MINISTRY OF
INDUSTRY AND TRADE

UNIT OF SME POLICY, FINANCIAL INSTRUMENTS AND RETAIL

2014–2020
SME

SMALL AND MEDIUM ENTERPRISES SUPPORT STRATEGY 2014–2020

2012

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INTRODUCTION

The Small and Medium Enterprises Support Strategy 2014–2020 (hereinafter referred to as the "SME Strategy 2014+") is **an essential strategic document, which sets out 50 specific measures, the objectives of which include efficient operation and overall development of small and medium enterprises** (SMEs) as an important component of the national economy. **Hence the aim of the SME Strategy 2014+ is the definition of priority areas of support for the 2014–2020 programming period, the measures of which will be financed from EU Structural Funds** (notably from the European Regional Development Fund and the European Social Fund) **while national funds will also be used** (including the funds that will, as part of financial instruments, be put under national administration rules after revolving). The proposed areas of support are a result of the targeted selection of priorities, with which the operation of SMEs is associated within the upcoming period. The SME Strategy 2014+ also includes the outline of the sectors supported and the instruments to meet the individual priorities.

The SME Strategy 2014+ reflects essential European and national documents. As far as European initiatives are concerned, we should primarily stress the "Europe 2020" Strategy, the "Fifth Report on Economic and Social Cohesion"; "EU's Multiannual Financial Framework for 2014-2020", European Commission Communication "Small Business Act for Europe" including its revision, the "Innovation Union", European Commission's proposals for Regulations of the European Parliament and of the Council on Structural Funds concerning the next period of Cohesion Policy, as well as the Horizon 2020. Of national documents, the Concept primarily reflects the "International Competitiveness Strategy", "National Reform Programme of the Czech Republic", "Regional Development Strategy of the Czech Republic", "Strategic Framework of Sustainable Development of the Czech Republic", "National Policy of Research, Development and Innovation in the Czech Republic 2009–2015", "National Innovation Strategy of the Czech Republic", "Export Strategy of the Czech Republic" and the "Economic Growth Strategy of the Czech Republic". The SME Strategy 2014+ is also in conformity with studies for the Ministry of Industry and Trade or other Ministries, as appropriate. These primarily include the Berman Group's study "Analysis of Substantive Priorities and Needs of the Individual Areas within the Competence of the Ministry of Industry and Trade for Focusing the Aid from EU Structural Funds in the Next Programming Period (2014+)" and the background study for the Czech Republic's preparations for using EU Funds 2014+, prepared by association DHV CR – Quartus ("Analysis of Enterprise Support Linked to Research, Development and Innovation, Education, Environment and Rural Development, and Recommendations for 2014+").

The main underlying principles of the SME Strategy 2014+ primarily include thematic concentration (4 strategic priorities have been defined) **and a link to European and national strategic documents** (see the previous paragraph). We should also stress that the **SME Strategy 2014+ contributes to Europe's added value,** arising from the business activities of small and medium-sized enterprises and the support for them. Another very important fact is that the **SME Strategy 2014+, much more than before, accentuates the use of financial instruments**, such as privileged guarantees and loans or the provision of support through capital contributions

(venture capital). Nevertheless, in spite of the growing importance of financial instruments, grant schemes continue to be a significant instrument in supporting small and medium-sized enterprises.

The support for small and medium enterprises within the 2014–2020 programming period will lay emphasis on boosting their competitiveness by creating and disseminating innovation; thus the innovation business of small and medium-sized enterprises is one of the top priorities, and also conforms to national and European objectives. **In addition, the development of the Czech business environment and the continuous improvement of the quality of consultancy services for SMEs will be supported. An important area of** support while boosting the competitiveness, with positive environmental impacts, **will be the reduction of energy requirements of business activities** of small and medium-sized businesses as well as the support for using renewable and secondary energy sources.

An important aspect with an impact on the business success of small and medium enterprises is the favourable business environment. This is why emphasis will be laid not only on the above direct interventions **but the process of cultivating the business environment and reducing the administrative burden will also continue** for business activities not to be excessively curbed by administrative barriers and inefficiencies in the operation of state administration.

In preparing the SME Strategy 2014+, the 'top-down' and 'bottom-up'[1] approaches were used, thus also taking account of the needs and specificities of individual regions of the Czech Republic. In addition, the SME Strategy 2014+ was widely consulted with key partners. These primarily included ministries, regional and local public administration authorities, economic and social partners and other expert and business communities. **The consultations took place as business meetings, informal consultations as well as an official consultation process.**

Another important part of the preparation of the SME Strategy 2014+ was a public online consultation, primarily intended for entrepreneurs, who could thus express their views on the individual strategic priorities and areas of support. **The participants in the public consultation included 946 respondents, who clearly supported the proposed sectoral priorities and their measures.** Detailed results of this investigation are included in the annex.

The SME Strategy 2014+ supersedes the Concept of Supporting SMEs 2007–2013.

[1] The Concept was prepared by the top-down and bottom-up method, which makes it possible to reflect both top-down and bottom-up views. This approach may involve divergences between both directions, but these were continuously coordinated and refined, thus achieving an important feedback.

Principle of Partnership in the Preparation of SME Strategy 2014+

The SME Strategy 2014+ was prepared by the Ministry of Industry and Trade. Several consultations, meetings, roundtables etc. were held during the preparations while the SME Strategy 2014+ was sent to key partners for comments several times. **The partners included the Czech Chamber of Commerce, Association of Small and Medium-Sized Enterprises and Crafts of the Czech Republic, Czech Confederation of Commerce and Tourism, Confederation of Industry of the Czech Republic, SME Union of the Czech Republic, CzechInvest, Technology Centre of the Academy of Sciences of the Czech Republic, Czech-Moravian Guarantee and Development Bank, Association of Regions of the Czech Republic, and the Union of Towns and Municipalities of the Czech Republic.** As part of its preparations, the SME Strategy 2014+ was also presented to an external expert, Ing. Petr Zahradník, member of the Government's National Economic Council. In addition, the entire SME Strategy 2014+ was independently reviewed by Martina Jakl, Director of the Institute for Technological and Innovative Management at the University of Economics, Prague.

An important part of the preparation of the SME Strategy 2014+ was a public online consultation, primarily intended for entrepreneurs, who could thus express their views on the individual strategic priorities and areas of support. The questionnaire consisted of two sections – **an identification section,** which was only intended for small and medium-sized enterprises and primarily concerned the experiences of businesses in drawing aid from Structural Funds as well as national programmes and the identification of their opinions on various forms of such aid. It also strove to identify the main difficulties currently faced by small and medium-sized enterprises as well as their success in introducing new business products, processes or seeking new sales channels. The second **strategic development section,** which sought to identify opinions on the individual strategic priorities and areas of support proposed in the SME Strategy 2014+, was intended for all respondents participating in the interview survey. **The participants in the public consultation included 946 respondents, who positively responded to the selected areas of support and thus supported the sectoral priorities proposed.** Detailed results of this investigation are included in the annex.

The cooperation that took place during the preparation of the entire SME Strategy 2014+ as well as during the interview survey is highly appreciated, and the continuation of that cooperation is being planned for the implementation and evaluation of the SME Strategy 2014+.

1 LINKS TO STRATEGIC DOCUMENTS OF THE EU AND THE CZECH REPUBLIC

1.1 EU Legislative Environment

- *Notice from the Commission – Towards an effective implementation of Commission decisions* ordering Member States to recover unlawful and incompatible state aid (2007/C 272/05);
- *Commission Regulation (EC) No 800/2008, declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation);*
- *Commission Regulation (EC) No 1998/2006* on the application of Articles 87 and 88 of the Treaty to *de minimis* aid;
- *Community Framework for State Aid for Research and Development and Innovation* (2006/C 323/01);
- *Proposal for a Regulation of the European Parliament and of the Council 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 covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund* and repealing Regulation (EC) No 1083/2006 (COM(2011) 615 final);
- *Proposal for a Regulation of the European Parliament and of the Council on specific provisions concerning the European Regional Development Fund and the Investment for growth and jobs goal* and repealing Regulation (EC) No 1080/2006 (COM(2011) 614 final);
- *Proposal for a Regulation of the European Parliament and of the Council on the European Social Fund* and repealing Council Regulation (EC) No 1081/2006 (COM(2011) 607 final);
- *Proposal for a Directive of the European Parliament and of the Council on public procurement* (COM(2011) 896 final);
- *Proposal for a Directive of the European Parliament and of the Council on procurement by entities operating in the water, energy, transport and postal services sectors* (COM(2011) 895 final);
- *Proposal for a Directive of the European Parliament and of the Council on the award of concession contracts* (COM(2011) 897 final);
- *Proposal for a Regulation of the European Parliament and of the Council establishing Horizon 2020* - The Framework Programme for Research and Innovation (2014-2020) (COM(2011) 809 final);

- *Proposal for a Regulation of the European Parliament and of the Council laying down the rules for the participation and dissemination in Horizon 2020* – The Framework Programme for Research and Innovation (2014-2020) (COM(2011) 810 final);
- *Proposal for a Council Decision, dated XXX, establishing the Specific Programme Implementing Horizon 2020* - The Framework Programme for Research and Innovation (2014-2020) (COM(2011) 811 final);
- *Proposal for a Council Regulation on the Research and Training Programme of the European Atomic Energy Community (2014-2018)* complementing the Horizon 2020 – The Framework Programme for Research and Innovation (COM(2011) 812 final);
- *Proposal for a Regulation of the European Parliament and of the Council establishing a Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (2014 - 2020)* (COM(2011) 834/2).

1.2 Legislative Environment of the Czech Republic

- *Act No 47/2002 Coll., on support to small and medium-sized enterprises* and amending Act No 2/1969 Coll., on establishment of ministries and other central authorities of the Czech Republic's state administration, as amended;
- *Act No 130/2002 Coll., on support to research, experimental development and innovation from public funds* and amending certain related Acts (Act on Research, Experimental Development and Innovation Support), as amended;
- *Act No 218/2000 Coll., on budgetary rules*, as amended;
- *Act No 215/2004 Coll., governing certain rules of public aid and amending the Act on Research and Development Support, as amended.*
- *Act No 137/2006 Coll., on public contracts*, as amended.

1.3 EU Strategic Documents

"Europe 2020" Strategy

The Europe 2020 Strategy, a European Commission Communication approved by the decision of the European Council of 3 March 2010[2], is **the main economic strategy of the European Union (EU) until 2020.** The strategy with subheading "for smart, sustainable and inclusive growth" is based on the Commission's consultation document issued on 24 November 2009 and on the subsequent public consultation. **The proposed Europe 2020 Strategy addresses the bottlenecks in the Member States' economies, and should drive the EU out of the**

[2] COM(2010) 2020 final

economic crisis and ensure that it will grow and be competitive. The strategy is based on five measurable targets: 75% of the population aged 20-64 should be employed; 3% of GDP should be invested in research and development; The "20/20/20" climate/energy targets should be met (i.e. to increase energy efficiency by 20%; to increase the share of renewable energy sources in the final energy consumption to 20%; to reduce greenhouse gas emissions by 20 %); The share of early school leavers should be under 10% and at least 40% of **30-34–year-olds** should have a tertiary degree; 20 million less people should be at risk of poverty. The primary targets are followed up by seven 'flagship initiatives', under which goals and instruments to achieve them are defined at EU and Member State level. The flagship initiatives, along with the targets, are elaborated into integrated guidelines.

Integrated Guidelines

The Integrated Guidelines set out the framework for the Europe 2020 Strategy and reforms at Member State level.[3] The previous 24 integrated guidelines of the Lisbon Strategy have been replaced with ten guidelines that are more coherent, six of which address economic policy while four guidelines address employment issues. The guidelines for economic policies of Member States and the EU include: Ensuring the quality and the sustainability of public finances; Addressing macroeconomic imbalances; Reducing imbalances in the euro area; Optimising support for R&D and innovation, strengthening the knowledge triangle and unleashing the potential of the digital economy; Improving resource efficiency and reducing greenhouse gases; Improving the business and consumer environment, modernising and developing the industrial base to ensure that the internal market is fully functional. The guidelines for the employment policies of Member States and the EU include: Increasing labour market participation of women and men, reducing structural unemployment and promoting job quality; Developing a skilled workforce responding to labour market needs and promoting lifelong learning; Improving the quality and performance of education and training systems at all levels and increasing participation in tertiary or equivalent education; Promoting social inclusion and combating poverty.

Fifth Report on Economic, Social and Territorial Cohesion

The aim of the Fifth Report on Economic, Social and Territorial Cohesion was to analyse the contribution that cohesion policy and its implementation at regional level can make to meet the objectives of the Europe 2020 Strategy. The report, released by the European Commission as at 10 November 2010[4], says that the primary targets of Europe 2020 cannot be achieved without integrated policies at EU and Member State level. Furthermore, cohesion policy must be linked to other EU policies. Unlike its predecessors, the Fifth Report on Economic, Social and Territorial Cohesion also deals with institutions, as part of the analysis of regional economic disparities. According to this Report, it will be necessary to ensure that Member States and regions

[3] Council Recommendation on broad guidelines for the economic policies of the Member States and of the Union – Part I of the Europe 2020 Integrated Guidelines, Proposal for a Council Decision on guidelines for the employment policies of the Member States – Part II of the Europe 2020 Integrated Guidelines (COM(2010) 193 final)
[4] COM(2010) 642 final

concentrate EU and national resources on a small number of priorities responding to the specific challenges that they face. The Report is composed of the following four chapters: Economic, social and territorial situation and trends in the EU; Contribution of national policies to cohesion policy; Contribution of other European Union policies to cohesion; Summary of the positive impacts of cohesion policy on promoting cohesion targets and the proposals for the policy improvements.

European Commission Communication: A "Small Business Act" (SBA) for Europe and its Review

On 25 June 2008, the European Commission released its Communication entitled Think Small First. A Small Business Act for Europe[5]. This document primarily aims to adopt specific measures in order to unleash the growth potential of small and medium-sized enterprises. The Communication from the Commission includes five legislative proposals focused on creating the best possible conditions for the business of SMEs, ten principles to guide the conception and implementation of SME-related policies both at EU and Member State level and 93 political (non-legally binding) measures, 42 of which laid down as the Commission's commitments and 51 as challenges to EU Member States. Thus the SBA is being implemented not only at EU level but particularly in Member States.

The Communication from the Commission to the European Parliament, the Council, Economic and Social Committee and the Committee of the Regions of 23 February 2011 entitled Review of the "Small Business Act" for Europe[6] describes the progress made at European and Member State level during the existing implementation of the recommendations included in the SBA. It also **puts forward a set of new measures to address the challenges resulting from the economic crisis and to continue to develop the existing measures in accordance with Europe 2020 in five areas**, the first three of which are identical to the priority areas identified in the SBA Action Plan of 1 December 2008: (1) making smart regulation a reality for European SMEs; (2) paying specific attention to SMEs' financing needs; (3) taking a broad-based approach to enhancing market access for SMEs; (4) helping SMEs to contribute to a resource-efficient economy; (5) promoting entrepreneurship, job creation and inclusive growth. In relation to this review, a SME Envoy function was set up in the EU, who is in charge of facilitating communication between SMEs, the State and the EU, monitoring the policies with an impact on SMEs and promoting the reduction of administrative burden.

European Commission Communication: "Innovation Union"

The Innovation Union is one of the seven flagship initiatives **to help meet the objectives of the Europe 2020 Strategy**. The European Commission issued the Innovation Union communication on 6 October 2010[7]. The communication puts forward 34 measures, divided into six areas: 1. Strengthening the knowledge base, 2. Getting good ideas to market, 3. Maximising social and territorial cohesion, 4. European Innovation Partnerships (hereinafter referred to as the "EIPs"), 5.

[5] COM(2008) 394 final
[6] COM(2011) 0078 final
[7] COM(2010) 0546 final

Leveraging our policies externally, 6. Making the Innovation Union happen.[8] Progress towards the Innovation Union should be measured by two headline indicators: the R&D investment target and a new Innovation indicator, as requested by the European Council. The former indicator covers R&D investments as % of GDP (3% of GDP by 2020 within the EU). The latter indicator is defined as a share of fast-growing innovative companies.

Communication on Multiannual Financial Framework 2014–2020

The Communication from the Commission "A budget for Europe 2020" was presented on 29 June 2011 as a package of legislative and non-legislative proposals for the EU's Financial Framework for 2014–2020[9]. Apart from the communication on the upcoming financial framework, the package proposes a Regulation adopting the Multiannual Financial Framework 2014–2020 and an inter-institutional agreement among the European Parliament, the Council and the Commission on cooperation in budgetary matters and sound financial management. **The package lays down new parameters of supported areas, notably with a view to the Europe 2020 Strategy, and analyses the detailed approach and innovations in cohesion policy.**

Commission Staff Working Document. *Elements for a Common Strategic Framework 2014 to 2020 for 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, dated 14 March 2012*[10]

On 14 March 2012, **the European Commission presented the Common Strategic Framework (CSF) 2014 to 2020** to help Member States prepare for a new programming period. The CSF is a document that translates the targets and objectives of the Strategy for smart, sustainable and inclusive growth (Europe 2020) into key actions for CSF funds while setting up, for each thematic objective, the key measures to be supported from individual CSF funds and the mechanisms to ensure cohesion and compliance of the CSF fund programming with the economic and employment policies of Member States and the EU. Under the CSF, Member States shall prepare a "Partnership Contract", a document which will set out the Member State's strategy, priorities and measures for the effective and efficient use of CSF funds to meet the objectives of Europe 2020 and which will be subject to European Commission's approval.

[8] The communication includes the following annexes: I. Self assessment tool, II. Performance Scoreboard for Research and Innovation with 25 indicators, III. Information on the pilot EIP "active and healthy ageing" and a list of other potential EIPs identified by the European Commission.
[9] COM(2011) 0500 final
[10] SWD(2012) 61 final

1.4 Strategic Documents of the Czech Republic

***International Competitiveness Strategy* 2012–2020**

The International Competitiveness Strategy of the Czech Republic 2012–2020 was discussed and approved by the Government of the Czech Republic on 27 September 2011 by Resolution No 713. The International Competitiveness Strategy is based on nine pillars and two horizontal themes, and **consists of more than forty key measures and several hundred sub-measures, the purpose of which is to create favourable conditions for creative entrepreneurship, innovation and growth. The objective of the Strategy is to push the Czech Republic among the top twenty countries based on the Global Competitiveness Index in the years to come.** Hence the Czech Republic needs to shift from the developing model, which is broadly based on cheap workforce, to a system based on quality institutions and infrastructure, where the potential of the prepared workforce will be fully utilised and where creative entrepreneurship and innovation will drive the economy. The International Competitiveness Strategy is consistent with Europe 2020 and with the National Reform Programme of the Czech Republic, and has the following structure: 1. Institutions; 2. Infrastructure; 3. Macroeconomic stability; 4. Healthcare; 5. Education; 6. Labour market; 7. Financial markets; 8. Efficiency of the market in goods and services and improving the characteristics of enterprise; 9. Innovation; 10. Export-oriented policy; and 11. Cohesion policy.

National Reform Programme of the Czech Republic *(until 2020)*

The National Reform Programme for 2012 was approved by the Government of the Czech Republic on 11 April 2012 by Resolution No 271. **The National Reform Programme is the Czech Republic's contribution to meeting the objectives of Europe 2020 and summarises the main principles of reform measures** whereas specific steps and detailed proposals will be included in strategic documents prepared in the individual areas by competent authorities of the state administration or local and regional administration, as appropriate. The Programme is outlined for the entire period until 2020, and will be annually updated under what is known as the European Semester, with a view to the developments in meeting the objectives of Europe 2020 at a pan-European level, to the progress achieved in the Czech Republic and to the development of political priorities of the Government of the Czech Republic. The National Reform Programme has the following structure: 1. Consolidation of public finances; 2. Functioning labour market and social system as a prerequisite for competitive economy; 3. Education as a route to competitiveness and a higher productivity of labour; 4. Support of business, digitisation and the development of the digital market; 5. Support of growth, based on research and innovation; 6. Support for a low-carbon, environmentally friendly competitive economy; and 7. Promoting competitiveness by improving transport infrastructure.

National Innovation Strategy of the Czech Republic *(2012–2020)*

The National Innovation Strategy of the Czech Republic (NIS), approved by the Government of the Czech Republic by Resolution No 714 on 27 September 2011, reflects the current situation in the Czech Republic, whether in research or in the innovation activities of enterprises operating in the Czech Republic, and responds to the recommendations included in the Innovation Union, a document adopted by the European Commission. The global **target of the NIS consists of strengthening the importance of innovation and using state-of-the-art technologies as the sources of the Czech Republic's competitiveness, and increasing the benefits from them to long-term economic growth, to the creation of quality jobs and to the development of the quality of life in the territory of the Czech Republic.** The document is divided into four main sections, concerned with excellent research, knowledge transfer cooperation between academic sector and industry, support for innovative entrepreneurship, and people as bearers of new ideas and initiators of changes. In accordance with the International Competitiveness Strategy of the Czech Republic, the NIS primarily covers the next programming period, i.e. until 2020. The policy background and the objectives of the National Innovation Strategy of the Czech Republic will be used for updating the National Policy of Research, Development and Innovation in the Czech Republic 2009–2015.

Regional Development Strategy of the Czech Republic 2014–2020

The Regional Development Strategy of the Czech Republic 2014–2020 (RDS) is the essential policy document in respect of regional development and, just as the RDS 2007–2013, **will create the primary background to lay down regional approaches within the sectoral and segment policies and programmes that strive to boost competitiveness through the maximum utilisation of the production potential of regions.** Likewise, in relation to the 2014+ programming period, it will be necessary, in defining the national priorities, to respect the specificities of the regional development of the Czech Republic – for example in relation to the changing external and internal conditions. The above regional specificities will be elaborated in the oncoming RDS, the completion of which is expected in late 2012 or early 2013. **In relation to the development of cohesion policy and territorial agenda of the EU, the Regional Development Strategy should create preconditions for the preparation of strategies and concepts focused on the development of functional regions and micro-regions, towns and urban agglomerations, urban-rural partnerships etc.**

Export Strategy of the Czech Republic 2012–2020

The Export Strategy of the Czech Republic 2012–2020, which **primarily aims to increase the share of Czech exports to countries outside the European Union as well as to provide good support from the State,** was approved by Resolution No 154 of the Government of the Czech Republic on 14 March 2012. The Export Strategy is based on the International Competitiveness Strategy of the Czech Republic 2012–2020 and, accordingly, declares that its main vision is to contribute to the Czech Republic becoming one of the top 20 competitive countries globally by 2020. **The Export Strategy also lays emphasis on enforcing positive changes in**

the Czech economy, on promoting exports with high value added and on shifting Czech exporters towards final customers within the value chain. The Export Strategy 2012–2020 is based on three pillars: export intelligence, export development and promoting business opportunities. Each of these pillars is composed of main projects, a total of 12, which will be carried out by a series of specific measures, aiming at the restructuring and streamlining the export support. The Strategy also envisages promoting diversification of the Czech Republic's exports, with an emphasis on 12 priority countries (Brazil, China, India, Iraq, Kazakhstan, Mexico, Russia, Serbia, Turkey, Ukraine, the U.S., Vietnam) and on 25 countries of the Czech Republic's interest.

State Energy Concept of the Czech Republic *(until 2040)*

The State Energy Concept of the Czech Republic (SEC), approved by the Government of the Czech Republic on 10 March 2004 by Resolution No 211, is a document that lays down – in accordance with the wording of paragraph 3 of Act No 406/2000 Coll., on energy management – the State's strategic objectives in energy management with an outlook for 30 years. A new update to the SEC of the Czech Republic is currently under preparation, and primarily aims to ensure that reliable, secure and environmentally friendly energy is supplied to the population and the economy of the Czech Republic at competitive and affordable prices. It must also ensure that energy will be supplied without interruptions during crises, to the extent required for the operation of the essential components of the State's infrastructure and the survival of the population. With the State Energy Concept, the Government of the Czech Republic has laid down the political, legislative and administrative framework for the energy supply that is reliable, affordable and sustainable in the long term. The SEC sets out the State's strategic objectives in energy management, defines the long-term vision and strategic priorities of the Czech Republic's energy sector with an outlook for approximately 30 years, i.e. within the horizon established by law and concurrently for the period within which the financial return on investment in all types of resources and networks is usually ensured and where the main characteristics of the future developments can still be reasonably foreseen. Investments in building new resources are taken care of by energy companies, and the decisions are entirely based on the anticipated return on investment. Through its instruments, the State can only influence the behaviour of investors to a limited extent and in a manner compatible with competition law. Thus the Concept must provide not only the long-term guidance but also the necessary flexibility for new technical and economic developments.

Strategic Framework of Sustainable Development of the Czech Republic *(until 2030)*

The Strategic Framework of Sustainable Development of the Czech Republic, approved by the Government of the Czech Republic on 11 January 2010 by Resolution No 37, sets out the vision of sustainable development in the Czech Republic, **defines the main principles of sustainable development, the measuring indicators, and determines the key priorities and objectives of sustainable development, divided into five interconnected priority axes.** The application of the priorities and objectives proposed in the Strategic Framework should ensure that the prosperity of the Czech society is based on the mutual balance of three pillars of sustainable development — economic, social and environmental. **The Strategic Framework of Sustainable**

Development of the Czech Republic serves as a long-term framework for political decisions in the context of international commitments that the Czech Republic has undertaken or is about to undertake on account of its membership of the UN, OECD and the EU while respecting the Czech Republic's specific conditions and needs. Thus the objective of the Strategic Framework is to define the key themes and issues of sustainable development of the Czech Republic and to find the relevant measures to tackle them – such measures may be included in the existing and approved policy documents. The priorities and objectives of sustainable development are broken down into the following five priority axes: 1. Society, people and health; 2. Economy and innovation; 3. Territorial development; 4. Landscape, ecosystems and biodiversity; 5. Stable and secure society. The time horizon of the strategic framework is 2030.

Theme Cards

The National Coordination Authority (NCA), in cooperation with experts, has prepared thematic lines (TLs), which should serve as a transition between the level of the national development priorities and objectives and the priority axes for the individual Operational Programmes (OPs). TLs analyse the Czech Republic's reality in the economic, social and cultural areas while defining the activities that should be supported from OPs in order to achieve the objectives defined in the national development priorities. Precisely prepared TL cards should contribute to the clear configuration of the intervention logic, thus significantly contributing to the efficient drawing from CSF funds in the 2014–2020 programming period. As part of the SME support in the next programming period, the following items are of particular importance:

- Functional research and innovation system;
- Competitive enterprises;
- Mobility, availability, networks, energy.

National Priorities of Oriented Research, Experimental Development and Innovation *(until 2030)*

The National Priorities of Oriented Research, Experimental Development and Innovation, approved by the Government on 19 July 2012 by Resolution No 552, apply to the period until 2030 and are to be implemented on an ongoing basis. The document follows on the objectives and activities of the National Policy of Research, Development and Innovation in the Czech Republic 2009–2015. The priorities will be used in the preparation of R&D&I programmes for providing special purpose support as well as in the preparation of draft expenditure from the state budget on R&D&I. The document defines six priority areas (I. Competitive knowledge-based economy, II. Sustainability of economy and material resources, III. Environment for quality life, IV. Social and cultural challenges, V. Healthy population, VI. Secure society), 24 sub-areas with a total of 170 specific objectives. Apart from describing the individual priority areas and sub-areas, the document specifies the links between the individual areas and defines several system measures. The material also includes an opinion on the expected allocation of R&D&I expenditure from the state budget to

the individual areas, and defines the period for evaluating the implementation and updating the priorities. A detailed Implementation Document will be prepared by the end of June 2013.

The preparation of the SME Strategy 2014+ also involved the use of strategic documents crucial for the current 2007–2013 programming period.

National Policy of Research, Development and Innovation in the Czech Republic 2009–2015

The National Policy of Research, Development and Innovation in the Czech Republic 2009–2015 was approved by the Government of the Czech Republic on 8 June 2009 by Resolution No 729. **The objective of the National Policy of Research, Development and Innovation (R&D&I) is to create a framework to implement R&D&I measures encouraging the development of knowledge society, which will lead to a further increase in the competitiveness of the Czech economy and to the improved quality of life of the population of the Czech Republic.** The National Policy of R&D&I should contribute to the creation of the environment that will motivate excellent research and the creation of new knowledge usable in applications while leading to an improved demand for R&D results from the application field and their transformation into innovative products and services. To this end, the National Policy of R&D&I focuses on nine areas for which it defines sub-objectives and a set of follow-up activities. The objectives include: 1. Putting in place R&D&I strategic management at all levels; 2. Focusing R&D&I public aid on sustainable development needs; 3. Increasing the efficiency of R&D&I public aid system; 4. Using R&D results in innovations and improving R&D&I cooperation between public and private sectors; 5. Improving the Czech Republic's involvement in the international R&D&I cooperation; 6. Securing quality human resources for R&D&I – enough of quality research workers and quality graduates from higher education institutions; 7 Creating an R&D&I stimulating environment in the Czech Republic; 8. Ensuring effective links to policies in other areas; 9. Consistently evaluating the R&D&I system.

National Strategic Reference Framework 2007–2013

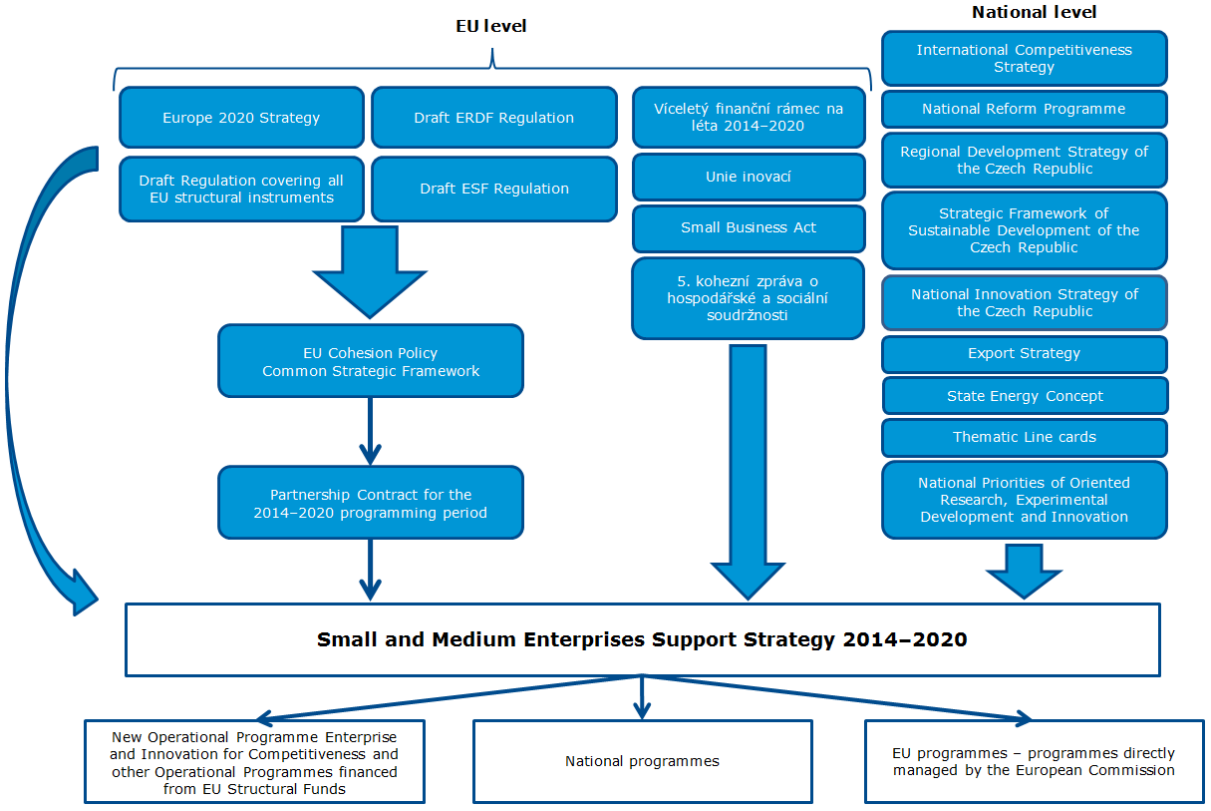
The National Strategic Reference Framework (NSRF) was approved by the Government of the Czech Republic by Resolution No 1477 of 20 December 2006. The NSRF of the Czech Republic is an essential programme document for drawings from Structural Funds and from the Cohesion Fund of the European Union from 2007 to 2013. The preparation of the NSRF of the Czech Republic 2007–2013 is based on the Member State's commitments defined in the Council Regulation (EC) No 1083/2006 of 11 July 2006 laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999. The background for the preparation of the draft National Strategic Reference Framework was the National Development Plan of the Czech Republic, which was taken into account by the Resolution No 175 of the Government of the Czech Republic. The NSRF was adopted by the European Commission on 27 July 2007. **The analytical section of the NSRF focuses on the identification of the Czech Republic's key strengths to boost its competitiveness, as well as on the identification of its problematic areas and weaknesses, which may prevent**

its economy and society from growing sustainably. The NSRF specifies a system of Operational Programmes of the Economic and Social Cohesion Policy 2007–2013, through which the individual priority axes are implemented.

Economic Growth Strategy of the Czech Republic *(2005–2013)*

The Economic Growth Strategy (EGS) was approved by Resolution No 1500 of the Government of the Czech Republic on 16 November 2005. **The objective of the Economic Growth Strategy is to put the Czech Republic much closer to the economic level of the economically more developed countries of the European Union while following the principles of sustainable development.** The Economic Growth Strategy has three essential roles – Setting the priorities for the economic policy coordination in the period until 2013 and directing the money from EU funds for the period of 2007–2013; Creating the best possible conditions for economic activities; Contributing to the maximum efficiency in directing limited public funds in the areas of direct intervention. The Economic Growth Strategy focuses on five priority areas, pillars, on which the competitiveness of the Czech economy is based – Institutional environment, Sources of funding, Infrastructure, Human resources development, and Research, development and innovation.

Figure 1: Links of SME Strategy 2014+ to strategic documents



(Source: Ministry of Industry and Trade)

2 ECONOMIC SITUATION OF THE CZECH REPUBLIC

2.1 Development of the Czech Republic's Macroeconomic Indicators

This chapter evaluates the macroeconomic development of the Czech Republic in recent years, which is the initial framework for the identification of problems and resulting challenges for focusing the Small and Medium Enterprises Support Strategy 2014–2020. The objective is to analyse the basic macroeconomic indicators of the Czech Republic.

In the last decade, and notably **from 2003 to 2008,** the Czech Republic and its economy **probably experienced its most favourable period in its modern history,** perhaps loosely analogous to the interwar pre-crisis period or the mid-1930's. The Czech Republic's GDP grew by more than 5% in that period (while average EU-27 growth was less than half that figure) in **a highly positive structure,** primarily based on **the export performance and a strong investment wave,** and this significantly helped approach (converge in real terms) the GDP per capita from around 73% to almost 83% of the EU average. This description combines two substantial features of the development of the Czech economy prior to the advent of the crisis: it was **very dynamically growing** but, given the level of development in the European context, it was **still underdeveloped**.

The period of rapid economic growth was concurrently accompanied by **low inflation** (the average inflation rate was 2.7% from 2003 to 2008, substantially affected by the adoption of one-off measures connected with the fiscal reform in 2008), **falling unemployment rate** (the average of 6.8% for the monitored period according to Eurostat methodology; approximately 1.5% more according to the domestic methodology of the Ministry of Labour and Social Affairs), **high trade balance surplus, especially at the end of the monitored period** (the average surplus for the monitored period was approximately 1.0% of GDP) and, **towards the end, also fairly positive public finance developments with a deficit below 1% of GDP** (the average deficit for the period was 3% of GDP at a relatively very low public debt of less than 28.5% of GDP vis-à-vis the EU average).

Even **the previous long-term period** from the start of the economic transformation was marked by fairly positive, albeit more variable, characteristics, essentially making the Czech economy a good example of a transforming and converging economy. Its main features included a reasonable growth rate and an exceptionally high level of investments, which, however, involved a relatively high trade deficit for the most of the 1990's and in the first years of the last decade.

Table 1: Basic macroeconomic indicators of the Czech Republic I

	2010		Year-on-year change in %					
	Billions of CZK in current prices	% of GDP	1992 - 2007	2008	2009	2010	2011e	2012f
GDP	3775.2	100.0	3.1	3.1	-4.7	2.7	1.7	0,7
Private consumption	1899.6	50.3	3.7	2.8	-0.4	0.6	-0.3	0,3
Government consumption	808.0	21.4	0.7	1.2	3.8	0.6	-1.0	0,3
Gross fixed capital formation (investments)	923.0	24.4	5.3	4.1	-11.5	0.1	1.7	-0,8
Exports of goods and services	2561.9	67.9	10.3	4.0	-10.0	16.4	9.8	3,8
Imports of goods and services	2441.4	64.7	12.3	2.7	-11.6	16.0	7.7	3,1
Contribution to GDP growth	- by domestic demand		3.5	2.7	-2.5	0.5	0.1	0.0
	- by inventories		0.3	-0.5	-3.0	1.4	0.1	0.0
	- by net exports		-0.6	0.9	0.8	0.9	1.7	0.6

(Source: European Commission, Czech Statistical Office, own calculations; e = estimate; f = forecast)

Table 2: Basic macroeconomic indicators of the Czech Republic II

	1992 - 2007	2008	2009	2010	2011e	2012f
Unemployment rate (as defined by Eurostat)	6.7	4.4	6.7	7.3	6.8	7.0
Unit labour costs	-	3.4	2.4	-0.7	1.2	1.5
Real unit labour costs	-	1.5	0.5	1.0	0.4	-0.3
Inflation rate (HICP)	3.9	6.3	0.6	1.2	1.8	2.7
Terms of trade in goods	-	-1.9	2.9	-2.7	-1.0	0.0
Trade balance in goods to GDP	-2.8	0.6	2.3	1.3	2.3	2.6
Current account to GDP	-3.2	-2.9	-3.4	-4.4	-3.6	-3.2
Government deficit to GDP	-3.3	-2.2	-5.8	-4.8	-4.1	-3.8
Structural deficit to GDP	-	-4.4	-5.6	-4.6	-3.6	-2.9
Government debt to GDP	11.3	28.7	34.4	37.6	39.9	41.9

(Source: European Commission, Czech Statistical Office, own calculations; e = estimate; f = forecast)

The significant deceleration and the subsequent decline in the performance of the Czech economy occurred in 2008 and culminated in 2009, when it initially made itself felt as a huge slump in external demand (which **peaked in the middle of 2009,** with this actually being the first time after 1989 that the large openness of the Czech economy was tested in this way under the market conditions that were going through an unprecedentedly strong recession). In that period, exports as well as industrial output fell by a record-breaking 18% y/y while the GDP saw its greatest decline since the early 1990's – 5% y/y. Since the second half of 2009, the Czech economy has been in a process of very moderate, fragile and still highly uncertain recovery.

From recession to moderate recovery. It's very decent macroeconomic fundamentals and relatively exemplary discipline and prudence helped the Czech economy **avoid the global** (or rather Euro-Atlantic) **financial crisis** although a significant fall in real output was likely

unavoidable, given the economic structure and high openness of the Czech economy (the only EU country that did not experience an economic recession in that period was Poland).

While the first wave of the economic recession primarily affected the Czech economy through foreign trade flows, the subsequent deterioration in the economic performance made itself felt through **subdued domestic demand,** notably in **investments** and investment flows; given the reduced availability of funding, notably loans, and the halted flow of foreign direct investment (FDI), and later due to public finance austerity measures, investments were also heavily affected in 2009 (a year-on-year decline by more than 11%) and their stagnation at muted levels has persisted afterwards; this was combined with a modest development of household consumption, which contributed to the suppression of the overall performance of domestic demand. While external demand, due in particular to the significant recovery of the German economy, recovered remarkably soon and still is actually the only highly positive and hopefully sustainable contribution to the Czech economic performance, investments continued to be strongly muted while household consumption is also modest and significantly subdued.

Regardless of the huge shock to the real economy, the domestic financial sector – though predominantly controlled by foreign entities – remained fairly stable, sound and particularly saved from the crisis conditions known from Ireland, the United Kingdom, Greece, Spain, Belgium, Germany and other countries; the reasons for this positive phenomenon presumably include responsible regulation, strong domestic deposit base and low exposure to foreign risks – notably almost no exposure to toxic assets and foreign currency loans.

In reaction to the economic crisis, the Czech Government adopted two types of stimulating measures, some of which being typical immediate stimuli, only applicable to alleviate the impacts of the crisis, while others may be seen as instruments applicable for a longer period of time to encourage competitiveness; these stimuli totalled nearly 2% of the Czech Republic's GDP.

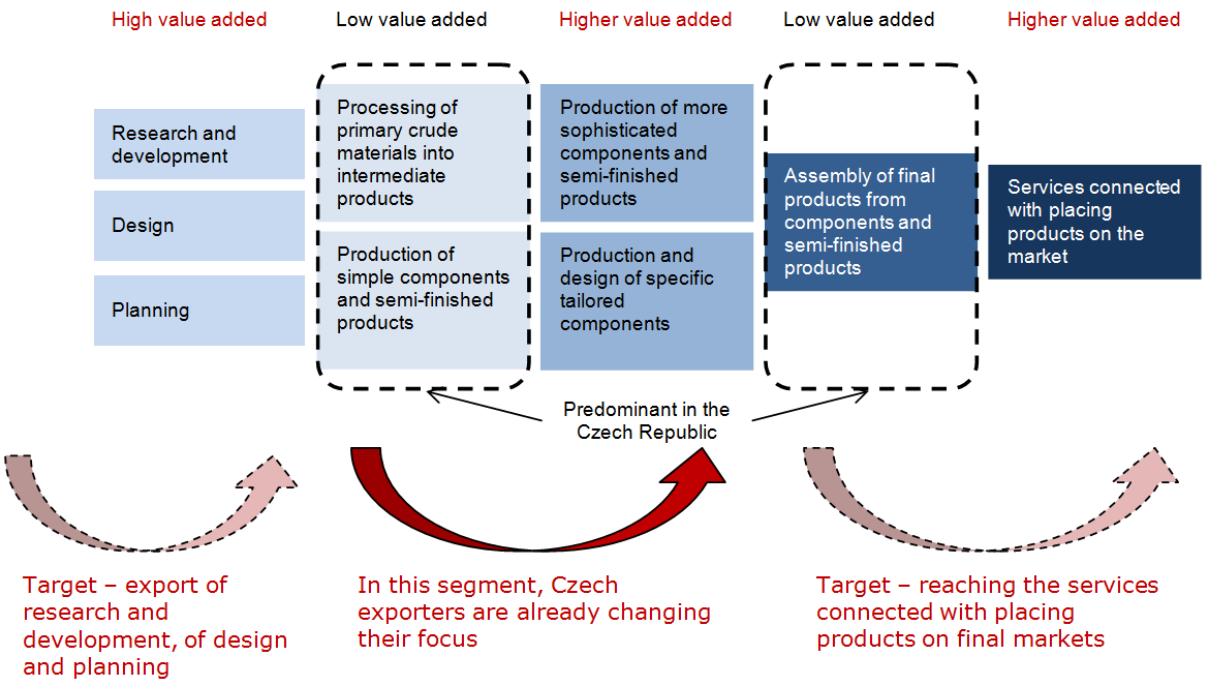
Hence, in a way, the economy of the Czech Republic can be currently seen as 'multi-speed', the duly and smoothly functioning part of which is based on attracting the external demand, whereas its second part, focused on domestic demand, tends to wane in the current period as concerns growth rate.

In view of the potential taxation and other fiscal changes, inflation may continue to swell slightly in the upcoming period, but probably not above the values usual in Europe. Unemployment remains relatively high (vis-à-vis its pre-crisis values) and is not very likely to fall significantly. Industrial output is in a good and sustainable condition, owing primarily to foreign factors. The contrary is true of construction, which finds itself in a period of significant downturn, affected by a dramatic reduction of investment as well as government expenditure, and this also applies to most services linked to domestic demand. Household consumption is also muted and unlikely to show signs of any huge increase, given the austerity measures of the State as well as the private sector.

It seems to be very evident that the effect of the extensive factors of expansion responsible for the Czech Republic's economic developments in the previous period (stimuli to encourage FDI inflow, privatisation of major industrial and financial corporations and expansion of corporations in services, attractiveness of the country because of its accession to the EU) has been slowly exhausted, and the future economic development and the policy to encourage it will need to lay much stronger emphasis on the development of qualitative factors in competitiveness, the detailed elaboration of which at the level of small and medium-sized enterprises is presented in the following chapters of the SME Strategy 2014+.

In the context of the global economy, the Czech Republic is a sort of a production base for European markets and the markets nearby. In addition, it should be noted that the use of this production base primarily depends on foreign managements of individual global companies. Domestic firms still have a very limited potential and its expansion largely depends on demand from transnational firms. Naturally, this is not the best starting point for the Czech economy. Nevertheless, if we exclude countries with long-term market economies from this comparison, the Czech Republic's position in the comparison is fairly good. Foreign trade is certainly the Czech economy's forte.

Figure 2: Predominant position of the Czech Republic in production value chain



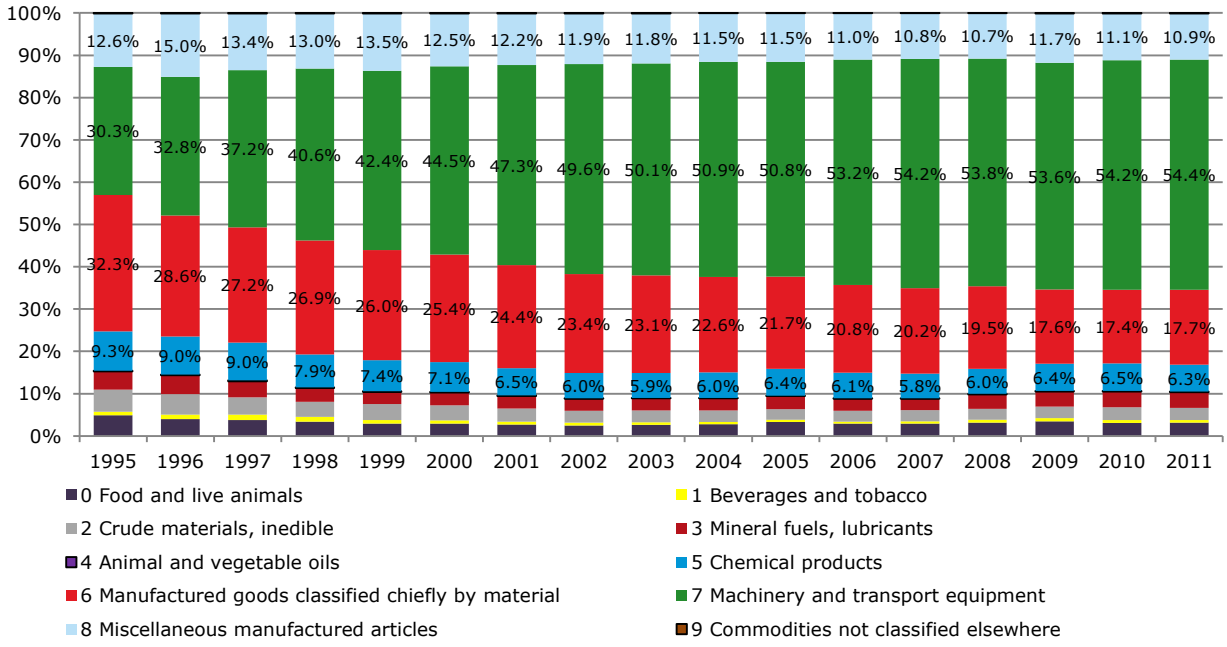
(Source: EEIP, 2009; Export Strategy of the Czech Republic 2012–2020)

The graph below indicates that a very important item in terms of development is category 7 – Machinery and transport equipment, the share of which in all exports was 54.4% in 2011. By contrast, category 6 – Manufactured goods classified chiefly by material, has recently developed negatively. The shares of the other categories continue to be constant.

Thus the surplus of the Czech Republic's trade balance is particularly a result of the items of category 7 which, unlike category 6, is primarily focused on final products. Regarding the exports

of transport equipment and machinery, we should point out the risk of the insufficient diversification of exports, with the automotive and transport industry making up more than a half of all exports. Nonetheless, the rate of increase in other categories of exports is currently accelerating (notably in category 8 – Miscellaneous manufactured articles, and category 5 – Chemical products), and this may indicate a slow diversification of the main driving sectors of Czech industry.

Graph 1: Development of the Czech Republic's export structure



Source: Czech Statistical Office, Berman Group, Ministry of Industry and Trade

2.2 SWOT Analysis of the Czech Economy

Strengths	Weaknesses
• Strong increase in the expenditure on research and development in the sector of foreign enterprises; • Strong export performance; • The main restructuring wave already completed in the traditional sectors and, in spite of the strong competition from low-cost countries, companies that are able to succeed in those sectors exist in the Czech Republic; • Good technical competences and tradition of industrial know-how; • Noticeable increase in direct investment by domestic entities abroad, motivated by the real expansion of their own business abroad; in addition, investments have shifted from production towards strategic services and R&D&I in recent years; • Good position of the sectors that require high knowledge according to performance characteristics vis-à-vis traditional sectors; • Increase in the number of development centres at companies (increase in the number of entities that carry out research, development and innovation activities); • High level of integration of Czech enterprises and institutions in the EU economy and their close interconnection with neighbouring countries in particular; • Strong export potential of the economy, notably of the manufacturing industry; • Competitive firms based on knowledge and high level of innovation.	• Foreign trade dependence – Czech products reach global markets indirectly in particular, through foreign (parent) companies + low level of autonomy of those Czech arms; this also involves limited innovation stimuli; • Use of qualified workforce for relatively standardised activities; • Much lower performance of domestic manufacturers of non-tradable goods vis-à-vis foreign firms; • The increase in the Czech Republic's export performance is driven by foreign business and trade competences; • Missing strategic and managerial competences and skills; • A large share of owners of originally local SMEs have no ambition to continue to expand their enterprises; • High susceptibility of enterprises to economic cycle as well as to external cyclical developments; • The largest portion of Czech industry is still composed of traditional sectors, i.e. activities where competitiveness is based on traditional factors, notably efficiency and productivity improvements; • Strong regional differences (notably as concerns the share of expenditure on research and development, innovation potential, level of investment or, for example, structural unemployment or transport infrastructure coverage) and predominance of only fragmented and limited regional innovation capacities; • Very limited cooperation on innovation activities (notably between higher education institutions and the application sector) – predominant reliance on internal sources; • Worsening availability of good-quality and skilled human resources for knowledge and technology based activities; • Small integration of transnational companies' branches in the strategic activities of their parents; • Poor transport infrastructure, and limited connection to European backbone networks.

Opportunities	Threats
• Another wave of SF funding for use virtually throughout the Czech Republic; • Reform of science and research financing – boosting the support of quality instead of quantity, and new stimuli to more intense cooperation between industry and academics; • Strategic position for access to Western European markets; • Improvement of institutional environment as a signal for foreign investments in high added value activities; • Creation of stable conditions for business in terms of regulations, tax rate changes etc. • Long-term appreciation of the Czech koruna puts pressure on productivity and qualitative changes at business level due to adverse impacts of the strengthening currency on the price competitiveness of the outputs of economic activities carried out in the territory of the Czech Republic; • Actual recovery of the global economy, chiefly of emerging markets – new stimuli to foreign trade; • Strong participation of domestic firms in European development programmes, notably in the implementation of comprehensive (extensive) investment projects (including the expanding range of post-production and after-sale services); • Medium-term potential of innovation supply owing to the implementation of larger projects by national and regional research centres with support from OP Research and Development for Innovation with required emphasis on the application of their results in business practice; • Advent of investments (investors) with high technology and knowledge requirements; • Influx of top skilled workers from abroad (countries outside the EU); • Support for activities of enterprises in the areas of social challenges and key technologies; • Use of foresight, creation of policies based on cognition /knowledge /information /facts /experience (evidence-based policy).	• Missing higher education reform – declining education quality in favour of quantity; • The pension situation, now fairly good compared to developed countries, is going to worsen soon – missing pension reform – constantly increasing pressure on public finances; • Competitiveness of manufacturers may be weakened notably vis-à-vis emerging markets due to unequal market conditions in relation to manufacturers and customers from third countries (including the obstacles to EU manufacturers entering those markets); • Persisting government deficit and rapid rate of population ageing as potential risks to the existing macroeconomic stability; • Long-term decline in the level of savings and their lagging behind investments, with this being evident in the deficit of the current account of the balance of payments, which needs to be covered by foreign resources; • Declining availability of funds for public interventions in the economy, including enterprise support; • Growing volume of foreign companies' facilities to be removed from the Czech Republic; • Rising prices of inputs (such as energy, basic materials); this will continue to worsen the competitiveness of traditional enterprises; • Inadequate protection of new knowledge, with difficult and lengthy enforcement; • Long-term underfunding of knowledge capacities located in Prague, i.e. insufficient resources for their development; • High administrative burden associated with founding a business and with business activities in general; • High administrative burden associated with tax collection; • Nepotism in state administration; complicated public procurement process.

Source: Berman Group, Ministry of Industry and Trade

3 Analysis of the Czech Republic's Business Environment by Evaluating the Administrative Burden on Entrepreneurs

The following chapter analyses the business environment in the Czech Republic. However, as some of the essential SME themes are evaluated in detail in separate chapters, the analysis only focuses on the summary evaluation of crosscutting issues of business environment, i.e. **evaluation of administrative burden on entrepreneurs**[11]. This is also because,

since 2008, **the Ministry of Industry and Trade has been the coordinator of the main system instrument in that area – the Plan of Reducing the Administrative Burden on Entrepreneurs** (hereinafter referred to as "Plan"). The Plan addresses business problems and barriers that entrepreneurs and their associations and institutions highlight most frequently in an effort to resolve or reduce/minimise the obstructions and notification obligations.

The primary communication with entrepreneurs takes place through the Business Council[12] and newly also through working groups established for the Review of Administrative Burden on Entrepreneurs project (approved by the Government of the Czech Republic by Resolution No 861 on 1 December 2010). In this context, expert studies on entrepreneurs' awareness of administration are being prepared if necessary. In addition, expert conferences, seminars and public discussions are being held (such as the public electronic discussion on the proposed solution to significant market power) and, for the direct communication with entrepreneurs, there are also a newly established expert group at the Ministry of Industry and Trade and the "Zjednodusujeme.cz" website, where entrepreneurs can notify their suggestions in respect of administrative burden.

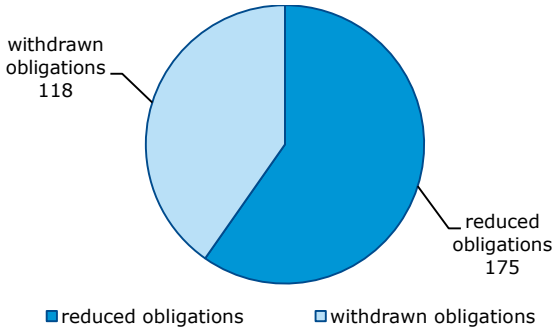
The specific target of the Plan is to reduce the administrative burden on entrepreneurs in the Czech Republic by 25% until 2012 from the overall burden measured in 2005.

The base 'adjusted' in this way will certainly be a better initial starting point for the acceleration of business in 2014–2020, both quantitatively and particularly qualitatively. The latest up-to-date assessment of this issue for the Government of the Czech Republic in 2012, pertaining to the Report on the Implementation of the Plan of Reducing the Administrative Burden on Entrepreneurs until 2011, states: "By and large, the changes carried out to date, as at 31 December 2011, correspond to the annual savings by entrepreneurs of CZK 12.1 billion, i.e. 16.38% of the overall burden measured in 2005. As at the monitored date, the administrative burden thus decreased to CZK 61.6 billion (vis-à-vis the initial position, which was CZK 73.7 billion in 2005)".

[11] The chapter is based on the latest "Report on the Implementation of the Plan of Reducing the Administrative Burden on Entrepreneurs" (until 31 December 2011)
[12] The Business Council is an inter-ministerial consultancy body at the Ministry of Industry and Trade, focusing on business environment support. Its mission includes enhancing the business environment and improving the international competitiveness of the Czech Republic. Its members are representatives of both public and private sectors.

It is reported that Ministries have dealt with a total of 293[13] notification obligations since the implementation of the Plan began; 118 obligations have been withdrawn and 175 reduced. The Plan of Reducing the Administrative Burden on Entrepreneurs until 2010[14] set the target of withdrawing 104 notification obligations and reducing 102 obligations by 2010.

Graph 2: Notification obligations

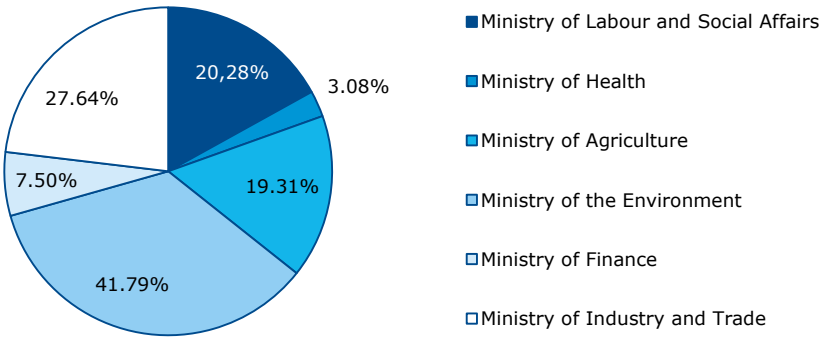


Source: Report on the Implementation of the Plan of Reducing the Administrative Burden on Entrepreneurs until 2011

As at the monitored date, the individual Ministries reduced the burden in the proportions as indicated in the following summary and graph:

- Ministry of the Environment (ME) by 41.79% (41.83% in 2010).
- Ministry of Labour and Social Affairs (MLSA) by 20.28% (20.18% in 2010).
- Ministry of Industry and Trade (MIT) by 27.64% (20.05% in 2010).
- Ministry of Agriculture (MA) by 19.31% (19.31% in 2010).
- Ministry of Finance (MF) by 7.50% (7.50% in 2010).
- Ministry of Health (MH) by 3.08% (2.88% in 2010).

Graph 3: Burden reductions by individual Ministries for 2011 (%)



Source: Report on the Implementation of the Plan of Reducing the Administrative Burden on Entrepreneurs until 2011

This is a comparison of the implementation of the Plan to the burden measured in 2005, always for the monitored Ministry separately.

[13] In 2011, the total number of notification obligations included notification obligations of two Acts not monitored in the Plan; however, their burden in 2005 was known.
[14] Initial target of reducing the administrative burden on entrepreneurs, as defined by Resolution No 446 of the Government of the Czech Republic of 21 April 2008 on the Plan of Reducing the Administrative Burden on Entrepreneurs until 2010.

In reducing the administrative burden on entrepreneurs, the length of the legislative process and the political situation in the country are relevant factors. Another factor is the development of the society and the State, with this consequently having an effect on the extent and possibilities of reducing some of the obligations in the specific period concerned.

In certain cases, the administrative burden on entrepreneurs increases, particularly if security, protection of public or other interests, operational verification records of the state budget, tax collection etc. are primary concerns, where the administrative burden on entrepreneurs cannot be excessively reduced to the detriment of those objectives.

The reduction of the administrative burden on entrepreneurs is a constant process, closely related to the agenda of Regulatory Impact Assessment (RIA), carried out at the start of the preparation of legislation. By contrast, the Plan of Reducing the Administrative Burden on Entrepreneurs is based on the principle of reducing the existing burden (reduction and elimination of notification obligations).

Table 3: Forecast of future developments in the reduction of administrative burden on entrepreneurs under the Plan

Ministry	Overall reduction of administrative burden in 2010 (compared to 2005)	Overall reduction of administrative burden in 2011 (compared to 2005)	Expected overall reduction of administrative burden as at 31 December 2012* and on ** (compared to 2005)
MLSA	20.18%	20.28%	25.81%
MH	2.88%	3.08%	9.29%
MA	19.13%	19.31%	19.36%
ME	41.83%	41.79%	41.79%
MF	7.50%	7.50%	36.28%
MIT	20.05%	27.64%	32.08%
Total	**15.60%**	**16.39%**	**22.60%**

Source: Report on the Implementation of the Plan of Reducing the Administrative Burden on Entrepreneurs until 2011

Explanatory notes:

* *Including the legislative changes that are not monitored in the Plan but their burden in 2005 is known.*

** *After the Act on Single Collection Point takes effect (SCP; applicable to MF, MLSA and MH).*

In view of the above statement in the previous blocks, the estimated reduction of administrative burden on entrepreneurs is calculated as at 31 December 2012 and then at **22.60%.**

Under this project, **the Ministry of Industry and Trade modifies, on an ongoing basis, the regulations** that fall within its material scope, **with the aim of facilitating/improving business and making it simpler.** Examples of reductions in the regulations within the competence of the Ministry of Industry and Trade include:

- **Act No 455/1991 Coll., on licenced trade** – Its Amendment has eliminated the duplicate governance of the terms of trading in electricity and gas; elimination of the unjustified requirement for expertise and medical fitness of all employees in the trades "Security of Property and Persons" and "Services of Private Detectives"; annulment of a specific integrity provision applicable to those trades and the trade "Provision of Technical Services to Protect Property and Persons"; deletion of the entrepreneur's obligation to keep

those documents in an establishment, for inspection purposes, that prove the way of the acquisition of goods and material; elimination of the entrepreneurs' obligation to notify the actual commencement of trade to the Trade Licensing Office; and the deletion of the obligation to notify the data maintained in the civil register information system (due to the database interconnection between the civil register and the register of trades).

- **Act No 64/1986 Coll., on Czech Trade Inspection Authority** – Elimination of the redundant duplicate inspection of personal hygiene and hygiene safety of an establishment; quality controls in respect of provided services where the administrative authority inappropriately intervened in the relations governed by private law; entrepreneurs' obligation to submit a report on adopted measures to eliminate deficiencies detected during an inspection; simplification and clarification of the legislation.

- **Act No 22/1997 Coll., on technical requirements for products** – Its Amendment has withdrawn the obligation to submit a certificate of insurance with an authorised person; reduction of certain notification obligations towards supervisory authorities, including the requirements for assistance during inspections, provision of duplicates of documents etc. In addition, in the context of other legislative changes, the use of new principles in submitting applications for authorisation was evaluated on an ongoing basis.

- **Act No 634/1992 Coll., on consumer protection** – In relation to the adoption of Act No 155/2010 Coll. (taking effect on 1 August 2010), which amended certain Acts to improve their application and to reduce administrative burden on entrepreneurs, the obligation to label products with all defined information (name or weight, dimension), with a view to the nature of products and the form of selling, has been reduced in the Act on Consumer Protection. Thus the decision on the extent and content of product labelling is left up to the obliged entities themselves, i.e. sellers. The obligation to label products with strictly defined data has, for numerous types of products, been evaluated as unnecessary, often even absurd, and clearly posed increased product labelling costs. Thus entrepreneurs only publish the information actually needed, with this reducing the requirements for the extent of producing and printing the information data (notably labels) and their placing on the market. This reduces the costs for sellers, manufacturers and importers associated with specifying the data about the marketed product.

- For example, as part of the material **"Proposals to take measures for boosting competitiveness and development of enterprise in the Czech Republic through the lens of environment protection legislation" (what is known as the "Eco-audit"),** the Ministry of Industry and Trade, in cooperation with the business sector, carried out a screening of problematic areas in the environmental legislation in 2011, on the basis of which a summary of proposals to modify individual legal provisions governing environment protection is being prepared. The tasks within the competence of the Ministry of the Environment, approved by Resolution No 157 of the Government of the Czech Republic of 2 March 2011 (a total of 96 suggestions), mostly of legislative nature, will be implemented on an ongoing basis, according to the Government's Legislative Work Schedule. The

updates to measures under the above Resolution of the Government of the Czech Republic will be, along with the report on their existing implementation, prepared in cooperation of the Ministry of the Environment and the Ministry of Industry and Trade, and submitted to the Government of the Czech Republic by 31 December 2012 and subsequently every two years.

Global Entrepreneurship Monitor 2011 (GEM)

The GEM is an international project dealing with entrepreneurship and entrepreneurial activity in the world. The project assesses comprehensive relationships between business creation and economic growth, and the factors with an impact on entrepreneurship in the individual countries while monitoring the differences among countries as to the level of entrepreneurial activity. The Czech Republic has been involved in the project since 2006, and the Global Entrepreneurship Monitor 2011 has presented information on entrepreneurial activity in the Czech Republic as at 2011.

GEM illustrates in the long term that entrepreneurial activity is influenced by entrepreneurial framework conditions. These help define the 'rules of the game', which set out the extent to which entrepreneurial activity in a country is productive. The framework conditions represent the inputs for entrepreneurial activity but also influence its outputs.

Under the GEM project, a total 50 experts in nine relevant areas of the GEM entrepreneurial framework conditions were interviewed about entrepreneurship. These conditions are complemented with eight general national framework conditions, as examined through the Global Competitiveness Index. The aim of the project was to provide expert insights into specific entrepreneurial framework conditions, and therefore interviews with experts in various expert fields were conducted.

A factor that helps entrepreneurship the most, according to experts, is the locational rent of the Czech Republic and its vicinity to Germany in particular, as well as the existence of good business opportunities. It should be noted that the interviews with experts had taken place prior to the outbreak of Europe's debt problems in the autumn of 2011. Characteristics of workforce, most frequently the decently educated and enterprising labour, were cited as the second favourable factor. The positive generational renewal, involving a better knowledge of languages, IT and having foreign experiences, was highlighted. The third positive factor included elements of governmental policy, such as the cut in corporate income tax in recent years, flat-rate tax and the reduction of compulsory contributions.

The political, institutional and social context (especially corruption, bloated bureaucracy and poor law enforcement) is the greatest barrier to entrepreneurial activity. Various aspects of governmental policy were mentioned equally often, most frequently the high taxation of labour and the complicated and frequently changing legislation. Financing was cited as the third preventing factor, but it lagged well behind the first two ones.

Experts made most recommendations on the governmental policy, notably in respect of simplifying the legislation and reducing the compulsory contributions. Recommendations to improve the political and institutional context, particularly in fighting corruption and improving the functioning of judiciary, were the second most frequent ones. The third area on which numerous recommendations were made was education. The need to change the elementary education, which should be focused on the development of entrepreneurial skills and on encouraging self-confidence, was mentioned most frequently. As far as further stages of education are concerned, boosting technical specialisations, language teaching and support for practical training and foreign experience were recommended.

If we compare the framework results to those of 2006, we find a few significant advancements. The first one is ***the improved awareness of the governmental policy in relation to entrepreneurship.*** *Despite the existing weaknesses, the experts are aware of the positive progress such as the income tax reduction or the reduction of compulsory contributions. Another change, which is by contrast negative, is* ***the deterioration in the awareness of the political and institutional context.*** *This is primarily due to the strongly increased awareness of corruption and its harmfulness. Poor law enforcement and bureaucracy are still viewed negatively. The third significant change is* ***the decreased awareness of market openness,*** *which was still significant in 2006, but this is no longer true of 2011. The last significant advancement is the improved awareness of the economic context, which primarily means the locational rent of the Czech Republic and the existence of business opportunities. The improvement in this area may also be due to the lack of other positive factors, seen by experts in other areas.*

4 Analysis of the Sector of Small and Medium Enterprises in the Czech Republic

4.1 Definition of Small and Medium Enterprises

The definition of micro, small and medium enterprise, as used in the EU, is based on Annex 1 to the Commission Regulation (EC) No 800/2008 of 6 August 2008, declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation). Some of the main criteria to assess the size of an enterprise include the staff headcount, annual turnover and annual balance sheet total (size of assets/property).

- The category of micro, small and medium enterprises is made up of enterprises that employ fewer than 250 persons, have an annual turnover/income not exceeding EUR 50 million and assets[15]/property[16] not exceeding EUR 43 million.
- Within the category of small and medium enterprises, a small enterprise is defined as an enterprise that employs fewer than 50 persons and whose annual turnover/income or assets/property does not exceed EUR 10 million.
- Within the category of small and medium enterprises, a micro enterprise is defined as an enterprise that employs fewer than 10 persons and whose annual turnover/income or assets/property does not exceed EUR 2 million.

A micro, small and medium enterprise that is starting business shall set the values of staff headcount, annual turnover/income and assets/property by his/her own reasonable estimate for the first accounting period when the business is run for at least 12 consecutive calendar months, i.e. for the first taxable period in which the business is run for the entire taxable period.

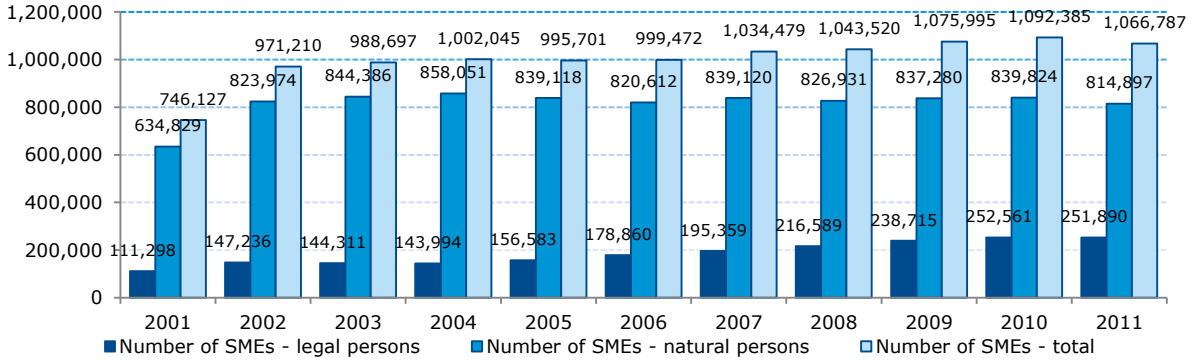
4.2 Development of the Number of Small and Medium Enterprises

Regarding the number of business entities in the Czech Republic, small and medium-sized enterprises are clearly the most numerous group of enterprises. According to statistics by the Czech Statistical Office[17], a total of 1,068,492 legal and natural persons were registered for business activity in the Czech Republic as at 31 December 2011, with 1,066,787 of them being small and medium-sized enterprises (with staff headcount of 0-249). This data indicates that the share of small and medium-sized enterprises in the total number of active business entities in 2011 was 99.84%. The statistical data also indicates that the number of small and medium

[15] Entrepreneurs who use double-entry accounting draw the data from the balance sheet.
[16] Entrepreneurs who use single-entry accounting draw the data from the income tax return.
[17] In relation to reducing the administrative burden on entrepreneurs, a new methodology preferring, to a greater extent, administrative data and numerical calculations to direct statistical surveys, was used. The 2010 data was recalculated here according to the same methodology, but the data for the other years are incomparable to that of 2010 and 2011. The data incomparability because of the changed calculation methodology applies to the entire SME Sector Analysis.

entrepreneurs declined by 25,598, i.e. 2.3%, in 2011 vis-à-vis 2010. The number of legal persons fell by 671 entities, i.e. less than 0.1%, while the number of natural persons went down by 24,927 entities, i.e. 3.73%. Thus a total of 251,890 legal and 814,897 natural persons that, according to the definition, fell within the category of small and medium-sized enterprises were doing business in 2011. The development of the number of small and medium-sized enterprises since 2000, broken down into legal and natural persons, is shown in the following graph.

Graph 4: Development of number of active SME entities in the Czech Republic, 2000–2010



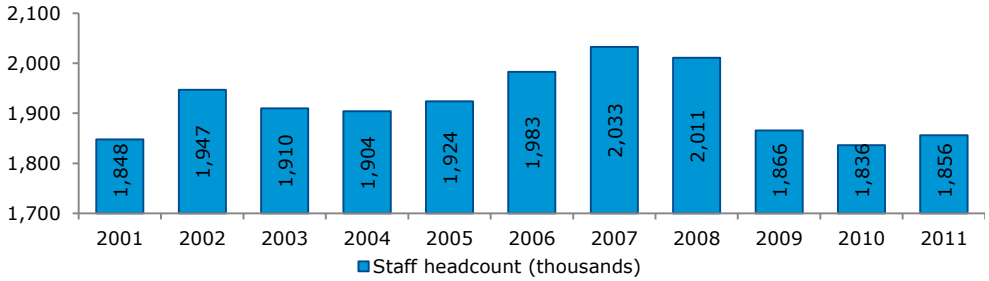
Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.3 Employment and Wage Developments at Small and Medium Enterprises

4.3.1 Employment Developments

The total number of employees of small and medium-sized enterprises rose by 20,000 (1.09%) to a total of 1,856,000 employees in 2011 vis-à-vis 2010. The share of SME employees in the total number of business sector employees in the Czech Republic was 60.85%. During crisis, SMEs have a much more stable employment base than large firms, which dismiss much more staff than SMEs when demand declines. SMEs are much more prudent in respect of layoffs, often trying to maintain the job even at the cost of a wage reduction. Looking at the graph below, we can also find that the staff headcount peaked from 2006 to 2008, when it exceeded 2 million staff employed by small and medium-sized enterprises. Another remarkable fact is that, after the subsequent economic crisis, the staff headcount returned to its initial level of the beginning of the past decade, i.e. year 2000, to the above-mentioned 1,827,000 employees. From the long-term view, we can therefore state that the staff employed by small and medium-sized enterprises hovers around 1,900,000 people.

Graph 5: Development of number of SME employees in the Czech Republic, 2001–2011

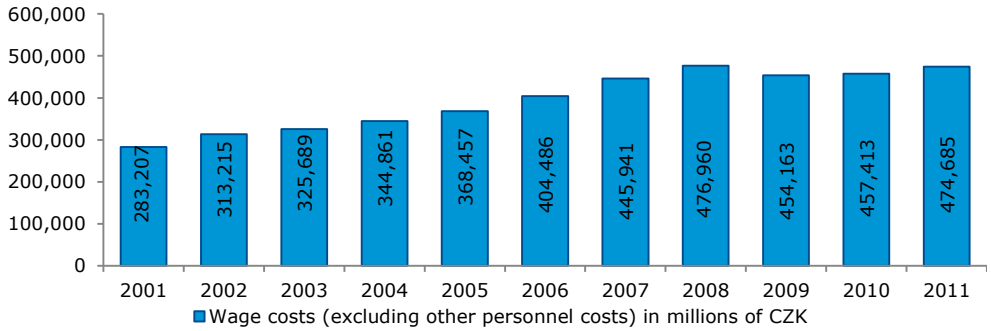


Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.3.2 Wage Level

The average monthly wage in the SME sector was CZK 21,313 in 2011, a year-on-year average wage increase by CZK 552, or 2.66%. In 2011, the average wages in the SME sector were 10.24% below the national average in the business sector, which is reported at the level of CZK 23,744 according to a calculation by the Ministry of Industry and Trade, using the Czech Statistical Office data (however, the effect of sectoral differentiation should be taken into account here). Even so, wages in the SME sector still have increased by more than 70% in the last ten years, and this is an important factor for SMEs to keep quality staff and improve their competitiveness.

Graph 6: Development of wage costs at SMEs in the Czech Republic, 2001–2011



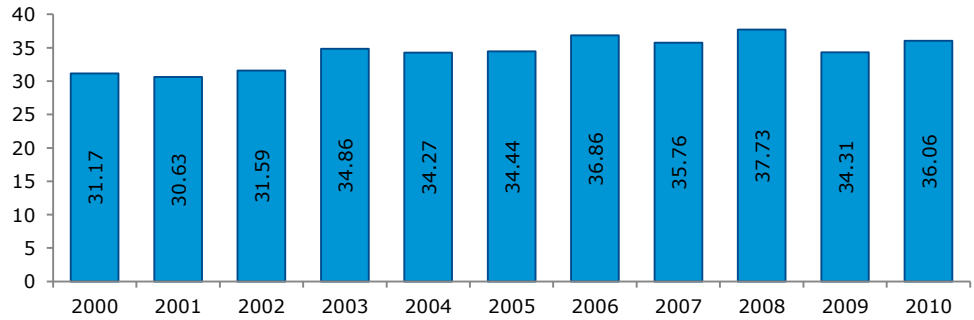
Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.4 Development of Main Economic Indicators of Small and Medium Enterprises

4.4.1 GDP Developments

The Czech Statistical Office does not currently prepare data on the contribution of SMEs to gross domestic product classified by size; this is why data until 2010 is included here. SMEs account for approximately one third of GDP in the Czech Republic. From the long-term view, the contribution of SMEs to GDP has been slightly increasing, reaching 36.06% in 2010. Compared to 2009, SMEs saw an increase by approximately 2% y/y. SMEs contribute to GDP most significantly during economic upswing.

Graph 7: Contribution of SMEs to GDP in current prices (%)

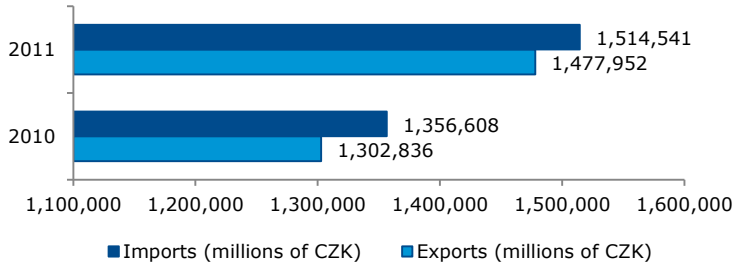


Source: Czech Statistical Office, Ministry of Industry and Trade

4.4.2 Foreign Trade

In the absolute value, exports by small and medium-sized enterprises have been continuously rising since 2002 and, if we compare 2000 and 2010, we find that they more than tripled to CZK 1,291,241 million. Just as in other indicators and statistics, 2009, a year when exports fell compared to the previous year, is an exception. In 2011, small and medium-sized enterprises raised their exports by CZK 175,116 million, or 13.4%, y/y. The contribution of small and medium-sized enterprises to all Czech Republic's exports was 51.5% in 2011.

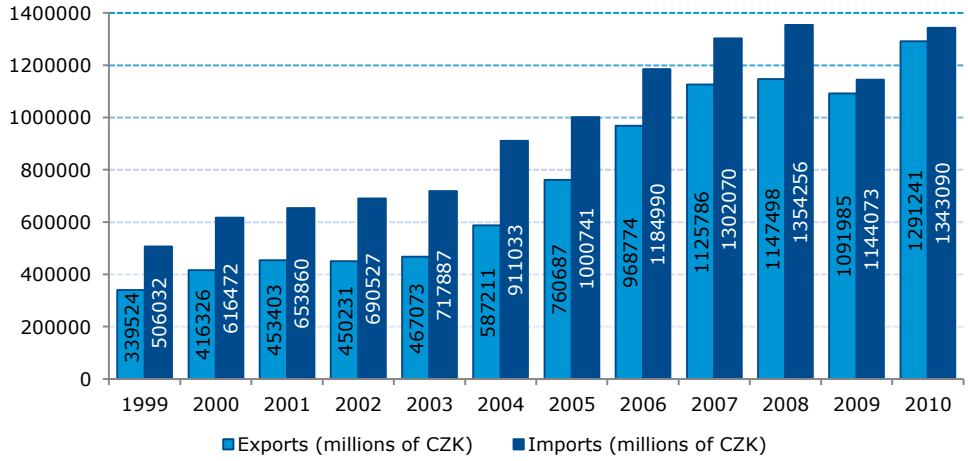
Graph 8: Small and medium-sized enterprises (natural and legal persons), staff headcount of 0-249



Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011[18]

Imports by small and medium-sized enterprises from 2000 up until the present have also been continuously rising. We should point out the specific year 2009 again, when the imports by small and medium-sized enterprises, depending on the development of the European and global economies, declined. The graph below shows that the import activity by small and medium-sized enterprises roughly doubled over the last decade to CZK 1,343,090 million in 2010. In 2011, small and medium-sized enterprises also raised their imports on the year-on-year basis, by CZK 157,933 million, or 11.6%. The contribution of small and medium-sized enterprises to all Czech Republic's imports was 56.6% in 2011.

Graph 9: Development of foreign trade at SMEs, 1999–2010



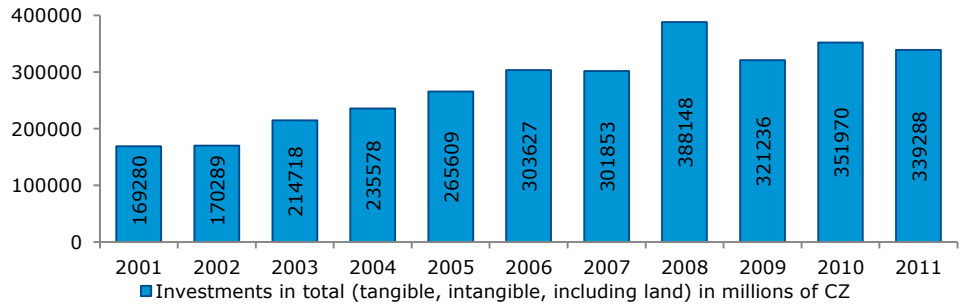
Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2010

[18] In relation to reducing the administrative burden on entrepreneurs, a new methodology preferring, to a greater extent, administrative data and numerical calculations to direct statistical surveys, was used. The 2010 data was recalculated here according to the same methodology as the 2011 data; the following graph compares values for previous years, including 2010. These values are based on the original methodology.

4.4.3 Investments

Investments (tangible, intangible, including land) by small and medium-sized enterprises reached CZK 339,288 million in 2011, i.e. CZK 12,682 million, or 3.61%, less than in 2010. Investments in tangible and intangible assets in that period were hugely affected by the economic crisis. Statistics for the last ten years indicate that the investment activity by small and medium-sized enterprises took place in three main stages. The first period is 2000 to 2002, when the annual investment volume was approximately CZK 170,000 million, and thus the period was specific for its constant nature without evident divergences. The second period was between 2003 and 2008, when investments by small and medium-sized enterprises rose every year, with the 2008 investment volume being the absolute peak. The current (third) period can be described by the wait-and-see attitude, with investments in tangible, intangible and land assets being lower, yet still reasonable, and just like people, small and medium entrepreneurs are also creating reserves, postponing those investments that are not necessary, and waiting for how the economy will develop in the next period.

Graph 10: Development of investment costs at SMEs in the Czech Republic, 2001–2011

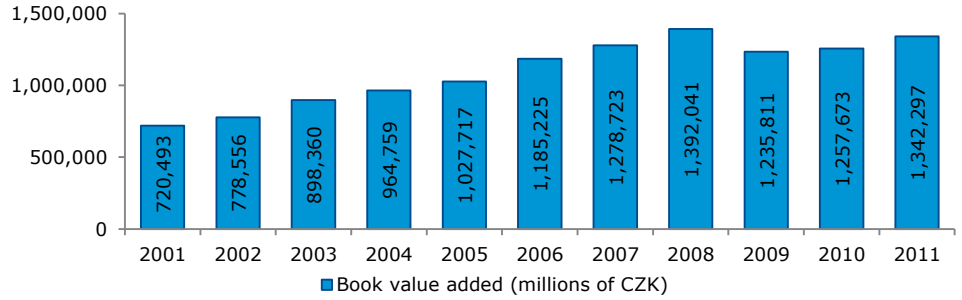


Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.4.4 Book Value Added

In 2011, small and medium-sized enterprises generated a total of CZK 1,342,297 million in book value added, an increase by CZK 84,624 million vis-à-vis 2010. The contribution of value added by small and medium-sized enterprises to the whole of the Czech Republic was 54.43% (up by 0.49% vis-à-vis 2010). Another remarkable fact is that the book value added generated by small and medium-sized enterprises in the Czech Republic almost doubled over the last decade, with this indicating a positive development of small and medium-sized enterprises towards business efficiency improvements and ability to succeed on the market.

Graph 11: Development of book value added at SMEs in the Czech Republic, 2001–2011

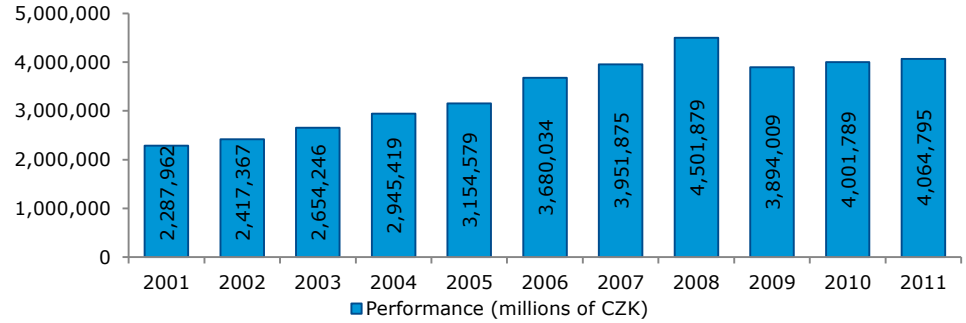


Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.4.5 Performance

In 2011, the performance of small and medium-sized enterprises was CZK 4,064,795 million, an increase by CZK 63,006 million vis-à-vis 2010. The contribution of small and medium-sized enterprises to the overall performance was 49.50% in 2011, down by 1.74% vis-à-vis 2010. Performance by small and medium-sized enterprises between 2000 and 2008 increased every year, peaking at CZK 4,501,579 million in 2008.

Graph 12: Development of performance of SMEs in the Czech Republic, 2001–2011



Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.5 Sectoral Analysis of Small and Medium Enterprises

Table 4: SME summary

	NACE category	Indicator				
		Number of active entities	Staff headcount (thousands of persons)	Performance (millions of CZK)	Book value added (millions of CZK)	Total investments (tangible and intangible, including land) millions of CZK
Agriculture, forestry and fishing	A	1,461	69	101,924	29,850	16,769
Industry	B+C+D+E	173,292	598	1,514,756	407,968	121,534
Construction	F	162,099	199	528,206	129,186	32,184
Wholesale and retail trade	G	227,184	367	563,952	247,370	40,765
Transporting and storage	H	37,721	99	254,283	65,704	17,165
Accommodation and food service activities	I	55,918	97	101,696	34,770	4,672
Information and communication	J	34,818	53	142,260	57,512	8,804
Financial and insurance activities	K	25,601	18	42,321	29,641	9,968
Other services	L-S	348,760	356	815,398	340,296	87,426
Total		**1,066,784**	**1,856**	**4,064,795**	**1,342,297**	**339,288**

(Source: Czech Statistical Office, Ministry of Industry and Trade; Note: Data for legal persons and natural persons with staff headcount of 0-249[19], year 2011)

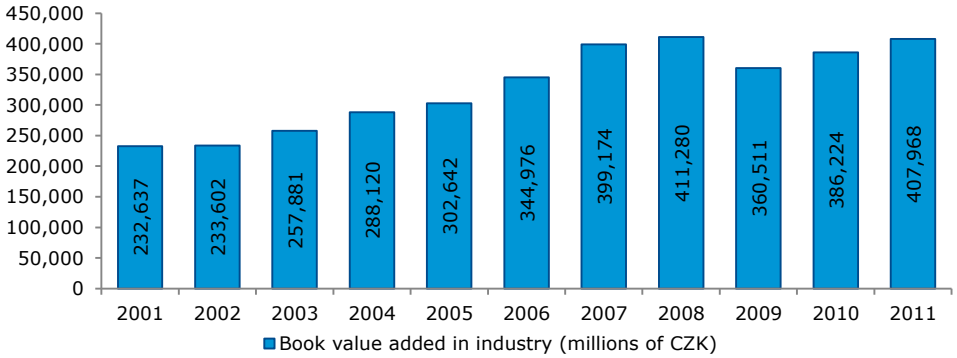
4.5.1 Industry

The number of economically active small and medium-sized enterprises in industry fell by 4,783 enterprises to a total of 173,292 active entities in 2011 vis-à-vis 2010. In 2011, these enterprises

[19] Due to the unavailability of data , the information on agriculture (NACE 01 to 03) is only available for 20 and more employees

had 598,000 employees in the Czech Republic. The book value added generated by small and medium-sized enterprises in industry rose by CZK 21,744 million, or 5.63%, in 2011 vis-à-vis 2010. Total wages (excluding other personnel costs) in the sector of small and medium-sized enterprises in industry were up by CZK 5,879 million, or 4.06%, in 2011 vis-à-vis 2010. Total investments (tangible and intangible, including land) by small and medium-sized enterprises in industry fell by CZK 6,371 million, or 4.98%, in 2011 vis-à-vis 2010.

Graph 13: Development of book value added at SMEs in the industrial sector of the Czech Republic, 2001–2011

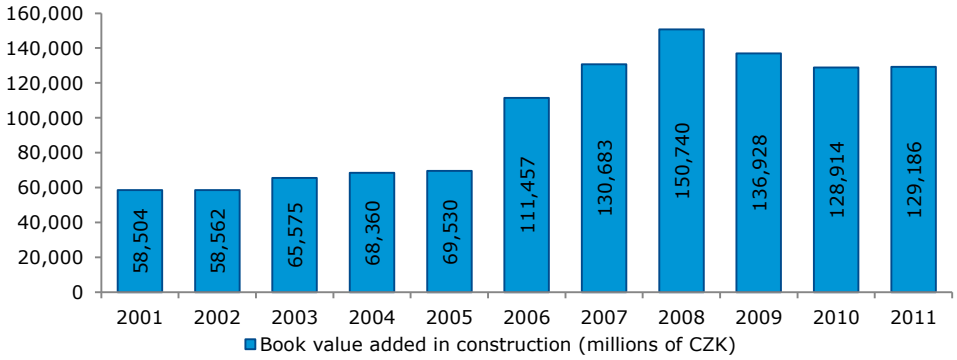


Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.5.2 Construction

The number of economically active small and medium-sized enterprises in construction went down by 5,360 enterprises, or 3.20%, to a total of 162,029 entities in 2011 vis-à-vis 2010. The number of employees of small and medium-sized enterprises in construction fell by 10,000, or 4.78%, in 2011 vis-à-vis 2010. Performance of small and medium entrepreneurs in construction was down by CZK 36,462 million, or 6.46%, in 2011 vis-à-vis 2010. The book value added generated by small and medium-sized enterprises in construction was up by CZK 272 million, or 0.21%, in 2011 vis-à-vis 2010. Wages (excluding other personnel costs) at small and medium-sized enterprises in construction declined by CZK 1,550 million, or 3.18%, in 2011 vis-à-vis 2010. Total investments (tangible and intangible, including land) by small and medium-sized enterprises in construction fell by CZK 1,786 million, or 5.26%, in 2011 vis-à-vis 2010.

Graph 14: Development of book value added at SMEs in the construction sector of the Czech Republic, 2001–2011

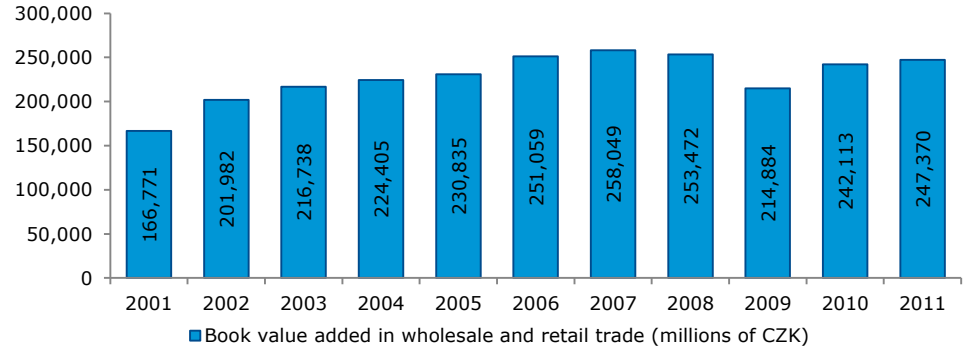


Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.5.3 Wholesale and Retail Trade

The number of economically active small and medium-sized enterprises in wholesale and retail trade was down by 4,941 enterprises, or 2.13%, to a total of 247,370 entities in 2011 vis-à-vis 2010. The number of employees of small and medium-sized enterprises in wholesale and retail trade rose by 3,000 people, or 0.82%, in 2011 vis-à-vis 2010. Performance of small and medium-sized enterprises in wholesale and retail trade fell by CZK 13,302 million, or 2.30%, in 2011 vis-à-vis 2010. The book value added generated by small and medium-sized enterprises in wholesale and retail trade was up by CZK 5,257 million, or 2.17%, in 2011 vis-à-vis 2010. Wage costs (excluding other personnel costs) at small and medium-sized enterprises in wholesale and retail trade were up by CZK 2,622 million, or 2.80%, in 2011 vis-à-vis 2010. Total investments (tangible and intangible, including land) by small and medium-sized enterprises in wholesale and retail trade were down by CZK 3,035 million, or 6.93%, in 2011 vis-à-vis 2010.

Graph 15: Development of book value added at SMEs in wholesale and retail trade in the Czech Republic, 2001–2011

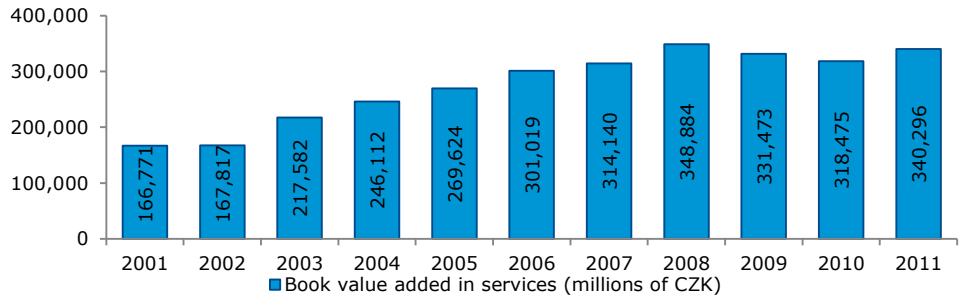


Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.5.4 Services

The number of economically active small and medium-sized enterprises in services was down by 4,996 enterprises, or 1.14%, to a total of 348,760 entities in 2011 vis-à-vis 2010. The number of employees of small and medium-sized enterprises in services rose by 16,000, or 4.71%, in 2011 vis-à-vis 2010. Performance of small and medium-sized enterprises in services improved by CZK 20,006 million, or 2.52%, in 2011 vis-à-vis 2010. The book value added generated by small and medium-sized enterprises in services went up by CZK 21,821 million, or 6.86%, in 2011 vis-à-vis 2010. Wage costs (excluding other personnel costs) at small and medium-sized enterprises in services were up by CZK 5,254 million in 2011 vis-à-vis 2010. Total investments (tangible and intangible, including land) by small and medium-sized enterprises in services were down by CZK 4,901 million, or 5.31%, in 2011 vis-à-vis 2010.

Graph 16: Development of book value added at SMEs in services in the Czech Republic, 2001–2011



Source: Czech Statistical Office, Ministry of Industry and Trade, Report on SME Development and Support in 2011

4.6 Access by Small and Medium-sized Enterprises[20] to Capital

Small and medium entrepreneurs are an indispensable part of the Czech economy and, at various stages of their development, they face various financial needs. When founding a business, money is needed to start up the business whereas more capital is required to run or develop the firm. There are several ways for an enterprise to obtain the required capital. The primary type of financing is a bank loan for both operational and investment needs of an enterprise. Another capital access option is the use of venture capital or an entry of an informal investor (business angels). Nevertheless, the access of small and medium enterprises to capital markets is limited.

As small and medium enterprises constitute an important part of the Czech economy, it is sought to increase their potential through support programmes. These primarily include programmes under which aid is provided from EU Structural Funds. While complying with the obligation to follow the additionality rule, in accordance with European Commission Regulations on Structural Funds, this also includes aid provided from the state budget. Boosting and improving the availability of funds for small and medium enterprises, concurrently innovative and fast-growing firms if possible, will lead to greater growth and more jobs in the future.

4.6.1 SMEs and Grant Schemes

To finance projects submitted by small and medium-sized enterprises, it is primarily possible to use money from EU Structural Funds, i.e. the European Regional Development Fund, with this money being provided to Czech business entities from 2007 to 2013 under the Operational Programme Enterprise and Innovation (OPEI).

The OPEI allocation, including the Czech co-funding, is almost EUR 3.6 billion, i.e. approximately CZK 90 billion if converted into korunas, 85% of which being financed from the European Regional Development Fund and 15% through the national co-funding by the state budget of the Czech Republic. These funds have to be drawn until the end of 2015. A total of CZK 15,681.4 million has been drawn under OPEI grant programmes by 31 December 2011. With money from Structural

[20] The small and medium enterprises that are supported from programmes of the Ministry of Industry and Trade.

Funds being complemented with that of the state budget, the contribution of EU Structural Funds to that drawdown is CZK 13,329.2 million while the contribution of the state budget is CZK 2,325.2 million.

Table 5: SME projects by grant programmes as at 31 December 2011 – grants in CZK

Programme	Decided – SMEs		Authorised – SMEs	
	Number of projects	Volume	Number of applications for projects	Volume
Eco-energy	526	5,069,594,000	329	1,905,069,183
ICT and Strategic Services	252	2,581,328,000	402	756,064,761
ICT in Enterprises	989	2,132,193,000	518	730,438,144
Innovation – Innovation Project	457	6,979,361,000	343	2,622,233,367
Innovation – Project to Protect Intellectual Property Rights	261	54,329,000	111	6,556,381
Clusters	27	844,624,000	54	251,123,952
Marketing	774	589,207,689	551	222,479,269
Real Estate	572	7,765,176,000	519	2,894,739,940
Consultancy	360	109,680,000	119	31,837,191
Potential	202	2,758,288,000	230	1,211,821,546
Prosperity	28	1,977,384,000	47	492,528,810
Development	1047	7,345,563,000	739	3,825,533,799
Training Centres	252	1,646,438,000	211	690,392,991
Technological Platforms	16	76,242,000	49	40,534,108
Total	**5763**	**39,929,407,689**	**4222**	**15,681,353,442**

Source: Ministry of Industry and Trade – SF data, ISOP7-13 information system

4.6.2 SMEs and Favourable Guarantees and Loans

For credit financing under OPEI, this includes the Progress and Start aid programmes and, regarding guarantee programmes, small and medium-sized enterprises may use the Guarantee and Start programmes under OPEI. As part of the implementation of the credit and guarantee programmes, CZK 6.202 billion was transferred to the Credit and Guarantee Fund of the Czech-Moravian Guarantee and Development Bank from 1 July 2007 to 31 December 2011.

CZK 2,407 million was drawn from the loans of the Progress and Start programmes from 1 July 2007 to 31 December 2011; 472 credit agreements were concluded under the programmes funded from OPEI.

Table 6: OPEI programmes – Status of handling the received applications for aid: Progress, Start – loans

Loans	Subscription to the fund		Concluded agreements		Received applications in total		Loans drawn	
	Total (mil. of CZK)	Of that: Ministry of Industry and Trade (mil. of CZK)	Number of loans	Amount of loans (mil. of CZK)	Number	Estimated amount of aid (mil. of CZK)	Number	Amount of loans (mil. of CZK)
PROGRESS – subordinated loans	2916.7	1750.0	375	2938.6	745	6065.7	318	2345.0
START – interest-free loans	70.0	42.0	97	62.5	227	149.7	97	61.8
Total loans	**2986.7**	**1792.0**	**472**	**3001.1**	**972**	**6215.4**	**415**	**2406.8**

Source: Czech-Moravian Guarantee and Development Bank, Ministry of Industry and Trade; Note: Data from 1 July 2007 to 31 December 2011

In the monitored period of 1 July 2007 to 31 December 2011, a total of 2,095 guarantee agreements, guaranteeing the amount of CZK 11.4 billion and supporting loans for more than CZK 17 billion, were provided under the Guarantee and Start programmes as part of OPEI. Business entities predominantly use the Guarantee programme. Of the total number of agreements concluded under those programmes (Start, Progress, Guarantee), more than ¾ (78.3%) were concluded in the Guarantee programme while this programme made up 73% of the applications submitted.

Use of money is more efficient in that event because the repaid loans allow for using the acquired money multiple times; with what is known as the leverage effect, guarantees make it possible to support, even with limited funds, the acquisition of a significant amount of loans. Compared to grants, a loan or a provided guarantee boosts the emphasis on supporting economically sustainable projects and, as a whole, distorts the competition in the economy to a much lesser extent.

Table 7: OPEI programmes – Status of handling the received applications for aid: GUARANTEE, START – guarantees

Guarantees	Subscription to the fund (mil. of CZK)	Concluded agreements			Received applications in total		
		Amount of guarantees (mil. of CZK)	Number of guarantees	Amount of aid (mil. of CZK)	Amount of guarantees (mil. of CZK)	Number	Estimated amount of aid (mil. of CZK)
GUARANTEE – total	4350	11,293	2010	4181.3	29,207	2915	7023
START – portfolio guarantees	60	101	85	39.4	128	103	50
Total guarantees	**4410**	**11,394**	**2095**	**4220.7**	**29,335**	**3018**	**7073**

Source: Czech-Moravian Guarantee and Development Bank, Ministry of Industry and Trade; Note: Data from 1 July 2007 to 30 December 2011

Loan guarantees are also financed from the state budget. National programmes can be efficiently used as a supplementary support instrument with programmes financed from Structural Funds. Their primary benefits include the possibility of targeting entrepreneurs from the Prague region as well as the fact that sectors not reflected in the calls of the individual OPEI programmes financed from Structural Funds can be supported. Thus the Guarantee national programme was used in 2009 and 2010, during the economic crisis and the recurring summer floods. In those difficult

times, small and medium-sized enterprises needed to obtain money, quite soon, required for the recovery of their fixed assets or to run their businesses. The Guarantee national programme enabled small and medium enterprises to obtain loans worth more than CZK 9 billion.

Table 8: National programme GUARANTEE (ended)

Guarantees	Concluded agreements			Received applications in total		
	Amount of guarantees (mil. of CZK)	Number of guarantees	Amount of aid (mil. of CZK)	Amount of guarantees (mil. of CZK)	Number of guarantees	Estimated amount of aid (mil. of CZK)
Guarantee – Operation and Investment	6615.5	1436	1841.4	9666.6	1998	2131.8
Guarantee – Floods	383.7	79	103.7	438.7	94	122.0
Guarantee – total	**6999.2**	**1515**	**1945.1**	**10,105.3**	**2092**	**2253.8**

Source: Czech-Moravian Guarantee and Development Bank, Ministry of Industry and Trade; Note: Data for the entire programme implementation period (1 January 2009 to 31 December 2011).

In 2011, a bank guarantee programme for nascent enterprises was launched, owing to which nascent enterprises can more easily reach commercial loans, they could scarcely reach under normal circumstances. This programme is still running. In addition, a new national programme was opened in June 2012, this time for small enterprises (with no more than 50 employees); through favourable guarantees, this programme aims to make accessible the financing to implement small entrepreneurs' business plans. The programme will allow for providing guarantees of CZK 1.4 billion for loans totalling CZK 2 billion. The guarantees can be provided for investment loans and loans to buy inventories in projects of industrial manufacture, construction business, retail and wholesale trade, and more.

Table 9: National programmes GUARANTEE currently in progress

Guarantees	Concluded agreements			Received applications in total		
	Amount of guarantees (mil. of CZK)	Number of guarantees	Amount of aid (mil. of CZK)	Amount of guarantees (mil. of CZK)	Number of guarantees	Estimated amount of aid (mil. of CZK)
Guarantee for Nascent Enterprises	137.7	81	34.5	174.6	104	43.2
Guarantee for Small Enterprises	89.5	40	4.4	245.2	106	13.1
Guarantee – total	**227.2**	**121**	**38.9**	**419.8**	**210**	**56.3**

Source: Czech-Moravian Guarantee and Development Bank, Ministry of Industry and Trade; Note: Data as at 30 June 2012.

4.7 Success of Small and Medium Enterprises in Public Procurement Contracts

Small and medium-sized enterprises are an important business group in the market of the Czech Republic, with 99.84% of business entities falling within that category. However, statistics prepared for the European Commission indicate that, even though small and medium-sized enterprises generate 58% of EU turnover, they can only succeed in 42% of public procurement contracts on

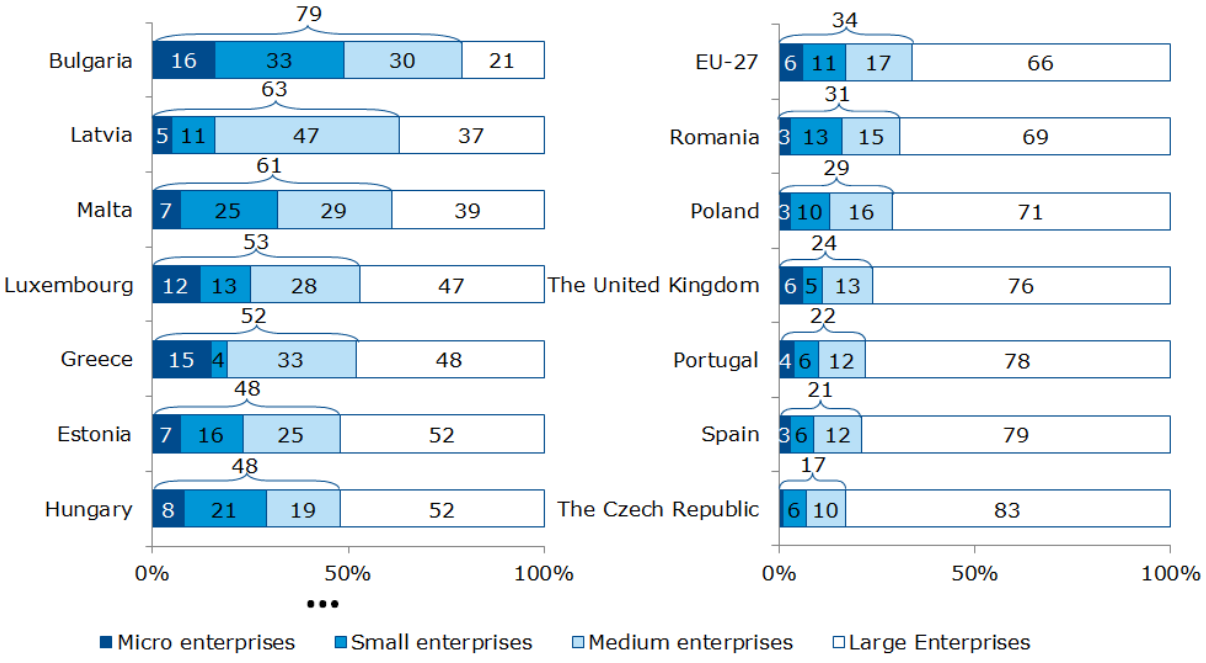
average. Graph 17 shows a summary of the countries that are most successful in this[21]. There are several reasons for the unused potential of small and medium-sized enterprises in public procurement contracts. The main difficulties include[22]:

- difficulties in obtaining information;
- lack of knowledge about tender procedures;
- excessive administrative burden;
- large size of the contracts;
- too little time to prepare the tenders;
- the cost of preparing the tenders;
- disproportionate qualification levels and certification requirements;
- excessive requirements for financial guarantees;
- late payments by contracting authorities.

The graph below indicates that the small and medium-sized enterprises which capture the greatest share of public procurement contracts are those in Bulgaria (79%), Latvia (62%), Malta (62%) and Luxembourg (53%). France with 44% and Germany with 41% can be cited as examples of large EU countries in this regard.

The Czech Republic holds absolutely the worst position in the whole of the European Union, with a 17% share of its small and medium-sized enterprises in public procurement contracts. Of this number, small enterprises make up 7% while medium-sized enterprises make up 10%.

Graph 17: Share of SMEs in the total value of public contracts awarded in EU Member States (%) – countries on the best and worst positions, EU-27 average



[21] GHK: Evaluation of SMEs' access to public procurement markets in the EU. DG Enterprise and Industry. Final Report. September 2010

[22] European Code of Best Practices facilitating access by SMEs to public procurement contracts – SEC(2008)2193.

Source: Evaluation of SMEs' access to public procurement markets in the EU, DG Enterprise and Industry

Public procurement contracts make up a sizable part of the market, which is estimated at more than 16% of GDP of all 27 Member States of the EU. However, small and medium-sized enterprises still fail to use all of the benefits arising from these opportunities. In addition, more competitive and more transparent procedures in public procurement processes will enable small and medium-sized enterprises to increase their participation in public procurement contracts and allow for triggering their growth and their innovation potential, with this to have a positive effect on the European economy. Moreover, the increased participation of small and medium-sized enterprises in public procurement contracts will result in a greater competition, leading to a better cost-performance ratio for public contracting authorities. The participation in public procurement contracts is also beneficial to small and medium-sized enterprises because of the certainties provided to them by the public budget. This primarily includes the certainty of payment within 30 days, as proposed in the oncoming Directive of the European Parliament and of the Council on public procurement.

4.8 Entrepreneurial Activity Analysis

The analysis of entrepreneurial activity under the international project Global Entrepreneurship Monitor (GEM) focuses not only on analysing the entrepreneurial activity of small and medium entrepreneurs but the analysis also covers large companies. The entrepreneurial activity analysis under the GEM project was conducted in cooperation with the University of Economics, Prague. The first international GEM project was conducted in 1999 by ten national teams. In 2011, there were as many as 54 national teams involved. GEM's vision is to contribute to global economic development through entrepreneurship. GEM focuses on the following primary objectives:

- Measuring the differences in entrepreneurial attitudes, activity and aspirations among different countries.
- Identifying the factors that determine the level of national entrepreneurial activity.
- Identifying the measures for enhancing entrepreneurial activity.
- Monitoring the change of entrepreneurial activity and its prerequisites over the course of time.

GEM's approach is based on two premises. First, an economy's prosperity is dependent on the dynamic business sector. Second, this sector needs individuals with the ability and motivation to start business, as well as positive societal perceptions about entrepreneurship.

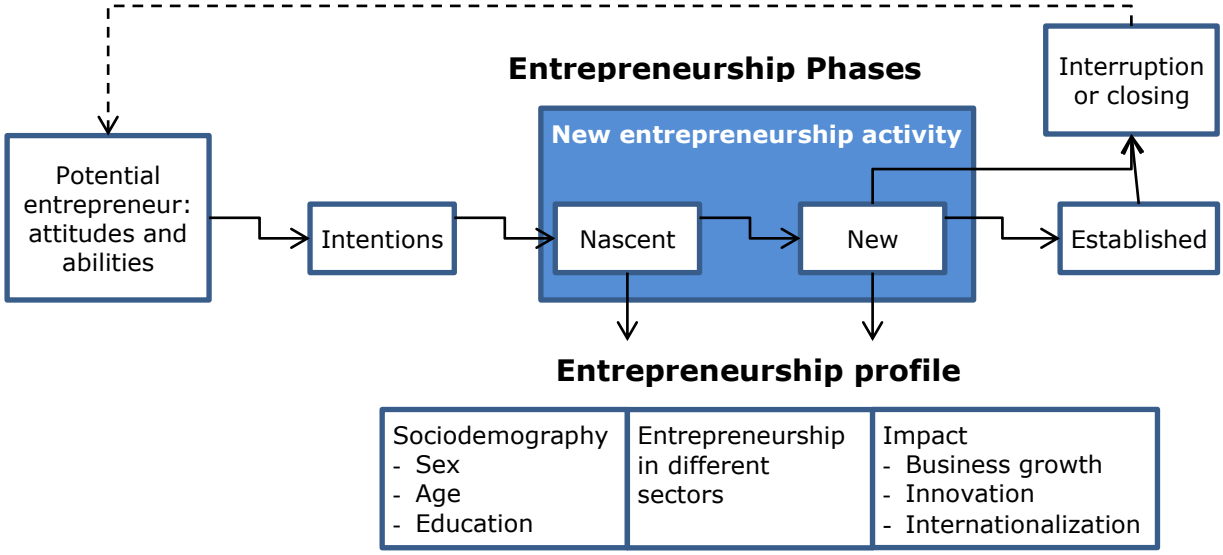
GEM defines entrepreneurship as: *"Any attempt at new business or new venture creation, such as self-employment, a new business organization, or the expansion of an existing business, by an individual, a team of individuals, or an established business"* (Bosma, Wennekers, Amoros, 2011).

Thus GEM takes a broader view to entrepreneurship in comparison with official registers of newly established firms or trade certificates. It focuses on individuals, their attitudes and activity, since individuals start new entrepreneurial efforts, and again individuals determine entrepreneurial

orientation of firms. Entrepreneurship is a comprehensive phenomenon that occurs in a range of situations. Thus no individual measure, regardless of its accuracy, can capture an entrepreneurial situation in a particular country. GEM adopts holistic attitude to entrepreneurial studies, and provides a decent range of measures describing plenty of fundamental aspects of the entrepreneurial situation in a particular country.

The percentage of adult population involved in different phases of the entrepreneurship process is a suitable primary indicator of entrepreneurial activity in a particular country. If there is nobody commencing entrepreneurship, there is no entrepreneurial activity in the country. Figure 3 shows the entrepreneurship process as conceptualised and measured in the GEM project.

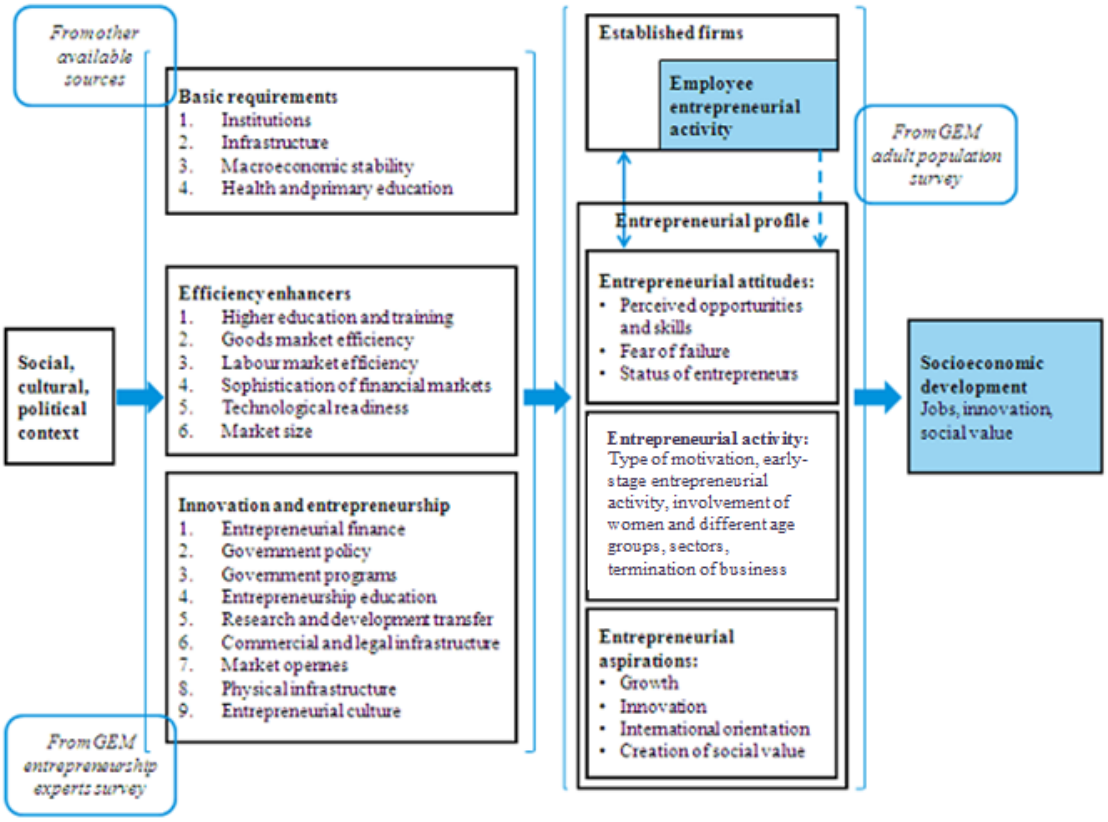
Figure 3: Entrepreneurship process according to GEM



(Source: Global Entrepreneurship Monitor 2011)

The GEM lays great stress on the impact the entrepreneurial dynamics has on economic growth by exploiting entrepreneurial opportunities and entrepreneurial potential. Both are influenced by entrepreneurship framework conditions that are influenced by the social, cultural and political context (see Figure 4). These factors are observed as a part of the GEM Project and represent a comprehensive system of interactions where particular recommendations may be applied individually or together with other factors with an effect on entrepreneurial activity.

Figure 4: GEM conceptual model



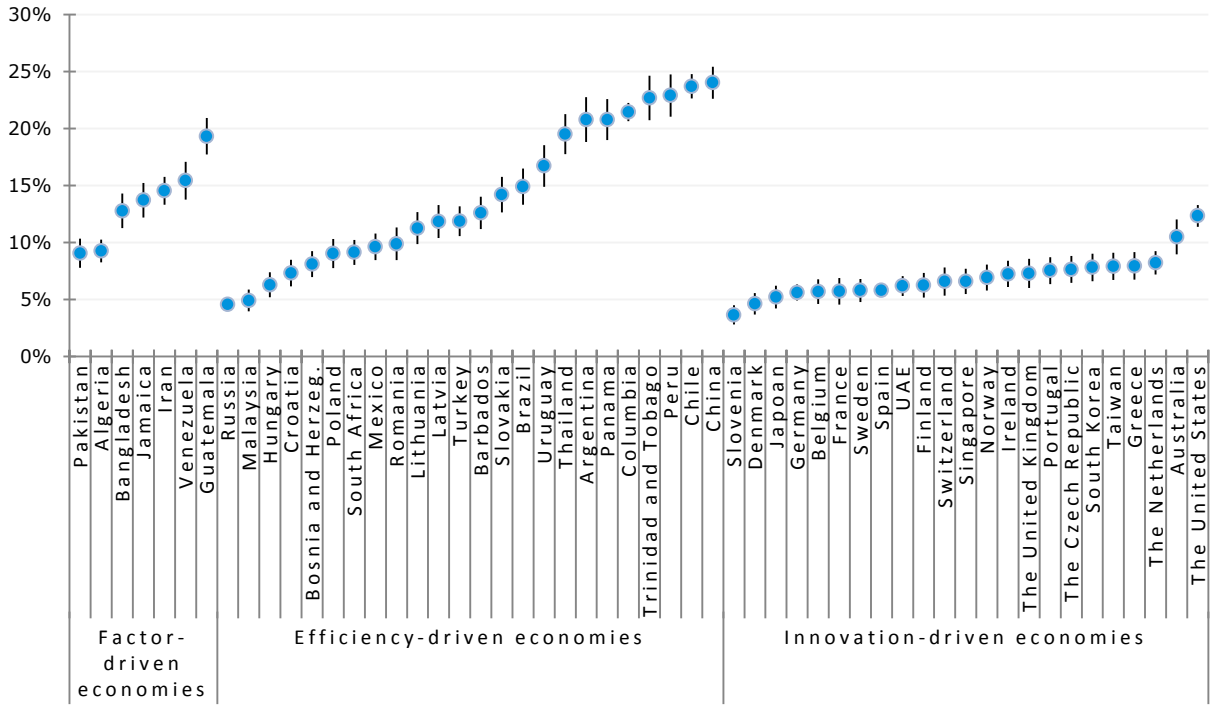
(Source: Global Entrepreneurship Monitor 2011)

4.8.1 Entrepreneurial Activity

Entrepreneurial activity in the Czech Republic is relatively good in the international comparison. **With 7.64%, the ratio of total early-stage entrepreneurial activity (TEA) is rather high in the European context** (8th position of the 24 European countries involved in the project). The TEA in the Czech Republic includes individuals who are either taking steps towards a business start-up, or managing their own firms younger than 42 months. This rate takes a key position in the GEM survey since, as proven by research, new firms grow faster than established businesses, and thus contribute significantly to job creation. Compared to 2006, the TEA rate in the Czech Republic only changed negligibly.

According to a simplified view that does not consider statistical significance of differences, **the TEA rate in the Czech Republic is rather high vis-à-vis developed countries** (7th position of the 23 innovation-driven economies). In comparison with other factor or efficiency-driven countries, the TEA rate is lower. The Czech Republic took the 34th position of all the 54 countries that participated in the GEM project in 2011. **According to a European comparison, the Czech Republic takes the 8th position of all the 24 European countries for which the data is available.**

Graph 18: Total early-stage entrepreneurial activity – international comparison



(Source: Global Entrepreneurship Monitor 2011)

The highest TEA rate was found in China (24%), Chile, Peru and in a number of South American countries. As concerns more developed countries, the highest TEA rate was in Slovakia (14.2%) and the U.S. (12.3%). By contrast, the lowest TEA rate was found in Slovenia (3.7%), Russia (4.6%) and Denmark (4.7%).

The share of expected fast growing companies as stated by the respondents is also optimistic. **Entrepreneurial activity of students and young people is increasing.** Another positive fact is that, compared to 2006, there is currently a much greater share of those who are starting up a business and do really start the business. Nonetheless, for students and young nascent entrepreneurs, this shift towards actually founding and starting up a business is more difficult, and only few of them succeed. This is why young people need to be efficiently encouraged to focus on business in order for their plans to stand better chances of being really accomplished.

On the other hand, certain **warning changes** have been detected in the development of entrepreneurial activity. The major ones include **the decreasing ratio of the entrepreneurial activity of women,** which is low compared to European countries and, between 2006 and 2011, it continued to decline for both early-stage and established entrepreneurial activities. This implies that the entrepreneurial activity of women has its difficulties in the Czech Republic, and economic policy should focus on promoting their entrepreneurial efforts. Furthermore, there is a noticeable decrease in the TEA rate for qualified workers with vocational certificate.

Finally, compared to 2006, there is a significant **decrease in the early-stage entrepreneurial activity of the unemployed.** It may be concluded that the worsened economic situation leads to a decline in the entrepreneurial efforts among this group of the population, for which the

recognition of business opportunities is currently more difficult. Such opportunities are also much less recognised by women, and this is rather specific to the Czech Republic in the international comparison. Moreover, **the perception of good opportunities** for starting a business **has decreased** among the population in general (only 24% of the working age population perceived them). Yet the responding experts said that there were enough of good opportunities. Thus their perception of the situation differs from how people perceive it.

Established entrepreneurial activity (entrepreneurs who are running their firms for longer than 42 months) strands at 5.2%. Compared to 2006, it has not changed very much in the Czech Republic, and is rather low in the international comparison with developed countries. This suggests that markets in the Czech Republic are dynamic, with market access for new businesses being relatively unobstructed, which is also confirmed by experts.

The overall rate of entrepreneurial activity reached 12.5%. In other words, 125 of 1,000 individuals in the working age population of the Czech Republic are involved in independent entrepreneurship in some way, while 7.9% of individuals in the working age population run at least one firm of their own.

A much greater share of **people with university degree** than the appropriate share of individuals with elementary education are involved in early-stage and established entrepreneurial activities. In addition, a much lower share of the established entrepreneurial activity than the early-stage activity is evident among people with primary and secondary education. This suggests that particularly these two groups have difficulties with the survival of the firms they found.

As expected, **entrepreneurial activity is higher among high-income households. The highest entrepreneurial activity is in Prague.** In comparison with 2006, there is a decrease in the TEA rate for employees, which may suggest stronger tendencies to hold on to a secure employment by those who are employed.

Over 70% of people in the Czech Republic start business because they **perceive a good opportunity** rather than by necessity. **The primary motive is to gain more independence;** this distinguishes the Czech Republic from numerous other countries, where the primary motive is higher income. Compared to other developed countries, there are still quite many people in the Czech Republic who start business because they have no other option.

Consumer oriented services (37.8%) are the main **sector** in the Czech Republic where new businesses are started, according to a representative population survey. The share of this sector has grown significantly vis-à-vis 2006, and the share of these firms in the economy is also likely to increase. The manufacturing sector was second with a 34.5% share of TEA. Nevertheless, the TEA rate for the manufacturing sector has decreased vis-à-vis 2006, and thus the share of manufacturing firms is also likely to decline slightly in the years to come. Even so, **manufacturing remains a strong sector in the Czech Republic if compared internationally.**

4.8.2 People's Attitudes towards Entrepreneurship

According to experts, Czechs are noted for their ability to improvise, younger generations have good IT and foreign language skills; in addition, they use the experience gained while staying abroad in the Czech Republic. On the other hand, Czechs lack sales skills, marketing knowledge and experience in fund raising for a company and generally in starting up a fast growing business.

Compared to the other countries, the Czech population has **a low level of self-confidence** as to the individual's conviction of having the skills, knowledge and experience required for starting new business. This may deter entrepreneurial activity at the very beginning.

4.8.3 Entrepreneurial Aspirations

A decent percentage of entrepreneurs involved in early-stage entrepreneurial activity (5.8%) do their business in a sector with medium or high technological requirements. **The latest technologies** are used in quite many of the early-stage as well as established entrepreneurial activities, and the Czech Republic is one of the top ten countries according to this criterion. The share of nascent entrepreneurs with an innovative focus on new products and services is also fairly positive. In this context, the protection of intellectual property rights is seen as reasonable in the international comparison. The entrepreneurial activity of established firms is strongly **export oriented** when compared to the other countries.

A total of 5.4% of people in the Czech Republic (aged 18–64) responded that they were involved in an early-stage entrepreneurial activity and either already had created or were about to create, within five years, at least one job. This is a positive indicator compared to developed European countries. Nascent entrepreneurs **expect fairly rapid growth** and the strong creation of jobs, and this is a positive finding because ambitious entrepreneurs are needed. On the other hand, the expectations are often unrealistic; the problems include overestimation of the expected customer demand for a product or service, inadequate exploration of competitors or poor marketing.

Nevertheless, the responding experts are of the opinion that the Czech Republic very **poorly supports fast growing firms.** Compared to 2006, the situation has worsened rather than improved, according to them, and a comparison to other countries is also unfavourable for the Czech Republic. An exception is a moderate positive advancement in the awareness of the competence of people working in entrepreneurship promoting initiatives. **In addition, people do not know how to manage a fast growing company.** This may curb the economic development.

4.8.4 Recommendations

- To improve the status of entrepreneurs in the society by publishing more positive news about entrepreneurs in the media, frequent and convincing appraisals of entrepreneurs by politicians and respected figures of public life. It is necessary to create more positive role models and give them credit for enhancing the economy, society and for creating jobs.

- To improve the political and institutional context, in particular to make real efforts to eliminate corruption, increase transparency of public contracts and improve the functioning of the judiciary.
- To simplify the legislation and tax system and reduce the taxation of labour.
- To make changes at all levels of education, especially in the primary and secondary education, with the aim of enhancing the development of independent self-confident and initiative-showing individuals having the competencies for running business successfully. At higher levels of education, it is important to boost technical subjects, foreign language teaching as well as the support for practical training and foreign experience.
- To support the possibility for higher education institutions to become co-owners of newly founded businesses and encourage students' motivation to found their own businesses, for example through entrepreneurship courses.
- To enhance financial and consultancy support for nascent and fast growing businesses through a mix of support programmes, which also include instruments such as capital contributions and consultancy.

4.9 ICT – The Environment and Opportunities for SMEs

Today, information and communication technology (ICT), primarily presented by the Internet, is crucial and indispensable for all entities in the economic environment. According to a study conducted by The Boston Consulting Group[23], the Internet made up approximately 3.6% of GDP of the Czech economy, i.e. about CZK 130 billion, in 2009. The estimate of further developments is also positive – the ICT will continue to be one of the most dynamic sectors of the Czech economy, and is expected to tend to grow at a double-digit rate annually (the estimate is up to 12% a year).

The Internet and ICT have a positive impact on the performance of enterprises, enabling them to use a new form of marketing – the Internet marketing or mobile marketing, where appropriate. In using the Internet for advertising and attracting new customers, enterprises may choose from among a website, a profile on social networks, promotion of products through purchase portals, promotion of services on portals associating industry professionals etc. ICT and notably its constant development provide enterprises with ever-newer possibilities of development, and enterprises that actively operate in ICT or the Internet are likely to grow faster than their less active competitors.

In 2009, 80% of Czech SMEs had their own websites, but numerous companies also invested in online marketing. In 2009, according to the study[24] conducted, 56% of Czech SMEs had a profile in one of Internet catalogues of firms, 37% used advertising in search engines, 18% advertised through e-mail, 14% used banner advertising and 14% of SMEs also had a website on some of social networks.

[23] Czech Online report, The Boston Consulting Group – March 2011
[24] Czech Online report, The Boston Consulting Group – March 2011

ICT offers SMEs a potential for developing their activities as well as opens up new opportunities or possibilities for them to compete with large enterprises, particularly in communication with customers, in speed of handling requests etc. The Internet helps create the same conditions for all, and increases the likelihood of SMEs expanding into other markets, all of that being possible owing to Internet advertising and instruments that require much lower costs than conventional advertising or ordinary sales channels. Enterprises that operate in the online environment or at least provide some of their activities online are more stable than the others during recession. For the future, it is therefore essential to support building the infrastructure for broadband Internet access and stimulate the involvement of SMEs in ICT.

5 INNOVATION PERFORMANCE ANALYSIS

5.1 The Czech Republic's Rankings in the Lists of Competitiveness and Innovation Performance

In the reports of the World Economic Forum (WEF)[25] and the IMD Business School[26], which evaluate the competitiveness of individual countries, the Czech Republic was 38th (of 142) and 30th (of 59) respectively. In spite of the decent position of the Czech Republic in the pillars of GCI (WEF Global Competitiveness Index), which are closely connected with innovation activities (Innovation – 33rd position, Business Sophistication – 36th position), a closer look at the individual indicators of those pillars shows that the knowledge potential in the Czech economy is still largely fragmented and its good ranking is based on a few indicators. In the "Innovation" pillar, the good ranking is primarily based on the quality of research, which, however, has failed to deliver the required results and economic effects so far, on market capacity for innovation and on company spending on research and development. In the "Business Sophistication" pillar, the drivers in the Czech Republic include the local supplier availability, notably in terms of quality and, to a lesser extent, in terms of quantity. By contrast, the Czech Republic lags behind in the nature of competitive advantage – where the country ranks as low as 38th and the score is approximately in the middle between the extreme points "low cost" and "unique products and processes". However, the areas where the Czech Republic lags behind the most include the control of international distribution and relatively also the extent of marketing. These are predominantly controlled by companies under foreign control, with this indicating a strong dependence of the Czech economy on foreign capital and its limited autonomy in the development of higher value added activities. Compared to the previous evaluation, under the Global Competitiveness Report 2010–2011, now respondents better evaluate the situation in using sophisticated marketing while they believe that the Czech Republic has greater difficulties in the management's willingness to delegate authority. A persisting problem in the Czech Republic's competitiveness is the long-term poor quality of its institutional environment and, to a lesser extent, of the infrastructure (notably roads).[27]

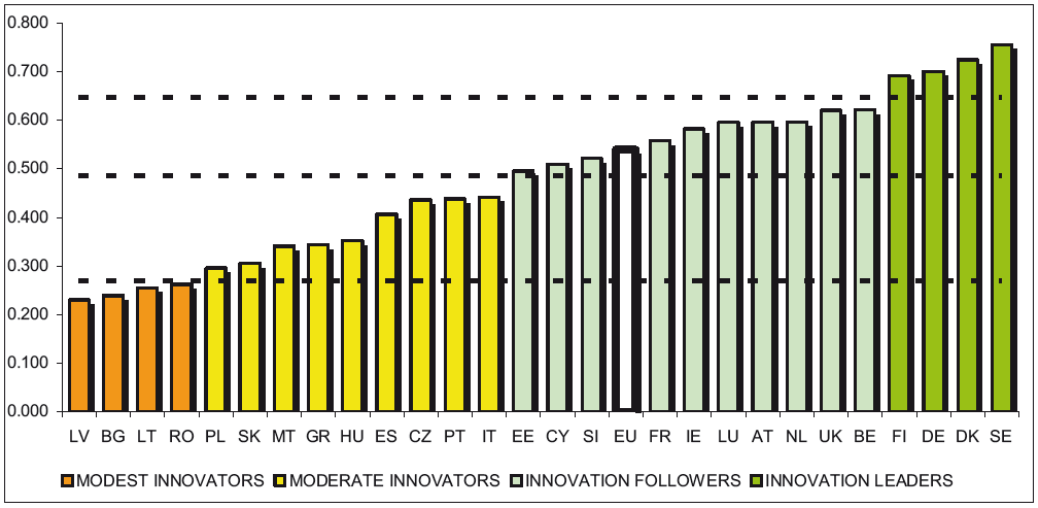
Another possibility of comparing the innovation performance of countries is the Global Innovation Index[28] by economic university INSEAD. The index is composed of 7 pillars. The Czech Republic ranks 27th (of 141 countries) in this list, thus keeping its previous position. As concerns the individual indicators, the Czech Republic has improved its ranking in "Human Capital & Research" as regards the quality of research institutions, researchers headcount and expenditure on R&D. The

[25] World Economic Forum. The Global Competitiveness Report 2011-2012. Geneva: WEF. 2011
[26] IMD World Competitiveness Yearbook 2011
[27] According to Analytical Background Data for the National Innovation Strategy of the Czech Republic, Technology Centre of the Academy of Sciences of the Czech Republic, June 2011, and the Analysis of Substantive Priorities and Needs of the Individual Areas within the Competence of the Ministry of Industry and Trade for Focusing the Aid from EU Structural Funds in the Next Programming Period (2014+), Berman Group (November 2010)
[28] The Global Innovation Index 2012, Stronger Innovation Linkages for Global Growth: 5 input pillars (institutions, human capital and research, infrastructure, market sophistication and business sophistication) and 2 output pillars (scientific outputs and creative outputs)

ranking in the "Business Sophistication" pillar makes it clear that the share of expenditure in the gross R&D expenditure performed by business as well as the share of R&D expenditure financed by business is relatively high vis-à-vis other countries. In addition, there is clearly a high absorption of imported knowledge – high-tech commodity and service imports, evidence of which is the fact stated below that domestic firms primarily innovate through purchased knowledge (note: this involves both negative and positive aspects – learning, higher level technology imports, etc.). The Czech Republic's ranking is also decent in high-tech exports. By contrast, the country has lower rankings in education expenditure, investor protection and ICT use for innovation, to name a few.

One of the other instruments of the international comparison of innovation performance in Europe is the Innovation Union Scoreboard (IUS, previously the European Innovation Scoreboard), the results of which are annually published by the European Commission. The Innovation Union Scoreboard evaluates the innovation performance of countries based on 25 selected indicators – enablers and outputs – of firms' innovation activities; it is a summary innovation index (unweighted average of the rescaled scores of all indicators for individual countries). The Czech Republic is currently 17th of the 27 Member States of the EU.

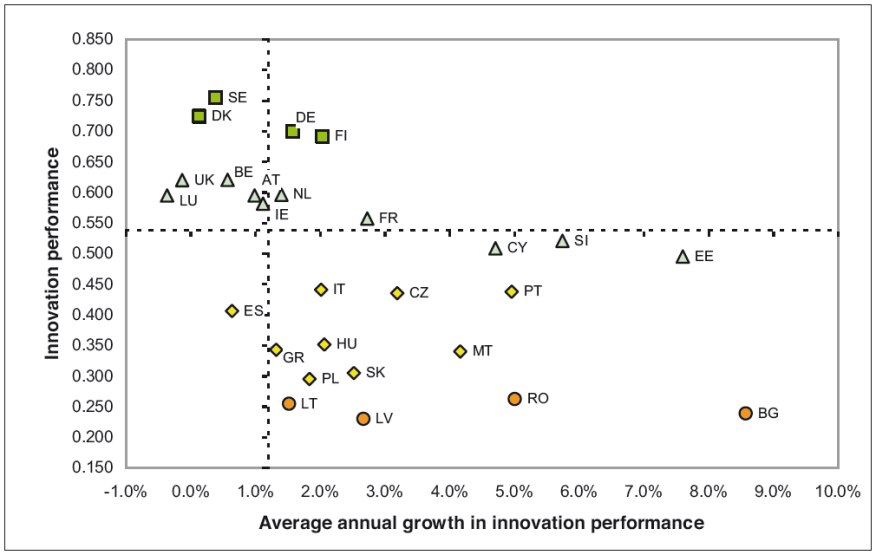
Graph 19: Innovation performance of EU Member States



(Source: IUS 2011)

The annual growth rate in the Czech Republic's innovation performance, according to IUS, is slightly above 3%, one of the fastest in the EU-27, and thus the Czech Republic gradually converges towards the EU-27 average.

Graph 20: Convergence in innovation performance



(Source: IUS 2011)

Relatively lower availability of venture capital funding for innovation activities and skilled workforce to meet the requirements for the development of the innovation performance of the economy can be regarded as the greatest difficulties in the Czech innovation system, according to the IUS international comparison. The number of innovators that use legal forms of intellectual property protection is also inadequate. Regarding R&D&I, the support for research activities in business and the use of venture capital to support those activities are low in the Czech Republic, according to the IUS comparison. Compared to the EU-27, the Czech Republic also has an under-average level of public expenditure on R&D. By contrast, the category of Firm Investments consisting of non-R&D innovation expenditures by business was above the EU average (146% of the EU-27 average). While the R&D expenditure in the business sector is only 79% of the EU average, its trend is on the rise, indicating that Czech firms are phasing in technologically more demanding production.

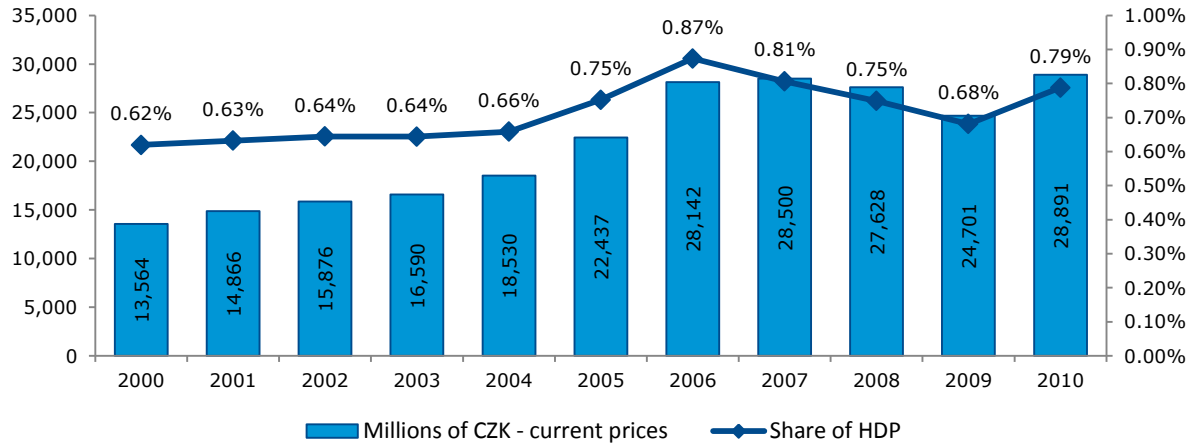
An area where the Czech Republic is on a par with the EU-27 average is the Innovators category, covering the indicators of innovative SMEs in process, product, organisational and marketing innovations (see also chapter 5.4; Note: this data is not indicative of the quality of such innovation activity or of the economic benefit of the innovations implemented). A comparison at the level of individual indicators in this area shows that Czech innovative SMEs are more intensively introducing marketing or organisational innovations (117% of the EU average). The share of innovative SMEs that introduce technical innovations (in process and product) is slightly above average in the Czech Republic (102% of the EU average). The Czech Republic achieves above-average levels in medium-high and high-tech product exports of the manufacturing industry, primarily due to the structure and openness of the Czech economy. The effect of economic structure is also evident in the share of employment and exports of knowledge-intensive services, where, by contrast, the Czech Republic lags behind the European average. A positive fact is that the share of the sales of new to market and new to firm innovations (in relation to the firm's total

sales) is well above the EU-27 average in the Czech Republic, indicating that the innovation potential of products introduced by Czech innovative SMEs is not negligible for the market.[29]

5.2 R&D – Expenditure, Human Resources and Research Infrastructure

In the long term, the business sector has been the most important source of R&D funding in the Czech Republic and concurrently the most important sector where the R&D is carried out (use of funds for R&D). In 2010, it contributed approximately 49% to the funding and 62% to the use. The business sector (private national resources) invested its own funds worth nearly CZK 28.9 billion in R&D in 2010.

Graph 21: Total R&D expenditure from business resources



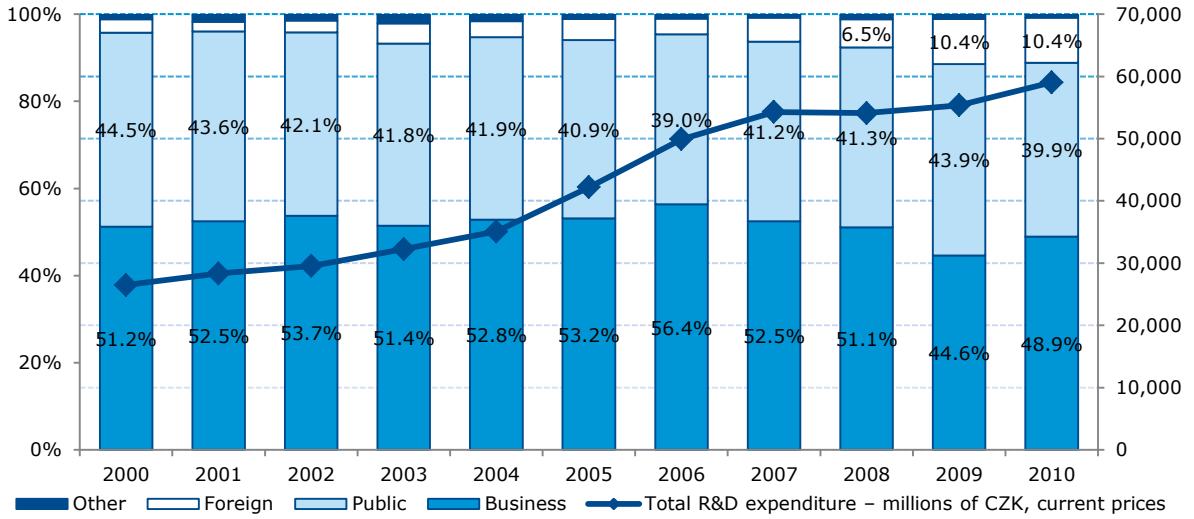
Source: Analysis and International Comparison of Research, Development and Innovation in the Czech Republic in 2011 and Czech Statistical Office data (Annual Statistical R&D Survey (VTR 5-01))

Domestic enterprises provide the largest portion of funding for R&D activities carried out in the territory of the Czech Republic from their own resources. Until 2008, they had always contributed at least 50%. Starting from 2007, however, the share of private business resources in R&D funding in the Czech Republic was declining to 45% in 2009. In that year, the level of public resources approached that of private resources for the first time. In 2010, this share slightly rose to 48.9%. Since January 2000, enterprises in the Czech Republic have invested their resources worth almost CZK 240 billion in their own R&D or in the R&D carried out in other sectors, but approximately 97% of those resources were again used in the business sector while only 3% were used for the co-funding of public R&D – i.e. the R&D carried out in the governmental and higher education sector.[30]

[29] According to the Innovation Union Scoreboard 2011, Analytical Background Data for the National Innovation Strategy of the Czech Republic, Technology Centre of the Academy of Sciences of the Czech Republic (June 2011) and the Analysis of Substantive Priorities and Needs of the Individual Areas within the Competence of the Ministry of Industry and Trade for Focusing the Aid from EU Structural Funds in the Next Programming Period (2014+), Berman Group (November 2010)

[30] Analysis and International Comparison of Research, Development and Innovation in the Czech Republic in 2010

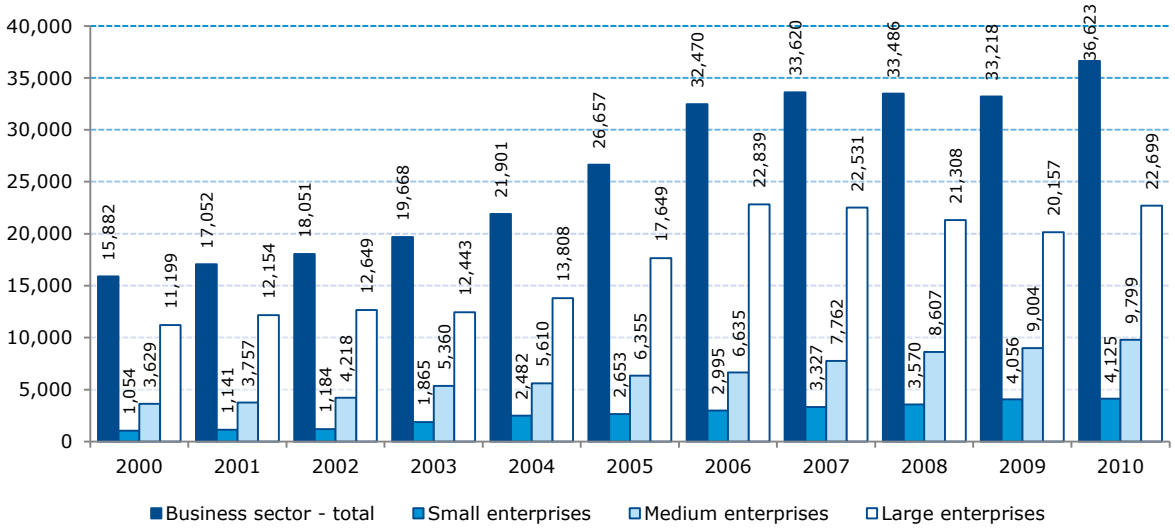
Graph 22: Total R&D expenditure by main sources of funding



Source: Analysis and International Comparison of Research, Development and Innovation in the Czech Republic in 2011 and Czech Statistical Office data (Annual Statistical R&D Survey (VTR 5-01))

R&D expenditure by the business sector (from business, public as well as foreign resources) in 2010 was CZK 36.6 billion, 11.3% of which at small enterprises (with staff headcount of 0–49) and 26.8% at medium-sized enterprises.

Graph 23: R&D expenditure in sub-sectors of the business sector by enterprise size (millions of CZK in current prices), 2000–2010

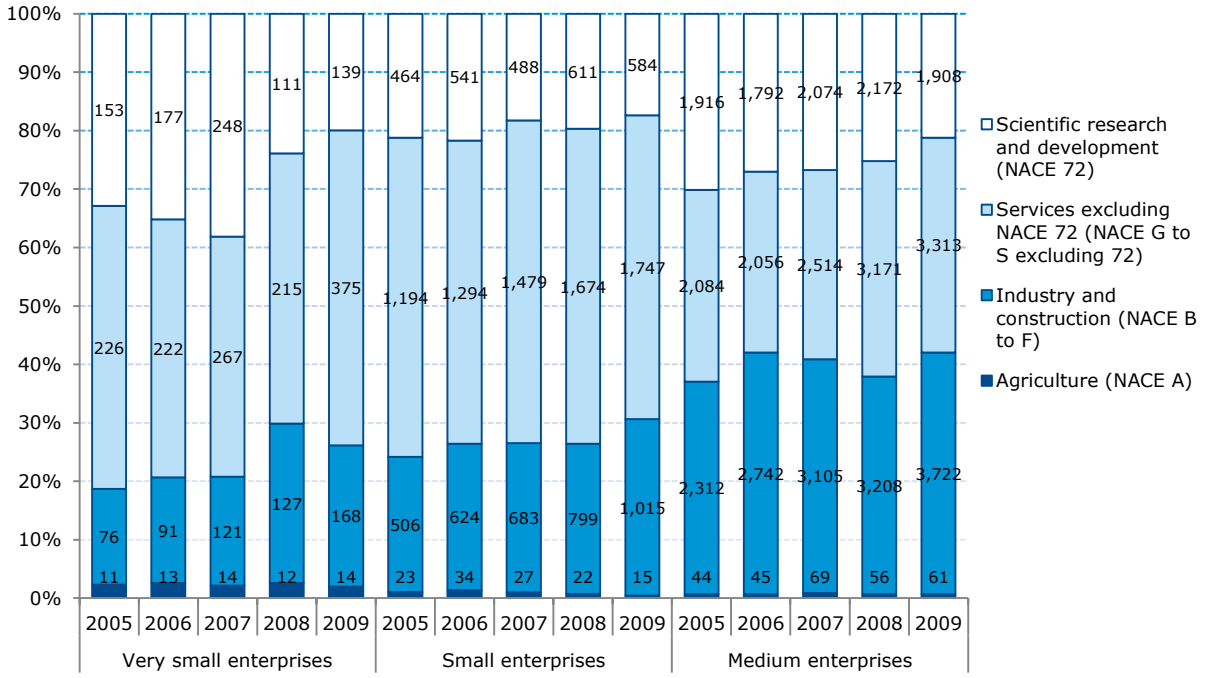


Source: Czech Statistical Office, Ministry of Industry and Trade

As concerns R&D expenditure in the SME sector, we can say that small enterprises (up to 49 employees) primarily spend such expenditure in services while medium-sized enterprises do so in industry and construction.[31]

[31] Source: Czech Statistical Office data (Annual Statistical R&D Survey (VTR 5-01), the classification of enterprises by size (staff headcount): very small enterprises (0-9 employees), small enterprises (10-49 employees), medium enterprises (50-249 employees)

Graph 24: R&D expenditure in the SME sector by the main branch sections (millions of CZK in current prices)



Source: Czech Statistical Office, Ministry of Industry and Trade

The number of R&D reporting units[32] has been regularly rising since 2005. In 2010, the number of entities defined in this way reached 2,587 (up by 28% since 2005). Of these R&D centres, 2,130 units (82% of all R&D centres) fell within the business sector in 2010 according to sector of performance; 1,000 units came from among small enterprises while 738 units from among medium-sized enterprises. R&D centres in the business sector were primarily engaged in technical scientific fields in 2010 (69% of R&D centres in this sector of performance), which is consistent with the sectoral structure of industrial enterprises in the Czech Republic[33]. In 2010, micro and small enterprises had 4,521 R&D employees (FTE equivalent[34]), i.e. 16.7% of all R&D staff in business, 48% of whom were researchers. Medium-sized enterprises employed 9,745 R&D staff (36.1% of all R&D staff in business), 47.1% of whom were researchers[35].

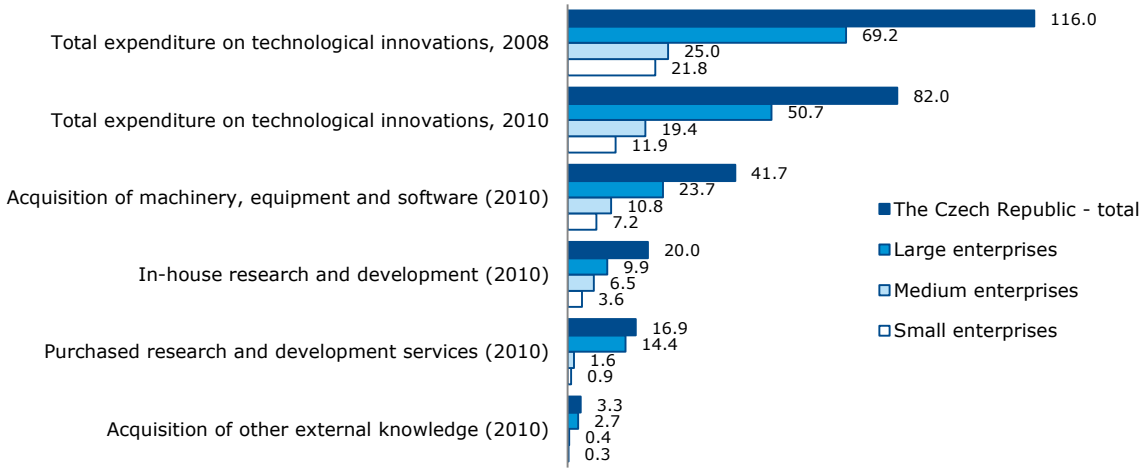
5.3 Innovation Expenditure, Amount of Public Aid and Venture Capital

Enterprises significantly reduced their expenditure on introducing technological innovations[36]. In 2010, economic operators spent CZK 82 billion on product and process innovations, down by 29% (from CZK 116 billion) vis-à-vis 2008. The costs of technical innovations dropped among enterprises of all sizes, with the percentage fall being the greatest, almost 50%, among small

[32] Legal and natural persons engaged in R&D&I in the territory of the Czech Republic, irrespective of their staff headcount, most frequent economic activity, legal form or institutional sector
[33] Source: Czech Statistical Office – Annual Statistical R&D Survey (VTR 5-01) and according to Analytical Background Data for the National Innovation Strategy of the Czech Republic, Technology Centre of the Academy of Sciences of the Czech Republic, June 2011
[34] FTE – full-time equivalent – corresponds to one year's work by one full-time employee
[35] Source: Czech Statistical Office – Human Resources for Science and Technology
[36] Introduction of a product or process innovation or ongoing or interrupted innovation activities (technical)

enterprises. Total expenditure on technological innovations of small and medium-sized enterprises fell by approximately 33% in 2010 vis-à-vis 2008, thus amounting to approximately CZK 31.3 billion.[37]

Graph 25: Expenditure on technological innovation by expenditure type (key sectors) in billions of CZK

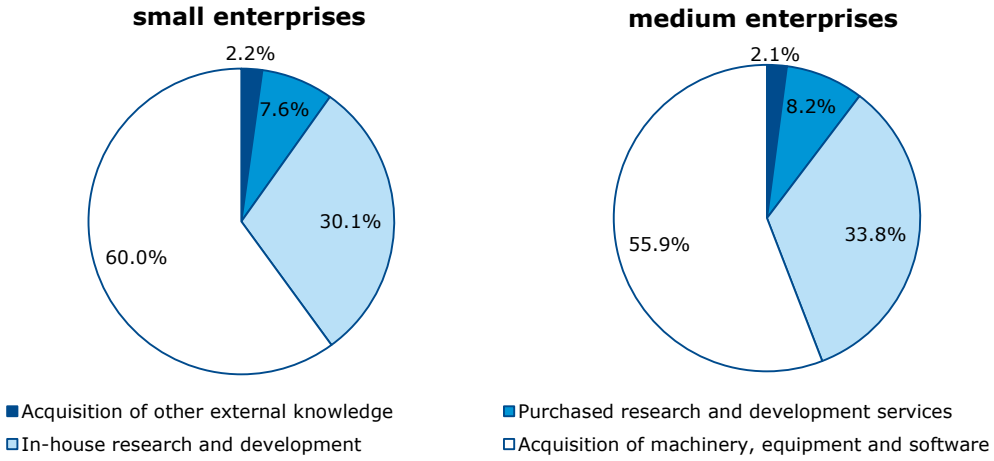


Source: Czech Statistical Office (Innovation Activities of Businesses, 2008–2010), Ministry of Industry and Trade

A more illustrative view of the structure of technological innovation expenditure by small and medium-sized enterprises is shown in the two graphs below. They indicate that the costs mostly consist of the purchase of machinery, equipment and software (60% at small enterprises, 55.9% at medium-sized ones). This signals that the innovation process of Czech enterprises is generally characterised by the high importance of knowledge transfer through the purchase of machinery and equipment. In the context of foreign investment inflow, we can assume that this transfer takes place along the line from a foreign parent company to its subsidiary located in the Czech Republic. Thus the innovation process of Czech firms takes the form of adopting state-of-the-art technologies, processes and other production-related methods rather than creating their own unique solutions.[38] However, we should note that firms also purchase technology and software because of introducing or expanding their own R&D. In-house R&D expenditure made up approximately 30% of technological innovation expenditure at small enterprises, as opposed to approximately one third at medium-sized enterprises. The lowest share of innovation expenditure at small and medium-sized enterprises consisted of expenditure on the acquisition of R&D results and other knowledge from other entities. For enterprises of both sizes, this expenditure makes up approximately the same share, i.e. 9.8% at small and 10.3% at medium-sized enterprises. By comparison, acquisition of R&D results or knowledge from external sources is particularly typical of large firms, which spent 33.7% of their technological innovation expenditure on this in 2010. The purchase of R&D services becomes a necessity for large firms, which thus increasingly seek a source of innovation outside their own organisations.

[37] Source: Czech Statistical Office, Innovation Activities of Enterprises, 2008–2010
[38] Analytical Background Data for the National Innovation Strategy of the Czech Republic, Technology Centre of the Academy of Sciences of the Czech Republic, June 2011

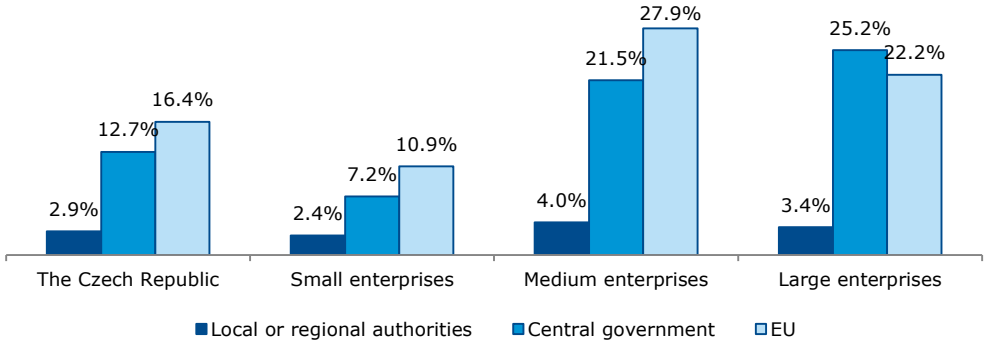
Graph 26: Structure of technological innovation expenditure (key sectors) in 2010



(Source: Czech Statistical Office, Ministry of Industry and Trade)

If we look at the possible impact of public aid for enterprises on their innovation activities, we find that the share of small technologically innovative enterprises that received the aid is 20.4% of all technologically innovative small enterprises, as opposed to 53.3% in the case of medium-sized enterprises.[39]

Graph 27: Public financial aid for innovations of technically innovative enterprises, 2008–2010 (share in the total number of technically innovative enterprises within the relevant group)



Source: Czech Statistical Office (Innovation Activities of Enterprises, 2008–2010), Ministry of Industry and Trade

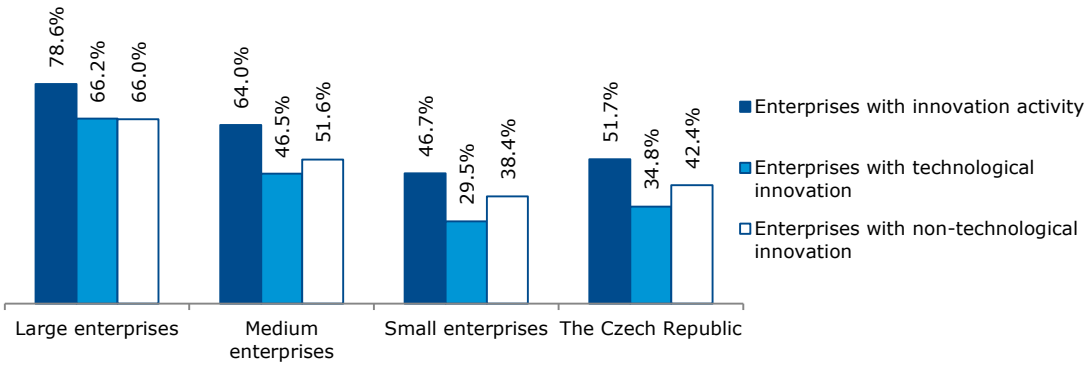
In 2010, the Czech Republic saw a significant decline in the level of private equity and venture capital investments vis-à-vis 2009. However, the exceptional level of 2009 investments was due to a small number of large investments, some of which even in companies operating not only in the Czech Republic but also in the entire Central and Eastern European region (notably an investment in StarBev, which exceeded EUR 1 billion). In 2010, the PE/VC investments in the Czech Republic were EUR 193 million, down by almost EUR 1.2 billion vis-à-vis 2009. The 2009 investments amounted to EUR 1.39 billion, as opposed to EUR 435 million in 2008 and EUR 182 million in 2007.[40] However, the nascent and initial stages of entrepreneurship were not covered.

[39] Source: Eurostat CIS6, 2008
[40] Source: CVCA (Czech Private Equity and Venture Capital Association), February 2011; Share of venture capital investments in GDP - Eurostat

5.4 Innovation Activities

A total of 51.7% of all economically active enterprises[41] innovated, i.e. were regarded as innovative according to a Eurostat definition[42], in the Czech Republic from 2008 to 2010, with 46.7% of small enterprises and 64% of medium-sized enterprises being innovative. The share of innovative enterprises declined according to the previous survey (Community Innovation Survey 2006–2008). From 2006 to 2008, the share of innovative enterprises in the total number of economically active enterprises was 56%, i.e. slightly above the EU-27 average (51.6%), with Estonia being the only Central and Eastern European country with a better share (56.4%). The share of small innovative enterprises was found to be 52.3% while the share of medium-sized innovative enterprises was 63.5%.

Graph 28: Share of enterprises with innovation activities by type of innovation in the total number of enterprises within the relevant size group (key sectors); 2008–2010



Source: Eurostat, Czech Statistical Office, Ministry of Industry and Trade

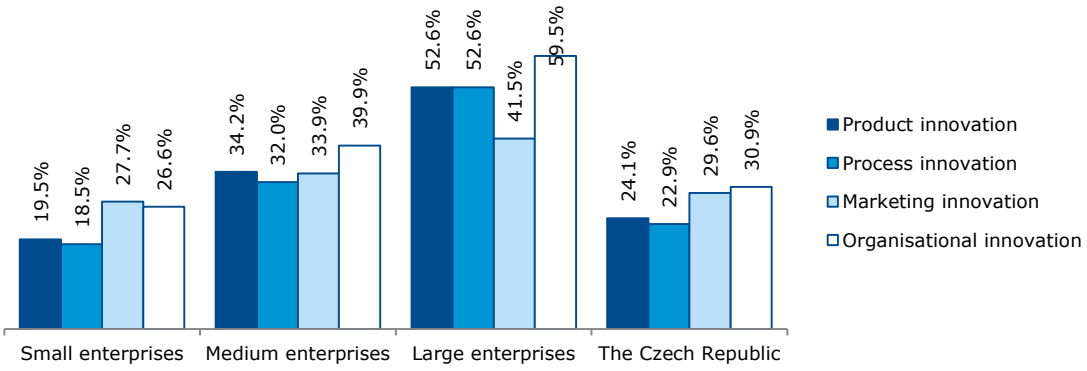
Compared to 2004–2006, the share of innovative enterprises increased from 42% to 56% in 2006–2008. The share of small innovative enterprises increased the most, from 37.2% in 2004–2006 to 52.3% in 2006–2008. Medium-sized enterprises saw an increase from 57.1% to 63.5% between the monitored periods.

The group of small and medium-sized enterprises tends to carry out non-technological innovation activities (marketing and organisational innovations) while the innovation activities of large enterprises are represented more evenly, by both technological and non-technological innovations.

[41] Key sectors for the innovation activities of enterprises according to Eurostat methodology (CZ-NACE rev. 2): Mining and quarrying (NACE B), Manufacturing (NACE C), Electricity, gas, steam and air conditioning supply (NACE D), Water supply; sewerage; waste management and remediation activities (NACE E), Wholesale trade, except of motor vehicles and motorcycles (NACE G46), Transporting and storage (NACE H), Publishing activities (J58), Telecommunications (J61), Computer programming, consultancy and related activities (J62), Information service activities (J63), Financial and insurance activities (NACE K), Architectural and engineering activities; technical testing and analysis (M71). Enterprises with more than 10 employees are monitored.

[42] Sixth Community Innovation Survey, Eurostat (data published on 10 November 2010) – Innovative enterprises are those enterprises which, within the specified period, either introduced (placed on the market or implemented in business operations) a new or significantly improved product (goods or services), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations. The method must be new (or significantly improved) at least for the enterprise.

Graph 29: Enterprises with innovation activities by type of innovation in the total number of enterprises within the relevant size group (key sectors); 2008–2010



Source: Eurostat, Czech Statistical Office, Ministry of Industry and Trade

For technological innovations, the largest share of enterprises with both product and process innovations is in the sector of information and communication. While for non-technological innovations besides the sector of information and communication, it is also the sector of financial and insurance activities and large share of enterprises with marketing innovations is also in wholesale trade.

In connection with the focus on tackling social challenges, the innovations to mitigate environmental impacts of economic activities have been monitored increasingly in recent years. In 2006–2008[43], small and medium-sized innovative enterprises in the Czech Republic, as part of introducing ecological innovations, primarily focused on waste, water and material recycling innovations. The share of enterprises that introduced this type of innovation reached 45.1% of all medium-sized innovative enterprises and 38.5% of small ones. The second most frequent ecological innovation introduced was the reduction of energy consumption per unit of labour (40.8% among medium-sized innovative enterprises and 28.4% among small innovative enterprises). By contrast, the least frequent type of eco-innovation introduced was an in-house CO_2 emission reduction (reported by 21.3% of medium-sized innovative enterprises and approximately 14% of small ones).[44] Larger enterprises carry out eco-innovations to a greater extent.

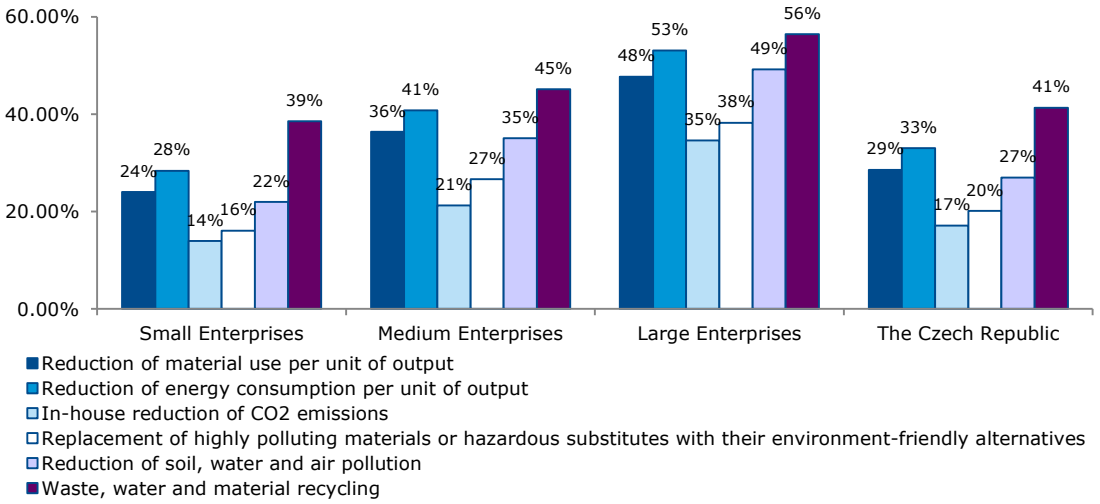
In 2006–2008, the largest share of eco-innovative enterprises among small and medium-sized innovative enterprises within the monitored sectors (CZ-NACE rev. 2) was in "Electricity, gas, steam and air conditioning supply" (almost 46% among small enterprises and more than 48% among medium-sized ones). This was followed by "Transporting and storage" (approximately 36%) and "Water supply; sewerage; waste management and remediation activities" (approximately 30%) among small innovative enterprises, as opposed to "Mining and quarrying" (approximately 46.5%) and, again, "Water supply; sewerage; waste management and remediation activities" (approximately 43.5%) among medium-sized enterprises.

One of the sectors where the lowest number of in-house eco-innovations connected with the production of goods or services were introduced was the "Financial and insurance activities". By

[43] This data was not separately monitored under the "Innovation Activities of Enterprises, 2008–2010" survey.
[44] Source: Eurostat, CIS6, 2006-2008

contrast, the largest overall share of small innovative enterprises was in the sector of "Electricity, gas, steam and air conditioning supply", specifically the CO_2 emission reduction (61.6%). For medium-sized innovative enterprises, this applied to waste, water and material recycling in the sector of "Mining and quarrying" (63.3%). In manufacturing, which is specific for its numerous innovation activities, small innovative enterprises most frequently introduced eco-innovations in waste, water and material recycling (40.7%), whereas medium-sized innovative enterprises did so in the reduction of energy consumption.

Graph 30: Share of individual types of eco-innovations connected with production of goods or services among innovative enterprises by enterprise size; 2006–2008



Source: Eurostat, Ministry of Industry and Trade

In 2006–2008, small and medium-sized innovative enterprises in the Czech Republic cited the need to comply with existing environment protection laws as the main reason for introducing ecological innovations (45.76% of medium-sized enterprises and 37.11% of small ones). The introduction of ecological innovations because of the need to comply with environment protection laws, where their application is anticipated in the future, was cited as the main reason by 31.51% of medium-sized innovative enterprises and 23.89% of small innovative enterprises. The lowest number of small and medium-sized innovative enterprises (below 10%) cited the availability of public contracts, a grant or other financial incentives relating to ecological innovations as the main reason for introducing an ecological innovation. Market demand from customers was the reason for 29.41% of medium-sized innovative enterprises and 20.92% of small innovative enterprises.[45]

5.5 Cooperation among Innovation System Actors as Viewed by Small and Medium-sized Enterprises

According to a Czech Statistical Office survey[46], 34.2% of innovative enterprises[47] cooperated in their innovation activities with another enterprise, university or research institution. Small and

[45] Eurostat, CIS6, 2006-2008
[46] Czech Statistical Office, Statistics of Innovation Activities of Enterprises, 2008-2010

medium-sized enterprises cooperate in their technical innovation activities to a lesser extent than large enterprises. In 2008–2010, small innovative enterprises in the Czech Republic primarily cooperated in technical innovations with enterprises from the Czech Republic (23.5% of them) and from the other European countries (13.8%), from the United States (2.4%) and from India or China (1.9%). In the same period, medium-sized innovative enterprises also primarily cooperated in their technical innovations with enterprises from the Czech Republic (39.5%) and the other European countries (28.1%), but their cooperation with partners from the United States (4%) and India or China (2.4%) was greater compared to small enterprises.[48] A previous survey[49] indicates a much larger share of foreign-affiliate enterprises than domestic enterprises (approximately double) that cooperate with a partner coming from the EU.

The most valuable cooperating partners for technologically innovative small and medium-sized enterprises were clients or customers (evidence of this is the ever-growing share of user-driven innovations) and suppliers of equipment, materials, components or software. This was followed by the other enterprises within the enterprise group, universities and other higher education institutions, consultants, commercial laboratories and private R&D institutions, as well as competing and other enterprises from the same sector. Government institutions and public R&D institutions were regarded as the least valuable.[50]

In 2008–2010, technically innovative small and medium-sized enterprises in the Czech Republic cited information gained within the enterprise or within the enterprise group as the most important information source for their innovation activities. Customers were another important source. Information from suppliers of equipment, materials, components or software was most frequently cited as being of medium importance. Technically innovative enterprises cited information gained from scientific journals and commercial (technical) publications as being of small importance most frequently. Information from the Government and private non-profit research institutions, as well as information from universities and other higher education institutions was almost not at all used as a source for innovation activities.[51]

The cooperation between the private and public sectors lags behind the European average. Detailed analyses indicate that the cooperation between the research and application sectors as well as other actors within the national innovation system is inadequate in the Czech Republic, with this being evident in the separation of the knowledge origination process and the knowledge translation into practical applications. Expenditure on R&D funded by business made up more than half the total R&D expenditure in the Czech Republic in the long term, but this share declined in the last two years. Since 2000, a total of CZK 231.8 billion[52] has been invested in R&D by business, CZK 7.6 billion of which on public research and development, i.e. 3.3% of all business resources allocated for R&D in the Czech Republic. The business sector made up 4.3% of all funds spent on

[47] With a product or process innovation
[48] Czech Statistical Office – Innovation Activities of Enterprises in the Czech Republic, 2008-2010
[49] Czech Statistical Office, Statistics of Innovation Activities of Enterprises, 2006-2008
[50] Czech Statistical Office – Innovation Activities of Enterprises in the Czech Republic, 2008-2010
[51] Czech Statistical Office – Innovation Activities of Enterprises in the Czech Republic, 2008-2010
[52] 2000–2010

public R&D in that period. A great majority of the business resources allocated for the support to public R&D, i.e. 91.5% of those funds, were spent in the government sector over the monitored period. Thus only 8.5% (CZK 0.65 billion) of the above amount was spent in the higher education sector in the last 10 years.[53]

5.6 Extent of the Market for Innovative Enterprises

In 2008–2010, 60.6% of small innovative enterprises in the Czech Republic operated in the national market, as opposed to 24.5% of small innovative enterprises citing that they operated at regional level, while 12.4% of those enterprises cited that they operated in the Member States and applicant countries of the EU or EFTA. Medium-sized innovative enterprises are more active in the Member States and applicant countries of the EU and EFTA (52.9%) than small enterprises, and slightly less at national (31.8%) and regional (11.2%) levels.

In 2008–2010, technically innovative small and medium-sized enterprises in the Czech Republic cited the expansion of the range of their product and service portfolios as the primary objective of their innovation activities (48% of small enterprises, 49.1% of medium-sized ones). The second most important objective of introducing technical innovations was an increase in the market share (41.8% of small enterprises, 48.7% of medium-sized ones). Entry into new markets was an important target for just about one third of small and medium-sized enterprises.[54]

For technically innovative small and medium-sized enterprises, a lack of funds in the company was the primary reason that curbed their innovation efforts (approximately one third of SMEs).[55] Other reasons they cited included excessive innovation costs, the factor of a market controlled by established firms and, to a lesser extent, the factor of a lack of funds from resources outside the company. A lack of skilled workforce was another important reason for approximately 10% of small and medium-sized enterprises. A positive aspect is the decreasing share of enterprises citing a lack of demand for innovations as the reason; this is evidence that enterprises are increasingly aware of the importance of innovations for their enterprise.

5.7 Intellectual Property Protection

The number of patents granted by the Industrial Property Office (IPO) to applicants from the Czech Republic has not been rising significantly since 2001, except for years 2005, 2009 and 2011, when the number of patents granted was slightly higher than in the previous years. The number of patents from the European Patent Office (EPO) granted to Czech entities has been slowly rising. However, relative to inhabitants, the Czech Republic obtains fewer than 2% of the number of

[53] Analytical Background Data for the National Innovation Strategy of the Czech Republic, Technology Centre of the Academy of Sciences of the Czech Republic, June 2011; Research and Development Indicators for 2010, Czech Statistical Office
[54] Czech Statistical Office – Statistics of Innovation Activities of Enterprises, 2008-2010
[55] Czech Statistical Office – Statistics of Innovation Activities of Enterprises, 2008-2010

patents granted to Switzerland and below 3% of the patents granted to Sweden, Germany or Finland. The Czech Republic lags dramatically behind leading European countries even in the number of patents granted by the United States Patent and Trademark Office (USPTO). Moreover, the number of patents granted by the USPTO essentially stagnates and, since 2000, has only increased by a third.[56]

The foreign patent activity of applicants from the Czech Republic is still very low. While entities from this country submitted 885 patent applications to the European Patent Office (EPO) from 1993 to 2008, this was just 0.05% of all applications. In 2008, entities from the Czech Republic submitted nearly 12 patent applications per 1 million inhabitants to the EPO. This indicator is still way below the average of the whole of the EU-27 (107 applications per 1 million inhabitants). A positive fact is that the number of patent applications submitted to the EPO by entities from the Czech Republic has been annually rising in recent years.[57]

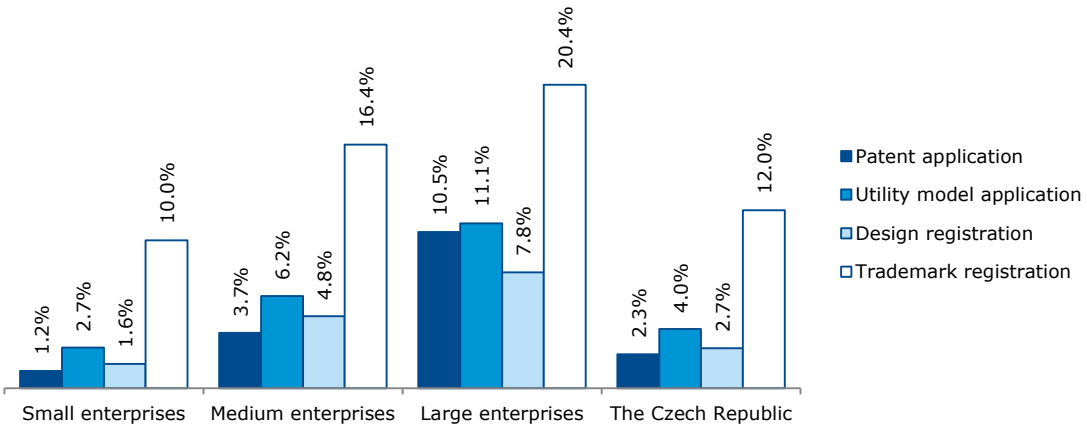
With the possibility of using the EU unitary patent system, to be put in place since 2014, Czech enterprises will face a new intellectual property challenge. Thus the patent protection across the EU territory (except Italy and Spain, as these Member States do not participate in the EU unitary patent system at the moment) should also open up to small and medium-sized enterprises.

A total of 340 patents were granted to applicants from the Czech Republic in 2011, with 125 patents (37%) granted to enterprises and 66 (19%) to natural persons; public higher education institutions also obtained a large number of the patents granted (107 patents; 31.5%). Enterprises from the Czech Republic obtained 61% of the 125 patents, as opposed to 39% for foreign affiliates. As concerns the patent distribution among enterprises of various sizes, medium-sized enterprises captured the largest share (35%), as did large enterprises (35%). The shares of small enterprises (staff headcount of 10–49) and micro enterprises (staff headcount below 10) in the number of patents were lower, making up 30% together (16% for the former; 14% for the latter). Thus enterprises held 1,094 valid patents in 2011.[58]

In 2006–2008, innovative enterprises in the Czech Republic most frequently registered a trademark as part of the protection of their industrial property (10% of small and 16.4% of medium-sized enterprises). A patent application was submitted by 1.2% of small and 3.7% of medium-sized innovative enterprises while a utility model application was submitted by 2.7% of small and 6.2% of medium-sized innovative enterprises. The share of innovative enterprises under foreign control that applied for a patent was greater than that of domestic enterprises.[59]

[56] According to Analytical Background Data for the National Innovation Strategy of the Czech Republic, Technology Centre of the Academy of Sciences of the Czech Republic, June 2011
[57] Czech Statistical Office – Industrial Property Protection in the Czech Republic in Figures
[58] Czech Statistical Office – Patent Statistics
[59] Czech Statistical Office – Statistics of Innovation Activities of Enterprises, 2006-2008

Graph 31: Rights to use intellectual property among innovative enterprises by size; 2006–2008



Source: Czech Statistical Office, Ministry of Industry and Trade

6 Analysis of Energy Requirements of Enterprise in the Czech Republic

Due to the unavailability of data for enterprises of individual sizes, this chapter focuses on the analysis of the energy requirements of enterprise and the use of renewable and secondary energy sources in general, and thus fails to define the role of small and medium-sized enterprises in those areas.

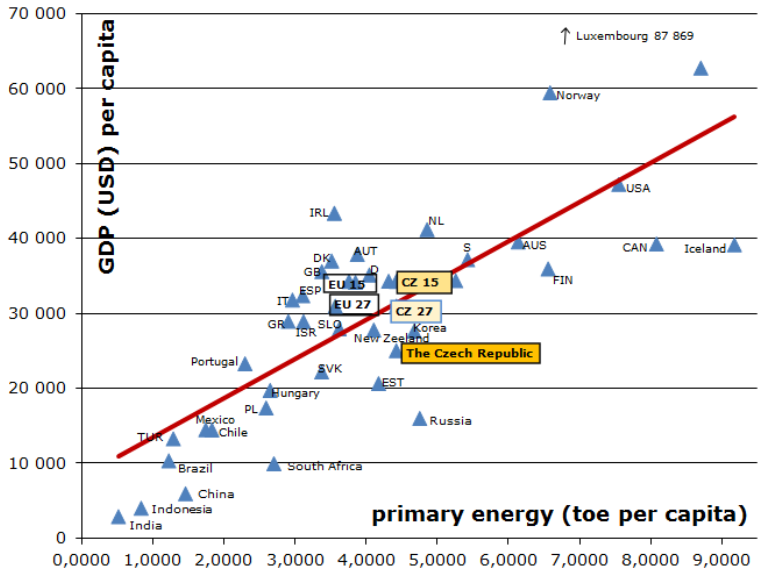
6.1 Development of Business Sector's Energy Requirements

In the indicators of energy requirements (such as the dependence of GDP value on primary energy consumption), the Czech Republic is currently above the EU-27 average. This position is consistent with the traditional industrial specialisation of the Czech Republic and the position of the Member States newly admitted into the EU in 2004 and 2007. However, the comparison should also take account of the difference in the economic performance of the countries compared; through a lower valuation of products, this influences the parameter of energy requirements and provides a distorted view of the energy requirements in one country or another. In terms of energy consumption per capita as well as electricity consumption per capita, the Czech Republic is approximately at the average of EU countries. The overvaluation of consumption of primary energy sources by value added has increased significantly after 2000. Nevertheless, there is still a decent potential for savings, influenced by the lack of funds for investments in power-saving projects and by the lack of knowledge about efficient use of energy in the tertiary sector, of small and medium-sized industrial enterprises.

Energy consumption (whether primary or electrical) greater than in other developed countries is not necessarily the only structural disadvantage of the Czech Republic; its disadvantage is a relatively lower performance of its economy than it ought to be according to its energy consumption vis-à-vis the average – a tendency in OECD countries.

In addition, it is evident that a GDP 'per capita' increase to the EU-27 or even EU-15 level would push the Czech Republic among the countries with above-average overvaluation of their energy consumption. This means that an increase in its gross domestic product while maintaining its energy consumption or faster GDP growth than the increase in energy consumption, both of which being related to productivity improvements at firms and the economy as a whole, is a major target for the Czech economy, as is the (absolute) reduction in energy consumption.

Graph 32: GDP dependence on primary energy consumption



Source: "Forman dixit" based on OECD statistics, Analysis of Substantive Priorities and Needs of the Individual Areas within the Competence of the Ministry of Industry and Trade in the Next Programming Period (2014+), BermanGroup

6.2 Energy Efficiency Status according to NAPEE II. The Czech Republic

In 2006, the European Union adopted Directive 2006/32/EC of the European Parliament and of the Council on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC. According to its wording, specifically Article 14(2), Member States shall submit Energy Efficiency Action Plans (EEAPs) to the European Commission. According to the Directive, Member States had to submit the first EEAP by 30 June 2007 and the second EEAP by 30 June 2011. In these Action Plans, Member States presented their ideas about implementing the national indicative target to promote energy efficiency. This target aims to reduce the annual average consumption by 9% of the final consumption average in 2002–2006, by 20,309 GWh, with the achievement of the target expected during 2008 to 2016. The EEAP will be updated by 30 June 2014 next time.

Table 10: Calculation of the 2002–2006 average and updated indicative target of the Czech Republic

Five-year average, 2002-2006	225,651 GWh
9% energy-savings target for the end of 2016	20,309 GWh
Average annual savings for 2008-2016	2,257 GWh

(Source: Second National Action Plan for Energy Efficiency of the Czech Republic)

The National Action Plan for Energy Efficiency (NAPEE), prepared pursuant to Directive 2006/32/EC, applies to final energy consumption except for the defence sector and the enterprises falling within trading in emission allowances. The graphs that show the development of final energy consumption in the Czech Republic apply to all sectors without exceptions. They clearly indicate a decrease in final consumption in 2007–2009, which is due to several reasons, including permanent efforts and direct support for energy savings in accordance with the State Energy Concept.

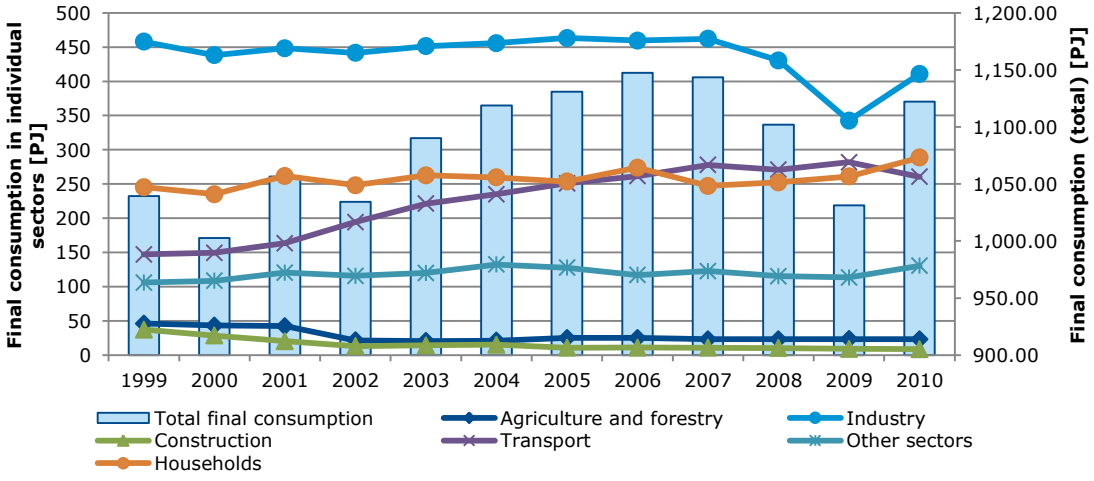
In the period covered by NAPEE-I (2006–2010), the greatest decrease is achieved in industry while the consumption also fell slightly in construction, agriculture, trade and services. The final consumption in transportation and households rose slightly.

Graph 33 clearly indicates that the rising trend in **overall energy consumption** in 2000–2006, when this consumption rose by 14% overall, ended in 2007, when the situation changed, with a positive decline in overall consumption (by 0.36% in 2007, by 3.6% in 2008 and by 6.42% in 2009). The decline is due not only to savings but also to the impacts of the economic crisis. In 2010, however, the overall energy consumption increased again, by 8.8%.

The sector with the highest energy consumption is industry (36.6% in 2010). Although the final energy consumption in this area varied on the year-on-year basis, a decline was evident from 2007 to 2009, in all forms of energy: electricity, heat and fuel. In 2010, however, energy consumption in industry again increased but failed to reach the 2008 level. The manufacturing sectors with the highest energy requirements include chemical and petrochemical industry, manufacture of basic metals, and manufacture of non-metallic mineral products.

Other largest energy consumers in the Czech Republic include households and the transport sector. In 2010, the share of households in energy consumption was 25.7% while the share of the transport sector was 23.2%. Unlike the other sectors, consumption in the transport sector annually increases, except for 2008, when the decrease was due to the starting economic crisis, a consequence of which was an overall decline in the volume of transport, as well as 2010. In the last 10 years (1999 to 2009), the total energy consumption in the transport sector rose by 91.5%. Consumption of households varies, influenced by numerous factors, including weather, with the length of the heating season and winter temperatures having a great impact. Since 2007, energy consumption in this sector has been rising, with 2010 consumption having increased by 10.6% y/y.[60]

Graph 33: Development of final energy consumption in the Czech Republic



(Source: Czech Statistical Office, Ministry of Industry and Trade)

[60] Key Indicators of the Czech Republic's Environment – Evaluation of the Final Energy Consumption Indicator

Our evaluation of the total energy savings under NAPEE I, covering the period of 2008–2010, is primarily based on the year-on-year consumption trends for individual types of fuel in the monitored sectors, as reported by the Statistical Office for 2006, 2007 and 2008.

The reduced final consumption of fuel and energy between 2007 and 2008 fell by **12,332 GWh.** Given the decline in final consumption according to this table, we assume that **the indicative energy savings target for 2008 was easily met.** The decline only attributable to energy savings under the ESD should be 2,257 GWh a year on average.

Table 11: Reduced final energy consumption in 2007 and 2008

	2007 [GWh]	2008 [GWh]	Difference between 2007 and 2008 [GWh]
Final energy consumption	**317,628**	**306,109**	**-11,519**
Exemption: energy consumption at enterprises with emission trading allowances and net energy consumption of armed forces	68,061	68,873	812
Final energy consumption under ESD	**249,568**	**237,236**	**-12,332**
Of which: household sector	68,663	67,788	-875
Tertiary sector	30,275	28,736	-1,539
Industry (under ESD)	67,618	60,824	-6,794
Transport	6,035	6,106	71
Agriculture	76,977	73,783	-3,194

Source: Second National Action Plan for Energy Efficiency of the Czech Republic

As 2009 was affected by the crisis and consumption fall in almost all types of fuel, **we expect that the planned savings were also achieved in 2009.**

6.3 Status of Development of Renewable Power Generation in the Czech Republic

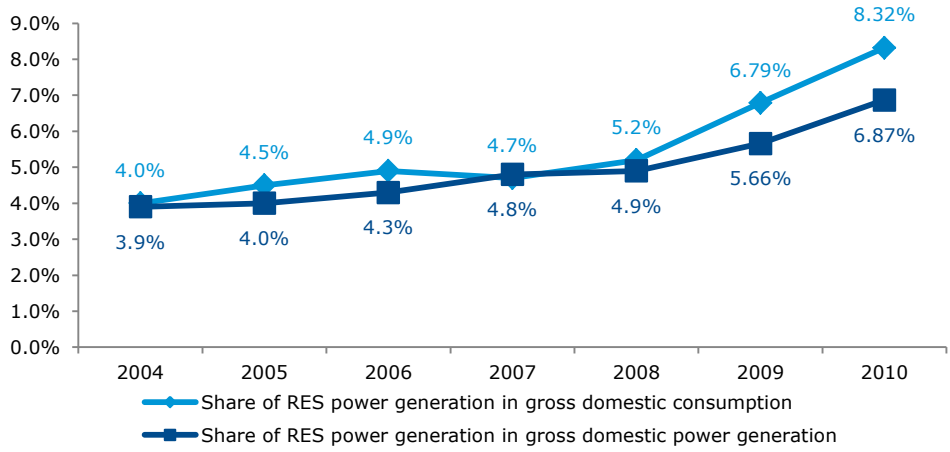
In the Czech Republic, renewable energy sources (RES) include non-fossil natural energy sources, i.e. energy of water, wind, solar radiation, solid biomass and biogas, ambient energy, geothermal energy and liquid biofuel energy. As a Member State of the European Union, the Czech Republic has undertaken to increase renewable power generation.

The indicative targets of the RES share for individual Member States were based on Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market. They were defined as percentage shares of power generation in the gross national electricity consumption of each Member State. In its Accession Treaty, the Czech Republic undertook to achieve the indicative target of 8% of the share of RES electricity in gross national consumption of the Czech Republic in 2010. The indicative target was included in Act No 180/2005 Coll., on promoting renewable power generation and amending certain Acts, by which the above Directive was implemented into Czech law.

In 2009, new Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC was issued and implemented into Czech legislation by Act No 165/2012 Coll., on promoted energy sources. This Act also superseded Act No 180/2005 Coll., on promoting renewable power generation and amending certain Acts. The Directive binds Member States to adopt measures and support programmes leading to increases in renewable power generation. The decision on the particular forms of such measures is up to the individual States. Each Member State shall adopt a national renewable energy action plan, where it shall set the national target for the shares of energy from renewable sources in transport, power generation, heating and cooling in 2020. **The Czech Republic's National Renewable Energy Action Plan was approved by the Resolution No 603 of the Government of the Czech Republic of 25 August 2010. Under this document, the Czech Republic has set the target value of RES energy at 13.5% of the gross final consumption of energy in 2020.**

Gross renewable power generation made up 8.32% of gross national electricity consumption in 2010, thus achieving the national indicative target of this share for 2010. **The gross renewable power generation made up 6.87% of the total gross domestic power generation (including exports).**

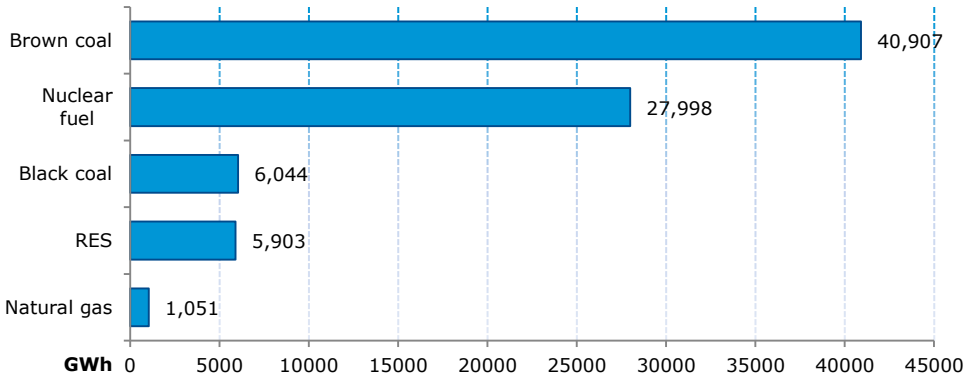
Graph 34: Development of the share of RES power generation



Source: Report on Achieving the Indicative Target of Renewable Power Generation for 2010 (RES 2010 Report)

A total of 85,910.1 GWh of electricity (gross power generation) was produced **in 2010.** The gross power generation increased by 4.5% vis-à-vis 2009. The Czech Republic primarily produces electricity from coal. In 2010, 46,951 GWh of electricity was produced by the direct burning of coal. Compared to 2009 (in spite of the declining tendency in the previous years), the share of coal again increased, and still makes up more than half the total power generation. The second most important source is nuclear energy, which generated 27,998.2 GWh of electricity. **RES generated 5,903.2 GWh of electricity, and its share in gross power generation rose to 6.87%.** Gross electricity consumption was up by 3.4% from 68,606.2 GWh to 70,961.7 GWh vis-à-vis 2009.

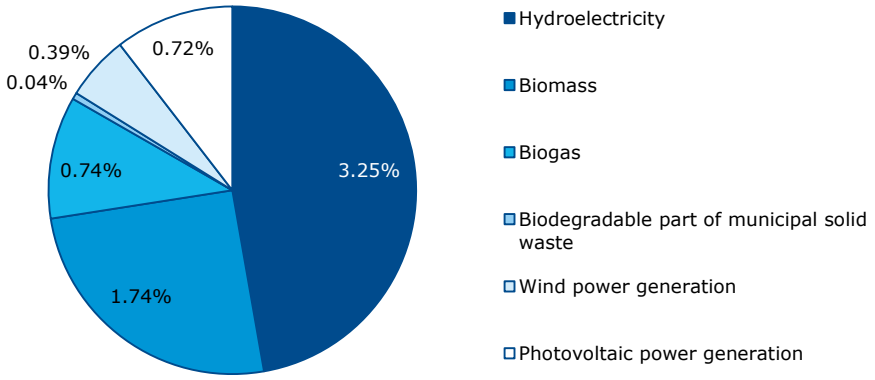
Graph 35: Power generation in 2010 – selected sources



Source: Energy Regulatory Office

The largest contributor to RES power generation in 2010 was hydroelectricity (2,789 GWh). The volume of electricity produced by hydroelectric power stations rose significantly by 359 GWh vis-à-vis the previous year. The second most widely used form of RES was biomass (1,492 GWh) with an increase by 96 GWh. Other major sources of RES electricity include biogas (635 GWh) with an increase by a third, and photovoltaic power generation (615 GWh), which produced more electricity than wind power stations (335 GWh) in 2010 for the first time. Waste incineration plants tripled their production (36 GWh), but this is still negligible in terms of total RES power generation.

Graph 36: Share of individual types of RES in gross power generation in 2010



Source: Report on Achieving the Indicative Target of Renewable Power Generation for 2010 (RES 2010 Report)

There was a significant increase in most power generation sources. **Total production from RES was up by 26.8%.** The year-on-year increase in RES power generation was 1,248 GWh. Photovoltaic power generation went up the most (by 692%), which meant 526.7 GWh more of total electricity produced.

Table 12: Gross renewable power generation

	Gross power generation – timeline (GWh)							2010		
	2004	2005	2006	2007	2008	2009	2010	Share in RES electricity	Share in gross national electricity consumption	Share in gross power generation
Hydro-electricity	2019.4	2380.0	2550.7	2089.6	2024.3	2429.6	2789.5	47.25%	3.93%	3.25%
Biomass	564.5	560.3	731.1	968.1	1170.5	1396.3	1492.2	25.28%	2.10%	1.74%
Biogas	138.8	160.9	175.8	215.2	266.9	441.3	634.7	10.75%	0.89%	0.74%
SMW (BDP)[61]	10.0	10.6	11.3	12.0	11.7	10.9	35.6	0.60%	0.05%	0.04%
Wind power generation	9.9	21.3	49.4	125.1	244.7	288.1	335.5	5.68%	0.47%	0.39%
Photo-voltaic power generation	0.3	0.4	0.6	2.1	12.9	88.8	615.7	10.43%	0.87%	0.72%
Total	**2742.9**	**3133.3**	**3518.9**	**3412.1**	**3731.0**	**4655.0**	**5903.2**	**100%**	**8.32%**	**6.87%**

Source: Renewable Energy Sources in 2010 – statistical findings

The share of gross heat production from RES makes up around 8% of total heat production. The share is based on an estimate of the total gross heat production of approximately 700 PJ for 2007; it is assumed that the total heat production has remained more or less unchanged in recent years. The total estimated volume of RES heat production does not yet include biomass used in small non-household sources and biomass used for heating during individual recreation of people.

Table 13: Generation of heat from renewable energy sources in 2010

	Gross heat production (GJ)	Share in RES heat (%)	Indicative estimate of the share in total gross heat production (%)
Biomass – total	46,736,280	87.8%	6.7%
Non-household biomass	16,065,796	30.2%	2.3%
Household biomass	30,670,484	57.6%	4.4%
Biogas	1,610,361	3.0%	0.2%
Biodegradable part of municipal solid waste	1,777,076	3.3%	0.3%
Biodegradable part of industrial waste and alternative fuel	969,244	1.8%	0.1%
Heat pump (ambient heat)	1,775,703	3.3%	0.3%
Solar thermal systems	366,468	0.7%	0.1%
Total	**53,235,132**	**100%**	**7.6%**

Source: Renewable Energy Sources in 2010 – statistical findings

The share of renewable energy in primary energy sources (PES) was 6.4% in 2010. This estimate applies to energy contained in the fuel used, without taking account of equipment efficiencies. An estimate of primary energy sources for 2010 at 1,856 PJ, prepared by the Ministry of Industry and Trade, was used as the reference value.

[61] Biodegradable part of municipal solid waste

Table 14: Total energy from renewable sources in 2010

	Energy in fuel used for heat production (GJ)	Energy in fuel used for electricity production	Primary energy	RES energy – total (GJ)	Share in RES energy (%)	Share in PES (%)
(Non-household) biomass	20,965,454	13,356,930	0	34,322,383	1.8%	28.8%
(Household) biomass	48,486,113	0	0	48,486,113	2.6%	40.7%
Hydroelectricity	0	0	10,042,106	10,042,106	0.5%	8.4%
Biogas	2,821,319	4,571,208	0	7,392,527	0.4%	6.2%
Biodegradable part of MSW	546,424	2,079,281	0	2,625,705	0.1%	2.2%
Biodegradable part of IW and AF[62]	975,082	0	0	975,082	0.1%	0.8%
Liquid biofuel	0	0	9,807,248	9,807,248	0.5%	8.2%
Heat pumps	1,775,703	0	0	1,775,703	0.1%	1.5%
Solar thermal systems	366,468	0	0	366,468	0.0%	0.3%
Wind power generation	0	0	1,207,775	1,207,775	0.1%	1.0%
Photovoltaic power generation	0	0	2,216,527	2,216,527	0.1%	1.9%
Total	**75,936,562**	**20,007,419**	**23,273,656**	**119,217,637**	**6.4%**	**100%**

Source: Renewable Energy Sources in 2010 – statistical findings

6.4 Support for Increased Use of Secondary Raw Materials

Renewable sources are closely related to the use of secondary raw materials[63]. Raw materials and secondary raw materials form the basic inputs for the economy of any country, thus having a very strong impact on its competitiveness in the conditions of rapidly changing global competition among individual global regions. Given the Czech Republic's insufficient raw material base, the base is largely composed of secondary raw materials in all sectors of its industrial production. Secondary raw materials save primary raw material resources[64] while facilitating technological processes. The sources of secondary raw materials include by-products of production, unprocessed extracted raw materials, products at the end of lifecycle and usable waste that meets the criteria for secondary raw materials and their further processing. The adjustment of secondary raw materials into the quality of input raw material for further production is, in numerous aspects, more economical than the acquisition of input raw materials from primary sources. A significant benefit of secondary raw materials is the reduction of energy and material requirements in all segments of production. Consumption of secondary raw materials keeps rising, proportionately to the increasing environmental requirements for industry. Secondary raw materials reduce the need to extract primary raw materials, reduce emissions from industrial activities and subsequently immissions.

[62] Biodegradable part of industrial waste and alternative fuel
[63] The term secondary raw material is used in numerous legal provisions of both the EU and the Czech Republic, albeit no single definition has been created yet. For us, "secondary raw material" means a substance or item that has ceased to be waste or has never become waste and enters another process of use; in addition, such substance or item is normally traded and its technical characteristics, such as technical and industry standards, trade practices etc., exist to allow for describing the substance or item clearly for the purposes of trade or technological process, and the use of the substance or item must be subject to environment protection.
[64] Primary raw materials mean natural substances of inorganic or organic origin intended for further processing. (Source: Raw Material Policy for Raw Materials and their Resources)

The Czech Republic has virtually no prospects to acquire raw materials for its production of steel and cast-iron as well as production of non-ferrous metals from domestic resources. Thus all metals for industrial use have to be either imported (ores, semi-finished products of metal, scrap) or provided through the only domestic source of metal commodities, i.e. secondary raw materials (metal scrap and materials extracted from products at the end of lifecycle). The use of these secondary raw materials has significant effects on the reduction of production costs (such as energy consumption reduced by approximately 80%), and it also reduces the environmental impacts of production (e.g. through reduced CO_2 emissions, solid and other pollutants).

Some of the ways out of the lack of what are known as the critical raw materials[65], the lack of which may pose a serious risk to key sectors of European industry, include the take-back of products at the end of lifecycle and intensive research and development of new technologies that will allow for extracting the deficient raw materials even from products in which only minute traces of these valuable raw materials are used.

The collection, purchase, treatment and sale of ferrous and non-ferrous secondary raw materials in the Czech Republic amount to approximately CZK 40-50 billion a year, and the sector employs about 20,000-30,000 staff. Approximately 1,500 entities currently operate in the Czech market of secondary raw materials (around 1,000 of those entities have no more than five employees). More than 3.5 million tonnes of ferrous scrap, 120,000 tonnes of non-ferrous metals, over 800,000 tonnes of waste paper, 140,000 tonnes of fragments of glass, and more than 130,000 tonnes of plastics are treated annually, while waste clothing and other commodities are being recycled.

A detailed analysis of the sector of secondary raw materials is included in the updated Raw Material Policy of the Czech Republic, which also reacts to the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Roadmap to a Resource Efficient Europe" (COM(2011)571), which has set a significant sub-target: "By 2020, waste is managed as a resource".

The reduction of energy and material requirements of production is one of the key factors in boosting the competitiveness of enterprises. The use of secondary raw materials as inputs for industrial production will ensure that the Czech Republic will be more self-contained in raw material resources, and it will also be an instrument to reduce the energy and material requirements of industrial production, thus directly contributing to the improvement of the production competitiveness.

[65] EU has defined 14 raw materials the availability of which decreases, and judges them as critical: Antimony, Beryllium, Cobalt, Fluorspar, Gallium, Germanium, Graphite, Indium, Magnesium, Niobium, Platinum Group Metals, Rare earths, Tantalum and Tungsten. These raw materials are very important for metallurgy (production of various alloys), for glass and ceramics industries, production of rubber, cement, optical devices, electric and electronic equipment, in medicine, aeronautical and automotive industries, in research and development of superconducting materials and in many other sectors.

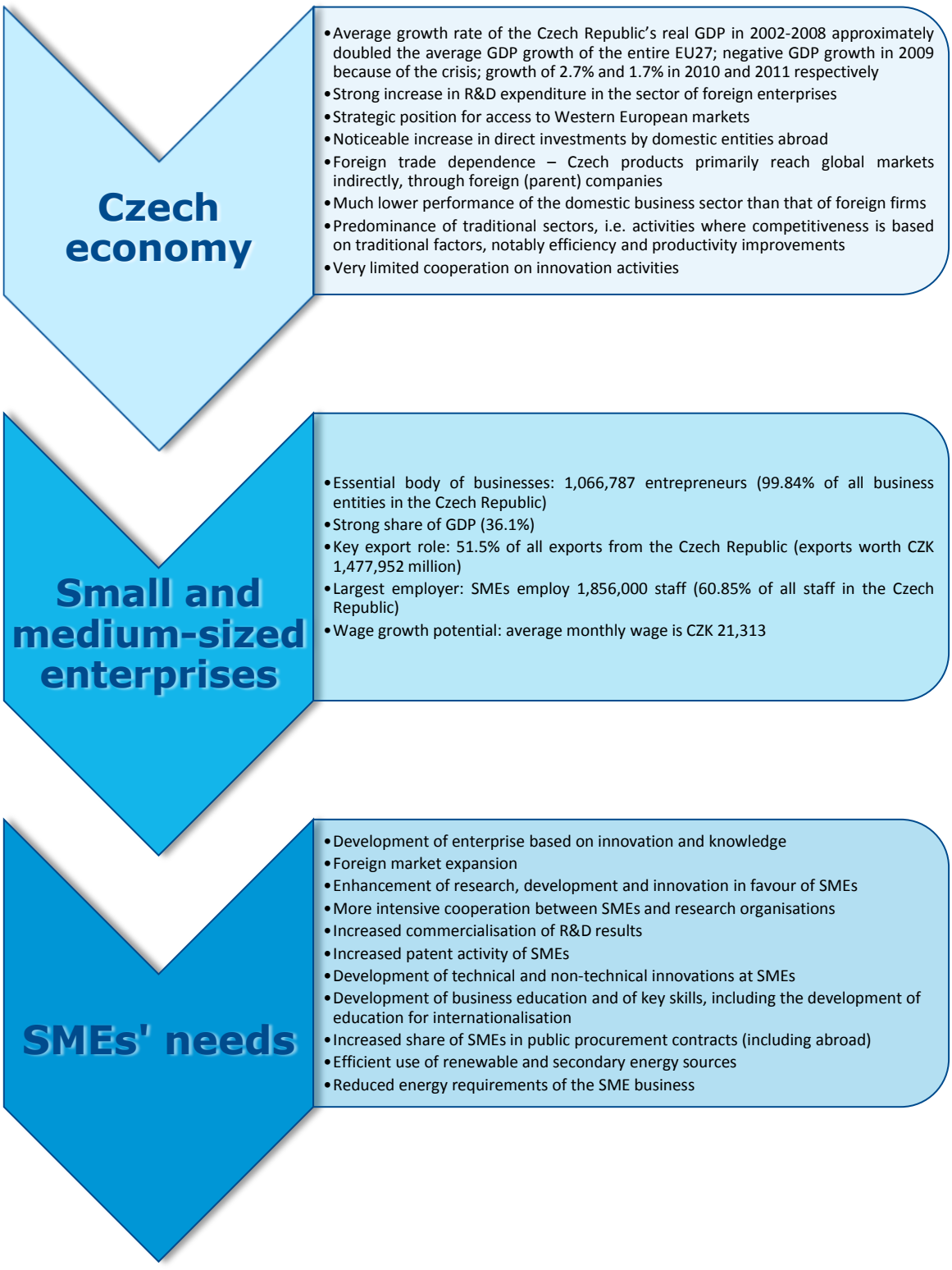
7 SWOT Analysis of Small and Medium Enterprises in the Czech Republic

Strengths	Weaknesses
• Flexible reactions to market developments, knowledge of local markets and customer needs; • Relative flexibility, speed of response to changed conditions (including the founding and winding up of a firm); • Increasing number of innovation-oriented SMEs; • Job creation; • Workforce adaptability; • Strong ability to absorb workforce, owing to flexibility; • Ability to fill the gap in the structure of business relations between large enterprises (subcontractor's role); • Strong performance motivation by company owners; • Ability to produce good products; • Innovation potential; • Relatively low costs of management and a lower level of bureaucracy; • Low financial requirements of founding smaller firms in particular; • Close links with a particular region – links to customers, suppliers, authorities etc.	• Inadequate capital, notably among small and micro entrepreneurs and self-employed individuals; • More difficult and costlier access to capital, information and knowledge; • Complications in obtaining bank loans; • Poor emphasis on marketing due to limited funds, abilities or knowledge; • Limited funds for the technical equipment of enterprises; • Inadequate protection of intellectual property rights; • Predominance of production with low value added; • Inadequate emphasis on HR development (further professional education); • Inadequate managerial skills and non-technical competences; • Lower ability to eliminate the consequences of external divergences in the initial stage of their development (start); • Inadequate cooperation among SMEs; • Low success of SMEs in public procurement contracts; • Relatively strong dependence on customers and suppliers (weaker bargaining position);

Opportunities	Threats
• Trade development – foreign market expansion; • Introduction of new products and services based on new technologies and knowledge; • Benefits arising from business networking (clusters) including the establishment of cooperation with foreign business partners and research organisations; • Broad range of support programmes for SMEs; • Enhancement of research, development and innovation in favour of SMEs; • Cooperation between SMEs and research organisations; • Increased commercialisation of R&D results; • Increased patent activity of SMEs; • Development of technical and non-technical innovations at SMEs; • Investments in technological and laboratory equipment; • Development of business education and of key skills, including the development of education for internationalisation; • Enterprise in high-tech fields; • Building a new business infrastructure, including the background for business training (training centres); • Increased cooperation of SMEs within purchase and distribution networks; • Improved availability of public procurement contracts in the Czech Republic to SMEs and increased share of SMEs in public procurement contracts (including abroad); • Efficient use of renewable and secondary energy sources; • Reduced energy requirements of the SME business; • Possible use of EU instruments.	• Lack of skilled workforce in technical fields; • Strong competition; • Administrative burden on business in the Czech Republic; • Legislative restrictions; • Technical and technological backwardness of enterprises; • Low activity in intellectual property protection; • Failure to find new business partners and markets, notably foreign ones; • Reliance on the competitive advantage based on factors (cheap labour) or efficiency; • Inability to upgrade a SME to a better quality business (competitiveness based on innovation and knowledge); • Inadequate investment activities of SMEs vis-à-vis large enterprises; • Reliance only on their own competences and distrust of the benefits of cooperation, whether between enterprises or with research organisations; • Lower competences of their own in drawing up business plans (for themselves and investors alike).

Source: Ministry of Industry and Trade

Executive Summary Diagram of the Analytical Section



8 SMALL AND MEDIUM ENTERPRISES SUPPORT STRATEGY 2014–2020

8.1 Preamble

One of the priorities of the Government of the Czech Republic is to support the competitiveness of small and medium entrepreneurs, who represent more than 1 million economic entities in the Czech Republic, i.e. 99.84% of all businesses. In addition, they employ more than 1.8 million staff, contribute approximately 51% to exports and about 56% to imports. Small and medium-sized enterprises have a significant role in developing the endogenous potential of individual regions in the Czech Republic, as they have strong business and social links with their respective regions and constitute the regional business backbone.

Given the importance that the SME sector already has and its indispensable role in the market economy, the Government of the Czech Republic believes that the appropriate environment ought to exist for activities of small and medium entrepreneurs so that SMEs can enhance their capability of contributing to economic growth while maintaining and boosting social cohesion. Small and medium entrepreneurs should have this role in the national economy and, to an increasing extent, also in the European and global economies.

The positive impact of the operation of SMEs may only be carried into effect if this sector keeps and continues to improve its competitiveness, and this is only possible if the sector is capable of increased innovations and cost reductions in an effort to gain a competitive advantage. To achieve this, it is essential to involve that part of the SME sector that is able to respond to such challenge. This is why various measures will be adopted, taking into account the size and time or the line of business, for the public expenditure to be spent as efficiently as possible. Furthermore, it is still necessary to continue to foster the start and development of enterprise for the widest possible range of entrepreneurs.

The Government of the Czech Republic will strive to ensure that business activity is not unnecessarily restricted by administrative barriers and inefficiencies in the functioning of the state administration. In addition, even though its possibilities are relatively limited, the Government will continue to spend public funds on mitigating the impacts arising from a lower economic strength of small and medium entrepreneurs and their greater susceptibility to market divergences in order to maintain and continue to boost their contribution to the functioning of the Czech economy. The Concept will be implemented using EU Structural Funds, including revolved money, the use of which to support the development of SMEs will also be possible in the next programming period. In addition, the state budget will be used for supplementary funding to finance aid for small and medium enterprises, while the enterprises will also be encouraged to use funds from EU programmes[66].

[66] EU programmes are launched and implemented directly by EU institutions.

8.2 Strategic Vision

Small and medium enterprises will continue to have a key role in the Czech economy, notably in GDP growth, employment and foreign trade. The competitiveness of small and medium-sized enterprises needs to be based primarily on the competitive advantage of innovation. This is why the following strategic vision of the Concept has been defined:

"Czech entrepreneur = ideas, self-confidence, competitiveness and prosperity"

The strategic vision of this SME Strategy 2014+ presents Czech small and medium enterprise as an economic entity whose competitiveness is based on:

- High-quality and competitive products and services;
- Continuous increase in innovation capacity;
- Ability to produce new ideas and greater use of intellectual property protection;
- Ability to use research knowledge and results primarily created at domestic research organisations;
- Ability to react flexibly to customer requirements and to reflect them in innovated products;
- Application of skills arising from efficient use of the Internet and ICT;
- Qualitative as well as price advantage;
- Ability to succeed in the international market and to continue to expand both qualitatively and quantitatively;
- Effective cross-border cooperation.

8.3 Global and Primary Objectives

The global objective of the Small and Medium Enterprises Support Strategy 2014–2020 includes the continuous boosting of competitiveness and of the economic performance of small and medium enterprises, based on quality business environment, on using and developing their innovation potential, knowledge and education (the upgrading of small and medium-sized enterprises to the entrepreneurial activity based on the competitive advantage of innovation and the advancement to a higher level in value chains), the internationalisation arising from the EU internal market and from markets with good prospects in third countries, and on the overall reduction of the energy requirements of business.

Primary Objectives

1. Reinforcement of the position of small and medium enterprises in the Czech economy and improvement of the competitiveness of small and medium enterprises in the European and global context.

2. Development and improvements of the business environment and improvements in the quality of consultancy services for SMEs, including an increase in the attractiveness of technical and natural science education, a reinforcement and development of technical intelligence.
3. Reinforcement of innovation ability and efficient use of intellectual property of small and medium enterprises and development of business and innovation infrastructure.
4. Reductions of energy and material requirements in the business of SMEs.

The indicators selected for the primary objectives as well as for the individual areas of support (see chapter 10, Table 17: Strategic priorities and areas of support for the SME Support Concept 2014–2020) primarily form an essential system to evaluate the accomplishment of objectives and effectiveness of the individual measures. This system of indicators will continue to be updated and extended under an operational programme or under national programmes.

Table 15: Indicators of primary objectives

Primary objectives	Indicator
Reinforcement of the position of small and medium enterprises in the Czech economy and improvement of the competitiveness of small and medium enterprises in the European and global context.	Share of SMEs in GDP The Czech Republic's competitiveness position according to the World Economic Forum Number of supported SME projects (number of enterprises) Value added (% accrual in value added) Number of exporting SMEs Share of SME exports in all exports Number of SMEs exporting to non-EU countries
Development and improvements of the business environment and improvements in the quality of consultancy services for SMEs, including an increase in the attractiveness of technical and natural science education, a reinforcement and development of technical intelligence.	Number of enterprises established in science parks and incubators Number of enterprises where venture capital is involved Number of supported SME projects (number of enterprises) Value added by SMEs (% accrual in value added) Number of students in technical fields – secondary schools (notably secondary vocational schools), higher education institutions Implemented cooperation between firms and secondary schools or higher education institutions (number of secondary schools / higher education institutions involved in the cooperation) Number of days and amount of costs to found a business
Reinforcement of innovation ability and efficient use of intellectual property of small and medium enterprises and development of business and innovation infrastructure.	Number of granted patents, trademarks, registered utility models and designs Commercial use of intellectual property protection (revenue from licensing etc.) Share of enterprises with innovation activities Sales at product innovation enterprises Share of R&D expenditure by business entities in GDP Number of supported SME projects Value added (% accrual in value added)
Reductions of energy and material requirements in the business of SMEs.	Energy savings (GJ)/year Installed capacity (MW) Energy produced from renewable sources (MWh/year) Share of RES energy in gross final energy consumption Number of supported SME projects

(Source: Ministry of Industry and Trade)

8.4 Strategic Priorities

Four strategic priorities have been defined under the SME Strategy 2014+: Cultivation of business environment, development of consultancy services and education for business; Development of enterprise based on support for research, development and innovation, including the innovation and business infrastructure; Support for the internationalisation of SMEs; and Sustainable energy management and energy innovation development. Thus the measures will primarily target the support and expansion of innovation capacities and infrastructure for small and medium-sized enterprises, improvement of the cooperation of entrepreneurs with academics and researchers (along with the development of education for business), making foreign markets more accessible to SMEs, improving the quality of consultancy services provided to enterprises or improving the technical and non-technical competences of SMEs themselves. Another important measure is to increase energy efficiency and use renewable and secondary energy sources. The strategic priorities have been laid down on the basis of strategic documents of the EU and the Czech Republic, analyses and studies from the Ministry of Industry and Trade and other ministries, consultations with a broad expert community, and a conducted analysis of opinions among small and medium-sized enterprises in the Czech Republic[67] prepared by the Association of Small and Medium-sized Enterprises and Crafts of the Czech Republic.

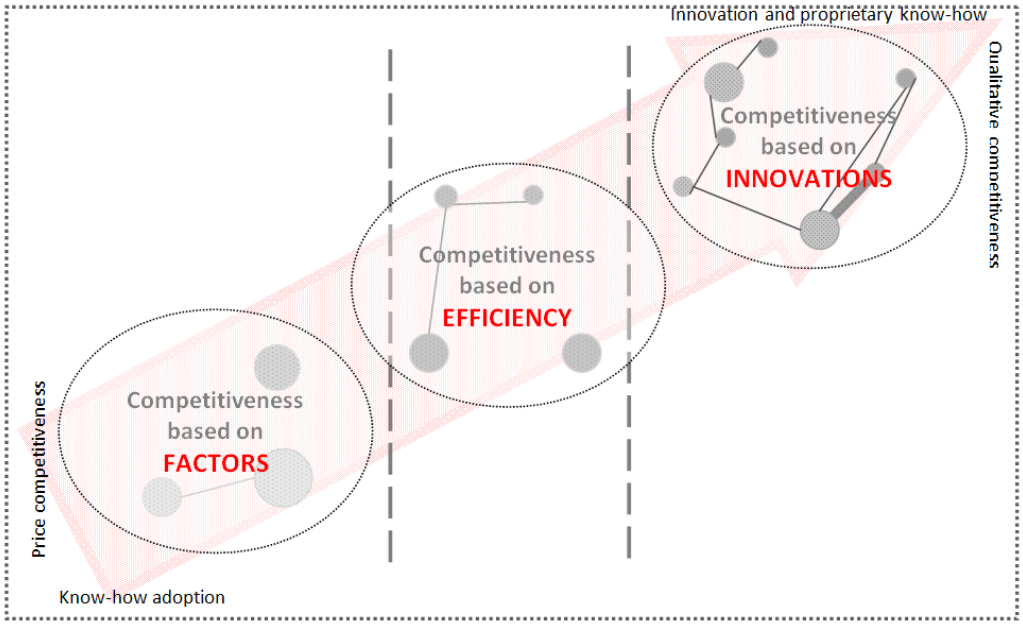
The Government of the Czech Republic wishes to focus primarily on supporting the ability of small and medium enterprises to create innovations, whether in technical or non-technical form. Innovations in this SME Strategy 2014+ are understood as being[68]:

> the implementation of a new or significantly improved **product** (good or service), or **process**, a new **marketing method**, or a new **organisational method** in business practices, workplace organisation or external relations.

The factor of innovation capability of small and medium-sized enterprises also has an important role for internationalisation, i.e. the ability to succeed in international markets. A great majority of industries and activities in the Czech Republic are in phase two of the competitiveness development, i.e. the competitiveness based on efficiency (although there are still industries or firms where the price of factors is the predominant competitive advantage), and therefore the Government of the Czech Republic wishes to support, through the SME Strategy 2014+, particularly the upgrading of small and medium-sized enterprises towards the competitive advantage of innovation, i.e. the advancement of SMEs from phase two to phase three in terms of the sources of competitiveness (see Figure 5).

[67] Final report "Implementation and Evaluation of Interview Survey among Small and Medium-sized Enterprises" in 2011
[68] Oslo manual, 3rd edition, 2005

Figure 5: Main sources of competitiveness



Source: Berman Group, 2010 according to classification by OECD, UNCTAD

8.4.1 Strategic Priority 1 – Enhancement of Business Environment, Development of Consultancy Services and Education for Business

Improvements of the Business Environment in the Czech Republic

Business environment consists of a broad range of conditions for business in terms of legislation, institutional infrastructure and the functioning of markets, thus being one of the essential factors of economic development.

A good and business-friendly environment is one of the preconditions for the growing competitiveness of enterprises, and thus an essential precondition for the growing competitiveness of the economy. A stable and cultivated business environment also contributes to fostering the job creation.

Business environment is formed by numerous factors and, to improve that environment, it is essential to facilitate the business of small and medium-sized enterprises in particular. However, at the current stage of preparations of the SME Strategy 2014+, it is difficult to specify what will be relevant in the business environment cultivation at the beginning of 2014 and afterwards. Nevertheless, **business environment** has to remain **transparent, stable and motivational,** and also needs as simple rules as possible, **just the necessary level of regulation and simple administration. To head towards that quality of business environment,** we must not ease our effort that – along with the appropriate combination of business aids – was launched as long ago as 2008, with **the project to reduce the administrative burden on entrepreneurs** (for details, see chapter 3 Analysis of the Czech Republic's Business Environment by Evaluating the Administrative Burden on Entrepreneurs).

Although permanent and straightforward attention has been paid to the cultivation of business environment, we cannot disregard two fundamental critical and justified comments on that process, i.e.:

- that new legislation keeps creating 'more and more' new legal and administrative burden;
- that the existing mechanisms of legislation and other rules to remedy the existing situation in certain areas of business have not been used properly enough.

This is why maximum attention will also need to be paid to the following areas:

- Assessment of the impact of a proposed legislative change on SMEs as an integral part of the legislative process (RIA);
- Implementation of EU legislative requirements in the Czech legislation 'only' to the necessary/needed extent;
- Publication of legislation in sufficient time before it takes effect;
- Observance of the rules for imports and exports of goods, the customs, tax, technical and health regulations, and the consistent activity of the Customs Administration Authority;
- Encouraging entrepreneurs and employees to upgrade their qualifications;

- Providing the support for technical standardisation, metrology and testing in accordance with the needs of the market and society, with the aim of improving the competitiveness of SMEs, etc.

In addition, to cultivate the business environment, representatives of small and medium entrepreneurs have to participate in the legislative process at the national as well as European level. The participation of chambers, SME associations and federations is necessary both at the initial stage of a proposal and during the implementation of the legislative acts adopted.

This strategic priority will also include support for those SME projects that focus on the cultivation of the Czech business environment. In this context, the support will be **focused on the implementation of quality management while attention will also be paid to supporting the voluntary approaches and developing the corporate social responsibility** (the CSR concept), **including the social entrepreneurship support.**

At present, numerous small and medium-sized enterprises, mostly established in the 1990s, are starting to face the problem of the transfer and successful continuation of the business after the existing owner leaves. The transfer of a business, whether to the next generation or to somebody inside or outside the firm, is a fairly complicated process, which consequently needs to be planned in sufficient time and very carefully. The owners often lack the knowledge and experience to tackle the legal, tax and administrative issues associated with such a process. Many of them are prevented from transferring their business by a psychological barrier. Transferring a business between generations, thus keeping it in the family, is probably the easiest way and often the most convenient solution for the owner, particularly if a direct descendant is the successor. However, the view of the descendant's capabilities should be unbiased, and the descendant has to be prepared. Hence it is not a single legal or economic act, and the process is much more complicated. Therefore, **in order to increase the number of successful business transfers, professional preparation and support will be provided, including awareness campaigns to stress the importance of the timely preparation for the business transfer.**

To boost competitiveness and fulfil the measures set out in the Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee – A strategic vision for European standards: Moving forward to enhance and accelerate the sustainable growth of the European economy by 2020, it is necessary **to support the facilitation of access by small and medium entrepreneurs to technical standards, the level of SMEs' awareness of the possibilities of access to technical standards and the involvement of SMEs in the process of creating technical standards at national level.** Support is also necessary for the participation of national organisations that represent small and medium-sized enterprises and social entities in the European standardisation system, including financial aid, where applicable. These objectives may be achieved, for example, in the form of thematic handbooks, manuals, methodologies or similar documents, which help involve the individual groups in the standardisation work or facilitate the guidance through the system of Czech technical standards (ČSN) or through the system of requirements as set out by law.

Technical standardisation is closely related to the legal framework of the free market in products, where education and consultancy in what is known as technical harmonisation, i.e. links between legislation and technical standards, i.e. an area of compliance assessment – certification and accreditation – should have a significant role. The technical harmonisation framework is complemented with metrology. This is where direct form of education as well as consultancy at Internet information portals (Ministry of Industry and Trade; Czech Office for Standards, Metrology and Testing; Chamber of Commerce etc.) can be used.

More Efficient Consultancy Services for Entrepreneurs

Some of the crucial factors for small and medium entrepreneurs currently include the receipt of information about aids or business legislation, particularly in relation to foreign countries, about intellectual property protection as well as about improvements in non-technical competences of strategic and innovation management. This is why information will be provided through channels created for that purpose (such as BusinessInfo.cz) while the support will also be focused on improving the quality of consultancy services. **Small and medium entrepreneurs should also be offered a new type of consultancy services of innovation nature,** such as mentoring[69], technology scouting[70], coaching[71], market intelligence[72] or technology foresighting[73], to help them better and more efficiently identify the areas where they have the potential and capabilities for long-term success among global competitors. The new types of consultancy services are also suitable in the preparation of start-ups for a venture capital contribution. Particularly in economically weaker regions (such as those defined for 2010–2013 by the Resolution No 141/2010 of the Government of the Czech Republic as the regions with concentrated state aid), basic consultancy services will also continue to be supported. As part of consultancy services, great emphasis will be laid on increasing the financial literacy of entrepreneurs. Such knowledge is required for the proper management of equity and debt, and is also helpful during a capital contribution to a company.

Another major area of support is that of consultancy services to develop providing the intellectual property protection, which is very important not only for the position but also for the competitiveness of enterprises in the market. Protected intellectual property makes it easier to choose a business strategy, attract new capital and reinvest in research, development and innovation. As concerns patent protection and support for technology transfer, we should raise awareness of Czech entrepreneurs in respect of the possibilities of protecting their intellectual property and of the importance of protecting technical and creative solutions through patents.

[69] **Mentoring** – continuous leading and training of entrepreneurs to develop modern trends in business
[70] **Technology scouting** – search for interesting ideas of technical and technological innovations and assistance in the acquisition of relevant know-how. A technology scout primarily seeks solutions to the existing technical and technological problems faced by the client. However, his or her services also include the systematic monitoring of the latest technology developments and seeking innovation ideas in the areas of client interest on an ongoing basis.
[71] **Coaching** – highly specialised consultancy for managers, business owners etc. focused on personal development and increasing their potential
[72] **Market intelligence** – services that put a new technology and the market situation in context, thus helping businesses in the commercialisation as well as market success of their new technology or invention
[73] **Foresighting** – forecast of future demand, trends

Through financial aid instruments for patent registration and maintenance, access to patent protection should be facilitated for businesses and research organisations to be able, as much as possible, to use national as well as foreign (or international) systems of patent protection and other intellectual property protection, and adequate support in using and commercialising the patents granted should be provided. In addition, we should focus on improving the enforceability of intellectual property rights. Other major components in the development of the market in the services of access to patent information include the offer of paid-for targeted retrievals for SMEs or researchers who are starting business, the implementation and support in respect of industrial legal audit, the assistance and consultancy for effective legal protection of intellectual property, and the support in putting inventions in place or granting licences.

Innovative consultancy services will be developed through business and innovation centres, science parks and business incubators, which currently offer basic rather than advanced consultancy services. In this context, support will be put in place to improve and extend consultancy services provided, e.g. support for the transfer of foreign experience of the already implemented science parks or business incubators.

The support will also target the development of entrepreneurship. This includes support for activities such as holding competitions for the best business plan or business creation. In this context, support will also cover specific competitions to encourage female entrepreneurs, such as businesswoman of the year etc. Another type of projects supported will be the financing of the preparation of and participation in managerial traineeships for students of secondary schools and higher education institutions.

Education for Business

Another important area to be supported under this strategic priority is the **development of education for business.** In this context, the support instruments will be primarily focused on the development of further professional education of employers, i.e. small and medium-sized enterprises, and employees through expanding, extending, increasing, renewing or maintaining their qualifications, as well as on gaining key skills to help them keep their jobs in the relevant small or medium-sized enterprise. As concerns education, entrepreneurs (employers) will be motivated to use more flexible employment and remuneration policies. Furthermore, the training of entrepreneurs will be focused on improving their command of new specific legislation. The use of these instruments is particularly important if the performance of the economy is declining. Other activities supported will include creation of business education programmes for employees, preparation of business tutors, and support to all forms of education to prepare the learner for a particular job.

The education support must also cover **the support for technical fields of study** because of several reasons. The most important one is the lack of skilled workforce and the related excess of demand for technical workers in the labour market; this was also confirmed by the analysis of employer needs conducted by the Czech Chamber of Commerce in November 2011. According to the analysis, 60% of firms have problems finding the required workforce while more than two

thirds of those 60% stated that finding skilled technical workers was particularly difficult for them. Other problems of the present time include the competence of graduates from Czech technical schools, who often fail to meet the employer expectations and needs, and the attractiveness of the fields of study to students. The gap between the quality of graduates and the employer requirements is widening, as enterprises require ever-higher quality of knowledge and skills; as a result, the gap is increasing especially in the sectors where the technological progress is fast and schools consequently fail to adapt their curricula to current needs, and even lack enough of funds. Hence it is important to focus on the support and promotion of craft specialisations at apprenticeship schools and technical specialisations at secondary schools and higher education institutions, and to motivate pupils and students to study those technical specialisations. In addition, the teaching of technical subjects, including traineeships, should improve, while the cooperation between the education system and enterprises should increase.

SMEs' Access to Funding

The evaluation of the interview survey conducted in connection with the preparation of the SME Strategy 2014+ confirmed the well-known fact about the problematic access by small and medium entrepreneurs to funding. This primarily applies to micro entrepreneurs, one quarter of who cited the access to funding as the biggest problem they currently faced.

The same problem of the availability of private funding to found and develop a business also applies to innovation-focused small and medium-sized enterprises, particularly at their initial stages of development (what is known as the early stage – seed and start-up). The number of spin-off firms also remains low, with this partly stemming from the lack of support for market background in the technical education system.

In this regard, the innovative SME support should also focus on the stage prior to founding a firm, what is known as the pre-seed. At the pre-seed stage, the potential of the commercialisation of R&D results is identified, e.g. at a university. An R&D analysis may designate certain projects as appropriate for commercialisation in the form of founding a new business, what is known as the spin-off.

Nascent innovation enterprises in the Czech Republic generally need, inter alia, business know-how for their development and for overcoming their initial business difficulties, but holders of technical solutions typically lack such know-how. Nevertheless, this can be provided by appropriately targeted consultancy services, which will help nascent enterprises prepare a good business plan and, through a coach, will ensure that the first implementation steps are made.

Another follow-up step in supporting nascent innovative SMEs is the financing of their development by venture capital. Enterprises typically obtain funds for their development through bank loans, but these are mostly unavailable to nascent firms. In addition, the Czech Republic still lacks an adequately large network of business angels and venture capital funds willing to invest in small and highly risky SME projects in the early stages of development.

Therefore, in addition to credit and guarantee instruments, the financial instruments that involve venture capital – seed and venture capital funds – seem to be a good option for innovative SMEs. This funding method is suitable for businesses established in business incubators and science parks (including spin-offs) as well as other types of innovation-focused SMEs. For 2014–2020, an experience in the implementation of a pilot seed fund under OPEI will already be available.

Hence, in the future programming period, the emphasis laid on repayable financial instruments will be greater than it has been so far. Repayable instruments such as a loan, guarantee or a direct capital contribution (private equity) are focused on economically justifiable projects with a real ability to achieve the required return on investment, and their typical feature is the compliance with the three requirements placed on them: efficiency, effectiveness and sustainability. Some of the greatest benefits of those instruments include the revolving nature of the funds, the mobilisation of private resources, the quick execution of the application and the reimbursement. In addition, these instruments may be combined with the funding through grants. Owing to the creation of a sound and reliable system of repayable financial instruments, the possibility of long-term 'recycling' of the financial resources will be newly available. In the future programming period, the importance of aid provided through blending[74], the benefit of which is the strong leverage effect, will increase. However, aid from Structural Funds will continue to be provided through grants in most cases.

Another possibility of support through financial instruments after 2014 will be based on EU programmes for R&D&I and enterprise (notably COSME and Horizon 2020), programmes of international R&D&I cooperation and, especially for micro enterprises, probably also national programmes. These are crucial for supporting the industries that cannot be supported from operational programmes as well as for supporting the enterprises from regions that will not be included in the aid from EU Structural Funds. In addition to financial instruments, the support should also target networks that inform entrepreneurs on the possibilities of their participation in EU programmes in particular, including the assistance in the project preparations (such as Enterprise Europe Network and National Contact Points), as well as active search for such opportunities.

In this priority, part of the support will be focused on nascent enterprises. This group of enterprises ought to be supported particularly in economically weak regions (such as those defined for 2010–2013 by the Resolution No 141/2010 of the Government of the Czech Republic as the regions with concentrated state aid), as these entrepreneurs may come from among long-term unemployed people and people at risk of or affected by social exclusion. **Support by favourable loans, guarantees, capital contributions (venture capital) as well as consultancy will be crucial**

[74] Blending means a combination of loans from financial institutions and funding by non-repayable assistance, and takes place in two essential ways:
- Parallel co-financing, where the individual partners themselves contribute directly to the relevant project or programme,
- Joint co-financing, where the funds from the individual partners are pooled and subsequently used as aid for the relevant project or programme.

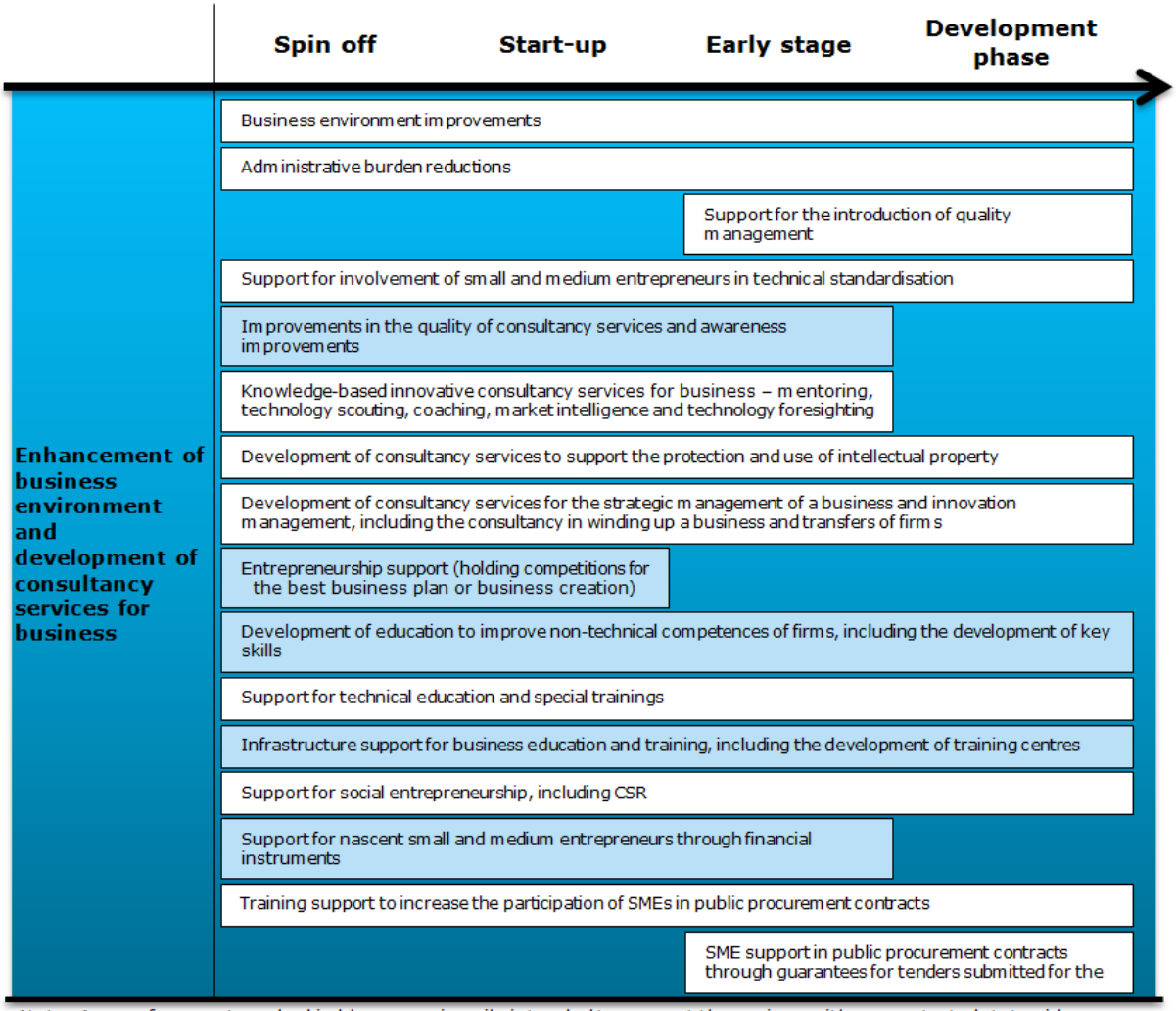
for nascent enterprises. In this context, experiences in the implementation of programmes with the Czech-Moravian Guarantee and Development Bank and the pilot Seed Fund project under the Operational Programme Enterprise and Innovation for 2007 to 2013 will be used. These instruments may consequently help carry out innovative projects in the difficult early stage of enterprise. **Another objective will include the encouragement of interest in entrepreneurial activity among people in the Czech Republic,** preferably in high-tech sectors, as this would significantly contribute to the overall increase in the diversification of the Czech economy.

The last area supported will include **support to small and medium enterprises in public procurement contracts in the Czech Republic as well as abroad.** In this context, SMEs will be provided with guarantees for their tenders submitted in public procurement processes because such guarantees are often required when a public procurement process is launched and are often a limiting factor for the participation of small and medium-sized enterprises in those public procurement contracts. The provision of a guarantee for a tender submitted for a public procurement contract will enable small and medium enterprises to participate in public procurement contracts without having to block their funds in order to deposit a security. To make public procurement contracts more accessible to small and medium enterprises, special trainings will be supported to improve the guidance of SMEs in the public procurement law, especially with regard to tender specifications and procedures of selecting tenderers as well as in the provision of information (BusinessInfo.cz).

Areas of support:

- Business environment improvements;
- Administrative burden reductions;
- Support for the introduction of quality management;
- Support for involvement of small and medium entrepreneurs in technical standardisation;
- Improvements in the quality of consultancy services and awareness improvements;
- Knowledge-based innovative consultancy services for business – mentoring, technology scouting, coaching, market intelligence and technology foresighting;
- Development of consultancy services to support the protection and use of intellectual property;
- Development of consultancy services for the strategic management of a business and innovation management, including the consultancy in winding up a business and transfers of firms;
- Entrepreneurship support (holding competitions for the best business plan or business creation);
- Development of education to improve non-technical competences of firms, including the development of key skills;
- Support for technical education and special trainings;
- Infrastructure support for business education and training, including the development of training centres;
- Support for social entrepreneurship, including CSR;
- Support for nascent small and medium entrepreneurs through financial instruments;
- Training support to increase the participation of SMEs in public procurement contracts;

- SME support in public procurement contracts through guarantees for tenders submitted for the public procurement contracts.



Note: Areas of support marked in blue are primarily intended to support the regions with concentrated state aid.

***Spin off** – A firm that uses tangible or intangible assets of another legal entity to start its business*
***Start-up** – A newly founded firm or a firm with a short history*
***Early stage** – A firm at an early stage of development, which already manufactures its product, has relations with its (business and financial) partners in place, has its position in the market and a potential for its further development*
***Development phase** – The growth stage in the lifecycle of an existing firm which is preparing a new product or services that involve a significant change to its offer, or an entry into foreign markets*

(Source: Ministry of Industry and Trade)

8.4.2 Strategic Priority 2 – Development of Enterprise Based on Support for Research, Development and Innovation, Including the Innovation and Business Infrastructure

This strategic priority focuses on supporting the early stage of business of innovative small and medium-sized enterprises and on the subsequent development of their business, and includes support for the development of the business and innovation infrastructure with an emphasis on promoting the cooperation between firms and research organisations.

The primary objective is to support the upgrading of small and medium-sized enterprises to a business model based on **competitive advantage of innovation.**

Research, Development and Innovation Activities of SMEs and Cooperation with Research Organisations

The main challenges in boosting the competitiveness include **an increase in private expenditure on research, development and innovation.** The aim is to increase the engagement and motivation of small and medium-sized enterprises to finance research and development, both their own and external, bought from another private company or a public institution. This priority will primarily include support for innovation activities and cooperation links in sectors with high value added, sectors of key technologies and with growth potential, focused on both technical and non-technical innovations. **Emphasis will be laid on supporting SMEs' own research and development facilities, preferably with an international element.** Furthermore, activities focused on the development of digital economy and centres of progressive ICT services will be supported.

Through this priority, innovation projects of small and medium-sized enterprises will be directly supported while **the key factor will be the translation of the research and development results and, where applicable, other new knowledge into practical application.** The aids granted will lead to the boosted competitiveness of SMEs, creation of new job opportunities and positive impacts on the environment and society through innovations in technologies used. **Absence of modern technological equipment is one of the persisting barriers to the competitiveness of Czech entrepreneurs,** but investment in such equipment alone will not boost that competitiveness. **Sophisticated investments must be complemented with the enhancement of SMEs' own knowledge and development activities and the development of the product manufactured, i.e. not just by the purchase of innovations.** Assessments under these activities will primarily include the relationship of the technology bought to the strategic targets of the firm, the relationship to the enhancement of its own development and innovation activities and the creation of its own unique know-how as well as the relationship to expansion into new markets.

State-of-the-art **design** is another contributor to the competitiveness of small and medium entrepreneurs. This is why the supported activities will also include the addition of design to the business strategy of small and medium-sized enterprises, assistance in the selection of an

appropriate designer, creation of the conditions for effective cooperation between the designer and entrepreneurs, partial reimbursement of the financial costs of creating a copyright work, and the promotion of new well-designed products created in this way.

This priority also focuses on boosting the competitiveness of SMEs through supporting the development of progressive ICT at enterprises. The ICT sector becomes ever more important, with an ever-increasing share in the operation of enterprises as well as in the GDP formation. Moreover, **ICT supports innovation processes in other sectors.**

As part of supporting innovative business, an establishment of cooperation between small and medium-sized enterprises and higher education institutions (notably in technology and natural science) **and research institutions is very important.** The instruments to support cooperation should progress from common graduands and doctoral candidates to professorial chairs or, where applicable, to other instruments that promote horizontal mobility between research organisations and enterprises. In their early stage, small and medium-sized enterprises primarily need to reduce the risks and costs in seeking the appropriate partners from the sector of scientific research, and therefore the transfer of knowledge and technologies between research organisations and enterprises will be supported, e.g. through **innovation vouchers.** The benefits of innovation vouchers will include SMEs' reduced costs and the increased availability of specialised measurement, testing and research services to small and medium-sized enterprises; in addition, research organisations will be motivated to create actively such internal conditions and approaches within their respective organisational structures that will suit small and medium entrepreneurs. Innovation vouchers will help reduce the barriers of mutual distrust between the business and academic sectors.

Another possibility of stepping up the cooperation of small and medium entrepreneurs with higher education institutions is **what is known as the professorial chair.** This instrument is based on the principle of shared funding by several small and medium-sized enterprises to attract top scientific workers and professors, including foreign researchers, to the region or to keep them subsequently there. This type of support will significantly contribute to the development of cooperation between the academic and business sectors while creating conditions for better benefits of research to the regional or local economy concerned.

The support will cover the transfer of knowledge and experience from universities and research centres to small and medium-sized enterprises. Knowledge from the 2007–2013 programming period, namely from a project with UK's University of Salford[75], will be used there. The support will

[75] A pilot knowledge transfer programme in Czech conditions – The aim of the project is to use the model of British programme "Knowledge Transfer Partnership" (KTP) to facilitate a closer cooperation of Czech universities and R&D centres with entrepreneurs, notably with innovation-focused small and medium-sized enterprises. The KTP programme supports joint projects of entrepreneurs and universities, with the research knowledge being directly used in the company and having strategic importance for the company's further development. The project takes place with the participation of one or several skilled experts and under professional supervision of a university centre. The project is carried out in cooperation with experts from the University of Salford, the United Kingdom.

primarily aim to increase the mobility of academics and researchers, thus stepping up the transfer of uncodifiable knowledge.

The quality of cooperation between entrepreneurs and the academic sector as well as among entrepreneurs is strongly influenced by intermediary institutions such as chambers, associations, federations or clusters. These institutions can help arrange the establishment of a particular targeted cooperation between partners that do not yet know each other. This is why coordination and search grants, focused on this intermediary sector, will be awarded.

Innovation and Business Infrastructure

Entrepreneurial activities in research, development and innovation are mostly connected with investments in technological as well as laboratory equipment. Those small and medium-sized enterprises that only carry out these R&D&I activities rarely may use the services of research organisations, such as higher education institutions or research institutes, which have state-of-the-art equipment and technologies. However, for more frequent research activities, entrepreneurs need to purchase such technological and laboratory equipment and adapt it to their own specific conditions. In that event, it is a very costly investment for small and medium-sized enterprises, and therefore it will be supported under this strategic priority.

In this as well as previous programming period, the Czech Republic has invested much money in the technical infrastructure development of science parks, business incubators and technology transfer centres. At the beginning of the 2014+ period, practically all regions will thus have technical infrastructure in place for the operation of those support institutions. However, it is essential that the efforts are not limited to the stage of physical construction; attention should be paid to the long-term care of those premises and to **the development of the required range and especially quality of the provided services to support innovative enterprise.**

This priority will cover the support for projects aiming at the development of business infrastructure. In this context, we should primarily mention **the development of industrial zones and parks, redevelopment of brownfields for further entrepreneurial activity or the development of particularly the existing business incubators and innovation centres,** which enable especially small and medium entrepreneurs to found and subsequently develop a business. Such projects provide nascent entrepreneurs with appropriate initial conditions for the operation of business and, in addition to business premises, they offer the office infrastructure, administrative services and professional consultancy to them.

Building up a business support infrastructure in regions is a good precondition for entrepreneurs or large transnational firms to decide to place their intended investments in a specific region, and consequently reduce the local unemployment as well as increase the local economic prosperity.

Innovation Support through Demand Instruments

Following the experience in the previous programming period and the evaluation of the current situation, **the development of cluster initiatives** will be supported within both the horizontal

dimension of cooperation (between SMEs and institutions with a similar or complementary focus) and the vertical cooperation (among firms whose products link together within a value chain). The support will primarily target collective research projects, consistent with innovation needs of small and medium-sized enterprises in the relevant technological area, and projects with a potential of upgrading the sector to a higher technological level. Other important areas include a greater involvement of clusters in the European research milieu and the reinforcement of their cross-border activities.

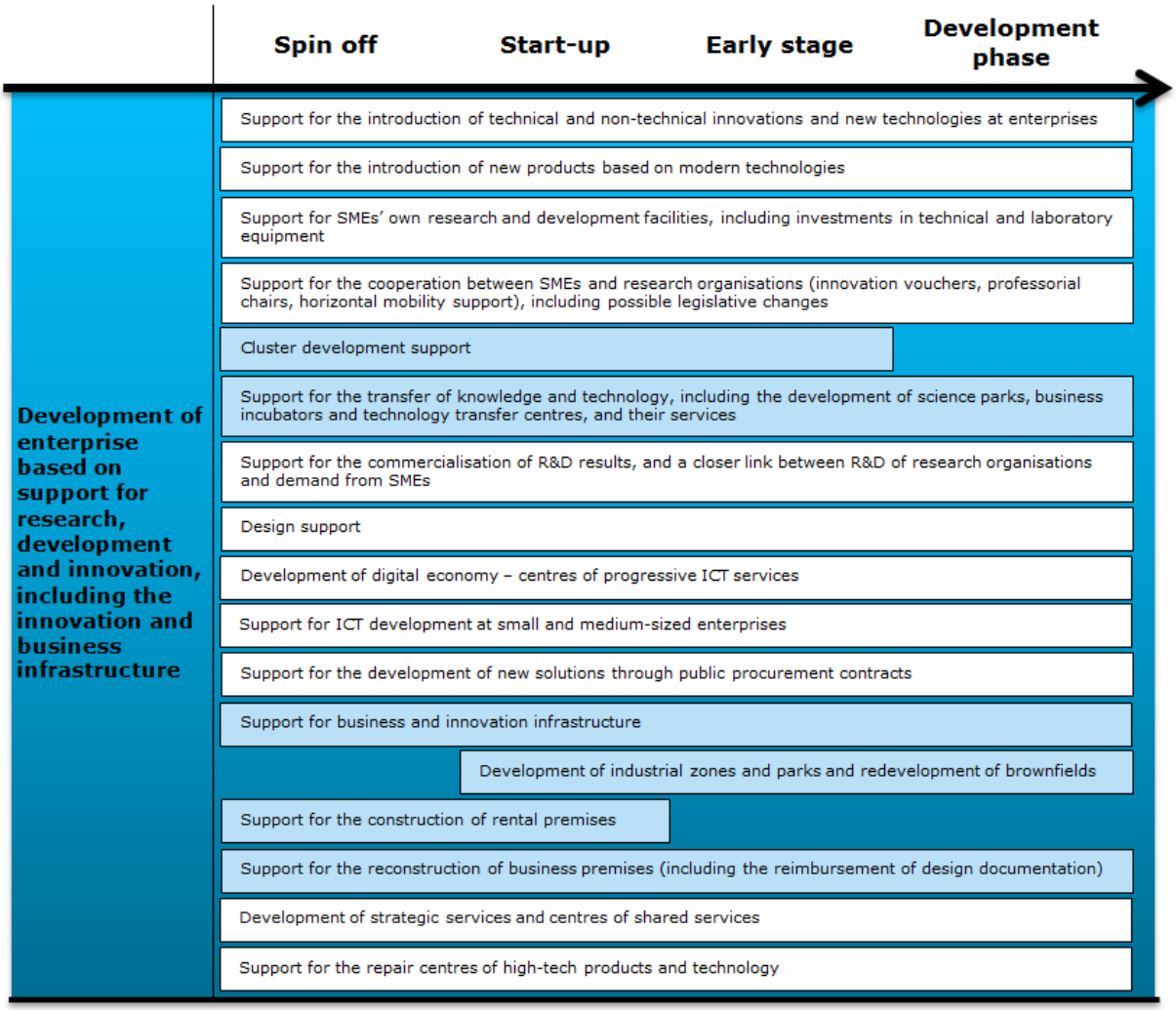
Numerous opportunities for using innovations exist in public sector institutions, notably those where state-of-the-art technologies are required (hospitals, military and security institutions etc.). However, these opportunities need to be appropriately highlighted in the form of demand so that firms, including small and medium-sized ones, are able to react to them. To this end, an instrument will be created in the Czech Republic to address this through **a combination of the coordination of demand from public institutions for innovative solutions and the funding of the projects of firms in the form of public competitions for a targeted R&D.** The objective of this priority will be the creation of an instrument similar to the British programme Small Business Research Initiative (SBRI)[76] or its equivalent in other countries (such as the Netherlands). The programme will create demand for innovative products or technologies through the coordination and selection of demand from public sector institutions, while the development of an innovative solution to a specific problem will be supported from public funds. In addition, the programme will motivate firms to seek appropriate cooperation partners, and thus public funds will reach the research organisations through the firms supported. If a successful solution is developed, new business opportunities (not only in the Czech Republic) will arise and the competitiveness of firms will improve. In addition to the development of a new solution, other major forms of support include the implementation or verification of the solution directly in public institutions (hospitals, schools, energy, water management and transport companies etc.) or in the firms established by them.

Areas of support:

- Support for the introduction of technical and non-technical innovations and new technologies at enterprises;
- Support for the introduction of new products based on modern technologies;
- Support for SMEs' own research and development facilities, including the support for investments in technological and laboratory equipment;
- Support for the cooperation between SMEs and research organisations (innovation vouchers, professorial chairs, horizontal mobility support), including possible legislative changes;
- Cluster development support;

[76] The primary aim of the UK's Small Business Research Initiative is to increase the success of small and medium-sized enterprises in obtaining public funds for research and development. The Initiative was created in 2000, with certain UK ministerial departments, which allocate at least 2.5% of their budgets for SME R&D, being involved. The UK's Research Council has its own scheme, entitled Small Business Research (SBR), where 2.5% of the total R&D budget at universities is spent on the cooperation of those institutions with small and medium-sized enterprises.

- Support for the transfer of knowledge and technology, including the development of science parks, business incubators and technology transfer centres, and their services;
- Support for the commercialisation of R&D results, and a closer link between R&D of research organisations and demand from SMEs;
- Design support;
- Development of digital economy – centres of progressive ICT services;
- Support for ICT development at small and medium-sized enterprises;
- Support for the development of new solutions through public procurement contracts;
- Support for business and innovation infrastructure;
- Development of industrial zones and parks and redevelopment of brownfields;
- Support for the construction of rental premises;
- Support for the reconstruction of business premises (including the reimbursement of design documentation);
- Development of strategic services and centres of shared services;
- Support for the repair centres of high-tech products and technology.



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(Source: Ministry of Industry and Trade)

8.4.3 Strategic Priority 3 – SME Internationalisation Support

The current wave of globalisation is characterised by the significant reductions of trade obstacles as well as reductions in transport, communication and information costs, and thus it opens up great opportunities even beyond Europe. However, for numerous small and medium-sized enterprises, state border is still a strong obstacle to expanding their business, and these enterprises continue to be largely or even completely dependent on their domestic markets. It is disconcerting that many of small and medium-sized enterprises do not even consider internationalisation because they already face strong international competition in their domestic markets. Moreover, active internationalisation boosts growth, increases competitiveness and fosters the company's long-term sustainability. Nonetheless, commencement of international activities is still a big step for most small companies. These companies mostly lack the resources and contacts that would draw their attention to good business opportunities, potential partners and gaps in international markets.

Numerous small and medium enterprises at the earliest stages of internationalisation lack the resources and expert knowledge required to identify business opportunities abroad, find potential business partners or partners for technological cooperation, acquire foreign business practices, efficiently protect intellectual property, successfully manage export procedures, import regulations, technical standards and product specialisations, legal and administrative regulations, marketing requirements etc. To surmount these obstacles and enter foreign markets more easily, small and medium-sized enterprises will be provided with support in the form of specific export education and training as well as other support services. The development of specialised consultancy services for small and medium entrepreneurs will, to the maximum possible extent, facilitate access to information relevant for exports and contribute to the continuous reduction of the initial costs and risks associated with the commencement of their international activities, as the availability of such key information also has a direct impact on the quality of the internationalisation strategy of entrepreneurs.

The consultancy services will be focused on **providing information about foreign markets, about the application of technologies to those markets, about the possibilities of export funding and insurance, about services of the export support network and about the Enterprise Europe Network (EEN).** In addition, they will focus on **assisting in the search for business partners and technology cooperation partners, on the identification and anticipation of new trends and tendencies of development and global demand (foresight), individual 'tailored' consultancy or the creation of cooperation networks for information services** (see strategic priority 1).

An important instrument to improve demand for Czech exports and facilitate the internationalisation of small and medium-sized enterprises is the support for their **participation in specialised trade fairs and exhibitions abroad, incoming missions, foreign trade missions in the presence of Czech political representatives and other specialised networking activities abroad.**

Furthermore, Czech small and medium-sized enterprises bidding for public procurement contracts abroad will be able to obtain support in the form of a guarantee for their tenders submitted for the public procurement contracts. Absence of such measure might significantly curb the access of Czech small and medium-sized enterprises to foreign tendering processes.

Support for the involvement of Czech small and medium-sized enterprises in **cross-border and international cluster initiatives** will contribute to the development of the SMEs in the target markets, to finding their strategic or business partners and to increasing their competitiveness. These objectives also involve support for the participation of Czech companies in **international projects** (such as the projects of external EU assistance, EU programmes to support R&D&I and enterprise), support for **bilateral programmes of the international cooperation of firms** or support for their **incubation abroad.**

To encourage the penetration of small and medium enterprises into the markets of third countries and into high growth markets, it is essential that state institutions (Czech Export Bank, Export Guarantee and Insurance Corporation), commercial banks and commercial insurers (with state aid, where appropriate) offer such **export insurance and funding** in their respective portfolios that will meet the needs of small and medium-sized enterprises.

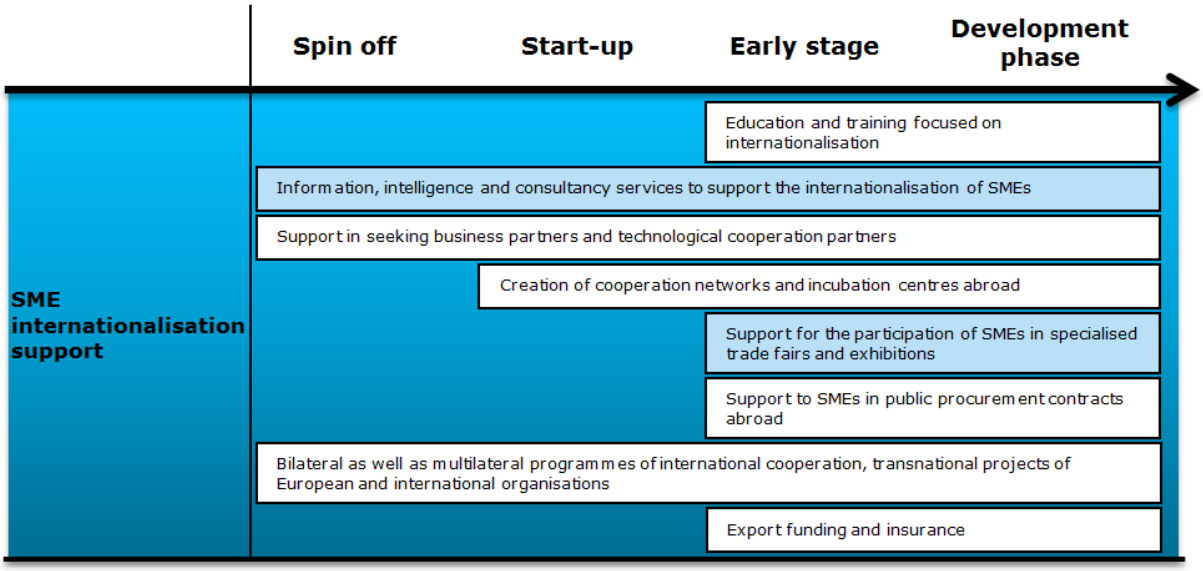
As concerns State-supported export funding and insurance, several programmes have been prepared to enable small and medium-sized enterprises to obtain the funding for their direct export activities or their subcontracts as part of the funding of medium-term and long-term export loans used by major Czech exporters. The programmes are carried out by the Czech Export Bank as direct funding or in cooperation with the Czech-Moravian Guarantee and Development Bank, Export Guarantee and Insurance Corporation and commercial banks. In addition, new distribution channels (e.g. through factoring companies) are being put in place to ensure that the services for small and medium-sized enterprises are provided.

With the Czech Republic's accession to the European Union, **a market with 450 million consumers** was opened up to Czech firms. The EU currently pays particular attention to **the elimination of barriers in the EU internal market;** nevertheless, state border is still a strong obstacle for Czech entrepreneurs to expand their business, and some of them only rely on domestic demand.

Nonetheless, in both domestic and EU markets, small and medium entrepreneurs have to cope with very strong competition from Czech as well as foreign business entities. Moreover, Europe is struggling with a lingering financial and economic crisis, high debt and declines in growth and demand, which are shifting to BRICS countries. This is why **great emphasis will also be laid on supporting the active internationalisation and seeking new export territories and opportunities.**

Areas of support:

- Education and training focused on internationalisation;
- Information, intelligence and consultancy services to support the internationalisation of SMEs;
- Support in seeking business partners and technological cooperation partners;
- Creation of cooperation networks and incubation centres abroad;
- Support for the participation of SMEs in specialised trade fairs and exhibitions;
- Support to SMEs in public procurement contracts abroad;
- Bilateral as well as multilateral programmes of international cooperation, transnational projects of European and international organisations;
- Export funding and insurance.



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(Source: Ministry of Industry and Trade)

8.4.4 Strategic Priority 4 – Sustainable Energy Management and Development of Energy Innovations

This area will focus on supporting the entrepreneurial activities in energy savings as well as in renewable and secondary energy sources. **The aim of providing this aid is to reduce the energy requirements per unit of output while keeping the long-term stability and availability of energy to the business sector.** The reduced energy requirements, increased efficiency of conversions and use of energy as well as energy savings are an important basis for a long-term sustainable energy management and improvements in the business competitiveness as a result of the reduced costs of business activities. Another reason why the improvements in the energy usage efficiency are necessary is the decreasing availability of the Czech Republic's resources and the persisting industrial focus of the country.

Other objectives of this priority include the reduction of the dependence of the Czech economy on the imports of energy commodities, reduction in the consumption of primary fossil energy sources and the support to entrepreneurs in using renewable energy sources. Other areas supported will include the modernisation of the existing energy production facilities in order to increase their efficiency, the introduction and modernisation of measurement and regulation systems, the modernisation, reconstruction and loss reductions in the power and heat distribution systems, and the utilisation of energy losses in industrial processes.

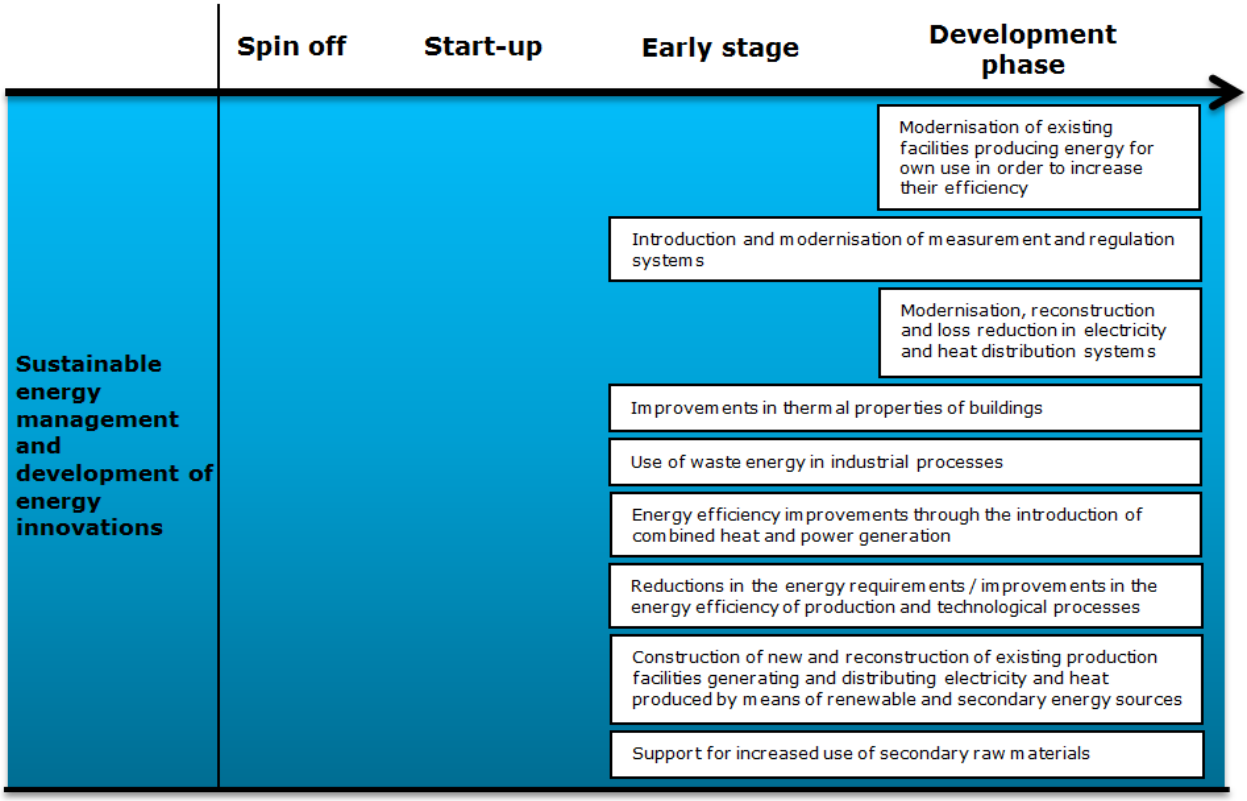
The support in respect of sustainable energy management will not be limited to promoting more efficient use of energy sources through buying and introducing available modern technologies; it will also focus on promoting the introduction of innovations in seeking new alternative sources as well as in more efficient use of conventional energy sources, which lead to significant energy savings and to technologies that are more environmentally friendly. Innovations in energy consumption savings are also important.

Other areas to be supported include improvements in the energy performance of buildings, construction of facilities to produce and distribute electricity and heat generated from renewable energy sources and reconstruction of existing production facilities in order to use renewable energy sources. **The introduction of technical standard ČSN EN ISO 50001 (01 1501) Energy management systems – Requirements with guidance for use – will also be supported.**

Areas of support:

- Modernisation of existing facilities producing energy for own use in order to increase their efficiency;
- Introduction and modernisation of measurement and regulation systems;
- Modernisation, reconstruction and loss reduction in electricity and heat distribution systems;
- Improvements in thermal properties of buildings except for family houses and residential buildings;
- Use of waste energy in industrial processes;
- Energy efficiency improvements through the introduction of combined heat and power generation;

- Reductions in the energy requirements / improvements in the energy efficiency of production and technological processes;
- Construction of new and reconstruction of existing production facilities generating and distributing electricity and heat produced by means of renewable and secondary energy sources;
- Support for increased use of secondary raw materials.



Note:
Spin off *– A firm that uses tangible or intangible assets of another legal entity to start its business*
Start-up *– A newly founded firm or a firm with a short history*
Early stage *– A firm at an early stage of development, which already manufactures its product, has relations with its (business and financial) partners in place, has its position in the market and a potential for its further development*
Development phase *– The growth stage in the lifecycle of an existing firm which is preparing a new product or services that involve a significant change to its offer, or an entry into foreign markets*

(Source: Ministry of Industry and Trade)

8.5 Outline of Supported Sectors

This chapter provides an outline of the sectors that are suitable for public aid from Structural Funds and the state budget and that will be taken into account accordingly during the creation of the new Operational Programme Enterprise and Innovation for Competitiveness as well as new national programmes. The sectors below have been defined on the basis of conducted analyses of the Czech economy, consultations with a broad range of partners and experiences in the implementation of operational programmes in the previous programming periods as well as the implementation of national support instruments. In deciding on the aid from Structural Funds for a particular sector, the relevant EU legislation governing public aid has to be respected.

Table 16: List of supported sectors

Section	Group	Name
		SECTION A - AGRICULTURE, FORESTRY AND FISHING
2		**Forestry and logging (2.40 only)**
		SECTION B - MINING AND QUARRYING
8		**Other mining and quarrying**
		SECTION C - MANUFACTURING[77]
10		**Manufacture of food products**
11		**Manufacture of beverages**
13		**Manufacture of textiles**
14		**Manufacture of wearing apparel**
15		**Manufacture of leather and related products**
16		**Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials**
17		**Manufacture of paper and paper products**
18		**Printing and reproduction of recorded media**
19		**Manufacture of coke and refined petroleum products (19.20 only)**
20		**Manufacture of chemicals and chemical products (except CZ-NACE C 20.60)**
21		**Manufacture of basic pharmaceutical products and pharmaceutical preparations**
22		**Manufacture of rubber and plastic products**
23		**Manufacture of other non-metallic mineral products**
24		**Manufacture of basic metals (24.5 only)**
25		**Manufacture of fabricated metal products, except machinery and equipment**
26		**Manufacture of computer, electronic and optical products**
27		**Manufacture of electrical equipment**
28		**Manufacture of machinery and equipment n.e.c.**
29		**Manufacture of motor vehicles, trailers and semi-trailers**
30		**Manufacture of other transport equipment except 30.11 Building of ships and floating structures**
31		**Manufacture of furniture**
32		**Other manufacturing**
33		**Repair and installation of machinery and equipment**
		SECTION D – ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY
35		**Electricity, gas, steam and air conditioning supply (35.11, 35.12, 35.13, 35.14, 35.21, 35.22, 35.23, 35.30 only)**
		SECTION E – WATER SUPPLY; SEWERAGE; WASTE MANAGEMENT AND REMEDIATION ACTIVITIES
38		**Waste collection, treatment and disposal activities; materials recovery**

[77] Unless it is the manufacture of erotic goods.

		SECTION F – CONSTRUCTION
41		**Construction of buildings**
42		**Civil engineering**
43		**Specialised construction activities**
		SECTION G - WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES
45		**Wholesale and retail trade and repair of motor vehicles and motorcycles**
46		**Wholesale trade, except of motor vehicles and motorcycles (except 46.1 and 46.2)**
47		**Retail trade, except of motor vehicles and motorcycles**
		SECTION H - TRANSPORTING AND STORAGE
49		**Land transport and transport via pipelines (49.31, 49.39, 49.41, 49.42 only)**
50		**Water transport (50.30, 50.40 only)**
52		**Warehousing and support activities for transportation (52.10, 52.21, 52.24 only)**
53		**Postal and courier activities**
		SECTION I - ACCOMMODATION AND FOOD SERVICE ACTIVITIES
55		**Accommodation**
56		**Food and beverage service activities**
		SECTION J - INFORMATION AND COMMUNICATION
58		**Publishing activities**
59		**Motion picture, video and television programme production, sound recording and music publishing activities**
60		**Programming and broadcasting activities**
61		**Telecommunications**
62		**Computer programming, consultancy and related activities**
63		**Information service activities**
		SECTION L - REAL ESTATE ACTIVITIES
68		**Real estate activities (68.1 only)**
		SECTION M - PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES
69		**Legal and accounting activities**
70		**Activities of head offices; management consultancy activities**
71		**Architectural and engineering activities; technical testing and analysis**
72		**Scientific research and development**
73		**Advertising and market research (73.2 only)**
74		**Other professional, scientific and technical activities**
75		**Veterinary activities**
		SECTION N - ADMINISTRATIVE AND SUPPORT SERVICE ACTIVITIES
77		**Rental and leasing activities (77.4 only)**
78		**Employment activities**
79		**Travel agency, tour operator and other reservation service and related activities**
81		**Services to buildings and landscape activities (81.2 only)**
82		**Office administrative, office support and other business support activities**
		SECTION P – EDUCATION
85		**Education**
		SECTION R - ARTS, ENTERTAINMENT AND RECREATION
93		**Sports activities and amusement and recreation activities (93.1 only)**
		SECTION S - OTHER SERVICES ACTIVITIES
95		**Repair of computers and personal and household goods**
96		**Other personal service activities**

(Source: Ministry of Industry and Trade)

EXECUTIVE SUMMARY DIAGRAM OF THE CONCEPTUAL SECTION

SME Support Strategy 2014 – 2020

The global objective of the Small and Medium Enterprises Support Strategy 2014–2020 includes the continuous boosting of competitiveness and of the economic performance of small and medium entrepreneurs, based on quality business environment, on using and developing their innovation potential, knowledge and education (the upgrading of small and medium-sized enterprises to the entrepreneurial activity based on the competitive advantage of innovation and the advancement to a higher level in value chains), the internationalisation arising from the EU internal market and from markets with good prospects in third countries, and on the overall reduction of the energy requirements of business.

SP 1:

Enhancement of business environment and development of consultancy services for business

- Business environment improvements
- Administrative burden reductions
- Support for the introduction of quality management
- Support for involvement of small and medium entrepreneurs in technical standardisation
- Improvements in the quality of consultancy services and awareness improvements
- Knowledge-based innovative consultancy services for business – mentoring, technology scouting, coaching, market intelligence and technology foresighting
- Development of consultancy services to support the protection and use of intellectual property
- Development of consultancy services for the strategic management of a business and innovation management, including the consultancy in winding up a business and transfers of firms
- Entrepreneurship support (holding competitions for the best business plan or business creation)
- Development of education to improve non-technical competences of firms, including the development of key skills
- Support for technical education and special trainings
- Infrastructure support for business education and training, including the development of training centres
- Support for social entrepreneurship, including CSR
- Support for nascent small and medium entrepreneurs through financial instruments
- Training support to increase the participation of SMEs in public procurement contracts
- SME support in public procurement contracts through guarantees for tenders submitted for the public procurement contracts

SP 2:

Development of enterprise based on support for research, development and innovation, including the innovation and business infrastructure

- Support for the introduction of technical and non-technical innovations and new technologies at enterprises
- Support for the introduction of new products based on modern technologies
- Support for SMEs' own research and development facilities, including the support for investments in technological and laboratory equipment
- Support for the cooperation between SMEs and research organisations, including possible legislative changes
- Cluster development support
- Support for the transfer of knowledge and technology, including the development of science parks, business incubators and technology transfer centres, and their services
- Support for the commercialisation of R&D results, and a closer link between R&D of research organisations and demand from SMEs
- Design support
- Development of digital economy – centres of progressive ICT services
- Support for ICT development at small and medium-sized enterprises
- Support for the development of new solutions through public procurement contracts
- Support for business and innovation infrastructure
- Development of industrial zones and parks and redevelopment of brownfields
- Support for the construction of rental premises
- Support for the reconstruction of business premises (including the reimbursement of design documentation)
- Development of strategic services and centres of shared services
- Support for the repair centres of high-tech products and technology

SP 3:

SME internationalisation support

- Education and training focused on internationalisation
- Information, intelligence and consultancy services to support the internationalisation of SMEs
- Support in seeking business partners and technological cooperation partners
- Creation of cooperation networks and incubation centres abroad
- Support for the participation of SMEs in specialised trade fairs and exhibitions
- Support to SMEs in public procurement contracts abroad
- Bilateral as well as multilateral programmes of international cooperation, transnational projects of European and international organisations
- Export funding and insurance

SP 4:

Sustainable energy management and development of energy innovations

- Modernisation of existing facilities producing energy for own use in order to increase their efficiency
- Introduction and modernisation of measurement and regulation systems
- Modernisation, reconstruction and loss reduction in electricity and heat distribution systems
- Improvements in thermal properties of buildings except for family houses and residential buildings
- Use of waste energy in industrial processes
- Energy efficiency improvements through the introduction of combined heat and power generation
- Reductions in the energy requirements / improvements in the energy efficiency of production and technological processes
- Construction of new and reconstruction of existing production facilities generating and distributing electricity and heat produced by means of renewable and secondary energy sources
- Support for increased use of secondary raw materials

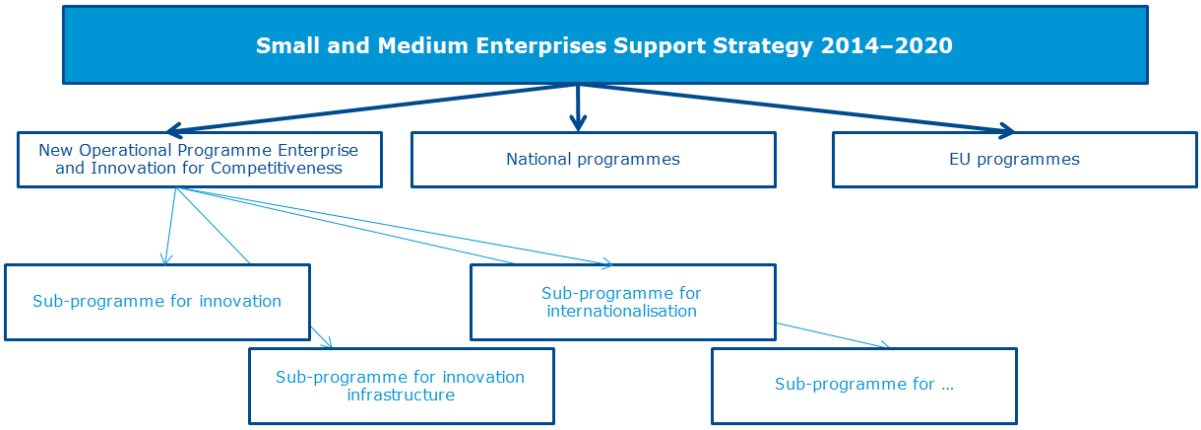
(Source: Ministry of Industry and Trade)

9 IMPLEMENTATION AND MONITORING OF SME STRATEGY 2014+

The SME Strategy 2014+ will be implemented through:

- the instruments for implementing the Concept that are specified in the following chapter and used within the competence of relevant ministries;
- the launching of the SME support programmes approved by the Government of the Czech Republic under Act No 47/2002 Coll., on support to small and medium-sized enterprises and amending Act No 2/1969 Coll., on establishment of ministries and other central authorities of the Czech Republic's state administration, as amended, and through the launching of calls in respect of those programmes, using the money from Structural Funds and the state budget, while following the rules of permissible public aid intensity and of the regional priorities set out by regional administration authorities.

Figure 6: Implementation of SME Strategy 2014+



(Source: Ministry of Industry and Trade)

The SME Strategy 2014+ will be implemented through several instruments. **Compared to the past, more attention will be paid to the revolving instruments, such as favourable loans and guarantees, and to capital contributions** (venture capital). However, support through grant schemes will be maintained. The use of the individual support instruments in relation to the strategic priorities of the Concept and its areas of support, along with the definition of measurable indicators, financial coverage of the implementation of the areas of support / measures and the determination of the responsibility, including co-responsibility, for the implementation of the areas of support, is specified in Table 17: Strategic priorities and areas of support for the SME Support Concept 2014–2020). However, the final list of the areas of support will depend on the managing authorities of the operational programmes and on a decision by the Government, which will approve the operational programmes.

The efficiency of use of the funds and the progress in the supported areas will be monitored and evaluated through the individual programmes.

Table 17: Strategic priorities and areas of support for the SME Support Concept 2014–2020

Strategic priority	Area of support	Type of support	Indicator	SF funding	State budget funding	Responsible*	Co-responsible*
Enhancement of business environment and Development of consultancy services for business	Support for the introduction of quality management	Grants, consultancy	Number of systems introduced	x	-	MIT	
	Support for involvement of small and medium entrepreneurs in technical standardisation	Grants, consultancy	Number of SMEs involved in technical standardisation	x	-	MIT	
	Improvements in the quality of consultancy services and awareness improvements	Grants, consultancy	Number of supported projects of consultancy services for the entrepreneurial development of SMEs	x	x	MIT	
	Knowledge-based innovative consultancy services for business – mentoring, technology scouting, coaching, market intelligence and technology foresighting	Grants, consultancy	Number of supported projects in which venture capital was invested	x	-	MIT	
	Development of consultancy services to support the protection and use of intellectual property	Grants, consultancy	Number of enterprises that used these services Number of granted patents, trademarks, registered utility models and designs in the CR	x	-	MIT	IPO
	Development of consultancy services for the strategic management of a business and innovation management, including the consultancy in winding up a business and transfers of firms	Grants, consultancy	Number of enterprises that used these services	x	-	MIT	MEYS
	Entrepreneurship support (holding competitions for the best business plan or business creation)	Grants	Number of projects supported	x	-	MIT	
	Development of education to improve non-technical competences of firms, including the development of key skills	Grants	Number of staff trained	x	-	MIT, MLSA	
	Support for technical education and special trainings	Grants	Number of staff trained Number of successfully trained persons who found appropriate jobs as a share of all persons trained	x	-	MIT, MLSA	MEYS
	Infrastructure support for business education and training, including the development of training centres	Grants	Number of projects supported Increase in the capacity of the training centre as at the date of project completion	x	-	MIT, MLSA	
	Support for social entrepreneurship, including CSR	Grants, consultancy, favourable loans, favourable guarantees	Number of social enterprises	x	-	MIT, MLSA	MRD
	Support for nascent small and medium entrepreneurs through financial instruments	Favourable loans, favourable guarantees, venture capital	Number of supported nascent SMEs Number of supported	x	x	MIT	MLSA

Strategic priority	Area of support	Type of support	Indicator	SF funding	State budget funding	Responsible*	Co-responsible*
			projects in which venture capital was invested				
	Training support to increase the participation of SMEs in public procurement contracts	Grants	Number of SMEs trained	x	-	MIT	MRD
	SME support in public procurement contracts through guarantees for tenders submitted for the public procurement contracts	Favourable guarantees	Number of guaranteed securities of SMEs in public procurement contracts and percentage of SMEs' success in tendering processes	-	x	MIT	MRD
Development of enterprise based on support for research, development and innovation, including the innovation and business infrastructure	Support for the introduction of technical and non-technical innovations and new technologies at enterprises	Favourable loans, favourable guarantees	Share of those innovations in supported enterprises that represent higher level innovations (new in the EU, globally) Number of SMEs that placed new or innovated products on the market, Number of SMEs that introduced process, organisational and marketing innovations	x	x	MIT	
	Support for the introduction of new products based on modern technologies	Favourable loans, favourable guarantees	Number of projects supported Share of the sales of innovated products in total sales at supported firms	x	-	MIT	
	Support for SMEs' own research and development facilities, including the support for investments in technological and laboratory equipment	Grants	Number of projects supported Number of enterprises that started to carry out their own R&D owing to the support (share of those enterprises in the total number of enterprises that started to carry out their own R&D)	x	-	MIT	MEYS
	Support for the cooperation between SMEs and research organisations, including possible legislative changes	Grants	Number of supported projects to encourage the establishment and development of the cooperation between SMEs and research organisations Horizontal mobility between enterprises and research organisations (number of person-days)	x	x	MIT	MEYS, TA CR
	Cluster development support	Grants	Number of cluster development projects	x	-	MIT	

Strategic priority	Area of support	Type of support	Indicator	SF funding	State budget funding	Respon sible*	Co-respons ible*
			supported R&D expenditure induced by joint projects within supported clusters				
	Support for the transfer of knowledge and technology, including the development of science parks, business incubators and technology transfer centres, and their services	Grants	Number of supported projects to develop science parks, business incubators, technology transfer centres Number of innovation firms supported by incubators, innovation centres and science parks Number of supported projects to support knowledge and technology transfer	x	-	MEYS	MIT
	Support for the commercialisation of R&D results, a closer link between R&D of research organisations and demand from SMEs	Grants, favourable loans, favourable guarantees, venture capital	Number of projects supported	x	x	MIT	TA CR
	Design support	Grants	Number of projects supported	x	x	MIT	
	Development of digital economy – centres of progressive ICT services	Favourable loans	Number of ICT development projects of SMEs	x	-	MIT	
	Support for ICT development at small and medium-sized enterprises	Grants	Number of SMEs that streamlined in-house processes owing to this support	x	-	MIT	
	Support for the development of new solutions through public procurement contracts	Grants	Number of successful SME outputs from public procurement contracts held Number of projects supported	x	x	MIT	TA CR
	Support for business and innovation infrastructure	Grants	Number of projects supported	x	x	MIT	MEYS
	Development of industrial zones and parks and redevelopment of brownfields	Grants	Number of supported zones and parks, Size of revitalised area (ha)	x	x	MIT	
	Support for the construction of rental premises	Grants	Number of projects supported Size of newly built rental premises (m^2)	x		MIT	
	Support for the reconstruction of business premises (including the reimbursement of design documentation)	Favourable loans, favourable guarantees	Number of projects supported Footprint of reconstructed premises	x		MIT	
	Development of strategic services and centres of	Grants	Number of projects	x	x	MIT	

Strategic priority	Area of support	Type of support	Indicator	SF funding	State budget funding	Responsible*	Co-responsible*
	shared services		supported				
	Support for the repair centres of high-tech products and technology	Grants	Number of projects supported	x		MIT	
SME internationalisation support	Education and training focused on internationalisation	Grants	Number of attendees at educational seminars as part of the internationalisation support	x	-	MIT	
	Information, intelligence and consultancy services to support the internationalisation of SMEs	Grants	Number of enterprises that used these services	x	-	MIT	
	Support in seeking business partners and technological cooperation partners	Grants	Number of SMEs linked with foreign business partners	x	-	MIT	
	Creation of cooperation networks and incubation centres abroad	Grants	Number of enterprises involved in cooperation	x	-	MIT	
	Support for the participation of SMEs in specialised trade fairs and exhibitions	Grants	Number of SMEs at specialised trade fairs and exhibitions	-	x	MIT	MFA
	Support to SMEs in public procurement contracts abroad	Favourable guarantees	Number of supported enterprises	-	x	MIT	
	Bilateral as well as multilateral programmes of international cooperation, transnational projects of European and international organisations	Grants	Number of supported enterprises that participated in these programmes	x	x	MIT	
	Export funding and insurance	Favourable loans, Favourable guarantees, Grants	Number of SMEs that used these services	x	x	MIT	
Sustainable energy management and development of energy innovations	Modernisation of existing facilities producing energy for own use in order to increase their efficiency	Favourable loans, favourable guarantees	Energy saved (GJ)/year Number of supported enterprises	x	-	MIT	
	Introduction and modernisation of measurement and regulation systems	Grants, favourable loans	Energy saved (GJ)/year Number of projects supported	x	x	MIT	
	Modernisation, reconstruction and loss reduction in electricity and heat distribution systems	Favourable loans, favourable guarantees	Energy saved (GJ)/year Number of projects supported	x	x	MIT	
	Improvements in thermal properties of buildings	Grants, favourable loans, favourable guarantees	Energy saved (GJ)/year Number of projects supported	x	x	MIT	
	Use of waste energy in industrial processes	Favourable loans, favourable guarantees	Installed capacity (MW) Number of projects supported	x	x	MIT	
	Energy efficiency improvements through the introduction of combined heat and power generation	Favourable loans, favourable guarantees	Energy saved (GJ)/year Installed capacity (MW) Number of projects supported	x	x	MIT	
	Reductions in the energy requirements / improvements in the energy efficiency of production and technological processes	Favourable loans, favourable guarantees	Energy saved (GJ)/year Number of projects supported	x	x	MIT	

Strategic priority	Area of support	Type of support	Indicator	SF funding	State budget funding	Responsible*	Co-responsible*
	Construction of new and reconstruction of existing production facilities generating and distributing electricity and heat produced by means of renewable and secondary energy sources	Grants, favourable loans	Energy produced from RES and secondary sources (MWh/year) Share of energy produced from RES and secondary sources in the consumption of primary energy sources Number of projects supported	x	x	MIT	
	Support for increased use of secondary raw materials	Grants, favourable loans, favourable guarantees	Energy produced from secondary sources (MWh/year) Share of energy produced from secondary sources in the consumption of primary energy sources Number of projects supported	x	-	MIT	

Source: Ministry of Industry and Trade; Note: * Responsible and co-responsible entities have been defined at the level of central administration authorities of the State or organisational units of the State, as appropriate.
The table does not take account of certain areas of support (Business Environment Improvements and Administrative Burden Reductions), where direct support is not used.

10 FINANCING

The sectoral priorities of the SME Strategy 2014+, i.e. their measures, will be financed from three primary sources. **The first strategic source will be the European funding under the EU cohesion policy.** In this context, we should mention the **European Regional Development Fund in particular,** the primary objective of which is to reduce regional disparities across the EU. This Fund may be used particularly for the financing of support measures of business development, dissemination of innovations, creativity, knowledge etc. In addition, the Fund will be used for the financing of measures of the SME Strategy 2014+ focusing on the reinforcement of research, technological development and innovations, including the support for innovation and business infrastructure, development and improvement of services for entrepreneurs, improvement of the access to, use and quality of ICT, increase in the competitiveness of SMEs; a shift towards low-carbon economy will be supported etc.

The second source is the **European Social Fund,** which focuses on supporting non-investment projects, such as retraining of the unemployed, creation of innovative educational programmes for employees, support for nascent self-employed persons, development of educational programmes including distance forms of education, modernisation of combined and distance forms of studies etc. The SME Strategy 2014+ will primarily use this Fund to finance measures supporting employment through self-employment, entrepreneurship and business creation, assistance to workers, enterprises and entrepreneurs to adapt to changes, investments in education, skills and lifelong learning, and will also focus on supporting research, technological development and innovations through post-graduate studies, vocational training of researchers, and creation of networks and partnerships of higher education institutions, research and technology centres with enterprises.

Regarding the funding of projects from EU Structural Funds, the applicants should bear in mind that co-financing from their own funds is required, and thus they need to secure enough of money for what is known as the pre-financing of the project and subsequently for the co-financing (the money from Structural Funds can make up just a portion of the total costs). In most cases, applicants use borrowings, notably loans from bank institutions.

The second strategic source of funding will be national funds. These primarily include money from the state budget as well as the money already used in a previous programming period, i.e. revolved. The national funding will be primarily used for those sectors that cannot be supported from operational programmes and for entrepreneurs from regions not to be included among those supported from Structural Funds. Some of the measures financed at national level will include in particular those to support nascent small and medium entrepreneurs, design, introduction of technical and non-technical innovations, support for the participation of SMEs in specialised trade fairs and exhibitions, SME support in public procurement contracts, as well as sustainable energy management.

The third strategic source of funding will include money from EU programmes. These are instruments of the European Union to enhance cooperation and tackle joint problems of EU Member States under specific policies of the Community (or the EU). They are always multi-year programmes, financed directly from the EU budget. Thus they are one of the possibilities of obtaining funds for activities in education, research and technological development, enterprise, environment, development of transport and energy infrastructure, culture, information society, consumer protection etc. The implementation of EU programmes is mostly the responsibility of the European Commission.

11 CONCEPT 2014+ IMPLEMENTATION AND UPDATE SCHEDULE

The SME Strategy 2014+ will be updated as follows:

- Update on an ongoing basis: The SME Strategy 2014+ will be annually evaluated and updated on an as-needed basis (due to extraordinary circumstances, such as a significant deceleration of the Czech economy).
- SME Strategy 2014+ update for the period after 2020: The SME Strategy 2014+ will be updated for the purposes of supporting small and medium-sized enterprises after 2020.

Table 18: Implementation and update schedule of the Concept

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Preparation and approval of SME Strategy 2014+										
Preparation and approval of the Operational Programme Enterprise and Innovation for Competitiveness 2014–2020										
Preparation of national SME support programmes										
Implementation of SME Strategy 2014+ through Operational Programme Enterprise and Innovation for Competitiveness 2014–2020 and national SME support programmes										
Annual evaluation of SME Strategy 2014+ and update if necessary										
Preparation and approval of new SME Concept 2021+										

Source: Ministry of Industry and Trade

List of Abbreviations

AF	Alternative fuels
BRICS	A short for the common reference to the economic association of Brazil, Russia, India, China and South Africa
BDMW	Biodegradable part of municipal waste
CSR	Corporate Social Responsibility
TTC	Technology transfer centre
CMGDB	Czech-Moravian Guarantee and Development Bank (ČMZRB in Czech)
CZSO	Czech Statistical Office (ČSÚ in Czech)
EEN	Enterprise Europe Network
EFTA	European Free Trade Association
EIP	European Innovation Partnership
ECo	European Commission
EMAS	Eco-Management and Audit Scheme, a name of a European Union programme, put in place by the Council Regulation (EEC) No 1836/93 of 29 June 1993 allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme
EPO	European Patent Office
EC	European Community
Eurostat	Statistical office of the European Union
FDI	Foreign direct investment
NP	Natural person
FTE	Full-time employee
GCI	WEF Global Competitiveness Index
GEM	Global Entrepreneurship Monitor
ICT	Information and communications technology
IUS	Innovation Union Scoreboard
SCP	Single Collection Point for public budget revenues
MRD	Ministry of Regional Development
MIT	Ministry of Industry and Trade
MLSA	Ministry of Labour and Social Affairs
SME	Small and medium(-sized) enterprises/entrepreneurs
MEYS	Ministry of Education, Youth and Sports
MH	Ministry of Health
MA	Ministry of Agriculture
MFA	Ministry of Foreign Affairs
ME	Ministry of the Environment
NAPEE	National Action Plan for Energy Efficiency
NIS	National Innovation Strategy
NCA	National Coordination Authority
NSRF	National Strategic Reference Framework

OECD	Organisation for Economic Co-operation and Development
OP	Operational programme
OP R&DfI	Operational Programme Research and Development for Innovations
UN	United Nations
RES	Renewable energy sources
PE	Private Equity
PES	Primary energy sources
BI	Business incubator
LP	Legal person
IW	Industrial waste
RIA	Regulatory Impact Analysis/Assessment
SBA	Small Business Act
SBRI	Small Business Research Initiative
SCM	Standard Cost Model
SEC	State Energy Concept
RDS	Regional Development Strategy
CSF	Common Strategic Framework
TA CR	Technology Agency of the Czech Republic
TC AV ČR	Technology Centre of the Academy of Sciences of the Czech Republic
MSW	Municipal solid waste
TLs	Thematic lines
UNCTAD	United Nations Conference on Trade and Development
IPO	Industrial Property Office
USPTO	United States Patent and Trademark Office
R&D	Research and development
R&D&I	Research, development and innovation
VC	Venture Capital
HEI	Higher education institution
VŠE	University of Economics, Prague
SP	Science park
WEF	World Economic Forum
PR	Payment request

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Annex 1: Links between the Concept and the thematic objectives of Annex IV to the Draft Common Provisions Regulation for Common Strategic Framework funds[78]

Thematic objectives	Precondition	Small and Medium Enterprises Support Strategy			
		Enhancement of business environment, development of consultancy services and education for business	**Development of enterprise based on support for research, development and innovation, including the innovation and business infrastructure**	**SME internationalisation support**	**Sustainable energy management and development of energy innovations**
1. Strengthening research, technological development and innovation (R&D target) (referred to in Article 9(1))	1.1. *Research and innovation:* The existence of a national or regional research and innovation strategic policy framework for smart specialisation, where appropriate, in line with the National Reform Program, to leverage private research and innovation expenditure.		xxx		
2. Enhancing access to and use and quality of information and communication technologies (Broadband target) (referred to in Article 9(2))	2.1. *Digital growth*: A strategic policy framework for digital growth to stimulate demand for affordable, good quality and interoperable ICT-enabled private and public services and increase uptake by citizens, including vulnerable groups, businesses and public administrations including cross border initiatives. 2.2. *Next Generation Access (NGA) Infrastructure:* The existence of national or regional NGA Plans which take account of regional actions in order to reach the EU high-speed Internet access targets, focusing on areas where the market fails to provide an open infrastructure at an affordable cost and to a quality in line with the EU competition and state aid rules, and provide accessible services to vulnerable groups.		xxx		
3. Enhancing the competitiveness of small and medium-sized enterprises (SMEs) (referred to in Article 9(3))	3.1. Specific actions have been carried out to underpin the promotion of entrepreneurship taking into account the Small Business Act (SBA).	xxx	xxx	xxx	x
4. Supporting the shift towards a low-carbon economy in all sectors (referred to in Article 9(4))	4.1. Actions have been carried out to promote cost-effective improvements of energy end use efficiency and cost-effective investment in energy efficiency when constructing or renovating buildings. 4.2. Actions have been carried out to promote high-efficiency co-generation of heat and power. 4.3. Actions have been carried out to promote the production and distribution of renewable energy sources[79].				xxx
8. Promoting employment and supporting labour mobility	8.1. Active labour market policies are designed and delivered in the light of the Employment guidelines.	xx	x	xx	xx

[78] Texts of the Regulation preliminarily approved by the Council of the European Union during the Danish Presidency in the form of partial general approach for Common Strategic Framework funds and Cohesion Policies, 2 April 2012 – Presidency compromise on Ex Ante Conditionality

[79] (OJ L 140, 5.6.2009, p. 16.)

Thematic objectives	Precondition	Small and Medium Enterprises Support Strategy			
		Enhancement of business environment, development of consultancy services and education for business	**Development of enterprise based on support for research, development and innovation, including the innovation and business infrastructure**	**SME internationalisation support**	**Sustainable energy management and development of energy innovations**
(Employment target) (referred to in Article 9(8))	8.2. *Self-employment, entrepreneurship and business creation:* the existence of a strategic policy framework for inclusive start-up. 8.3. – Labour market institutions are modernised and strengthened in the light of the Employment Guidelines; - Reforms of labour market institutions will be preceded by a clear strategic policy framework and ex ante assessment including the gender dimension. 8.4. *Active and healthy ageing:* Active ageing policies are designed in the light of the Employment Guidelines. 8.5. *Adaptation of workers, enterprises and entrepreneurs to change:* The existence of policies aimed at favouring anticipation and good management of change and restructuring.				

Source: Ministry of Industry and Trade; Note: xxx……strong link; xx……medium link; x……link

Annex 2: Links between Strategic Priorities of the Concept and the National Reform Programme

Strategic priority	Area of support	National Reform Programme (abridged according to content of the NPR)							
		II.2 Competitiveness	III.1 Public finance consolidation	III.2 Functional labour market and social system	III.3 Education	III.4 Enterprise support, digitalisation	III.5 Research and innovation	III.6 Support for low-carbon economy	III.7 Transport infrastructure
Enhancement of business environment and development of consultancy services for business	Business environment improvements	xxx				xxx			
	Administrative burden reductions	xxx				xxx			
	Support for the introduction of quality management	xxx				xx		x	
	Support for involvement of small and medium entrepreneurs in technical standardisation								
	Improvements in the quality of consultancy services and awareness improvements	xx		x	x	xx	x		
	Knowledge-based innovative consultancy services for business – mentoring, technology scouting, coaching, market intelligence and technology foresighting	xx		x		xxx	xxx	x	
	Development of consultancy services to support the protection and use of intellectual property	x		x		x	xxx		
	Development of consultancy services for the strategic management of a business and innovation management, including the consultancy in winding up a business and transfers of firms	x		xx	x	x	x	x	
	Entrepreneurship support (holding competitions for the best business plan or business creation)	xx		x	xx	x			
	Development of education to improve non-technical competences of firms, including the development of key skills	x		xx	x	x			
	Support for technical education	xx		x	xxx	x			

Strategic priority	Area of support	National Reform Programme (abridged according to content of the NPR)							
		II.2 Competitiveness	III.1 Public finance consolidation	III.2 Functional labour market and social system	III.3 Education	III.4 Enterprise support, digitalisation	III.5 Research and innovation	III.6 Support for low-carbon economy	III.7 Transport infrastructure
	and special trainings								
	Infrastructure support for business education and training, including the development of training centres	x		x	x	x			
	Support for social entrepreneurship, including CSR			xxx	x				
	Support for nascent small and medium entrepreneurs through financial instruments	xxx				xxx	xxx		
	Training support to increase the participation of SMEs in public procurement contracts	xxx			x	xx			
	SME support in public procurement contracts through guarantees for tenders submitted for the public procurement contracts	xxx				xx			
Development of enterprise based on support for research, development and innovation	Support for the introduction of technical and non-technical innovations and new technologies at enterprises	xx				xxx	xxx	x	
	Support for the introduction of new products based on modern technologies	xx				xxx	x	x	
	Support for SMEs' own research and development facilities, including investments in technological and laboratory equipment	xxx				x	xxx	x	
	Support for the cooperation between SMEs and research organisations, including possible legislative changes	xx			x	xx	xxx	x	
	Cluster development support					xxx	x		
	Support for the transfer of	xx				xxx	xxx		

Strategic priority	Area of support	National Reform Programme (abridged according to content of the NPR)							
		II.2 Competitiveness	III.1 Public finance consolidation	III.2 Functional labour market and social system	III.3 Education	III.4 Enterprise support, digitalisation	III.5 Research and innovation	III.6 Support for low-carbon economy	III.7 Transport infrastructure
	knowledge and technology, including the development of science parks, business incubators and technology transfer centres, and their services								
	Support for the commercialisation of R&D results, a closer link between R&D of research organisations and demand from SMEs	x				x	xxx		
	Design support	xx				x	x		
	Development of digital economy – centres of progressive ICT services	x				xxx	x		
	Support for ICT development at small and medium-sized enterprises	x				xx	x		
	Support for the development of new solutions through public procurement contracts	x				x	x		
	Support for business and innovation infrastructure	xx				xx	xx		
	Development of industrial zones and parks and redevelopment of brownfields	xx				xxx	x		
	Support for the construction of rental premises	x				x	x		
	Support for the reconstruction of business premises	x				x	x		
	Development of strategic services and centres of shared services	x				xx	x		
	Support for the repair centres of high-tech products and technology	x				x	x		
SME internationalisation	Education and training focused on internationalisation	xxx		x	x	xxx	x		

Strategic priority	Area of support	National Reform Programme (abridged according to content of the NPR)							
		II.2 Competitiveness	III.1 Public finance consolidation	III.2 Functional labour market and social system	III.3 Education	III.4 Enterprise support, digitalisation	III.5 Research and innovation	III.6 Support for low-carbon economy	III.7 Transport infrastructure
support and Development of education for business	Information, intelligence and consultancy services to support the internationalisation of SMEs	xxx				xxx			
	Support in seeking business partners and technological cooperation partners	xxx				xxx	x		
	Creation of cooperation networks and incubation centres abroad	xxx				xxx	xx		
	Support for the participation of SMEs in specialised trade fairs and exhibitions	xxx				xxx			
	Support to SMEs in public procurement contracts abroad	xxx				xx			
	Bilateral as well as multilateral programmes of international cooperation, transnational projects of European and international organisations	xxx				xx			
	Export funding and insurance	xxx				xxx			
Sustainable energy management and development of energy innovations	Modernisation of existing facilities producing energy for own use in order to increase their efficiency	x					x	xxx	
	Introduction and modernisation of measurement and regulation systems	x					x	xx	
	Modernisation, reconstruction and loss reduction in electricity and heat distribution systems	x					x	xxx	
	Improvements in thermal properties of buildings	x					x	xxx	
	Use of waste energy in industrial processes	x					x	xx	
	Energy efficiency improvements through the introduction of	x					x	xx	

Strategic priority	Area of support	National Reform Programme (abridged according to content of the NPR)							
		II.2 Competitiveness	III.1 Public finance consolidation	III.2 Functional labour market and social system	III.3 Education	III.4 Enterprise support, digitalisation	III.5 Research and innovation	III.6 Support for low-carbon economy	III.7 Transport infrastructure
	combined heat and power generation								
	Reductions in the energy requirements / improvements in the energy efficiency of production and technological processes	x					x	xxx	
	Construction of new and reconstruction of existing production facilities generating and distributing electricity and heat produced by means of renewable and secondary energy sources	x					x	xxx	
	Support for increased use of secondary raw materials	x					x	xxx	

Source: MIT; Note: xxx……strong link; xx……medium link; x……link

Annex 3: Links between Strategic Priorities of the Concept and the International Competitiveness Strategy

Strategic priority	Area of support	International Competitiveness Strategy										
		1. Institutions	2. Infrastructure	3. Macroeconomic stability	4. Healthcare	5. Education	6. Labour market	7. Financial markets	8. Market efficiency and improvements of entrepreneurial characteristics	9. Innovations	10. Export-led policy	11. Cohesion policy
Enhancement of business environment and development of consultancy services for business	Business environment improvements	xxx		x			xxx	xx	xxx	x	x	xxx
	Administrative burden reductions	xxx		xx			xx		xxx	x	x	xxx
	Support for the introduction of quality management								xxx			xxx
	Support for involvement of small and medium entrepreneurs in technical standardisation								x			xx
	Improvements in the quality of consultancy services and awareness improvements	x				x	xxx	x	xxx	xxx	xxx	xxx
	Knowledge-based innovative consultancy services for business – mentoring, technology scouting, coaching, market intelligence and technology foresighting						x	xx	xxx	xxx	xx	xxx
	Development of consultancy services to support the protection and use of intellectual property								xxx			xxx
	Development of consultancy services for the strategic management of a business and innovation management, including the consultancy in								xxx			xxx

Strategic priority	Area of support	International Competitiveness Strategy										
		1. Institutions	2. Infrastructure	3. Macroeconomic stability	4. Healthcare	5. Education	6. Labour market	7. Financial markets	8. Market efficiency and improvements of entrepreneurial characteristics	9. Innovations	10. Export-led policy	11. Cohesion policy
	winding up a business and transfers of firms											
	Entrepreneurship support (holding competitions for the best business plan or business creation)					xx						xxx
	Development of education to improve non-technical competences of firms, including the development of key skills					x			xxx		xxx	xxx
	Support for technical education and special trainings					xxx						xxx
	Infrastructure support for business education and training, including the development of training centres											xxx
	Support for social entrepreneurship, including CSR					x	xx		x			xx
	Support for nascent small and medium entrepreneurs through financial instruments							xx	xx			xxx
	Training support to increase the participation of SMEs in public procurement contracts	x									xx	xx
	SME support in public procurement contracts through guarantees for	x									xx	xx

Strategic priority	Area of support	International Competitiveness Strategy										
		1. Institutions	2. Infrastructure	3. Macroeconomic stability	4. Healthcare	5. Education	6. Labour market	7. Financial markets	8. Market efficiency and improvements of entrepreneurial characteristics	9. Innovations	10. Export-led policy	11. Cohesion policy
	tenders submitted for the public procurement contracts											
Development of enterprise based on support for research, development and innovation	Support for the introduction of technical and non-technical innovations and new technologies at enterprises								xxx		xx	xxx
	Support for the introduction of new products based on modern technologies								xxx		xx	xxx
	Support for SMEs' own research and development facilities, including investments in technological and laboratory equipment								xxx	x		xxx
	Support for the cooperation between SMEs and research organisations, including possible legislative changes					xxx			xxx	xxx		xxx
	Cluster development support									xxx		xxx
	Support for the transfer of knowledge and technology, including the development of science parks, business incubators and technology transfer centres, and their services								xxx	xxx		xxx
	Support for the					x			xxx	xxx	xx	xxx

Strategic priority	Area of support	International Competitiveness Strategy										
		1. Institutions	2. Infrastructure	3. Macroeconomic stability	4. Healthcare	5. Education	6. Labour market	7. Financial markets	8. Market efficiency and improvements of entrepreneurial characteristics	9. Innovations	10. Export-led policy	11. Cohesion policy
	commercialisation of R&D results, a closer link between R&D of research organisations and demand from SMEs											
	Design support											xxx
	Development of digital economy – centres of progressive ICT services		x									xxx
	Support for ICT development at small and medium-sized enterprises		x									xx
	Support for the development of new solutions through public procurement contracts											xx
	Support for business and innovation infrastructure								xxx	xxx		xxx
	Development of industrial zones and parks and redevelopment of brownfields											xxx
	Support for the construction of rental premises											xx
	Support for the reconstruction of business premises											xx
	Development of strategic services and centres of shared services											xxx

Strategic priority	Area of support	International Competitiveness Strategy										
		1. Institutions	2. Infrastructure	3. Macroeconomic stability	4. Healthcare	5. Education	6. Labour market	7. Financial markets	8. Market efficiency and improvements of entrepreneurial characteristics	9. Innovations	10. Export-led policy	11. Cohesion policy
	Support for the repair centres of high-tech products and technology											xxx
SME internationalisation support and Development of education for business	Education and training focused on internationalisation								xxx		xxx	xxx
	Information, intelligence and consultancy services to support the internationalisation of SMEs								xx		x	x
	Support in seeking business partners and technological cooperation partners								xxx	xx	xxx	xx
	Creation of cooperation networks and incubation centres abroad								xxx	xx	xxx	xxx
	Support for the participation of SMEs in specialised trade fairs and exhibitions										xxx	x
	Support to SMEs in public procurement contracts abroad	x									xx	x
	Bilateral as well as multilateral programmes of international cooperation, transnational projects of European and international organisations										x	x
	Export funding and insurance										xx	x

Strategic priority	Area of support	International Competitiveness Strategy										
		1. Institutions	2. Infrastructure	3. Macroeconomic stability	4. Healthcare	5. Education	6. Labour market	7. Financial markets	8. Market efficiency and improvements of entrepreneurial characteristics	9. Innovations	10. Export-led policy	11. Cohesion policy
Sustainable energy management and development of energy innovations	Modernisation of existing facilities producing energy for own use in order to increase their efficiency		xxx						xxx			
	Introduction and modernisation of measurement and regulation systems		xxx						xxx			
	Modernisation, reconstruction and loss reduction in electricity and heat distribution systems		xxx						xxx			
	Improvements in thermal properties of buildings		xxx						xxx			
	Use of waste energy in industrial processes		xxx						xxx			
	Energy efficiency improvements through the introduction of combined heat and power generation		xxx						xxx			
	Reductions in the energy requirements / improvements in the energy efficiency of production and technological processes		xxx						xxx			
	Construction of new and reconstruction of existing production facilities generating and distributing electricity and heat produced by means of renewable and		xxx						xxx			

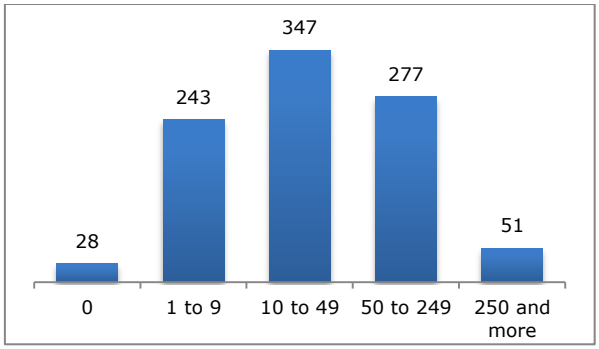
Strategic priority	Area of support	International Competitiveness Strategy										
		1. Institutions	2. Infrastructure	3. Macroeconomic stability	4. Healthcare	5. Education	6. Labour market	7. Financial markets	8. Market efficiency and improvements of entrepreneurial characteristics	9. Innovations	10. Export-led policy	11. Cohesion policy
	secondary energy sources											
	Support for increased use of secondary raw materials		xxx						xxx			

Source: Ministry of Industry and Trade; Note: xxx……strong link; xx……medium link; x……link

Annex 4: Evaluation of Public Consultation on the Draft Small and Medium Enterprises Support Strategy 2014–2020

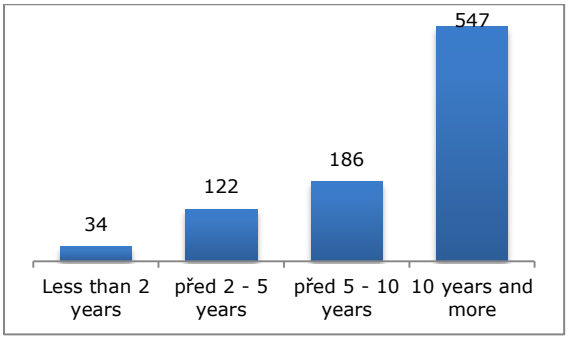
The consultation for the SME Strategy 2014+ at BusinessInfo.cz attracted **946 respondents, 28.6% of whom were micro entrepreneurs (staff headcount of 0–9), 36.7% were small entrepreneurs (staff headcount of 10–49) and 29.3% were medium entrepreneurs (staff headcount of 50–249).** In addition, 51 large entrepreneurs (5.4%) commented on the proposed areas of support. The questionnaire consisted of two sections – an identification section, which was only intended for small and medium-sized enterprises and primarily concerned the experiences of businesses in drawing aid from Structural Funds as well as national programmes and the identification of their opinions on various forms of such aid. It also strove to identify the main difficulties currently faced by small and medium-sized enterprises as well as their success in introducing new business products, processes or seeking new sales channels. The second (strategic development) section, which sought to identify opinions on the individual strategic priorities and areas of support proposed in the SME Strategy 2014+, was intended for all respondents participating in the interview survey.

Graph 37: Business size (number of enterprises)

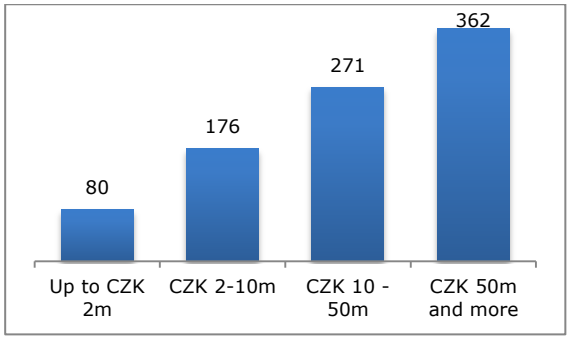


Most respondents, i.e. small and medium enterprises, registered their entities ten or more years ago, and thus they were mostly established enterprises with longer histories. Regarding turnover, the number of corresponding firms rose hand in hand with turnover, and most respondents (40%) had turnover in excess of CZK 50 million a year. As concerns the individual sectors, firms operating in manufacturing, IT and telecommunications, construction and services were the most frequent ones.

Graph 38: Length of existence (number of enterprises)

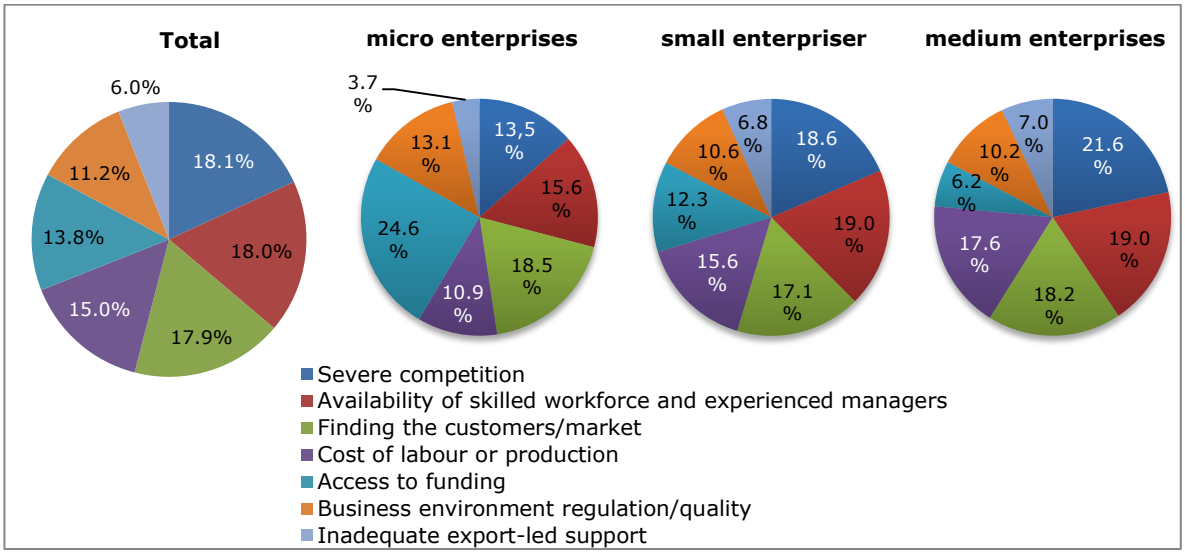


Graph 39: Company turnover (number of enterprises)



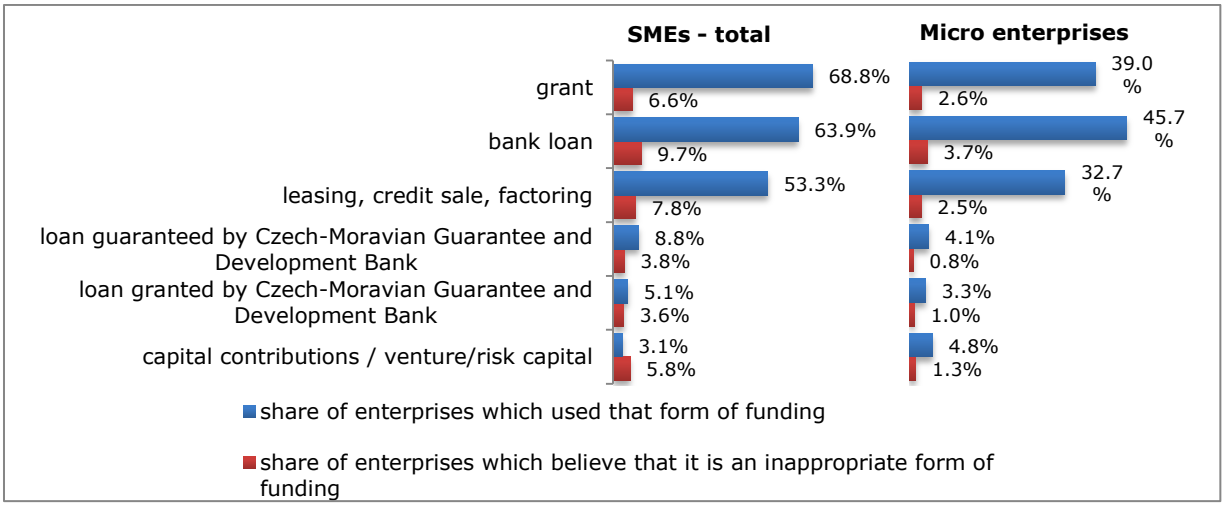
The biggest problems that firms currently faced included the availability of skilled workforce and experienced managers, severe competition, and finding the customers, or the market. Another difficulty seen by enterprises was the increasing cost of and worsened access to funding. Inadequate export-led policy was cited relatively less frequently by the firms. However, the problems faced relatively differ between enterprises of different sizes, with **micro entrepreneurs in particular viewing the access to funding as absolutely crucial.** Almost 25% of them highlighted that problem. With the growing size of an enterprise, the importance of this issue decreases while the relevance of other difficulties increases, including severe competition, availability of skilled employees and managers, cost of production and labour. Moreover, inadequate export-led policy also becomes a problem for larger enterprises.

Graph 40: Most-felt problems of firms



The public consultation attracted 889 small and medium entrepreneurs (94%), and most of them stated that they were experienced in grants. **From 2007 to the present, almost 70% of SMEs have used grants for the development of their businesses,** while other frequent funding methods included bank loan (64%) and leasing, credit sale, or factoring (53,3%). **This differs significantly for micro enterprises, thus confirming the well-known fact that smaller enterprises suffer from difficult access to funding.** Based on the survey conducted, we find that approximately one third of micro enterprises had to seek funding elsewhere, and the most frequent 'other source' included equity, personal loans, account overdrafts, loans from family members, shareholders, suppliers, private financial assistance, contributions from partners etc.

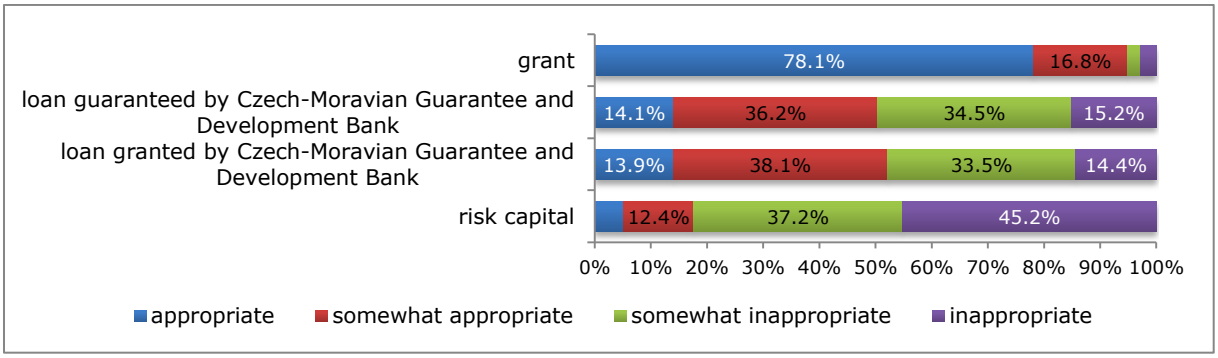
Graph 41: Share of enterprises that used any of the specified forms of financing



Thus grants appear to be the best form of aid for enterprises of all sizes, with more than three thirds of small and medium enterprises citing it as an appropriate form of aid. Views on the aid provided by the Czech-Moravian Guarantee and Development Bank vary among entrepreneurs; the percentage of small and medium enterprises that view it as being appropriate is approximately the same as the percentage of those who view it as inappropriate. An important factor in these statistics is particularly the persisting popularity of grants, but this is economically logical if viewed through the lens of entrepreneurs. Given the previous graph, a possible reason for the lower popularity of the aid provided by CMGDB may be the inexperience in that type of aid among the entrepreneurs participating in the public consultation – the aid in the form of a loan guaranteed by the CMGDB was used by 8.8% of entrepreneurs while a loan granted by the CMGDB was used by 5.1% of entrepreneurs. Only 13 of the 123 entrepreneurs who used the aid provided by the CMGDB reported that this type of aid was inappropriate.

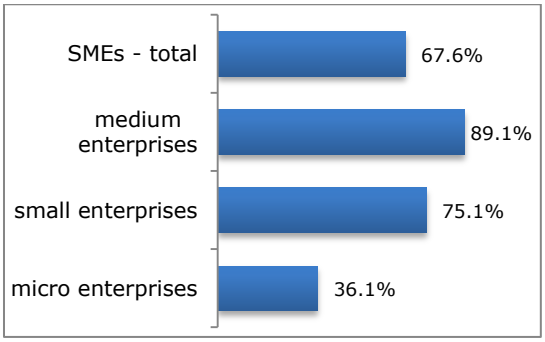
A negative attitude among entrepreneurs persists vis-à-vis risk capital (seed, venture capital), due probably to the lack of awareness of risk capital in the Czech Republic generally. Numerous entrepreneurs participating in the survey stated that they did not know what exactly the use of risk capital would involve for them. Another reason is that venture capital as an aid instrument is less suitable for established firms with a longer track record. **To improve the current situation, a new programme to provide aid to nascent small and medium-sized enterprises through risk capital (the Seed/Venture Capital Fund project) is under preparation for this programming period, when one risk capital fund will be created as a result; however, the programme should also focus on raising awareness among entrepreneurs and on consultancy.**

Graph 42: Appropriateness of individual forms of aid as seen by entrepreneurs

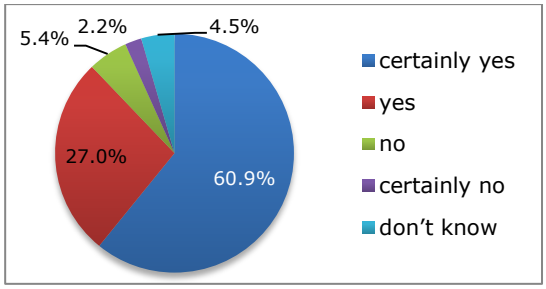


Most small and medium entrepreneurs (67.6%) who participated in the public consultation have a past experience with aid from EU Structural Funds. Successful applicants most frequently came from among medium entrepreneurs, with almost 90% of them having obtained aid from EU Structural Funds. Small enterprises were second, with 3/4 of them being successful, while the share of micro entrepreneurs was the lowest, with 36% of them having obtained such aid. Given the success of entrepreneurs in the applications for the aid, we can conclude that particularly entrepreneurs who have had previous (good) experience of obtaining aid from Structural Funds or national programmes and were considering the use of such aid in the future wished to express their views on the proposed areas of support in the next programming period 2014–2020. Evidence of this is the following graph, where approximately 88% of entrepreneurs are considering the aid.

Graph 43: Share of enterprises that obtained aid from EU Structural Funds



Graph 44: Interest among entrepreneurs in the aid from EU Structural Funds or national programmes in the programming period 2014-2020

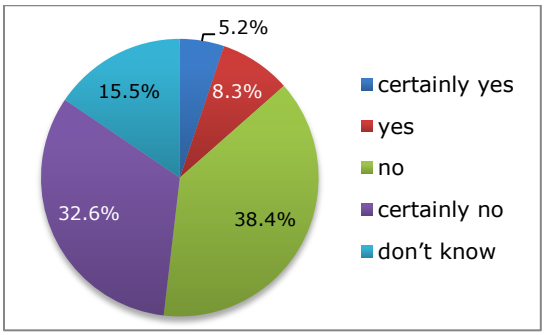


A survey about the use of risk capital as a source to fill a gap in funding for the development of enterprise shows, as mentioned above, that numerous entrepreneurs have no idea about venture capital. **70% of entrepreneurs report that they would not or would certainly not use risk capital aid. Micro entrepreneurs proved to evaluate risk capital more favourably, and were more open to that instrument.** 12.6% of micro entrepreneurs report that they would certainly use such aid while 11.2% would probably use it. The most frequent reason the entrepreneurs cited as to why they did not wish to use venture capital for the development of their business was the 'risk because it is venture capital'. However, it is primarily the investor in the firm who bears the risk if the investment fails. Hence this reason is yet more evidence of lower awareness of risk capital as an aid to support enterprise. **Another reason cited, in addition to the lack of knowledge of risk capital, was the entry into the company's ownership**

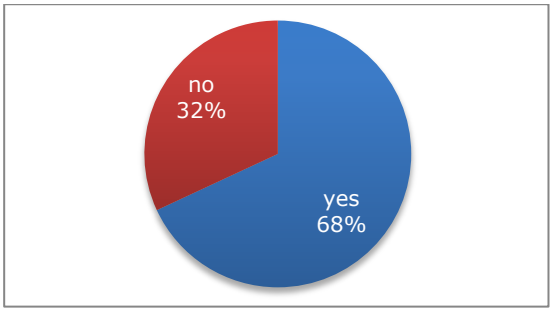
structure, when particularly family businesses typically have a negative attitude to an entry of another partner and the reduction of their decision-making powers. **Numerous firms also cited conservative approach to financing their business and the preference of using their own funds, e.g. the established instruments such as bank loans or guarantees.**

The consultation also tried to identify what entrepreneurs thought of the implementation of special support programmes in regions with concentrated state aid. Most entrepreneurs (68%) supported the regional dimension of support.

Graph 45: Interest among entrepreneurs in using risk capital aid



Graph 46: How entrepreneurs view the possibility of special support programmes in regions with concentrated state aid

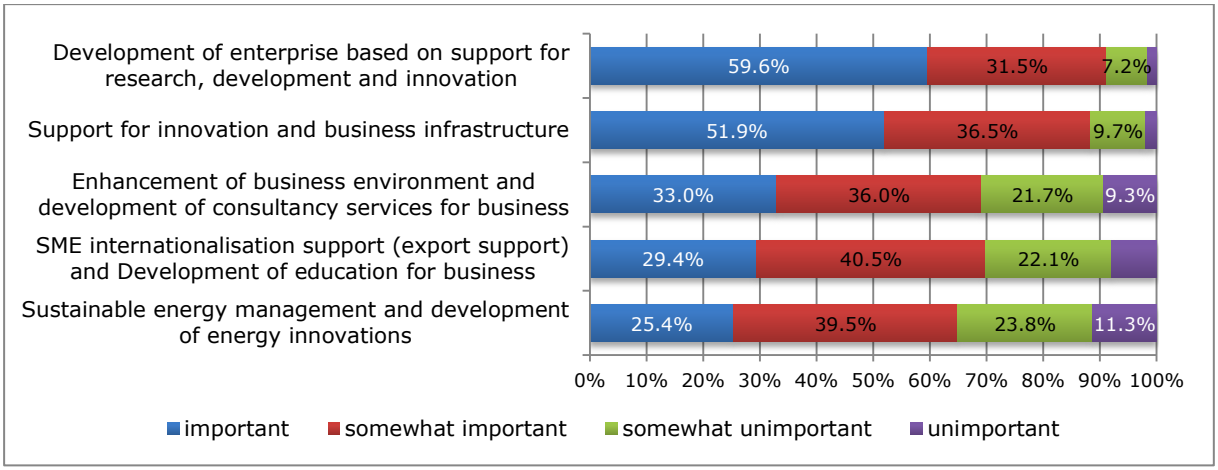


Strategic Development Section

Based on the results of this interview survey, the allocation of the areas of support to the individual strategic priorities was reviewed, and the priorities have been concentrated into only four of them – Enhancement of business environment and development of consultancy services and education for business; Development of enterprise based on support for research, development and innovation, including the innovation and business infrastructure; SME internationalisation support; and Sustainable energy management and development of energy innovations.

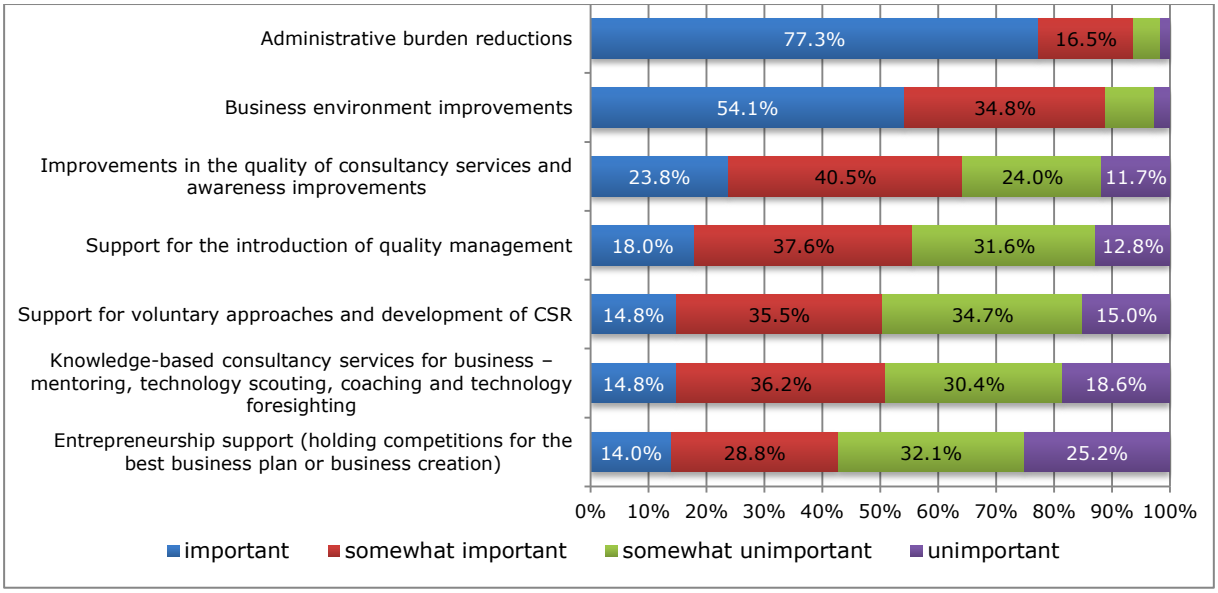
Evaluation of the survey questions that dealt with the draft SME Strategy 2014+ **showed that the chosen strategic priorities as well as individual areas of support were viewed positively, with most of them being seen as important or somewhat important.** Particularly the priority Development of enterprise based on support for research, development and innovation was seen by entrepreneurs as the most important; followed by the Support for business and innovation infrastructure. By contrast, small entrepreneurs believe that the Sustainable energy management and development of energy innovations is more important than the SME internationalisation support.

Graph 47: How entrepreneurs view the strategic priorities



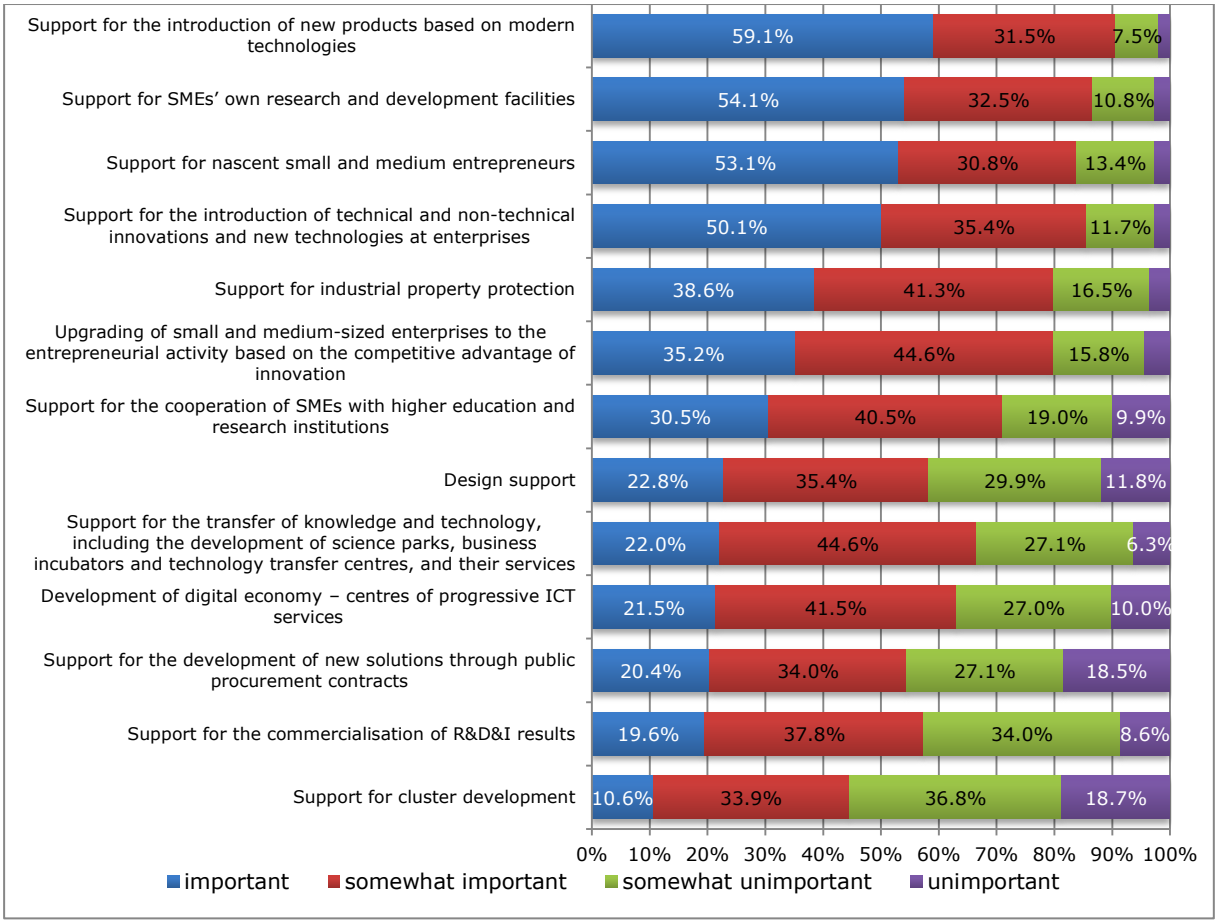
The consultation also targeted the evaluation of selected areas of support for small and medium entrepreneurs in a new programming period. Based on the evaluation of the **first priority** (Enhancement of business environment and development of consultancy services), we can conclude that particularly a good business environment and reduction of administrative burden are most important to entrepreneurs.

Graph 48: PRIORITY 1 – Enhancement of business environment and development of consultancy services for business



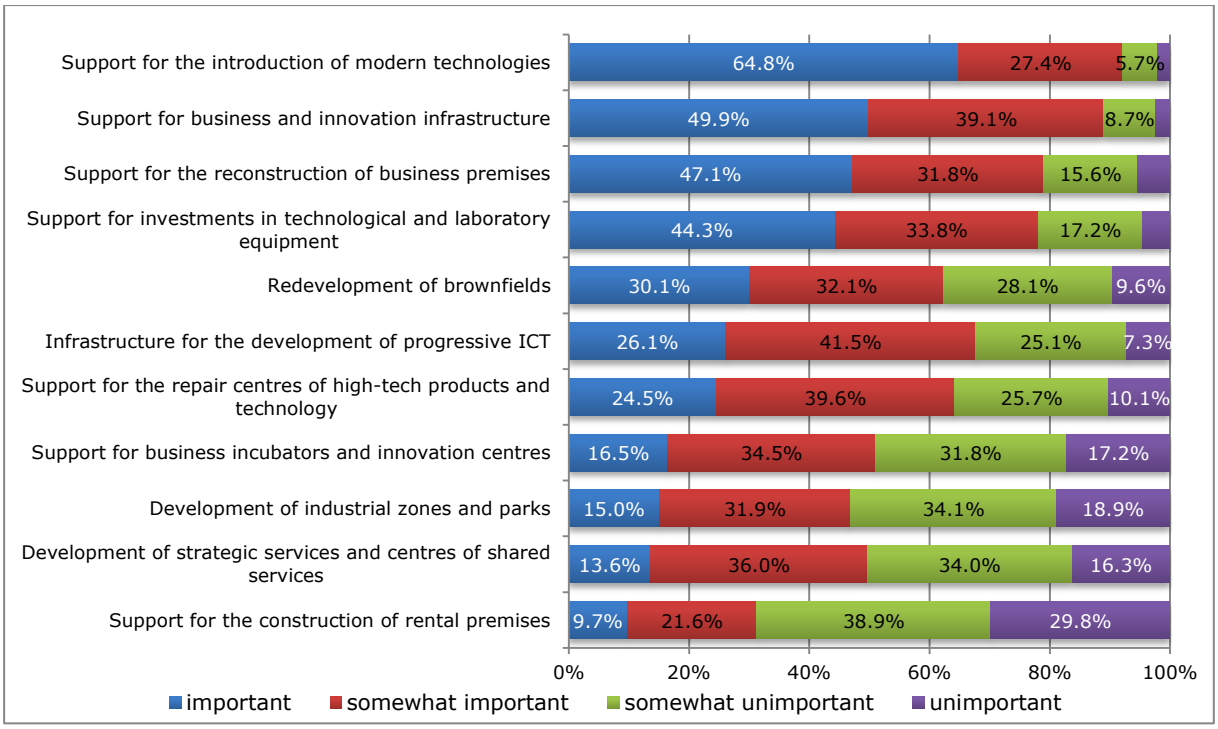
In **the second priority** (Development of enterprise based on support for research, development and innovation), the importance of the priorities is distributed more evenly, with four areas of support being regarded by more than half the entrepreneurs as important. Entrepreneurs believe that the most important areas include: Support for the introduction of new products based on modern technologies; Support for SMEs' own research and development facilities; Support for nascent small and medium entrepreneurs; and Support for the introduction of technical and non-technical innovations and new technologies at enterprises.

Graph 49: PRIORITY 2 – Development of enterprise based on support for research, development and innovation



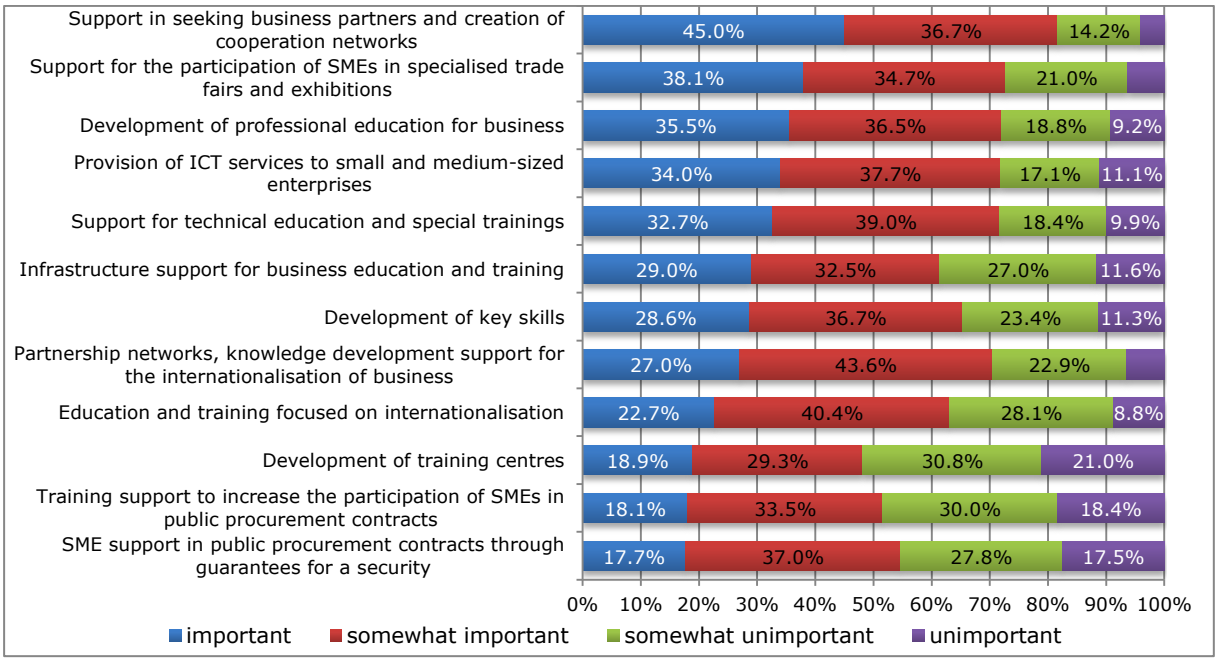
In the **third priority** (Support for business and innovation infrastructure), Support for the introduction of new technologies in particular was important to entrepreneurs. Three other areas of support were cited as important by less than 50% of entrepreneurs, yet they were still seen as more important than the others. They include Support for business and innovation infrastructure; Support for the reconstruction of business premises; and Support for investments in technological and laboratory equipment.

Graph 50: PRIORITY 3 – Support for business and innovation infrastructure



In **priority 4** (SME internationalisation support and Development of education for business), the importance of the individual areas of support is more or less balanced. Entrepreneurs, notably micro and small ones, cited the Support in seeking business partners and the Creation of cooperation networks as the most important areas.

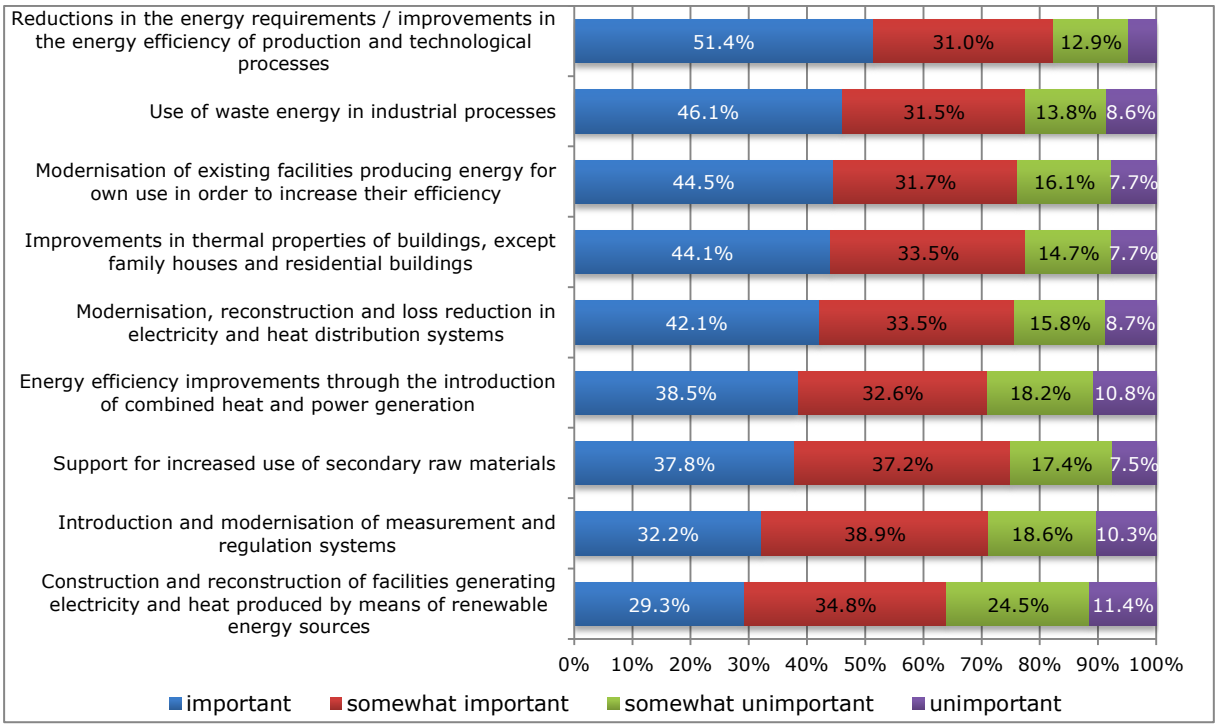
Graph 51: PRIORITY 4 – SME internationalisation support and Development of education for business



The fifth priority focuses on energy and the use of secondary and renewable energy sources. The most important areas of support were Reductions in the energy requirements or improvements in

the energy efficiency of production and technological processes; as well as the support for Use of waste energy in industrial processes; Modernisation of existing facilities producing energy for own use in order to increase their efficiency; and Improvements in thermal properties of buildings, except family houses and residential buildings. The individual areas of support were seen as being of much the same importance if compared between enterprises of different sizes.

Graph 52: PRIORITY 5 – Sustainable energy management and development of energy innovations



Summary

Of all strategic priorities, the most important areas of support, according to entrepreneurs, seem to be the support in Administrative burden reductions and Business environment improvements; Support for the introduction of modern technologies and new products based on those technologies; Support for SMEs' own research and development facilities; and Support for nascent small and medium entrepreneurs. The top ten most important areas also include Reductions in the energy requirements of production and technological processes; Support for the introduction of technical and non-technical innovations and new technologies at enterprises; Support for business and innovation infrastructure; and Support for the reconstruction of business premises.

Graph 53: TOP 10 – Ten areas of support that the largest number of entrepreneurs cited as important