give rise to new institutions of this type;
- 2015 (preparation)
- 2016 (effect)

c.) Transformation of the Slovak Academy of Sciences (SAS) – amendment to Act No. 133/2002 Coll. on the SAS

- transformation of the SAS and of its institutes into public research institutions given the possibility of setting up a very new entity which the Slovak legislation has not defined so far;
- 2015 (preparation)
- 2016 (effect)

d.) Amendment to Act No. 185/2009 Coll. on Incentives for Research and development

- increasing the effectiveness and the leverage effect of expenses in R&I; update on the basis of stimulation models;
- 2015 (preparation)
- 2016 (effect)

e.) New Act on vocational education and training¹⁴

- introducing the principles of dual education in vocational education

¹⁴ The document has already been approved by the National Council of the Slovak Republic.

- 2014 (preparation)
- 01 September 2015 (effect)

f.) Amendment to Act No. 131/2002 Coll. on Higher Education Institutions

- introducing the principles of practical training relating to enterprises, optimising the numbers of students and related financial indicators according to practical requirements; increasing the effectiveness of the accreditation of study fields through the involvement of employers in accreditation committees;
- 2015 (preparation)
- 2016 (effect)

g.) New act on life-long learning

- setting up of an effective system of monitoring and forecasting of labour market needs, reconciliation of further education with labour market needs; defining the processes of quality of further education;
- setting up of a single system of career guidance in cooperation with the MoLSAF SR;
- 2015 (preparation)
- 2016 (effect)

h.) New Act on state administration in education and in school self-governments

- increasing the influence of central state administration bodies, in particular of the MoESRS SR, on the content focus and school system organisation;
- 01 September 2015 (effect)

8 Annexes

Annex 1 Statute of the Government Council for Science, Technology and Innovation

Statute of the Council of the Government of the Slovak Republic for Science, Technology and Innovation

(approved by Resolution of the Government of the Slovak Republic No. XX of XXX)

The Statute of the Council of the Government of the Slovak Republic for Science, Technology and Innovation (hereinafter referred to as the “Statute”) governs under Art. 2, par. 7 of Act No. 575/2001 Coll. on the organisation of government activities and on the organisation of the central state administration as amended, the position, the tasks, the composition and the rules of procedure of the Council of the Government of the Slovak Republic for Science, Technology and Innovation (hereinafter referred to as the Government Council for Science, Technology and Innovation” or the “Council”).

Article 1 Introductory Provisions

- (1) The Council is the permanent, advisory, initiative¹ and coordination body of the Government of the Slovak Republic (hereinafter referred to as the “Government”) in the field of science and technology² and innovation,³ including innovation in the field of wood production and processing, forestry, biotechnology, food industry, construction products and innovation in healthcare and agriculture (hereinafter referred to as “innovation”).
- (2) The Council is the permanent supreme coordination, expert, supervisory, advisory, initiative body of the Research and Innovation Strategy for Smart Specialisation of the Slovak Republic (hereinafter referred to as the “RIS3”) set up on the basis of the partnership principle (state represented by ministries, the academic sector by higher education institutions and the Slovak Academy of Sciences, sectoral research, private sector, employers’ unions and associations).
- (3) For the purposes of an effective process of the RIS3 implementation, the Council shall set up as its working body a Permanent Committee of the Government Council for Science, Technology and Innovation for the RIS3 Implementation (hereinafter referred to as the “PC GCSTI”), the duties, composition and competencies of which are specified in Article 7.
- (4) The Council’s activities shall not affect the competencies and responsibilities of ministries and other central state administration bodies in the fulfilment of tasks in the field of science, technology and innovation.

Article 2 Duties of the Council

- (1) The Council discusses and assesses mainly conceptual, legislative, strategic and financial documents,

¹ Art. 2(3) of Act No. 575/2001 Coll. on the organisation of government activities and on the organisation of the central state administration, as amended.

² Art. 10(1) of Act No. 172/2005 Coll. on the organisation of the state support for research and development and on amendments to Act No. 575/2001 on the organisation of government activities and on the organisation of the central state administration, as amended.

³ Art. 6(n) of Act No. 575/2001 on the organisation of government activities and on the organisation of the central state administration, as amended.

approaches in the field of research, development and innovation, as well as RIS3 action plans submitted to the Government, European Union bodies and international organisations.

- (2) The Council reviews the proposals and recommendations relating to the RIS3 implementation and its evaluation, recommendations for reaching a sustainable growth of research, development and innovation, including recommendations for frameworks for the financing of research and innovation in Slovakia, and ensures the prioritisation of research and innovation in the country.
- (3) The Council coordinates the cooperation between associations and unions representing the different research and development sectors, and associations and unions representing entrepreneurs in achieving the objectives of the long-term plan of the state science and technology policy and innovation strategy of the Slovak Republic.
- (4) The Council discusses and reviews, in particular:
 - a) the draft long-term plan of the state science and technology policy and other important documents on science and technology, and gives its opinion on the fulfilment thereof;
 - b) action plans detailing the RIS3 implementation in two-year rolling cycles, and monitors the fulfilment thereof;
 - c) the draft innovation policy of the Slovak Republic and other important documents on innovation, and gives its opinion on the fulfilment thereof;
 - e) the research, development and innovation strategy of the Slovak Republic;
 - f) the draft middle-term perspective of the budget programme “National Programme for the Development of Science and Technology”, important changes to this document and the evaluation of the fulfilment thereof;
 - g) draft state research and development programmes, state programmes for the development of research and development infrastructures, as well as Research Agency and Technological Agency programmes, and gives opinion on the reports on the fulfilment thereof;
 - h) proposals for membership and financing of Slovakia’s membership in European and international research and development centres, and Slovakia’s participation in European and international research and development programmes and European Union initiatives on research and development, as well as evaluation of Slovakia’s participation in such centres, programmes and initiatives;
 - j) proposals for practical research, development and innovation priorities in the Slovak Republic;
 - k) proposals for the focus of financial support on strategic objectives in the field of science, technology and innovation from funds allocated to such support and from operational programmes funds;
 - m) evaluation of the benefits of science, research and innovation to the application practice with the aim to foster interactions with the business sector, promote an effective transfer of knowledge and dissemination of research results, and mobilise innovation links;
 - n) documents, decisions and draft legislation on research, development and innovation related to the RIS3;
 - o) integration of Slovak research and innovation entities in the European Research and Innovation Area through the European Innovation and Technology Institute, European Technology Platforms, EU programmes and initiatives, such as HORIZON 2020, Entrepreneurship 2020 Action Plan, Digital Agenda for Europe, Enterprise and Industry, Steel Action Plan, CARS 2020 and other new initiatives relevant to research and innovation;
 - p) legislation proposed in the field of science, technology and innovation within Slovakia and the European Union.
- (5) The Council discusses and reviews the documents of all ministries and other central state administration

bodies on science, technology and innovation, submitted to the Government. The Council ensures the preparation of clauses on the impacts of reviewed documents evaluating the application and transfer of scientific knowledge, technology and innovation into practice.

- (6) The Council reviews the initiatives, proposals and recommendations relating to the RIS3 implementation and its evaluations to ensure a sustainable growth of research, development and innovation and related fields relevant to the RIS3 in Slovakia and of their role in accelerating convergence and employment growth.
- (7) The Council approves the Statute of the PC GCSTI RIS3 and its Rules of Procedure.
- (8) The Council participates at the joint meetings of the Councils of the Governments of the European Union Member States for research, development and innovation.

Article 3

Composition of the Council and Council bodies

- (1) The Council is composed of the Chair, five Vice-Chairs and other members.
- (2) The Council Bodies are the Council Chair and the Council Presidium.
- (3) The Council is chaired by the Prime Minister.
- (4) The Council Presidium is composed of the Council Chair and Council Vice-Chairs.
- (5) The Council Vice-Chairs are the Minister of Education, Science, Research and Sports of the Slovak Republic, the Minister of Economy of the Slovak Republic, the Deputy Prime Minister and Minister of Finance of the Slovak Republic, the Chair of the Slovak Academy of Sciences, and the Government Plenipotentiary for Research and Innovation.
- (6) The other members of the Council are:
 - a) Minister of Agriculture and Rural Development of the Slovak Republic;
 - b) Minister of Healthcare of the Slovak Republic;
 - c) Minister of Environment of the Slovak Republic;
 - d) Minister of Labour, Social Affairs and Family of the Slovak Republic;
 - e) Minister of Interior of the Slovak Republic;
 - f) Ambassador with a special mission for science and innovation of the Ministry of Foreign and European Affairs of the Slovak Republic;
 - g) Chair of the Nuclear Supervisory Authority of the Slovak Republic;
 - h) representative of the Slovak Rectors' Conference;
 - i) representative of the board of higher education institutions;
 - j) Chair of the Slovak Academy of Agricultural Sciences;
 - k) President of the Association of Industrial, Research and Development Organisations;
 - l) representative of the Research Agency;
 - m) representative of the Technological Agency;
 - n) one representative of an association of research- and technology-oriented universities;
 - o) four representatives of the business sector appointed by the Government.
- (7) The function of a Council Member is an honorary function and does not establish any employment relationship or any entitlement to remuneration.
- (8) The Council Members and their permanent representatives under par. 6, letters h) and i) of this article are appointed and recalled by the Government upon recommendation by the Ministry of Education, Science,

- Research and Sports of the Slovak Republic and upon proposal of the Council Chair.
- (9) The Council Member and his/her permanent representative under par. 6, letter l) of this article is appointed and recalled by the Government upon recommendation by the Ministry of Education, Science, Research and Sports of the Slovak Republic and upon proposal of the Council Chair.
- (10) The Council Member and his/her permanent representative under par. 6, letter m) of this article is appointed and recalled by the Government upon recommendation by the Ministry of Economy of the Slovak Republic and upon proposal of the Council Chair.
- (11) The Council Member and his/her permanent representative under par. 6, letter n) of this article is appointed and recalled by the Government upon recommendation by the association of research- and technology oriented universities and upon proposal of the Council Chair.
- (12) The Council Members and their permanent representatives under par. 6, letter o) of this article are appointed and recalled by the Government upon recommendation by employers' associations and upon proposal of the Council Chair.
- (13) Membership of the Council shall cease
- on death;
 - by recall, if it is a Council Member as per par. 6, letter h), i), l) to o) of this article;
 - by withdrawal on the basis of a written request delivered to the Council Chair, if it is a Member as per par. 6, letters h), i), l) to o) of this article; and
 - by expiry of the term of office under par. 18 and 19 of this article.
- (14) The Government shall recall the Council Member as per par. 6, letters h), k) to n) of this article if s/he fails to attend two consecutive Council meetings without giving reason or without being substituted by his/her representative.
- (15) The Council's activities are managed by the Council Chair. The Council Chair is liable to the Government for the Council's activities. During his/her absence, the Council Chair is substituted by the Minister of Education, Science, Research and Sports or by other Council Vice-Chairs in the order specified in par. 5 of this article.
- (16) The Council Vice-Chairs may only be represented at the Council meetings by the State Secretary of the respective ministry or by the Vice-Chair of the Slovak Academy of Sciences. The Council Vice-Chair in charge of substituting the Council Chair is not allowed to entrust this duty to the State Secretary of the respective ministry or to the Vice-Chair of the Slovak Academy of Sciences.
- (17) The other Council Members as per par. 6, letters a) to e) of this article may be substituted at the Council meetings by the State Secretaries of the respective ministries. The other Council Members as per par. 6, letters g), i) and j) may only be substituted at the Council meetings by their permanent representatives.
- (18) The term of office of the Council Members appointed under par. 5 and par. 6, letters a) to e), g), j) and k) of this article is tied to the term of office of the respective function.
- (19) The term of office of the Council Members appointed under par. 6, letters h), l) to o) is four years. The Council Members may be appointed repeatedly.

Article 4 **Council Chair**

The Council Chair, in particular:

- a) convokes and manages the Council meetings and the Council Presidium meetings;
- b) proposes to the Government the appointment and recall of members under Art. 3, par. 6, letters h), k) to n);
- c) appoints and recalls the chairs and other members of expert working groups upon proposal by the Council pursuant to Article 8 hereof.

Article 5 Council Presidium

- (1) The Council Presidium, in particular:
 - a) manages the Council's activities in between meetings;
 - b) coordinates the work of the Council's expert working groups.
- (2) The Council Presidium decides about the participation at the Council meetings and Council Presidium meetings by other persons, including representatives of the committees of the National Council of the Slovak Republic who are not Council members.
- (3) The Council Presidium informs the Council about its activities in between meetings.
- (4) The meetings of the Council Presidium are usually held once a month.

Article 6 Council Members

- (1) The Council has 24 members, including the Council Chair and Council Vice-Chairs.
- (2) The Council Members
 - a) are obliged to attend the Council meetings and the meetings of the Council's expert working groups to which they were appointed, to actively participate in the Council's work, and to fulfil the tasks arising from the resolutions adopted by the Council;
 - b) have the right to submit to the Council proposals for agenda, and to attend any meeting of the Council's expert working groups;
 - c) are obliged to submit justified proposals for substantial changes to draft resolutions on the documents discussed by the Council at the latest 48 hours prior to the beginning of the respective Council meeting. A substantial change to a resolution means a proposal for cancellation or delay of discussion on a point of agenda.
- (3) The Council Members shall keep confidentiality of the discussed documents until they are approved by the Council.

Article 7 Permanent Committee of the Government Council for Science, Technology and Innovation for the RIS3 Implementation (PC GCSTI RIS3)

- (1) The PC GCSTI RIS3 is the cross-sectional coordination body identifying the state of RIS3 implementation for the GCSTI and preparing recommendations for the GCSTI, created on the basis of the partnership principle.
- (2) The PC GCSTI RIS3 is chaired by the Minister of Education, Science, Research and Sports of the Slovak Republic, and vice-chaired by the Minister of Economy of the Slovak Republic.

- (3) The PC GCSTI RIS3 is composed, pursuant to the decision of the Minister of Education, Science, Research and Sports of the Slovak Republic and the Minister of Economy of the Slovak Republic, on the basis of the partnership principles, of the appointed representatives of:
- a) the Ministry of Education, Science, Research and Sports of the Slovak Republic, the Ministry of Economy of the Slovak Republic (where at least one member represents the Managing Authority for the Operational Programme Research and Innovation and the Intermediate Body for the Operational Programme Research and Innovation);
 - b) the Research Agency;
 - c) the Technological Agency;
 - d) other selected organisations within the founding competence of the Ministry of Education, Science, Research and Sports of the Slovak Republic;
 - e) other selected organisations within the founding competence of the Minister of Economy of the Slovak Republic (including organisations in which the Ministry of Economy of the Slovak Republic exercises its decision-making powers);
 - f) selected higher education institutions conducting research;
 - g) the Slovak Academy of Sciences;
 - h) other research institutions (e.g. sectoral research institutions, university hospitals, non-profit research and development institutions);
 - i) the business sector;
 - j) representatives of regional self-governments (SK8);
 - k) the Operational Programme Human Resources;
 - l) the Operational Programme Effective Public Administration;
 - m) the Integrated Regional Operational Programme;
 - n) the Operational Programme Environmental Quality
 - o) the Operational Programme Integrated Infrastructure;
 - p) the Rural Development Programme;
 - q) by decision of the Chair of the Research Agency Council;
 - r) by decision of the Chair of the Technological Agency Council.
- (4) The members of the PC GCSTI RIS3 are appointed and recalled jointly by the Minister of Education, Science, Research and Sports of the Slovak Republic and the Minister of Economy of the Slovak Republic.
- (5) The Government Plenipotentiary for Research and Innovation is also a member of the PC GCSTI RIS3.
- (6) The PC TGCSTI RIS3 meets at least once in two months.
- (7) The PC TGCSTI RIS3 fulfils, in particular, the following tasks:
- a) monitors the RIS3 implementation and the fulfilment of the action plans for RIS3 implementation in relevant areas, while using the available analytical capacities of central state administration bodies;
 - b) gives opinions on the linkages, timing and funding of the calls under relevant operational programmes with respect to their contribution to the fulfilment of the RIS3 objectives;
 - c) gives opinions on the linkages, timing and funding of the calls for projects from the state budget which are relevant to the RIS3 implementation, and informs the GCSTI of any irregularities;
 - d) evaluates the RIS3 implementation by means of monitoring reports, and proposes measures for improving its implementation and submits them to the GCSTI;
 - e) ensures the preparation of evaluation reports on the state of the areas of economic specialisation, prospective areas of specialisation and areas of specialisation on the basis of available scientific and research capacities (hereinafter referred to as the “areas of research specialisation”);
 - f) coordinates the detailing of Government decisions and regulations and laws relating to science, research and innovation in Slovakia;
 - g) coordinates the monitoring of the state of

- integration of the Slovak science in the European Research and Innovation Area;
 - involvement of the industry-oriented Slovak science in the innovation programmes of multinational groups running their activities in Slovakia;
 - excellent and industrial research in Slovakia;
- h) coordinates the monitoring of the state of investments in public research and scientific infrastructures so that to ensure cost efficiency and prevent duplicated investments in infrastructures;
- i) gives opinions on the specialisation of public scientific and research institutions, and proposes to the GCSTI recommendations in this field.

Article 8

Expert working groups of the Council

- (1) The Council appoints expert working groups to ensure the exercise of the Council's competences under Art. 2, par. 4 hereof. The work of an expert working group is temporary and expires upon completion of the tasks for which it was set up.
- (2) The members of the expert working groups are selected by the Council from among prominent experts in the given field, and are appointed and recalled by the Council Chair upon proposal of the Council. The members of expert working groups may also be recalled on the basis of withdrawal.
- (3) A Council expert working group may have among its members representatives of ministries, other central state administration bodies, the Slovak Academy of Sciences, higher education institutions, the Research Agency, the Technological Agency, research and development organisations, employers' associations and unions, trade unions, and domestic and foreign experts.
- (4) An expert working group is always chaired by a Council Member.
- (5) The Chair of the expert working group is liable to the Council for the expert working group's activities.

Article 9

Council meetings

- (1) The Council meetings are convoked and managed by the Council Chair.
- (2) The Council meets as appropriate and usually on a quarterly basis.
- (3) The agenda of the Council meetings is prepared by the Minister of Education, Science, Research and Sports in cooperation with the Minister of Economy and the Government Plenipotentiary for Research and Innovation.
- (4) The Council adopts resolutions on the documents discussed.
- (5) The Council constitutes a quorum if the majority of all its members are present.
- (6) The resolution on a document is adopted if was voted by a majority of the present Council Members. Where votes are tied, the Chair has the casting vote. The Chair may also put to the vote individual issues related to the document discussed.
- (7) The manner of submitting documents to the Council meetings in written and electronic form, the preparation and the meeting rules, and the publishing of the results of the meetings on the internet are laid down in the Council's Rules of Procedure.

- (8) The Rules of Procedure are adopted by the Council upon proposal by the Council Chair. The Rules of Procedures are adopted if voted by the majority of all Council Members.

Article 10
Council Secretary and Secretariat

- (1) The function of the Council Secretary is exercised by the Director of the Secretariat of the Government Plenipotentiary for Research and Innovation, who attends the Council meetings without the voting right. The Council Secretary is appointed and recalled by the Council Chair.
- (2) The Council Secretary, in particular:
- a) provides for the organisational and administrative preparation of the Council meetings;
 - b) produces records from the Council meetings;
 - c) coordinates the preparation of documents for the Council meetings.
- (3) The tasks related to the organisational, administrative and technical preparation of the work of the Council and of its expert working groups are carried out by the Secretariat of the Government Plenipotentiary for Research and Innovation. The function of the Council Secretariat is exercised by the Secretariat of the Government Plenipotentiary for Research and Innovation. The costs of the Board Secretariat are covered from the budget of the Government Office of the Slovak Republic.
- (4) The Council Secretariat cooperates in the fulfilment of the tasks under par. 3 of this article with the Ministry of Education, Science, Research and Sports of the Slovak Republic and the Ministry of Economy of the Slovak Republic.

Article 11
PC GCSTI RIS3 Secretariat

- (1) The tasks relating to the organisational, administrative and technical provision for the PC GSTI RIS3 activities are carried out by the Secretariat. The function of the PC GCSTI RIS3 Secretariat is exercised by the European Union Structural Funds Section of the Ministry of Education, Science, Research and Sports of the Slovak Republic. The costs of the Secretariat are covered from the technical assistance budget of the Operational Programme Research and Innovation.
- (2) The function of the Secretary of the Secretariat is exercised by the General Director of the European Union Structural Funds Section of the Ministry of Education, Science, Research and Sports of the Slovak Republic.
- (3) The Secretary of the GCSTI Council and the Secretary of the PC GCSTI RIS3 Secretariat closely cooperate to eliminate any duplication and to ensure synergies in the execution of the agendas of the GCSTI and PC GCSTI RIS3.
- (4) The PC GCSTI RIS3 Secretariat ensures in particular:
- a.) the organisational and administrative preparation of the Permanent Committee meetings;
 - b.) records from the Permanent Committee meetings;
 - c.) coordination of the preparation of documents for the Permanent Committee meetings.

Article 12
Transitional and repealing provisions

- (1) The Statute of the Council of the Government of the Slovak Republic for Science, Technology and Innovation, approved by Government Resolution No. 114 of 27 February 2013, is hereby repealed.

- (2) The membership of the present members of the Council of the Government of the Slovak Republic for Research, Technology and Innovation and of the members of Council expert working groups appointed under the Statute approved by Government Resolution shall remain preserved after approval of this Statute by the Government.
- (3) The relevant provisions concerning the Research Agency and the Technological Agency and their representatives shall not apply until the agencies are established.

Article 13
Effect

This Statute shall enter into effect on the day of its approval by the Government.

Annex 2 List of RIS3 Indicators

Measurable output indicator	RIS3 measure																Total				
	1.1. Development of innovative capacities through cooperation between businesses and research institutions	1.2. Technological upgrade for structural changes in industry	1.3. Support for building research and innovation capacities in Slovak businesses	1.4. Establishment of indirect motivational tools	2.1. Fostering excellence of research	2.2. Development of excellent research while ensuring the necessary research and development infrastructures	2.3. Linking universities, the Academy of Sciences, research institutions and industrial partners	2.4. Systematic support and stimulation of international cooperation in science and technology	3.1. Stimulation of knowledge-oriented services and creative industry	3.2. Supporting research and innovation in environmental areas including adaptation to climate change	3.3. Research and innovation in addressing major societal challenges in Slovakia	3.4. Supporting an open and inclusive society	3.5. Support for a dynamic business environment favourable to innovation	3.6. Protection and utilisation of intellectual property	4.1. Improving the quality of secondary education	4.2. Improving the quality of higher education		4.3. Improving business involvement in education	4.4. Improving the quality of life-long learning	4.5. Increasing emphasis on education in fields relevant to the RIS3 priority areas	4.6. Increasing the mobility of highly skilled workers
Employment growth in supported enterprises		9 300					10	20	1 087	12	32	1 118	1 087								3 366
Estimated annual greenhouse gas reduction																					9 300
Number of new SMEs established by persons from disadvantaged social groups	116	116	116		60	125	78	23		116	7	7	22	116	116				125	1 110	
Number of new researchers in supported enterprises	27																			29	
Number of energy efficiency measures implemented in enterprises	2	2	2		10	10	4	3		2			2	2						39	
Number of enterprises with a registered EMAS and with the environmental management system	4																			4	
Number of enterprises cooperating with research institutions	88	88	88	44	10	44	47	11		88			88	88						687	
Number of enterprises receiving support for the launch of products which are new for the company	275	275	258	60			129	26	77	258	60	123	443	258						2 245	
Number of enterprises receiving support for the launch of products which are new for the market	161	161	150	38			75	30	49	150	38	78	294	150						1 374	
Number of enterprises receiving support	459	39	442	117	30		445	30	76	884	117	310	376	20		3		17		3 373	
Number of supported cluster organisations	11	11					6													40	
Number of supported SMEs run by persons from disadvantaged social groups												10	20							30	
Number of supported new enterprises	18	18	18	57			9			57	18	57	250	18			46			656	
Number of supported business and support platforms																				1	
Number of enterprises supported through counselling centres for SMEs																				589	
Number of supported research institutions					26	23	15	7		17			17	17		7	67			220	
Number of supported research institutions cooperating with enterprises	10	10	10																	20	
Number of applications for the registration of intellectual property rights	84	84	84				42	1		84		2	86	84						553	
Number of SME participations at fairs and exhibitions abroad													20							20	
Number of participants to counselling and training programmes									206		285	742	698					64		1 995	
Number of researchers working in reconstructed facilities of the research infrastructure																2 360	8 800			2 200	
Number of new start-ups and spin-offs					5	20	22			39			39	39						168	
Number of SMEs involved in EU programmes								6					4	21						39	
Number of information activities																	2 500			2 500	
Number of reconstructed research infrastructure facilities					20	23	7													103	
Estimated saving in primary energy sources in an enterprise according to the energy audit		25 000														7	23			23	
Saving in primary energy sources in an enterprise		25 000																		25 000	
Increased capacity of heat generation from renewable sources		3																		3	
Increased capacity of power generation from renewable sources		2																		2	
Increased waste recycling capacity									13 822											13 822	
Increased waste recovery capacity									23 077											23 077	
Number of central state administration bodies with legislative or legal competencies, receiving support for the implementation of the RIA process													13							13	
Number of partnerships linking higher education institutions to the business sector																	9			9	
Number of participants involved in life-long learning																		809		809	
Number of employees in the analytical units of state administration bodies at the start of support																		82		82	
Number of central state administration bodies that received support for the set up and/or fostering of their analytical units																		9		9	
Increased capacity of energy generation from renewable sources		5																		5	
Number of new standard procedures for prevention										2										2	
Number of Roma employed in the educational process and in the provision of social services												350								350	
Number of Roma employed in the field of spreading health and educational awareness, prevention and counselling											90									90	
Capacity of the supported school infrastructure															52 370					52 370	
Number of participants involved in activities supporting a dual system of education and traineeship in employers																	7 596			7 596	
Number of new or innovated study fields comprising elements of a dual system of education and traineeship in employers																			40	40	
Number of supported job-oriented bachelor's programmes																			9	9	
Employees including self-employed persons										1 450										1 450	
Number of energy audits		80																		80	
Number of subjects with improved equipment with intervention capacities		2																		2	
Number of supported medium and large stationary source facilities of air pollution intended to reduce emissions		1																		1	
Number of established measurement and management systems		2																		2	



Súbor ukazovateľov
RIS3

Source: MoESRS SR and MoE SR

Annex 3 Evaluations Plan of THE RIS3 Implementation

Title	Reason	Evaluation questions	Method	Data sources	Timeframe	Duration (months)	Form
Analysis of available data to complete the set of RIS3 indicators with respect to the fulfilment of partial objectives defined in the RIS3	Setting of the baseline values of indicators (indicators the target values of which could not be set and which are crucial for evaluating the fulfilment of the RIS3 partial objectives; for example, the following indicators: Number of companies that have moved higher in the supplier chart; Number of areas in which Slovakia has reached at least the average according to the European Public Sector Innovation Scoreboard; Total external R&D research).	Are all result and output indicators smart and can all of them be monitored? What other indicators should be added in the monitoring system for an effective monitoring of also partial RIS3 objectives?	One shot	ITMS, SO SR, surveys	2016	12 months	external
Analytical evaluation of the RIS3 areas of specialisation – current state and the development potential of the areas of specialisation in Slovakia and prospective areas of specialisation (the evaluation will include foreign peer-reviews)	Evaluation of the current state of key industries in Slovakia with regard to their prioritisation in the RIS3, and the international context and linkages to the research areas of specialisation	Are all four basic industrial sectors smart from the point of view of RIS3 specialisation, and do they have a clearly identified development potential for Slovakia, and are the development trends defined correctly? Are all the defined prospective areas of economic specialisation smart, and are their development tendencies identified correctly? Which of the available scientific areas of specialisation have a clearly identified smart development potential for the key industrial sectors and society-wide challenges defined in the RIS3?	Partial peer-review with the involvement of foreign experts in the different areas of specialisation. Foreign peer reviews of each area of specialisation with an emphasis on linkages between the economic and research areas of specialisation/in combination with forecasting/technology foresight in each area	SO, surveys and questionnaires/ entrepreneurial discovery process, ITMS, Eurostat, IPTS/OECD, analyses and studies, peer-review results	2016-2017	18 months, of which 6 months of preparation and 12 months of implementation	external
Thematic evaluation of the brain drain	Mapping of the situation in Slovakia	What is the current brain-drain situation? To which countries do highly skilled people leave? What are the reasons for people leaving	One shot	Social Insurance Agency, Central Office of Labour, Social	2017	12 months	external

		abroad? What are the characteristic features of people in this category (e.g. field of specialisation, education, region, average wage, etc.)? What measures would change the motivation of highly skilled people not to leave abroad? What measures would ensure the return of Slovak experts back to Slovakia to work in the RIS3 key areas of specialisation?		Affairs and Family, Health Insurance Company, Financial Administration			
Thematic evaluation of workers' mobility with a focus on mobility between the academic sector and the private sector in Slovakia and inter-sectoral mobility	Mapping of the situation in Slovakia	What is the mobility rate between the academic sector and the private sector and vice versa? What is the extent of inter-sectoral mobility of workers? In what fields? What is the mobility duration? Is it one-way?	One shot	Social Insurance Agency	2018	12 months	external
Continuous evaluation of the RIS3	Continuous evaluation of the RIS3 implementation	In what way are the strategy objectives being fulfilled? Have the AP tasks been fulfilled? At what level is it possible to expect the fulfilment of the objectives according to the current development? What measures will contribute to the fulfilment of the set objectives? What is the share of implementation of the measures defined in RIS3 in GDP growth?	One shot	ITMS, SO SR, other databases (SCSTI)	2019	12 months	external
Analytical evaluation of the areas of specialisation and of the implementation of their mutual links in practice, and proposing possible modifications for the period 2021–2027	Evaluation of the progress made in the different areas of specialisation since initial evaluations in 2015/2016.	Is it possible to modify the areas of specialisation of the Slovak Republic for the next period? If yes, what should be the modified areas of specialisation?	Entrepreneurial discovery process combined with the evaluation of global development trends in key industrial sectors (foreign peer-reviews of scientific areas of specialisation / technology foresight)	ITMS, SO SR, OECD, IPTS, Eurostat, questionnaires and surveys, peer-review results	2019-2020	24 months	external

Source: MoESRS SR and MoE SR