

# **THE STRATEGIC FRAMEWORK FOR SUSTAINABLE DEVELOPMENT IN THE CZECH REPUBLIC**

## TABLE OF CONTENTS

1	INTRODUCTION	3
2	SUSTAINABLE DEVELOPMENT IN THE CZECH REPUBLIC AS PART OF THE WORLD'S AND EUROPE'S FUTURE	6
3	STRATEGIC VISION FOR SUSTAINABLE DEVELOPMENT IN THE CZECH REPUBLIC	9
4	SUSTAINABLE DEVELOPMENT PRIORITIES AND OBJECTIVES IN THE CZECH REPUBLIC	10
4.1	Priority Axis 1: Society, people and health	13
4.2	Priority Axis 2: Economy and innovation	24
4.3	Priority Axis 3: Spatial development	34
4.4	Priority Axis 4: Landscape, ecosystems and biodiversity	44
4.5	Priority Axis 5: A stable and secure society	53
5	THE IMPLEMENTATION OF THE SDS CR	67
5.1	Basic principles of implementation	67
5.2	Sustainable development principles	67
5.3	Additional activities to ensure the implementation of the SDS CR	69
5.4	Subsequent updates of the SDS CR	70
6.	THE MONITORING OF THE SDS CR	71
6.1	Basic monitoring principles	71
6.2	Monitoring the accomplishments of the SDS CR	71
6.3	SUSTAINABLE DEVELOPMENT INDICATORS	73
7	ANNEXES	76
7.1	Annex 1: Indicator lists	76

**The role of the Strategic Framework for Sustainable Development of the Czech Republic (hereinafter “SDS CR”) is to establish a consensual framework for the preparation of other materials of a conceptual nature (sectoral policies and action programmes) and can thus be considered an important starting point for strategic decision-making within individual departments, for interdepartmental cooperation, and for collaboration with interest groups.**

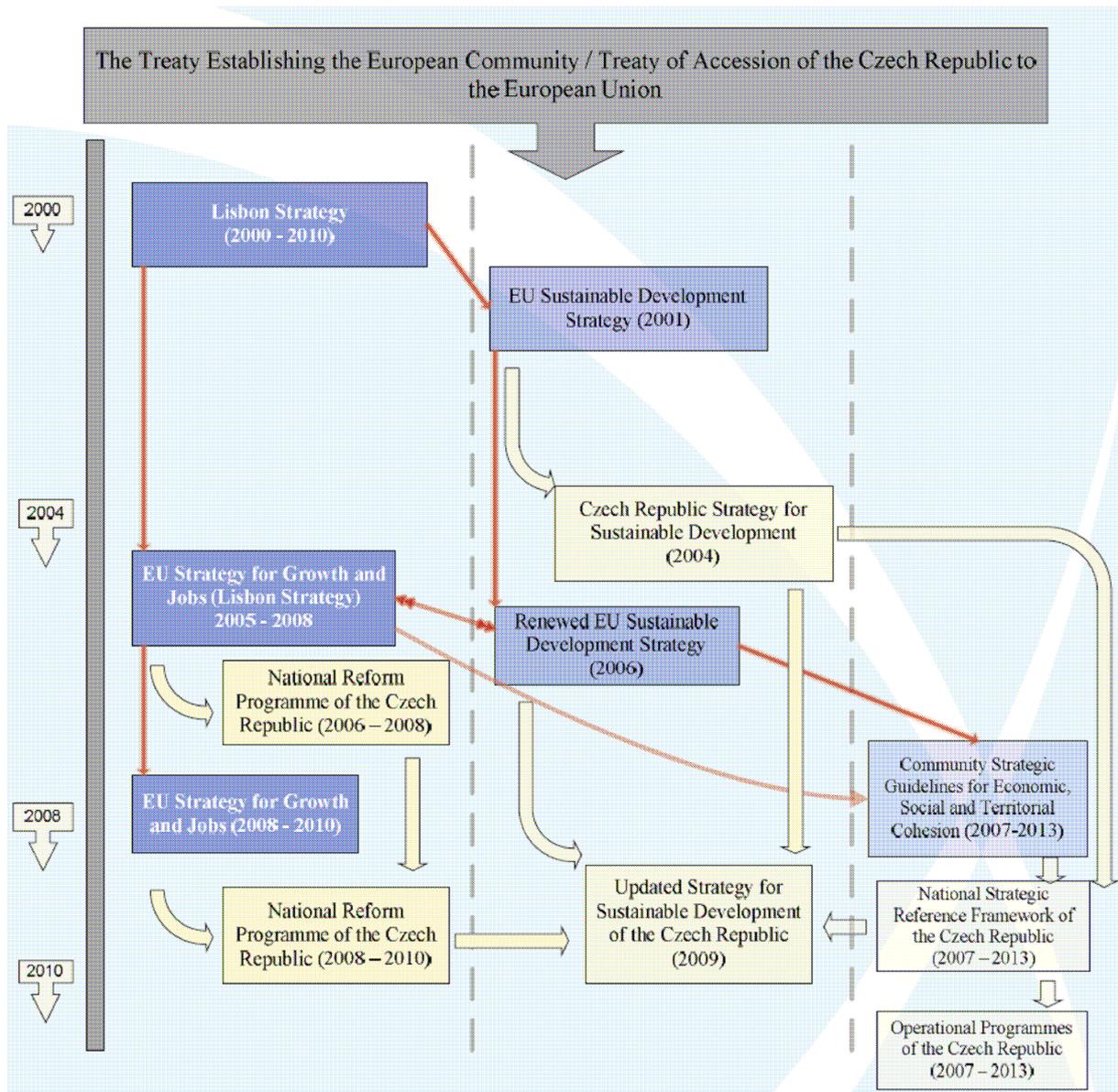
The Czech Republic adopted its Sustainable Development Strategy through Government Resolution No 1242 of 8 December 2004. Its primary role is to provide timely warning of any existing or potential problems that might endanger the Czech Republic’s transition to sustainable development, and to initiate measures designed to prevent such threats or at least mitigate their impact.

The body responsible for preparing the SDS CR, including its updates, is the Government Council for Sustainable Development (GCSD) – the SDS is subject to the approval of the Government of the Czech Republic. For the purposes of updating, the Steering Committee for Updates was set up within the GCSD headed by a representative of the Ministry of Finance. The update to the existing SDS CR of 2004 was started in 2007 under the above-mentioned resolution.

Sustainable development is complementary to the renewed Lisbon Strategy that significantly contributes to the main objective of sustainable development by primarily focusing on actions and measures aimed at increasing competitiveness and economic growth and enhancing job creation. To implement actions that contribute to fulfilling the renewed Lisbon Strategy, National Reform Programmes (NRP) have been prepared at the member states level, including within the Czech Republic.

The Strategic Framework for Sustainable Development (SDS) has a cross-cutting character that goes beyond individual departments, similarly to the Czech Republic’s 2008–2010 National Reform Programme and the 2007–2013 National Strategic Reference Framework, which are in compliance with the updated SDS CR. The difference is this document’s considerably longer and broader concept. The SDS provides information to government bodies and generally summarizes the key issues, problems and possible solutions. It is not aimed at imposing specific measures or replacing departmental and cross-cutting strategies, but rather at supporting their long-term orientation and mutual links.

The relationship of the Updated SDS to major strategic documents, both EU and Czech, is shown in the following figure.



The update also aims to identify possible threats (social, economic and environmental) to the Czech Republic's further development, as well as to find ways (tools) to avoid these threats while making the maximum possible use of the synergies between social, environmental and economic areas. The Strategic Framework for Sustainable Development of the Czech Republic does not seek to replace the various sectoral concepts, strategies and policies. The document aims to identify key themes and issues related to the Czech Republic's sustainable development and to find appropriate measures for addressing them – these measures may be included in already existing and approved policy documents. The update is thus intended to foster the mutual links between measures that are contained in the various sectoral strategic documents and, as the case may be, indicate problems for which

there are no currently adequate policies or measures. It can be concluded that the update has not found any fundamental conflicts with the majority of strategic materials. However, since the Czech Republic does not yet have any common frameworks for strategic work, the compatibility with all such texts – both those that are finished and those under preparation – cannot be fully guaranteed. The SDS shall operate until 2030.

An important task within the implementation of the SDS is to prepare a text on sustainable development that will include binding tasks, verifiable targets and, above all, binding decisions and verifiable cost and impact estimates.

Work on the update began at a time when neither the extent nor the consequences of the global economic situation for the Czech Republic were clear. Because the negative impacts of the global economic recession on Czech society have been gradually increasing, the priorities and objectives that had been proposed for the update have been revised taking into account this situation. It can be concluded that the proposed priorities and objectives have held true over the long-term, notwithstanding the current economic developments. In addition, a significant portion of them should lead reduced risks of major negative societal-wide fluctuations and changes now because of the current crisis as well as in the future.

The situation in the various fields of Czech sustainable development is monitored using a set of indicators, with the results being regularly published as Progress Reports on the Czech Republic Sustainable Development Strategy. The latest Progress Report (2009), i.e. the third in succession, clearly indicates that while there has been improvement in some monitored areas (e.g. the coverage of the Czech Republic by municipalities' land-use planning documentation), many indicators (economic structure, biodiversity, corruption, etc.) have shown a consistent adverse trend.

## **SUSTAINABLE DEVELOPMENT IN THE CZECH REPUBLIC AS PART OF THE WORLD'S AND EUROPE'S FUTURE**

According to the World Commission on Environment and Development's definition, development is considered sustainable<sup>1</sup> if it meets the needs of the present generation without compromising the ability of future generations to meet their own needs. The basic milestones in the development of the definition are the international summits, the United Nations Conference on Environment and Development (Rio de Janeiro, 1992) and the Millennium Summit and the World Summit on Sustainable Development (Johannesburg, 2002). **The Strategic Framework for Sustainable Development of the Czech Republic serves as a long-term framework for policy making in the context of international commitments that have been or will be adopted by the Czech Republic as part of its membership in the UN, OECD and the EU, while respecting the Czech Republic's specific conditions and needs.**

In 2001, the European Council adopted the first EU Sustainable Development Strategy in Gothenburg. In 2002, the strategy was supplemented through the UN World Summit (Johannesburg, 2002) and in 2006, it was adopted as the renewed EU Sustainable Development Strategy<sup>2</sup>. The document identifies persisting unsustainable trends in relation to climate change, energy utilization, public health, poverty and social exclusion, demographic pressures and the aging of society, natural resource management, biodiversity loss, transport and the use of territory. If sustainable development is to be achieved, these trends must be changed.

The overall aim of the renewed Strategy is to improve the quality of life for both current and future generations through the creation of sustainable communities able to manage and use resources efficiently, and able to tap the ecological and social innovation potential that is necessary for ensuring economic prosperity, environmental protection and social cohesion.

The following global objectives are derived from this strategic vision:

- a) Environmental protection (ecosystems, biodiversity, resources, sustainable production and consumption)
- b) Social cohesion (social cohesion, health, safety, rights, equal opportunities, cultural diversity)

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<sup>1</sup> Basic terms related to sustainable development can be found for example in the Dictionary of Basic Terms in Sustainable Development, K. Remtová, Ministry of the Environment, 2009. In addition, the definitions of sustainable development and other terms are also included in currently valid Act No 17/1992 Sb. on the environment.

<sup>2</sup> i.e. the Renewed EU Sustainable Development Strategy, 2006

- c) Economic prosperity (prosperity, innovation, knowledge, eco-efficiency, living standards, employment)
- d) International responsibility (stable democratic institutions, peace, security, freedom, global sustainability and international obligations)

The renewed EU Sustainable Development Strategy sets out the basic strategy-forming principles. Furthermore, the document contains the following key challenges (sustainable development themes):

- 1) Global climate change and clean energy (overall objective: To limit climate change and its costs and negative effects on society and the environment).
- 2) Sustainable transport (overall objective: To ensure that our transport systems meet society's economic, social and environmental needs whilst minimising their undesirable impacts on the economy, society and the environment)
- 3) Sustainable consumption and production (overall objective: To promote sustainable consumption and production patterns)
- 4) Conservation and management of natural resources (overall objective: To improve management and avoid overexploitation of natural resources, recognising the value of ecosystem services)
- 5) Public health (overall objective: To promote good public health with equal conditions and improve protection against threats to health)
- 6) Social inclusion, demography and migration (overall objective: To create a socially inclusive society by taking into account solidarity between and within generations and to secure and increase the quality of life of citizens as a precondition for long-lasting individual well-being)
- 7) Global poverty and sustainable development challenges (overall objective: To actively promote sustainable development worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments)

The document also proposes cross-cutting policies in the areas of education, training, and research and development – key challenges from the perspective of education, training and awareness raising will be further elaborated in Action Plans of the Strategy for Education for Sustainable Development.

The strategy is to be reviewed no later than 2011. The progress report on the Sustainable Development Strategy (2009) assesses the results achieved in relation to key objectives and identifies policy initiatives at the EU and member state levels (the benchmark year is 2000). The document assesses the progress made at all levels in relation to each key challenge. The report concludes that only partial success has been achieved (climate change, clean energy) and the priorities that had been set in June 2006 thus remain valid. As

the outcomes show, constant attention must be focused on implementing the strategy in all priority areas.

### **STRATEGIC VISION FOR SUSTAINABLE DEVELOPMENT IN THE CZECH REPUBLIC**

The below strategic vision outlines the Czech Republic's desired situation in 2030, with the Czech Republic being a society whose prosperity is based on a mutual balance between the economic, the social and the environmental areas. The proposed priority axes and objectives are intended to achieve this situation. Furthermore, the vision assumes that:

- The Czech Republic is a country with a consistently developing knowledge and post-industrial economy with a declining material intensity, i.e. an economy whose performance gradually catches up with the EU average.
- There is a high degree of social cohesion that is attributable to a functioning economy, a democratic political system, the participation of citizens in decision-making, functioning families, effective and financially sustainable education systems, health care and social insurance, as well as a balance between population dynamics and migration.
- The Czech Republic is a society that meets the material and spiritual needs of individuals while minimizing social exclusion and pathological forms of social behaviour (crime, violence against weaker individuals, parasitism, corruption, political extremism, xenophobia and racism).
- The Czech Republic is a flexible society able to timely detect possible developmental risks and rationally respond to both unexpected changes in global development and its accelerating dynamics.
- The Czech Republic is a society of educated, responsible and active citizens that makes use of flexible and efficient human resources for the economy and prefers a healthy lifestyle and sound consumption.
- Economic activities, including transport, make efficient use of available natural resources – both renewable and non-renewable – and are implemented with minimal negative effects on human health and natural ecosystems.
- Responsible land use creates conditions for the balanced and harmonious development of municipalities and regions leading to increased territorial cohesion and improved quality of life for all residents.
- Agricultural production, forestry and water management are sufficiently stable taking account of both global and regional climate variations.
- The Czech Republic's foreign policy ranks it among those countries that contribute to stability on a regional (EU) and a global scale (through active cooperation within the UN and other organizations), with foreign aid being oriented and scaled accordingly.

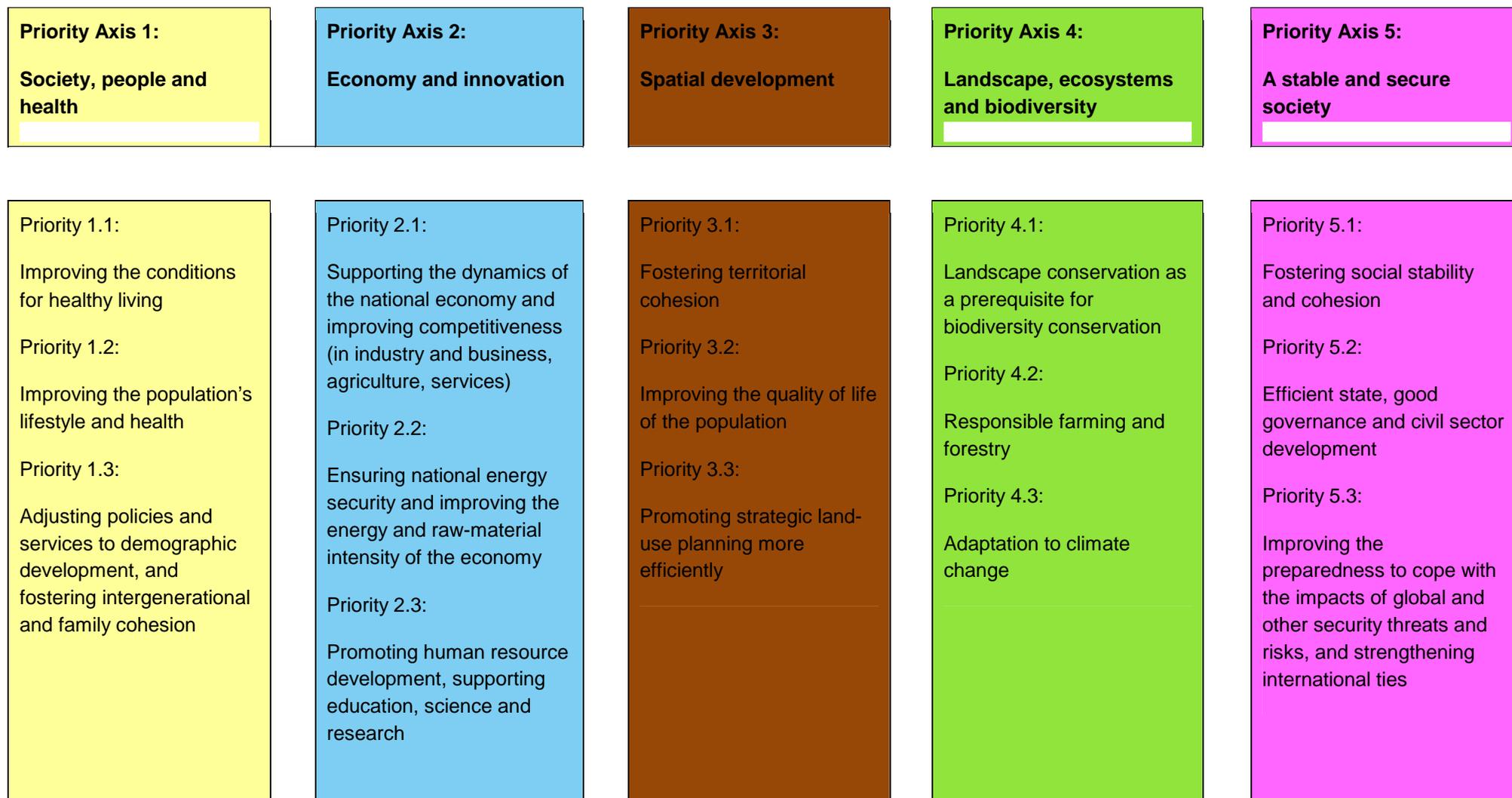
## **SUSTAINABLE DEVELOPMENT PRIORITIES AND OBJECTIVES IN THE CZECH REPUBLIC**

The priorities and objectives of sustainable development are classified into the following five priority axes:

- Priority Axis 1: Society, people and health
- Priority Axis 2: Economy and innovation
- Priority Axis 3: Spatial development
- Priority Axis 4: Landscape, ecosystems and biodiversity
- Priority Axis 5: A stable and secure society

These axes represent the key areas whose sustainable development is addressed by the Update. Each Priority Axis includes (i) a description of the main problems in the given area; (ii) proposed priorities and objectives. In the search for the optimal structure and thematic composition of the axes, effort was made to capture the links (both synergies and negative links) that exist between individual areas. The following page shows a diagram of the structure of priority axes and priorities.

## The strategic vision for sustainable development in the Czech Republic





<p><b>Priority 1.1:</b></p> <p><b>Improving the conditions for healthy living</b></p>	<p><b>Priority 1.2:</b></p> <p><b>Improving the population's lifestyle and health status</b></p>	<p><b>Priority 1.3:</b></p> <p><b>Adjusting policies and services to demographic development and fostering intergenerational and family cohesion</b></p>
<p>Objective 1: Promoting social stability through ethical education</p> <p>Objective 2: Developing social services and their accessibility within the social infrastructure</p> <p>Objective 3: Promoting the social inclusion of disadvantaged groups and reducing poverty</p> <p>Objective 4: Reducing the health risks associated with negative environmental factors and food safety</p>	<p>Objective 1: Improving the lifestyle and the health status of the population</p> <p>Objective 2: Reducing the impact of the Czech population's consumption in economic, social and environmental areas</p>	<p>Objective 1: Improving the health status of senior citizens and the quality of life in old age</p> <p>Objective 2: Supporting families and making parenting easier</p>

## 4.1.1

*Key themes****Living conditions***

Over the past 20 years, living conditions in the Czech Republic have undergone a significant change. The principal factors that impact living conditions include the legal framework and law enforceability, the human potential and its motivation for work, the operation of the economy, a fair degree of resource and work allocation, the functioning of public administration, the level of environmental pressure, the maintenance of macroeconomic stability that promotes savings, investment and job creation, as well as sound monetary and fiscal policies. All this affects social cohesion and living conditions in the country.

Despite a positive trend, the scope and effectiveness of state social policy and public administration does not correspond to current needs. The scope, quality and availability of social services are lagging behind both demand and

contemporary European trends. A situation of growing social exclusion affects contemporary society's values.

Those who are excluded from the social mainstream are often tied to inadequate local labour markets, are out of reach of social control and lose the majority population's patterns of behaviour. The groups at risk of social exclusion include an increasing number of people with excessive debts, single parents, large families, single-income families, the long-term unemployed, young people, elderly people and people with disabilities. Neither the state nor municipalities – including the basic social institutions, i.e. the family, churches, political parties, as well as the legal labour market and the education system – have succeeded in finding a way to effectively counter this trend.

Economic development must be seen as one of the necessary conditions for improving the quality of life and fostering its sustainability. However, there is also the opposite relationship – the quality and sustainability of life is a major factor in economic development. However, ideal proportions between the focus on economic development on the one hand, and the quality and sustainability of life on the other, are yet to be established.

Within the society, the importance of personal property and leisure activities according to interests and hobbies has been growing consistently. By contrast, the perception of the significance of "being helpful to others" and of community service has been declining. In addition, the perception of democracy has also been declining, namely as a result of the experience with our political system, political culture and the citizen's position within this system.

Research and studies show that within the value scale of young people, a growing importance is being attached economic prosperity and career as a means to acquire property, material values, and sensory life and its experiences, including drugs. The significance of responsibility for others is declining and, at the same time, the importance of self-improvement and of the general meaning of life and common ideas that go beyond the importance of the individual is also declining. The poor situation in moral awareness among the younger generation shows a significant deficit in the ability to distinguish between what is moral and what is not.

The environment constitutes a significant portion of the living conditions. One of the Czech Republic's most pressing problems is the high level of air pollution. The proportion of pollutant emissions from sectors that consist of unregulated small air pollution sources (i.e. mainly from household heating and transport) is growing. Since 2000, pollutant emissions have been rather stagnant and, in some indicators, air quality has begun to further deteriorate. The protection of groundwater from pollution caused especially by nitrates from mineral fertilizers, but also the protection of surface water from non-point pollution sources are a long-standing concern. In some areas, there still is a high level of soil pollution with nitrate. Also significant is the population's exposure to noise pollution, particularly in settlements. Quality environment

also consists of healthy ecosystems that provide a number of services essential to life (see Priority Axis 4).

In the context of ensuring the Czech Republic's security, it is important that the health sector be prepared to provide health care in the case of events that pose a large-scale threat to public health (this issue is addressed within Priority Axis 5).

### ***Health and the environment***

Over the past 20 years, life expectancy at birth has shown steady growth in the Czech Republic. However, it remains lower than in developed European countries, similarly to healthy life expectancy. Similarly to other industrially developed countries, major health problems in the Czech Republic include chronic non-infectious diseases, especially cardiovascular diseases, malignant tumours, diabetes and respiratory diseases.

A serious problem is the injury rate, especially in children and young adults. The Czech Republic ranks among countries with the highest child mortality due to injuries: injuries are the leading cause of death in children and young adults and the third most common cause of death in the general population.

In developed countries, lifestyle is currently perceived as the most significant influenceable determinant of the health status of individuals and populations. Despite adopted anti-smoking measures, smoking among the adult population has remained more or less stable at a level consistent with the European average. Problematic is in particular an increased trend in smoking among young girls. Despite some improvements, the Czech population's eating habits are not satisfactory. In addition, more than a half of the Czech population does not adequately engage in physical activity. The Czech Republic has an alcohol consumption of about 10 litres of pure alcohol per capita per year, which is one of the highest in the world. In this respect, the situation among children and adolescents is also poor, as alcohol consumption and the incidence of intoxication in these groups is on the rise. Compared to the neighbouring countries and the countries of Western Europe, the incidence of risky substance abuse is high in the Czech Republic, especially in adolescents and younger generations. Overall, the use of almost all types of narcotic and psychotropic substances – especially synthetic drugs – is increasing.

Mental health is also an important indicator of the population's health status. The increasing significance of mental health issues is linked to population aging and lengthening life expectancy on the one hand and changes in the pace of life and lifestyles on the other. According to estimates by the World Health Organization, 15-20% of the European population suffers from mental health problems.

Emphasizing both consumption and production while marginalizing the non-economic components of development (the social and the environmental pillars) poses a serious threat to future stability. The impacts of the rising consumption of various products, steadily growing transport and sprawling

residential and other developments in the landscape are a problem. A serious problem is also the use of huge quantities of various chemicals without knowing their effects on human health and the environment. Material intensity is higher in the Czech Republic than in other new EU member states and more than double compared to some EU 15 countries. The Czech Republic's annual consumption of natural resources exceeds the capacity of its own resources.

### ***Demographic aspects and the family***

As life expectancy increases, the principal challenge related to population aging is 'successful aging', with the main objective being to promote and develop elderly persons' self-sufficiency. Successful aging requires preventing disease and self-insufficiency, maintaining adequate cognitive and physical functions, and an active participation of the individual in society.

Demographic aging is mistakenly regarded as a negative phenomenon and this issue is often being reduced only to the necessary reform of the pension system. A negative attitude towards population aging can be observed, and it is often associated with a stereotypical or even ageist perception of the elderly. This situation raises concerns that disrupt intergenerational cohesion and open room for age discrimination. Consequently, not only the potential of elderly people, but also the implications and possibilities of social development are disregarded.

It can be concluded that the Czech family is becoming weaker. At the same, the cohesion of individual family members is also weakening; the position of women and children is more vulnerable than before. With respect to the position of women in the labour market, there have been changes in terms of greater emancipation. However, in the context of their traditional role as mothers and caretakers, their position remains difficult. The current situation is also illustrated by a high divorce rate and a large proportion of single-parent families with dependent children. Solidarity of childless people with families that care for children is dissipating from people's attitudes and from the conditions for the lives of families that are co-formed by the state.

In most European countries, including the Czech Republic, the compatibility of the parental and the professional roles is important for the functioning of families, especially in families with children whose parents have achieved more advanced levels of education. The conditions prevailing in the Czech Republic make the compatibility of these roles rather complicated. Plans to have children are often delayed or even suppressed completely for professional reasons.

Support for families by the state, including state administration and self-government at district, regional and municipal levels, is deficient in both conceptual and institutional terms. Especially at the central level, there are no institutions (authority) to address the issue of family policy and its orientation. The concept of family policy should be coordinated by a body that would create and manage family policy measures and steps according to the

requirements and opinions of other social actors. Significant deficiencies can be found in services for families, which are mostly provided within the independent competence of municipalities, self-governing regions and in the sphere of non-profit NGOs. At the central level, there is no framework policy for services within care for the family, which needs to be anchored in legislation.

#### 4.1.2

##### *Priorities and objectives*

##### ***Priority 1.1: Improving the conditions for healthy living***

Good conditions for living have a significant social dimension. Emphasis needs to be placed on developing social prevention services and on reducing social exclusion. Civil society is composed of mature citizens; such maturity is based on human decency, a sense of justice, duty and responsibility, etc. Education for moral values and social awareness is the basis of stability of any society. Care for good living conditions includes ensuring fairness in health, improving the quality of the environment and reducing health and safety risks (this also includes improving the system for protecting the population and providing health care in emergency situations), preventing such risks and improving the population's preparedness for self-protection and mutual assistance (see Priority Axis 5).

- **Objective 1: Promoting social stability through ethical and pro-family education**

*All areas of human values integrate into moral values, which are therefore significant for ethical education. The aim is to positively influence attitudes, value system motivations, standards and rules, and to educate people in a way that makes them capable of cooperating and having positive relationships with others. Ethical education will serve as a means to develop and to promote humane behaviour and the formation of harmonious relationships in both families and society, between people of different nationalities, different ethnic groups and different ages. Education for positive parenting (pro-family education) should eliminate potential parents' future undesirable behaviour towards their children. Such education needs to be used to reinforce behaviour in interpersonal relationships at the family level, while also presenting the positive role of the family.*

- **Objective 2: Developing social services and their accessibility within the social infrastructure**

*The development of social prevention with a reduced risk of social exclusion needs to be promoted through field social work, after-care services, crisis assistance, creating educational programs for social workers, methodologies for working with clients, mutual assistance among*

*social service providers, interdepartmental cooperation and raising public awareness about these services.*

*It is necessary to improve the quality of life of the clients of social services – both in and outside of residential facilities – through adjusting the service network to suite their individual needs. Also, training for professionals in social services needs to be supported in order to improve the quality of the services, including services within care that is provided by a family member. It is in particular in this area that volunteering needs to be developed and promoted as a significant driving force that contributes to both solidarity with and the integration of socially excluded groups within society and to the development of modern community life. To that end, an effective and sustainable volunteering infrastructure needs to be built up in the Czech Republic. With a view to improving access to social services, the development of medium-term social-service planning needs to be pursued, particularly at the regional level, which is related to objective 3 of priority 3.2.*

- **Objective 3: Promoting the social inclusion of disadvantaged groups and reducing poverty**

*In order to accomplish this objective, the local labour market's health needs to be improved, including support for small businesses employing local residents. The employability of socially excluded people must be improved through promoting social entrepreneurship. Public administration needs to apply a concerted and comprehensive approach to creating the conditions for a stronger regional economy and increased jobs in the local labour market and to stabilizing local communities through improving housing and the environment.*

*A greater participation of people living in poverty in the system of further education must be promoted and these people must be motivated to feel the need to continue learning and improving their education. People living in poverty need assistance in acquiring at least partial qualifications, thus formalizing their knowledge and skills through a system facilitating verification of continuing education results.*

*In order to achieve the objective, it is also necessary to improve the quality of preschool and school facilities in order to prevent the segregation of children from excluded environments and children from the general population. Families need to be assisted in improving their competence to cooperate with schools. It is necessary to create the conditions for children's education and to motivate both children and their parents for such education.*

*Culture needs to be used in the area of social inclusion, especially as it has the potential to mediate knowledge, social skills, moral values, healthy lifestyles, and as an opportunity for improving self-knowledge and personal growth of socially excluded citizens. Intercultural dialogue and cooperation need to be promoted in order to stimulate the integration of minorities into*

society. Culture needs to be used as a means of preventing socially negative phenomena that affect the social exclusion of people, especially children and young people, through improving their access to quality public cultural services. It is necessary to increase the proportion of volunteers in the work of cultural organizations.

Socio-economic conditions for life, which are determined by education level, social status, working conditions, income, etc., significantly affect health. Continued social differentiation within society may result in an adverse impact on the health of disadvantaged population groups. The aim is to prevent the deterioration of and, on the contrary, to improve the health status of disadvantaged population groups through their participation in lifelong learning, through promoting the employment of disadvantaged population groups and creating job opportunities, as well as through health promotion programmes targeted at disadvantaged groups. This objective is connected with the availability and the quality of social services within objective 2 of this priority.

The issues of excluded territory and socially excluded people should be seen as society-wide issues and not as internal problems of their communities. To that end, it is necessary to organize self-help groups and to develop volunteering and active cooperation with the NGO sector. This objective is related to Priority Axis 3 (priorities 3.1 and 3.2) and Priority Axis 5 (objective 3 of priority 5.1).

- **Objective 4: Reducing the health risks associated with negative environmental factors and food safety**

Environmental pollution and damage has a number of proven negative impacts on health. For example, it contributes to the development of serious diseases such as asthma, cardiovascular diseases and cancer, and causes damage to the immune, hormonal and reproductive systems. The aim is to reduce exposure to chemical substances and physical agents in the environment, thus reducing the health risks that are associated with air, water, soil and food pollution, and to reduce other negative factors such as noise pollution.

**Priority 1.2: Improving the lifestyle and the health status of the population**

The current lifestyle brings about an increase in chronic disease. It is crucial to improve the population's health and to promote a healthy and sustainable lifestyle. This should reduce the risk factors within lifestyles, improve the quality of life, as well as reduce consumption and the negative aspects that are associated with it.

- **Objective 1: Improving the lifestyle and the health status of the population**

In developed countries with good levels of health care, it is the lifestyle that has the greatest effect on health. Reducing the health risks of the lifestyle –

*especially through promoting healthy nutrition, preventing and eliminating smoking, promoting physical activity and reducing stress – is the basis for the prevention of major chronic diseases, i.e. cardiovascular diseases and cancer, diabetes and diseases of the respiratory, muscular and skeletal systems.*

*The measures that lead to this objective include providing a systematic long-term and targeted education on healthy lifestyles and consumer education, creating conditions for the implementation of dietary recommendations, increasing the availability of healthy and safe food, creating conditions that are friendly to the population's physical activity, promoting and supporting non-smoking, etc. The incidence of chronic non-infectious diseases will also be reduced for example through implementing primary prevention programs.*

*The aim is also to reduce the incidence and the health-related consequences of mental health disorders through comprehensive programmes of care for mental health. Also significant is the injury rate – here it is necessary to focus on injury prevention in children and adolescents through preventive educational activities and on injury prevention in senior citizens through targeted education.*

*This will create the conditions for maintaining the current gradually increasing trend in both life expectancy and the proportion of healthy life years.*

- **Objective 2: Reducing the impact of the Czech population's consumption on the economic, social and environmental areas**

*The aim is to reduce the impact of household consumption on both the environmental and the social and economic areas through awareness raising and educational means targeted at the general public. Households are currently the key contributor to the problems in these areas, and household consumption is estimated to double by 2030; food and drink consumption, impacts associated with the use of buildings (i.e. the consumption of energy and resources such as water) and individual automobile transport have been identified as areas of household consumption that have the greatest impact on both the environmental and the social and economic areas. In order to reduce the negative impacts in these key areas, it is necessary to:*

- *Prepare an awareness raising campaign to promote more sustainable patterns of consumption among the wider public.*
- *Perform awareness-raising and educational activities to promote sustainable consumption as part of the National Strategy for Education for Sustainable Development and of raising public awareness about sustainable consumption.*

- *Promote projects that contribute to the exchange of information about initiatives in sustainable consumption and production at the local level in the Czech Republic.*
- *Introduce the monitoring of sustainable consumption and production indicators at the level of strategic objectives.*
- *Support the adoption of programmes for sustainable consumption and production under the conditions existing in the Czech Republic.*
- *Implement measures that follow from the Action Plan on Sustainable Consumption and Production and Sustainable Industrial Policy.*

**Priority 1.3: Adjusting policies and services to demographic development and fostering intergenerational and family cohesion**

Given the projected demographic trends, it is imperative to intensify the process of preparing for the consequences of population aging through promoting active and successful aging and improving care for the elderly. In developed countries, the process of demographic aging is inevitable, and its consequences can be only partially influenced through measures to increase birth rate.

The growth in both the number and the proportion the elderly in society makes it necessary – above all – to tailor services and products to their needs and to adopt measures to support economic growth. Any strategy adopted in response to population aging should tap into the potential of elderly people and create a society that is both intergenerationally cohesive and age-inclusive. At the same time it is desirable to increase the effectiveness of measures taken to support the family and harmony between family and working life. The family must be restored to true sovereignty in deciding on the choice of life strategies, which must be reflected in the family policy.

• **Objective 1: Improving the health status of senior citizens and the quality of life in old age**

*The conditions for a healthy, active and dignified old age can only be achieved if there is strategic long-term coordination between central and local government in creating the conditions and programmes for the promotion of healthy and active aging on the one hand and the exchange of experience and good practice examples on the other. This mainly includes using and spreading local and regional government examples that affect the quality and availability of transport, housing, health and social services, cultural and leisure activities, safety and other services that are important for the quality of life of the elderly.*

*Given the demographic trends, the maximum inclusion and participation of the elderly in active life needs to be pursued, which includes extending the economically active life and increasing employment rate in younger seniors (aged 50 and over), i.e. to encourage their presence and success in the labour market (the consistency of care in the family and at work, conditions*

*friendly to caregivers, flexible working hours, part-time work, the availability of community and day centres, counselling and other services). The problem of population aging does not lie in its impact on the economy, but rather in its interaction with the situation in the labour market and the pension system. Effort must therefore be directed towards ensuring that aging and possible decline in labour force are compensated by increased employment. The economic impact of population aging will largely depend on what use is made of increased life expectancy.*

*The common denominator of health care in older age should consist in maintaining the functional state of the organism, in particular through promoting healthy lifestyles in the elderly (nutrition in old age, physical activity, injury prevention and increased quality of life), not only in treating individual diseases. In pursuance of the concept of geriatric medicine, a functioning system of long-term care needs to be established in order to introduce a comprehensive system of health and social services for the elderly, including financing, to ensure coordination of both health and social services in the natural environment of elderly persons and to tailor these services to the needs of the elderly and their families (i.e. the efficiency, accessibility and coordination of these services at the local level, the promotion of life and care at home, etc.) It is necessary to create such conditions and educational opportunities that make people feel the need to educate and improve themselves.*

*Intergenerational relations are crucial for the individual's development in the family and society and for the quality of life at any age. Therefore, intergenerational solidarity and age diversity in the workplace must be sought; the benefits of elderly generations should be promoted in families, communities and the society at large.*

- **Objective 2: Supporting families and making parenting easier**

*Given the importance of the family for the demographic trends within the Czech Republic's population, the role of the family needs to be strengthened. It is necessary to continue adopting legislative, economic and material measures in order to strengthen the confidence of young people in marriage, encourage and support young marriages, provide education for conscious parenting, raise awareness among young people and strengthen responsible behaviour in the area of reproductive health, to protect young families, etc. Support that is provided to families with children by the state and society must be viewed as a significant social investment in the future development of the entire society.*

*It is crucial to create conditions in which people can realize their ideas about family size, i.e. the number of children. In this respect, it is important to promote gender equality in the labour market and possibilities for harmonizing professional and family life (flexible working hours, the possibility to work part time, day care in the workplace).*

*The trends in interventions by the state, local government and the non-profit sector need to be directed in particular towards transforming and unifying the system of care for at-risk families and children, which is still uncoordinated and fragmented. In cooperation with local government, the state must create good conditions for the development of family policy and childcare, improve the social prestige of the family and counter the weakening of the family, which is often incapable of withstanding both the pressures posed by its members' participation in economic activity and the problems that are generated by contemporary civilization. It is necessary to seek to promote the development of the child's personality and to maintain a standard of living that is required for its physical, mental, moral and social development.*

*It is desirable to increase the quality of social work with at-risk families and to enhance and promote individual approach, a more active involvement of children and families in addressing their own situation, and the availability and accessibility of services that are intended for at-risk children and families. Emphasis must be placed on prevention and on protecting them from all socio-pathological phenomena. At the same time, the aim is also to reduce the number of children that are placed in all types of long-term institutional care and the number of children that are removed from the custody of their parents.*

<p><b>Priority 2.1:</b></p> <p><b>Supporting the dynamics of the national economy and improving competitiveness (in industry and business, agriculture, services)</b></p>	<p><b>Priority 2.2:</b></p> <p><b>Ensuring national energy security and improving the energy and raw-material intensity of the economy</b></p>	<p><b>Priority 2.3:</b></p> <p><b>Promoting human resource development, supporting education, research and development</b></p>
<p>Objective 1: Creating a better environment for enterprise and encouraging private initiative</p> <p>Objective 2: Promoting entrepreneurship and competitiveness</p> <p>Objective 3: Improving the effectiveness of support for small and medium-sized enterprises</p> <p>Objective 4: Improving transport quality, efficiency and safety</p>	<p>Objective 1: Achieving maximum independence</p> <p>Objective 2: Achieving maximum safety</p> <p>Objective 3: Promoting the sustainability of the energy sector</p> <p>Objective 4: Promoting a sustainable materials management</p>	<p>Objective 1: Promoting human resource development and education</p> <p>Objective 2: Promoting research, development and innovation</p>

## 4.2.1

*Key themes****The competitiveness of the Czech economy***

Since entering the EU (2004), the Czech economy has taken advantage of access to the common market, but it has also been much more exposed to globalization pressures, and it must address the need to cope with new environmental and labour legislation. Competitiveness of many industries relative to “non-OECD” markets (China, India, Middle East, Latin America, Russia, Ukraine and others) will continue to be affected by global fuel and raw material prices, transportation costs, labour costs, regulation within the EU and the development in the Czech crown’s exchange rate, including the date of the adoption of the Euro. The difference in the Czech Republic’s economic

level compared to the “old” EU member states is, similar to other new Member States, the result of significantly lower hourly labour productivity.

It is clear that it is necessary to substantially reduce material and energy intensity of the Czech economy – particularly given the rising energy and raw material prices in world markets. Global competition disadvantages especially cheap consumer goods, products with low added value and transportable intermediate products.

In addition to limited raw material resources and outdated production technology, the Czech economy has an additional problem – a lack of qualified human resources. In the past years, during the period of economic growth and falling unemployment (including long-term unemployment) that set in after 2000, their lack had to be compensated for using foreign workers (however, these were mostly used for less-skilled labour).

In addition to the anticipated extension of the statutory retirement age, the response to existing demographic trends (falling birth rate and population aging, see priority 1) should consist in promoting greater economic activity in pre-retirement age and in improving labour market flexibility taking account of the lower number of people in working age (i.e. the employable portion of the population). Among other things, this is conditional on the good health of the population (see priority 1). In addition, lifelong learning policies, educational systems that reflect the needs of the labour market, and other measures to increase or maintain the employability of workers will also play an important role. The aim is to achieve a permanent linkage between basic and lifelong education on the one hand (in terms of both the curricula in various fields of study and the number of students) and projected labour market needs in the Czech Republic's regions on the other.

Czech industry generates a proportion of GDP than is greater than the EU average and is thus exposed to corresponding globalization pressures. In the Czech Republic, industry still accounts for about one third of GDP, while in the EU this is about one fifth. Given a per-capita GDP growth (PPP<sup>3</sup> between 2005 and 2007) of 18.3%, an increasing labour productivity (about 5% year to year) and a proportionately decreasing energy intensity, year-to-year sales in industry grew by 8.1 to 11.6%. In the Czech Republic, one in three employees work in industrial enterprises. More than a half of industry produces for export. Despite the current recession, the service sector is expected to grow.

Maintaining further economic growth, i.e. mitigating the impacts of global recession, will not be possible without effective public sector interventions that need to be oriented especially towards small and medium-sized enterprises (SMEs). SMEs account for more than 99% of all entities doing business in the Czech Republic and employ over 60% of the total number of employees<sup>4</sup>. During recession, the economy is adversely affected by the segment of large

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<sup>3</sup> PPP stands for purchasing power parity.

<sup>4</sup> In 2008, SMEs accounted for 61.52% of employment and 54.57% of book value added, the proportion of SMEs in the total number of active businesses was 99.83%.

enterprises, often foreign-owned. In the Czech Republic, this means car manufacturing, which entered into recession in the autumn of 2008 (a decline in exports).

To a large degree, economic development is linked to changes in the transport sector. The volume of road freight transport grows, including transit transport. Transport adversely affects air quality (PM<sub>10</sub>, tropospheric ozone) and increases noise pollution. Logistic centres and new plants are being set up near highways and top-class roads. Transport trends and development are related to priority axes 1, 3 and 4; in terms of sustainable development, transport plays a role in numerous contexts (the economy, land use, quality of life, environmental pollution, safety, etc.)

### ***The energy sector***

Relative to the amount of generated GDP, the Czech Republic uses more primary energy sources (PES) and electricity than the EU average. In the Czech Republic, the relatively higher consumption of primary energy sources (PES) per GDP unit is determined by a structure of industry different from the industrial structure of the EU-15, i.e. domestic energy sources have been used in the long term – black and brown coal, uranium and biomass. The Czech Republic's energy mix is very diverse and consists of virtually all types of energy. Currently, coal has a significant share (40%), followed by uranium nuclei (about 15%), RES (about 5%) and imported sources – natural gas and oil (40%)<sup>5</sup>. The comparison with the EU-15 shows that, once converted “to the same industrial structure and purchasing power”, the difference in PES consumption per unit of GDP is about 20%. The greatest potential for energy savings is in the energy sector, households, the tertiary sector (services), industry, transport and agriculture.

While the preferred use of domestic energy within the energy mix is positively reflected in the Czech Republic's energy import dependence, which is relatively favourable in energy terms (about 45% of energy source consumption by contrast to almost 60% in EU-15), it is structurally unbalanced. The dependence on oil, gas and nuclear fuel imports is virtually 100%<sup>6</sup>. At the current pace of extraction and with the current methods of use, domestic reserves of energy coal will last for 20-30 years (black coal) and about 50 years (brown coal), i.e. if the existing mining limits are observed<sup>7</sup>.

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<sup>5</sup> Figures for 2008 according to the Czech methodology: solid fuels (43.8%), liquid fuels (21.9%), gaseous fuels (15.9%), primary electricity (-1.8%), primary heat (15.6%), RES (4.6%). A total of 1861.2 PJ. Source: Ministry of Industry and Trade.

<sup>6</sup> The Czech Republic's energy sector makes virtually no use of oil, limited use is made of natural gas – for producing a portion of heat, and imports of nuclear fuel are significantly offset by the export of ‘yellowcake’ (i.e. uranium concentrate that contains approximately 74% uranium).

<sup>7</sup> At the current pace of extraction and with the current methods of use, the total domestic reserves of energy coal (i.e. beyond the existing mining limits) might last until the end of this century.

Brown coal mining in opencast mines has negative environmental impacts. For economic reasons, black coal mining was scaled down in the early 1990s.

Oil imports are expected to gradually decline, mainly due to decreasing consumption in transport, which will be offset by increased imports of natural gas as a low-emission source to be used in heat generation and transport.

As regards nuclear energy, new nuclear blocks are expected to be commissioned around 2020. The question is, how to achieve a significant reduction in the necessary amount of permanently deposited radioactive waste.

Under the conditions existing in the Czech Republic and given the currently available technologies, up to 293 PJ per year (according to NEK up to 448<sup>8</sup> PJ per year) can be obtained from renewable energy sources (RES) in the long-term horizon, with the Czech Republic's PES consumption being about 1900 PJ. The proportion of RES in PES could rise to over 10% by 2020 and to about 15% in the longer term, provided that PES consumption does not grow and the available RES potential is achieved by 2020. The use of industrial and consumer waste for both material and energy recovery is insufficient. In connection with the increasing requirements for the use of biomass in the energy sector and as a renewable raw material in industry, the potential of biomass needs to be utilized efficiently. In doing so, the principles of sustainable land use and forestry must be observed.

In the longer-term horizon, it is envisaged that all available domestic energy resources will be used preferentially – using the best available technologies and with minimal environmental impacts – in order to achieve a high degree of energy security in terms of energy supply, and to keep energy import dependence at an acceptable level, that is up to 50%.

### ***Human resources, research and development***

The factors influencing the development of entrepreneurial activity include a lack of cooperation between the business sector and research institutions and schools, only slowly emerging support for the development of applied research and related infrastructure, the fact that support for technology transfer and for developing proprietary technologies is – for all practical purposes – still in its beginnings, inadequate knowledge and understanding of modern corporate governance methods, low labour flexibility and qualifications due to lacking links between the education system on the one hand and labour market requirements and requirements that are necessary for facilitating the transition of school graduates into practice on the other. Effectively functioning public administration (see Priority Axis 5) is a general precondition for sustainable development and for ensuring competitiveness in the international environment.

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<sup>8</sup> The Report of the Independent Expert Commission for Assessing the Energy Needs of the Czech Republic in the Long-Term Horizon, 2008.

Compared to the EU average, there is a lower proportion of research staff in total employment in the Czech Republic's labour market. Also, the Czech Republic has (compared to the EU average) a lower proportion of tertiary educated population, especially graduates of shorter programmes (educational programmes at tertiary professional schools and bachelor-degree programmes at universities). By comparison with developed EU countries, the production and services that are concentrated in the Czech Republic are – for the most part – less knowledge- and technology-intensive; this is partly due to the qualification level of human resources.

The situation in research and development (R&D) is largely characterized by a relatively small proportion of total R&D expenditure in total GDP. Developed EU countries spend 2 to 3% of GDP on research and development while, in 2005, the Czech Republic spent a total of 1.42% of its GDP on R&D. In the area of research and development, it is necessary to improve cooperation between public and private research institutions while, at the same time, increasing the amount and the efficiency of public R&D spending.

The "high-tech" area lacks systematic links between universities and academic institutions on the one hand and businesses on the other, there are no "centres of excellence" that would use academic and corporate capacity to develop technology sectors with high growth potential. Domestic companies lack the necessary understanding of the quality and the orientation of research organisations.

#### 4.2.2 *Priorities and objectives*

##### ***Priority 2.1: Supporting the dynamics of the national economy and improving competitiveness (in industry and business, agriculture, services)***

Increasing the diversification of the economy and protecting domestic production from the negative effects of globalization ('eco-dumping' and 'social dumping') is crucial for success in international markets. Support for small and medium-sized enterprise will also contribute to the balanced development of regions. Improving the quality and the effectiveness of transport will result in greater mobility of human resources, capital and services as a necessary precondition for economic development coupled with reduced negative impacts on the population and the environment.

##### **• Objective 1: Creating a better environment for enterprise and encouraging private initiative**

*It is necessary to continue reducing the overall administrative burden on entrepreneurs<sup>9</sup>, i.e. while improving the quality of legislation in terms of*

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<sup>9</sup> Government Resolution No 446 of 21 April 2008 imposes an obligation to reduce the administrative burden on entrepreneurs by 20% by the end of 2010.

*information obligations that are imposed on entrepreneurs, with strict adherence to the Guidelines for Regulatory Impact Assessment (RIA) and using the Standard Cost Model. Legislation in enterprise must be unified and simplified and coherence among legal regulations must be ensured. The objective will be achieved through improved legal regulation, including the avoidance of inappropriate implementation of EC legislation.*

- **Objective 2: Promoting entrepreneurship and competitiveness**

*The measures to promote entrepreneurship and competitiveness include in particular support for technologies with greater added value, high-tech, support for service development, export promotion and support for sustainable development at the enterprise level.*

*It is necessary to improve the management of organizations through supporting the implementation of quality management systems (ISO 9001), management accounting systems for sustainable development (SMA), and environmental management systems (EMAS, ISO 14001), and to increase the use of environmental technologies through promoting the eco-innovation process (reducing energy and material intensity) and implementing other eco-efficient measures at the enterprise level.*

- **Objective 3: Improving the effectiveness of support for small and medium-sized enterprises**

*It is necessary to improve the motivation for venturing into entrepreneurship and to intensify the activities of small and medium-sized enterprises (among other things through making use of resources from operational programmes financed by the Structural Funds of the European Union), as well as to support new lines of enterprise (including social entrepreneurship) and new job opportunities in enterprise (e.g. through diversifying economic activities in rural areas and smaller settlements). Social entrepreneurship must be used to address independent entrepreneurial activities and market participation in the areas of employment, social cohesion and local development, thus supporting solidarity, social inclusion and growth of social capital, in particular at local level, while fully respecting sustainable development.*

*Small and medium-sized enterprises contribute to a healthy entrepreneurial environment and dynamically create new opportunities in the country's economy. The improvement of international competitiveness of small and medium-sized businesses is also addressed by the Export Strategy of the Czech Republic for 2006–2010.*

- **Objective 4: Improving transport quality, efficiency and safety**

*This objective stems from the need to ensure transport sustainability, to reduce hazardous emissions including noise, and to improve energy efficiency in transport. It is necessary to complete the construction of basic road and rail transport infrastructure networks (the TEN-T network and significant subsequent transport routes of regional importance) and to build*

*the lacking infrastructure for safe cycling. Also, it is essential to support the implementation of traffic-engineering and traffic-organizational measures in order to both remove transit transport from populated areas and increase the flow of road transport in general (thus significantly reducing emissions of pollutants and carbon dioxide). Construction projects must be implemented in a way that reduces the negative impacts on valuable natural areas, landscape fragmentation and migration permeability. Railway transport needs to be modernized and – due to smaller external damage – its ‘backbone’ function in terms of both freight and passenger transport needs to be established. It is essential to improve energy and economic efficiency, reduce hazardous emissions from transport and prepare the transport sector for peak oil. It is necessary to encourage public transport and to support networks of multimodal transport terminals, including multimodal public logistics centres based mainly on rail transport. It is crucial to ensure the provision of quality transportation services, to improve transport safety and to introduce telematics applications in all modes of transport. In addition, introducing an appropriate system for setting prices for transport infrastructure usage and for internalizing external damage into transport prices is also an important goal.*

**Priority 2.2: Ensuring national energy security and improving the energy and raw-material intensity of the economy**

The diversification of energy resources and their efficient use serve as a means of reducing the dependence on foreign resources and, by extension, of improving national energy security. Reducing the energy and material intensity of the economy is also a prerequisite for maintaining the Czech economy's competitiveness.

• **Objective 1: Achieving maximum independence**

*The aim is to achieve maximum independence of the Czech Republic from foreign energy resources, i.e.:*

- *to reduce dependence on foreign energy resources;*
- *independence from energy resources from risk areas; and*
- *independence from the reliability of supplies of foreign resources.*

*Accomplishing the objective will also significantly contribute to achieving security in the energy sector (see the following objective). The Czech Republic will prefer the optimal use of the reserves of brown and black coal and other fuels, including RES that are located in its territory. In addition, it is essential to diversify sources or at least transport routes and to increase the stock capacity.*

• **Objective 2: Achieving maximum safety**

*The aim is to achieve:*

- *security of energy resources, including nuclear safety;*

- security of critical infrastructure entities within the energy sector;
- reliability of supply of all types of energy; and
- a rational decentralization of energy systems.

*The objective includes in particular:*

- optimizing a long-term secure energy mix, while respecting the necessary requirements for operational safety.
- reducing environmental burdens on the Czech Republic, including reducing greenhouse gas emissions.
- solving the problem of spent nuclear fuel.

- **Objective 3: Promoting the sustainability of the energy sector**

*The aim is in particular to:*

- improve energy efficiency in the conversion of primary energy sources and, at the same time, make optimal use of RES;
- increase energy savings in individual sectors of the national economy and at the final consumer; and
- promote the use of efficient and environmentally friendly technologies (e.g. BAT technologies).

*The measures will be aimed at optimizing the use of all energy sources while also promoting the decentralization of energy sources. Maximizing energy savings will be encouraged at all levels of the economy. The means by which the objective is to be achieved include:*

- supporting innovation processes that make maximum use of science and research (especially in energy, transport and construction) in accordance with EU objectives and obligations;
- achieving maximum environmental soundness that is primarily based on an efficient and environmentally friendly structure of PES consumption and on the methods of electricity and heat energy generation;
- maintaining and further reducing the environmental impacts of processes in the energy sector.
- making optimal use of PES, thus helping solve the Czech Republic's economic and social problems.

- **Objective 4: Promoting a sustainable materials management**

*The aim is primarily to achieve a sustainable relationship between the economic efficiency of material consumption and the environmental impacts of material flows within an internationally defined methodological framework. The fulfilment of this objective will also help to improve the*

*Czech Republic's standing in the international comparison of production material intensity and competitiveness. In order to accomplish the objective, it will be necessary to:*

- *provide support for increasing the proportion of environmentally friendly technologies (e.g., low-waste technologies and BAT);*
- *support research, development and innovation in environmentally sound and knowledge technologies with high added value and lower material consumption requirements;*
- *apply a system for minimizing, sorting and subsequently using waste for material recovery (reducing the consumption of primary sources through the promotion of products from recycled materials);*
- *raise consumer awareness of the issue of sustainable consumption and production and of the impact of behaviour that does not support sustainable development;*
- *promote education and awareness of sustainable consumption and production.*

***Priority 2.3: Promoting human resource development, supporting education, research and development***

Qualified human resources are essential to maintaining and improving the competitiveness of the Czech economy. Supporting education in all areas of sustainable development, science and research will lead to an increased use of innovation and, by extension, to an economy with a higher added value, thus positively influencing the society at large (lifestyles, the population's consumption, social inclusion, improved risk prevention, level of self-protection and mutual assistance, etc.) Education influences the citizens' priorities and attitudes, which is an important prerequisite for the sustainable development of the state.

**• Objective 1: Promoting human resource development and education**

*The aim is to provide all population groups – throughout their entire lives – with opportunities for acquiring and recognizing qualifications that can be used in the labour market and for improving the key competencies necessary for success in their professional, civic and personal lives, in accordance with the principles of sustainable development and with a view to ensuring the Czech Republic's competitiveness and supplying skilled workforce for future economic activity and for providing public and community services. In addition, the aim is also to incorporate education into the overall strategy for the Czech Republic's socio-economic development and to promote investment in education.*

*The measures to accomplish the objective should be aimed at developing and improving the system of initial and continuing education (lifelong learning), with an emphasis on improving the core competencies of graduates in order to enhance their employability in the labour market and*

success in civic life, and on improving motivation for further education. The measures should also be oriented towards a greater involvement of business entities in education and stronger cooperation between public administration, the business sphere and the non-profit sector.

Education must become a priority of the Czech Republic' socio-economic development, as it has a decisive impact on human and social capital in society, the creative<sup>10</sup> orientation and values of people and the quality of their everyday lives. Educational strategies should also be thoroughly adapted to the principles of educational policies of democratic countries.

- **Objective 2: Promoting research, development and innovation**

The objective is oriented not only to promoting industrial research and development, but also to improving the standing of Czech science in all fields. Support will be implemented in particular through improving cooperation between research and development institutions and the business sphere in order to speed up the introduction of new knowledge and new technologies into practice and to promote the establishment and development of technologically oriented businesses (intellectual property protection, etc.) Support will be provided to business incubators, especially those specialising in support for start-up businesses and businesses with links to universities<sup>11</sup>, i.e. businesses focusing on research, development and innovation. Also, support will be provided to both cooperation between scientific research organizations and the public and the non-profit sectors and the use of scientific and research outcomes in public service provision and policy implementation. The support will be targeted not only at existing research organizations and their projects, but also at the establishment of new institutions and, as the case may be, their expansion and further development and operation. Support will cover activities that link the academic sphere with research and industry, custom-tailored technology transfer, the establishment of centres for protecting companies' intellectual property rights, programmes for the inclusion of university students in innovative processes in companies, trainings and professional seminars, counselling that is required in the early stages of starting a business, etc. We consider it desirable to promote new technologies and innovations that are more environmentally friendly, because new technologies (innovations) are more efficient in terms of raw material and energy utilization, while also being friendlier to the environment (see priority 2.1, objective 2).

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<sup>10</sup> The Statement by the Government on the Promotion of Culture (Government Resolution No 344/2003) and the National Cultural Policy for 2009–2014.

<sup>11</sup> Start-ups and spin-offs.

**Priority 3.1:****Fostering territorial cohesion**

Objective 1: Improving the economic and environmental potential, competitiveness and welfare of the Czech Republic's regions to a level comparable with developed European regions and gradually reducing excessive regional disparities.

Objective 2: Strengthening the role of towns as an accelerator of regions' growth and development

Objective 3: Ensuring sustainable rural development and fostering harmonious relations between the town and the countryside

**Priority 3.2:****Improving the quality of life of the population**

Objective 1: Providing financial backing for improving the quality of life in the territory through a system of budgetary tax allocation (in municipalities and self-governing regions)

Objective 2: Improving the quality and the accessibility of transport, and the technological, energy and knowledge standards in settlements, thus also improving the environment in settlements.

Objective 3: Improving the quality and the accessibility of services (including culture), especially housing

**Priority 3.3:****Promoting strategic land-use planning more efficiently**

Objective 1: Creating the conditions for sustainable land use

Objective 2: Use economically built-up areas, protect undeveloped land and land grounds that cannot be used for development

## 4.3.1

*Key themes****Territorial cohesion***

One of the Czech Republic's major problems are regional disparities resulting from regional differences in economic structure and its diversity, and from the poor accessibility of public services. There are also large regional differences in the potential for innovation. Even though regional differences in unemployment rates have decreased over the recent years, they still exist and are affected in particular by the qualification mismatch between the demand for labour and the supply, low inter-regional migration (commuting to work with staying overnight and long-distance moving) and inadequate and costly transport infrastructure. The current situation reveals the consequences of the transformation changes that took place after 1990 (a significant decrease in production and employment in heavy industry (NUTS II Moravia Silesia and

NUTS II North-West), a production decline in the textile and the electronics industries (NUTS II North-East), the clothing and footwear industry (the Pardubice, the Zlín and the Vysočina Self-Governing Regions) and agriculture). The development of the tertiary sector has been more intensively concentrated in large cities and agglomerations. In connection with Priority Axis 4, there are also significant regional differences in the quality of the environment. The unsatisfactory condition of the environment has persisted for example in some areas of the Moravia Silesian and the Ústí nad Labem Self-Governing Regions and in many large towns.

The Czech Republic is characterized by a fragmented settlement structure that has been historically shaped by a large number of municipalities, of which only a small proportion can be classified as towns according to international standards. However, large urban agglomerations with diversified economic structures and with the presence of industries that are capable of generating growth in their surrounding areas are very significant from the perspective of regional development. Their role as 'growth poles' is a result of their population and its growth, competitiveness and communication links. The current (historically determined) dense network of small and medium-sized towns does not allow for the emergence of stronger development poles outside the Prague metropolitan area.

#### ***The conditions for the quality of life in the territory***

While the post-war period was characterized by a continuous growth of regional capitals to population levels exceeding one hundred thousand, in the 1990s the growth dynamics of regions was different. Prague was losing significant numbers of residents to the Central Bohemian Self-Governing Region, and the Plzeň Self-Governing Region's population was also shrinking. In 2002, Prague's trend reversed and has been growing ever since. By the end of 2007, the Central Bohemia Self-Governing Region had experienced the greatest growth dynamics. By contrast, the Moravia Silesian and the Zlín Self-Governing Regions had shown moderate yet persisting losses. Even though the trend of rural depopulation and population migration to larger towns has stopped in recent years – this is not a return to the original structure, but rather the result of massive construction (single-family and apartment houses) in the vicinity of large towns and dense 'satellite' development in these areas. However, interjacent and remote areas still experience rural depopulation. These mainly include border regions, the Vysočina region and regions with higher unemployment.

The negative consequences of suburbanization include increased traffic burden (especially individual car transport) in the catchment areas of towns, and increased traffic in the towns as such. This situation corresponds to a specific problem of the Czech Republic, namely the inadequate interconnection between the centres of self-governing regions, and the existing concentrically oriented transport network. Overexposed areas (small municipalities in the vicinity of large towns, attractive recreational areas, etc.)

suffer from technical infrastructure overloads (sewerage, waste disposal, etc.) and a lack of civic amenities.

The Czech Republic's rural areas are characterized by a dense network of roads that support the integration of rural areas and their catchment area centres; however, this positive aspect is currently being negated by the poor condition of class III and local roads, and an insufficient connection to the highway and high-speed road network. The availability of transport services in rural municipalities is inadequate, especially at weekends (reductions of transport connections). This mainly affects peripheral areas and their connection to regional centres, which causes difficulties in commuting for work and services. It is in particular the municipalities that are located off the main routes that suffer from insufficient transport serviceability.

Public services are being cut back especially in small municipalities and towns – largely for economic reasons – thus also reducing their social (see the rate of poverty, population aging, education of children and the youth), educational (education of children and the youth, interest activities) and economic significance (see for example tourism), which in turn contributes to reduced quality of life of the inhabitants.

In the second half of the 20<sup>th</sup> century, urban environment suffered deterioration of local conditions due to insensitive refurbishment and redevelopment, housing estate construction and the penetration of traffic into the historic cores of towns. Also, production and industry have become part of wider town centres due to the expansion of towns, thus also resulting in deteriorated environment and sociocultural conditions. After 1989, town cores have undergone gradual regeneration, neglected building and housing stocks in central town boroughs have been refurbished, and the traditional social, leisure, cultural and economic functions of towns have been restored.

In addition, changes in economic structure have resulted in a decline in industrial production and the abandonment of production and industrial areas in towns. These are often large areas (also referred to as “brownfields”) that currently hamper the development of parts of many towns, in particular because of the costs and the complexity of their renewal and redevelopment. By their nature, these sites pose a threat to the environment and their surroundings, but they also represent a certain development potential and room for further business development. In addition to industrial areas, these also include locations whose function was originally residential, and possibly also facilities used for military purposes. The advantages of re-using brownfields lie not only in revitalizing the entire area, removing environmental burdens from urban landscape, protecting public health and the environment and reducing pressure on the use of greenfields (which means, among other things, preventing potential urban sprawl into the surroundings of towns), but also in kick-starting the local economy and increasing its revenues, attracting investors and improving the location's attractiveness.

In the Czech Republic, nearly a third of all apartments are located in prefabricated apartment buildings. The current condition of these buildings has been considerably affected by their long-neglected maintenance that reflects in reduced use value, increased running costs, reduced functional safety and the emergence of a potential risk of reduced housing quality of the population. Other shortcomings include inadequate conditions in the surroundings of residential areas and housing estates, a lacking network of possibilities for leisure activities, and a lack of green spaces, transport and related services. These and other reasons lead to increased crime, a more frequent occurrence of socio-pathological phenomena, and underused physical and human capital (this is related to Priority Axis 5). If housing deficiencies are not addressed, they may gradually lead to the devastation of the residential environment and consequently also to a change in the social structure of the population living in housing estates.

Tourism is a major segment of the Czech economy. The Czech Republic has a significant historic natural and cultural potential for the development of tourism and spas. The country has a dense and well-marked network of interconnected hiking paths and routes, which offers the potential for tourism and recreational or leisure activities. However, the potential of tourism is underused – a considerable proportion of historic buildings (especially listed buildings) are in an unsatisfactory condition and fail to sufficiently utilize their potential to provide cultural services; in addition, the level of tourism infrastructure is low, as is the quality of basic and supplementary services. Problematic is also the uneven concentration of tourists and visitors in individual regions and the untapped potential of regions, which also often tends to be limited to the relevant part of the season.

### ***The coordination of spatial development***

One of the main instruments in spatial development coordination is land-use planning. Land-use planning ensures good conditions for sustainable territorial development through systematically and comprehensively addressing the efficient use and the spatial arrangement of the territory in order to achieve a generally beneficial balance between public and private interests in territorial development. To that end, it monitors development potential, both social and economic.

For land-use planning objectives (i.e. creating conditions for construction and for sustainable territorial development that consists in a balanced relationship between the conditions for a favourable environment, economic development and cohesion within the territory's residential community and that meets the needs of present generations without compromising the living conditions of future generations) to be achieved, it is essential that anyone who is involved in land-use planning activities (especially authors of land-use planning documentation, representatives of local government, relevant authorities and the public) at any level (national, regional and municipal) should exercise a responsible approach. To this end, it is also necessary to improve education

and awareness of land-use planning. In this context, among other things, sufficient attention must be focused on addressing the negative consequences of suburbanization for sustainable spatial development. Another important issue is the need to improve the coherence of land-use planning and development documents at all levels of public administration while respecting the principles of sustainable development.

#### 4.3.2 *Priorities and objectives*

##### ***Priority 3.1: Fostering territorial cohesion***

Stimulating the development potential of regions will contribute to harmonious spatial development and to reducing the existing disparities. The sustainable development of rural areas requires providing support for activities at the local level and enhancing the attractiveness of life in municipalities. Strengthening the role of cities as centres of regional growth and development while also ensuring effective urban-rural links is a prerequisite for the creation of urban networks capable of transmitting development and innovation impulses.

- **Objective 1: Improving the economic and environmental potential, competitiveness and welfare of the Czech Republic's regions to a level comparable to developed European regions and gradually reducing excessive regional disparities.**

*This development objective is aiming to improve Czech regions' economic, social and cultural level to a level comparable to developed European regions and also to reduce undesirable regional disparities and to promote development in specific problematic areas. The problems addressed while pursuing the objective have the character of significant regional disparities, are territorially identifiable, and retard or are very likely to retard balanced regional development in the Czech Republic. The objective also includes improving the quality and effectiveness of regional links and processes. The implementation of the objective is aided considerably by financial resources of cohesion policy.*

*The measures will include, in particular, creating conditions for the dynamic economic development of regions (supporting the business environment in regions, creating conditions for the inflow of foreign capital into regions, supporting the export of competitive products), job creation (developing cooperation between the public and the private sectors in retraining programmes, supporting projects for the coordination of training, retraining and incentive programmes), promoting sound energy and materials management (supporting the development and use of low-emission, low-waste and energy-efficient technologies). The measures that are targeted at problematic areas focus on improving the economic performance of these areas (promoting diversification of economic activities in problematic areas with inefficient patterns of production and services), interventions in*

*the labour market in areas with disproportionately high unemployment rates (promoting education and qualification improvement, improving the targeting and the efficiency of the instruments of active labour market policy, placing people that are at risk of social exclusion in the labour market, programmes supporting the creation of new jobs for the long-term unemployed).*

- **Objective 2: Strengthening the role of towns as an accelerator of regions' growth and development**

*The objective aims to increase the competitiveness of towns through strengthening the progressive sectors within their economies, and to overcome their insufficient critical weight through networking and through transforming (revitalizing) the urban environment (i.e. those parts that are declining). The objective also includes addressing the issue of agglomerations, where it is necessary to manage and offset the effects of suburbanization through public funding.*

*The measures will include supporting the creation of urban networks capable of transmitting development and innovation impulses, developing innovation potential, stimulating enterprise and the development of services, acquiring talent and attracting highly skilled workers. In addition, this will include support for projects that are aimed at revitalizing and changing the functional use of selected boroughs, addressing the overall transport situation, caring for the environment in towns and promoting healthy lifestyles. Additional measures will focus on revitalizing and humanizing residential neighbourhoods, restoring and revitalizing areas that had already been urbanized (brownfields) and revitalizing town centres. In addition, a wide range of urban infrastructure will be supported.*

- **Objective 3: Ensuring sustainable rural development and fostering harmonious relations between the town and the country**

*The aim is to stabilize the rural population (i.e. to prevent gradual depopulation), which requires ensuring living conditions that are – in the aggregate – comparable to those in towns, in the sense of an alternative to life in the town, while having a free choice of lifestyles. By strengthening the partnership and cooperation between the country, towns and micro-regional centres, the territory will become functionally integrated including links to main development centres, thus achieving balanced polycentric development. The assumption for accomplishing the objective is conditional on increased responsibility in the management of rural space, i.e. an increased proportion of rational, close to nature management of natural resources and rural landscape, so that the country maintains its comparative advantages over the town.*

*The measures concern in particular supporting the development of micro-regional centres, public infrastructure and local services. Furthermore, they will focus on promoting the diversification of economic activities, self-*

*employed enterprise, and re-establishing traditional crafts and production sectors in rural and peripheral areas.*

**Priority 3.2: Improving the quality of life of the population**

Living conditions in urban and rural areas will be improved through developing local infrastructure (improving the quality and the accessibility of transport, technical and energy infrastructure), ensuring the accessibility of services (including cultural services), and providing adequate housing conditions and opportunities. Enterprise can only develop if there is improved availability of technology, innovation and knowledge in the territory. For sustainable tourism to develop, it is crucial to make use of the local potential. Quality facilities need to be built up for tourism with view to the number of tourists, their longer stay and increased spending. The financial backing for these activities is a necessary precondition for improving the quality of life in the territory.

• **Objective 1: Improving the quality of life in the territory through a system of multi-source financing for municipalities and self-governing regions**

*Quality of life is a multi-dimensional concept. Due to the scarcity of public budget resources, individual components making up the quality of life compete. However, investments in priority areas of risk prevention and the protection of health, life, environment and property (in relation to both the risks of everyday life and the risk of emergencies) must not be neglected. It would therefore be useful to:*

- a) set local priorities at the level of municipalities and self-governing regions, i.e. priorities that are key to the territorial unit and its sustainable development in the short and the long term horizons;*
- b) discuss possible modifications of the budgetary allocation of taxes in response to suggestions arising from practical application or made by relevant entities (the Union of Towns and Municipalities of the Czech Republic, the Association of Regions of the Czech Republic, sectoral ministries, etc.). This should result in proposals for modifications on which agreement has been reached;*
- c) rationalize the system of subsidy titles that are provided by EU financial resources and the state budget in order to meet the needs of self-governing regions and municipalities, in particular as regards the financing of investments.*

• **Objective 2: Improving the quality and the accessibility of transport, and the technological, energy and knowledge standards in settlements, thus also improving the environment in settlements.**

*Primarily, the aim is to ensure quality and advanced infrastructure that stimulates development impulses into the surrounding area and into remote and lagging areas. This is associated with improving the quality and the efficiency of energy supply, technology transfer and access to education*

*and information technology. At the same time, this will improve the comfort of life and reduce the negative impacts of the “operation” of settlements on their (as well as the surroundings) environment and, by extension, on their residents’ quality of life.*

*The measures will focus in particular on ensuring regional and supra-regional transport accessibility (connecting all self-governing regions to a quality railways network, completing and renovating the highway network and other roads, building infrastructure for cycling, etc.) Also, the aim is to ensure quality and accessible regional, interregional and supra-regional transport services (this includes introducing integrated transport systems and improving urban public transport). Other measures focus on promoting the development of energy and communication networks and facilities in regions (modernizing energy distribution systems in regions, renovating pipeline and cable networks in towns) and the development of information technologies in regions. Furthermore, there are measures that are aimed at modernizing water sources and water treatment plants, extending and reconstruction water supply and sewerage systems and waste water treatment plants, municipal waste disposal and care for green spaces.*

- **Objective 3: Improving the quality and the accessibility of services (including culture), especially housing**

*The emphasis is placed on ensuring adequate quality and accessibility of public and non-public services, particularly in the areas of health care, education, childcare and services for families, culture, social services, information and telecommunications services and services related to direct territorial impacts.*

*One of the key aims is to ensure quality and affordable housing for all citizens. With regard to the regionally differentiated structure, construction and reconstruction of apartment blocks, it is necessary to make effective use of the existing housing stock, the rental sector and to create a functioning legal framework (apartment ownership, tenancy, rents, etc.)*

*The measures will include improving and developing new forms of social and health care services, developing new forms of social services to families with children, citizens with disabilities and the elderly, modernizing the buildings of medical facilities and their equipment, optimizing the network of public health services, providing preventive health programmes. There will also be measures aimed at developing leisure time activities for the citizens, especially children and the youth, building and modernizing infrastructure for sports and leisure, and completing infrastructure for culture. The measures will also cover optimizing educational facilities and lifelong learning infrastructure in general. In addition, housing development will be supported as a tool for stabilizing the residential structure, humanizing prefabricated housing estates and modernizing and renovating the housing stock, with an emphasis on energy savings and elimination of building elements that are dangerous to health.*

- **Objective 4: Strengthening the proportion of sustainable tourism within the structure of local economies**

*The aim is to increase the proportion of tourism in the economies of individual regions through making better use of the potential for sustainable tourism development. In addition, the aim is to increase visitor numbers in regions, which includes extending their stay and the visitor season. For the objective to be achieved, it is necessary to promote improving the environmental, technical and aesthetic quality of infrastructure and the degree of conservation of the natural and cultural attractiveness of the territory as a condition for the sustainable development of recreation and tourism – this will increase the attractiveness of the territory for holidaymakers and visitors (especially through enhancing the environmental quality of services offered and preserving the natural and cultural heritage intact).*

*The measures will include expanding and improving infrastructure and tourism services, including promoting the use of cultural services, renovating and allowing for access to cultural and historic monuments, creating specific regional tourism products, supporting tourist information centres and tourism organizations at the regional and the local levels, creating conditions for the implementation of friendly forms of tourism and introducing individual state-guaranteed national quality standards for services in the accommodation sector.*

**Priority 3.3: Promoting strategic land-use planning more efficiently**

Land-use planning comprehensively addresses and explores the territory in all contexts through different land-use planning instruments at interrelated levels, at the national, regional and local levels, taking into account the need for a balanced relationship between the conditions for a favourable environment, economic development and cohesion within the community of the territory's residents, and is an essential prerequisite for sustainable land use. It also helps to protect the natural, cultural and civilization values of the territory.

- **Objective 1: Creating the conditions for sustainable land use**

*Accomplishing the objective is conditional on improving the quality of land-use planning, especially in the preparation of land-use planning documentation of self-governing regions and municipalities (spatial development principles, land-use plans and regulatory plans), and increasing the responsibility of local self-government and local residents within spatial and regional development – increasing their effective participation in land-use planning processes will contribute to enhancing their cultural identity and sense of belonging to the territory. As a necessary prerequisite, national priorities need to be set and adhered to in land-use planning, as laid down by the Spatial Development Policy of the Czech Republic, in order to ensure the sustainable development of the territory. An important part consists in ensuring the coherence and coordination of land-use planning and development documents at the national, regional*

*and local levels. The measures focus for example on supporting updates of land-use and planning analytical materials of municipalities while taking account of the sustainable development of the territory.*

- **Objective 2: Use economically built-up areas, protect undeveloped land and land grounds that cannot be used for development**

*This mainly includes effectively tackling the territorial impacts of human activities and preserving the character of the urban structure of the territory, the population structure and the cultural landscape. As a prerequisite for accomplishing the objective, the responsibility of all stakeholders in spatial or regional development towards undeveloped landscape must be increased. One of the measures will consist in supporting the revitalization of brownfields and prioritizing their use by contrast to building on “greenfields”, thus preventing the disproportionate expansion of towns (the so-called “urban sprawl”).*

<p><b>Priority 4.1:</b></p> <p><b>Landscape conservation as a prerequisite for biodiversity conservation</b></p>	<p><b>Priority 4.2:</b></p> <p><b>Responsible farming and forestry</b></p>	<p><b>Priority 4.3:</b></p> <p><b>Adaptation to climate change</b></p>
<p>Objective 1: Maintaining and enhancing the ecological stability of the landscape and supporting its functions, especially through sustainable landscape management</p> <p>Objective 2: Conserving the open landscape</p> <p>Objective 3: Halting the decline in biodiversity</p>	<p>Objective 1: Promoting sound and close-to-nature farming methods and developing the non-production functions of farming</p> <p>Objective 2: Conserving and enhancing biological diversity in forests through promoting sound, close-to-nature farming methods in forests and reinforcing the non-production functions of forest ecosystems</p>	<p>Objective 1: Ensuring readiness to deal with emergencies related to climate change</p> <p>Objective 2: Achieving a good quantitative condition of groundwater and surface water</p> <p>Objective 3: Improving the water regime in the landscape</p> <p>Objective 4: Reducing the impacts of expected global climate change and extreme weather events on forest and agricultural ecosystems</p>

## 4.4.1

*Key themes****The condition of the landscape and biodiversity***

Despite significant positive changes after 1989, the current condition of the landscape and biodiversity is not satisfactory. In the second half of the 20<sup>th</sup> century, the Czech Republic's landscape as a whole was exposed to the inadequate intensification of agricultural and forestry production, and excessive and inappropriate urbanization. Landscape fragmentation increased significantly, thus reducing its permeability to both people and animals (mainly as a result of the implementation of linear structures as part of transport and technical infrastructure, the problematic construction of settlements and the

consolidation of agricultural land plots). In many places, the landscape character and the aesthetic values of the landscape have been damaged significantly, which has – among other things – negative psychosocial impacts (see Priority Axis 1). In some parts of the territory, the landscape's ecological functions have been undermined by large-scale mineral extraction over the long term. Forest ecosystems in mountain areas have in some locations been critically damaged by high air pollution from industrial, energy-sector and mobile sources. This threatens not only the existence of the forest as a natural 'body', but also the stability of the water regime in the wider area and the long-term usability of these landscape types for tourism (see Priority Axis 3).

Landscape, in its current structure, does not provide sufficient suitable living conditions for wild species of flora and fauna, which constitutes a threat to biodiversity. Currently, 34% of mammal species, 52% of bird species nesting in the Czech Republic, 50% of reptile species, 43% of amphibian species, 43% of fish species and 60% of higher plant species are endangered in the Czech Republic<sup>12</sup>. Also problematic is the presence of non-native species – 90 of the 1378 non-native species are evaluated as invasive species<sup>13</sup>, often irreversibly damaging the communities they infiltrate. Also, a potential risk in terms of biodiversity consists in using genetically modified organisms. Their free and uncontrolled spreading – which could, however, only occur if both Czech and EU regulations are breached – may lead to additional threats to species and genetic diversity (in addition to posing a threat to human health).

Water is one of the basic landscape components. The most striking effects on the appearance and the function of aquatic ecosystems in the Czech Republic could be attributed to watercourse straightening and riverbank reinforcement, the construction of weirs and dams, pollution with municipal and industrial waste water, large-scale drainage of land, the intensification of agriculture as part of large-scale production (erosion, use of chemicals) and the intensification of fish farming. Many structures on watercourses act as barriers preventing the migration of a wide range of animals. As a result of human activity, the total length of watercourses in the Czech Republic decreased by one third. Until the beginning of the 1990s, river regulation had grown exponentially. In terms of biodiversity and water retention in the landscape, the situation with regard to the condition of ponds is not good either. In the Czech Republic there are more than 24 thousand ponds and water reservoirs, totalling about 52 thousand ha, of which 42 thousand ha is used for fish farming (The Report on Water Management in the Czech Republic, 2008). Furthermore, many ponds have been restored since the 1990s. Despite that, there are currently still not enough small natural reservoirs that support increased biodiversity and retain water in the landscape. Forests have a positive effect on the water regime in the landscape. However, this important function of forests still fails to be adequately taken into account.

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<sup>12</sup> The Statistical Environmental Yearbook of the Czech Republic 2008

<sup>13</sup> The National Biodiversity Strategy of the Czech Republic, 2005.

Total surface water and groundwater extraction decreased from a level of 3400–3500 million m<sup>3</sup>/year in 1990 to 1800 million m<sup>3</sup>/year in 2001. Between 2003 and 2008, total surface water and groundwater extraction stagnated at 2000 million m<sup>3</sup>/year. Abstracted underground water is to about 85% used as a source of drinking water. Since as early as the beginning of the 1990s, water prices have been increasing (including water and waste water tariffs), which has led to a more efficient use of both groundwater and surface water. In water management, the Czech Republic is almost entirely dependent on water resources generated from rainfall. However, depending on the climate development scenario, the projected impacts of climate change may cause a decrease in the Czech Republic's water resources on the order of up to tens of percent. Therefore, in the coming years, the most important task in the area of water management will be both to improve the condition of water and flood protection in accordance with Directives 2000/60/EC and 2007/60/EC, and to ensure sufficient water resources to cover the needs of the society.

### ***Agriculture and forestry***

The appearance of the landscape has always been affected by agriculture – in the Czech Republic, ecosystems created by agricultural activities are the most common type of environment. The trend of land consolidation into large land blocks, which often ignored the relief of the terrain, and the impacts of intensive farming have resulted in a highly disturbed landscape water regime, water pollution, soil degradation, decreased biodiversity and reduced ecological stability of the landscape. Even though the importance of non-production agricultural ecosystems is undeniable, their appearance is still largely determined by the technological requirements of agricultural production.

Current agro-ecosystems in production areas are therefore characterized by a disproportionately high percentage of arable land, excessive hunting, few eco-stabilizing components, a large proportion of land at risk of erosion, general physical, chemical and biological soil degradation, and contamination with foreign substances from fertilizers and pesticides. The most serious consequences include the loss of natural fertility, a significant reduction in water retention capacity, reduced biodiversity and declining populations of native species.

Forest ecosystems currently occupy about a third of the country's area. Forests are an essential and indispensable component of ecologically balanced landscapes and also a source of wood as a significant renewable raw material. Especially during the industrial boom of the early 18<sup>th</sup> century, forests became an essential source of raw material and energy. Due to the long-term massive exploitation that had taken place until the end of the 20<sup>th</sup> century, the structure and the texture of the original forest ecosystems have been markedly changed. The impacts of air pollution that originate from the development of industrial civilization, and the growing manifestations of extreme climate fluctuations threaten the health and the compactness of

forests. The most significant change is considered to be the replacement of the original forest with conifer monocultures (often of genetically unsuitable origin). The changes in forest ecosystems have resulted in the prevalence of forest stands with low ecological stability and an unsuitable species, age and spatial composition that has little in common with the original natural situation. This results in a low resistance to natural and anthropogenic influences (wind, insect pests, air pollution). In some forests, sustainable production capacity has been compromised by the use of often inappropriate management methods that are based on even-aged stands, and the cultivation of tree species that are less suited to the habitat, which may lead to forest health deterioration, loss of resistance, a more frequent occurrence of disasters, low biological diversity, a decline in the retention capacity and other functions of forests, erosion etc. In recent years, as a result of extreme weather events, there have been large wind disasters almost every year, which in turn cause large-scale clearings. This can make the subsequent restoration of forests very difficult.

In the 21<sup>st</sup> century, the most important strategic objective in forestry is to gradually and systematically restructure forest stands in a way that is differentiated according to the changing conditions of the natural environment and with a view to improving the health of forest ecosystems and ensuring their mechanical and biological stability, while preserving their ability to provide stable yields.

#### ***The impacts of climate change***

The expected climate change will be reflected especially in a changed water balance in the landscape, temperature increases and a more frequent occurrence of alternating extreme weather events (droughts, floods, windstorms, heat waves).

In terms of natural disasters, it is floods that pose the greatest direct risk for the Czech Republic. Floods can cause serious crisis situations that are associated with not only substantial material damage, but also the loss of life in affected areas as well as damage to the landscape, including ecological damage. The consequences of the floods that occurred over the past 12 years have shown that the Czech Republic is highly vulnerable to floods – among other things – because of inappropriate urbanization and construction in floodplains and as a consequence of indifference to the principle of precaution and prevention.

Equally serious is the risk of increasing temperatures that are caused by the drying of surface and subsurface water, the inability of excessively dry soil to absorb greater amounts of short-term rainfall and, in consequence, the rapid runoff. Some areas will thus be exposed to longer and more frequent dry periods.

#### **4.4.2** *Priorities and objectives*

#### **Priority 4.1: Landscape conservation as a prerequisite for biodiversity conservation**

Improving the effectiveness in landscape use, and thus slowing the loss of open landscape and undeveloped areas, will both enhance the stability and the functions of the landscape and improve the trends in the condition of biodiversity. Attaching an adequate value to the services of ecosystems will improve the management of natural resource exploitation and prevent their overexploitation<sup>14</sup>. As one of the tools of environmental protection, it is necessary to promote environmental education and awareness<sup>15</sup>.

- **Objective 1: Maintaining and enhancing the ecological stability of the landscape and supporting its functions, especially through sustainable landscape management**

*It is necessary to promote sound landscape use and to minimize any negative interference in landscape systems in order to prevent the disruption of the landscape's ecological stability, as well as to support implementing vegetation measures in the landscape, especially planting and restoring hedgerows, tree lines, solitary trees, windbreaks, water elements and territorial systems of ecological stability. An important factor in the successful implementation of the above measures will be support for implementing the European Landscape Convention. Another important means of achieving this objective is to promote land management as a tool that creates – among other things – the conditions for improving environmental protection, conserving and fertilizing land resources, water management, and improving the landscape's ecological stability, which will facilitate the implementation of the above measures. It is also necessary to promote the protection of the system of the landscape's ecological stability, which is the responsibility of landowners and users – however, landowners and users must be positively motivated through subsidies and contributions to cooperate effectively. Other important aspects of this objective are: reducing the exploitation and the appropriation of soil and rock environments, creating the conditions for land- and rockslide prevention and promoting the assessment of anthropogenic interference in soil and rock environments.*

- **Objective 2: Conserving the open landscape**

*In order to achieve the objective, there will be measures aimed at promoting preferential construction within or with links to existing settlements (but not at the expense of green residential areas), promoting the use of brownfields, minimizing ecosystem fragmentation (especially in cases where the construction of infrastructure and settlements gradually results in the separation of entire landscape and orographic units),*

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<sup>14</sup> See the renewed EU Sustainable Development Strategy, 2006.

<sup>15</sup> See the State Programme of Environmental Education and Public Awareness and its Action plan (for 2010–2012 with an outlook to 2015), approved on 19 October 2009 through Resolution of the Government of the Czech Republic No 1302.

*minimizing land appropriation (especially of quality land), and preparing and implementing a training programme for awareness raising on the value of the landscape, its role and its changes. The issue of the fragmentation and the links of natural elements in the territory must also be taken into account consistently as part of developing the territory.*

- **Objective 3: Halting the decline in biodiversity**

*A steady decline in biodiversity can be observed not only in the Czech Republic, but also in the international context. The aim is to ensure the conditions for preserving life and its evolutionary processes. The objective can be accomplished in particular through protecting and improving the condition of biotopes and the landscape and supporting research in this area. The protection and improvement of the condition of biotopes should be pursued through strict protection of surviving sites with natural communities (peatbogs, wetlands, primeval forests, etc.) and sound land management and use that takes account of the needs of specially protected and endangered species and specific communities. Also, it is necessary to coordinate anthropogenic activities in areas of natural value. The objective also includes preparing and implementing rescue programmes for the most critically endangered species of flora and fauna, as well as measures restricting the introduction of new invasive species and the expansion of those already present (including creating appropriate legislative and financial mechanisms that are required for implementing effective measures). In the area of genetically modified organisms, it is necessary to ensure that these organisms are used in accordance with the existing very strict legislation that is currently in force both at the EU level and in the Czech Republic, and that they do not pose an increased risk to biodiversity compared to traditional methods of agricultural production.*

**Priority 4.2: Responsible farming and forestry**

Improving the condition of the environmental components is conditional among other things on responsible farming and forestry that will also lead to an increased stability of agricultural and forest ecosystems.

- **Objective 1: Promoting sound and close-to-nature farming methods and developing the non-production functions of farming**

*As part of the objective, the environmental aspects of farming must be promoted using good agricultural practices<sup>16</sup>. It is also important to preserve genetic resources, especially of agricultural crops, livestock and wild animals, forest tree species and rare trees growing outside the forest.*

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<sup>16</sup> Good agricultural practices (GAP) as a term are defined by some departmental laws and bylaws. They are comprised of a set of measures aimed at reducing the adverse effects of agricultural activities on the environment. In addition to the principles of good agricultural practice, farmers that receive 'direct payments' or draw on funds from axis II of the EAFRD are required to observe cross-compliance, i.e. the standards of Good Agricultural and Environmental Conditions (GAEC), Statutory Management Requirements (SMR) and, at the national level, maintaining the proportion of permanent pastures.

- **Objective 2: Conserving and enhancing biological diversity in forests through promoting sound, close-to-nature farming methods in forests and reinforcing the non-production functions of forest ecosystems**

*The objective will be pursued using measures aimed at changing the species, age and spatial composition of forests, increasing the proportion of natural regeneration, as well as measures to promote biological diversity in forests and their non-production functions. The aim is to promote creating a comparable space for closer-to-nature management that is not based on even-aged stands, but rather on the maximum utilization of natural processes. Close-to-nature management methods must be introduced in a way that is differentiated according to the natural conditions and the type of ownership and must lead to a closer-to-nature tree species composition, while maintaining competitiveness in forestry. It is also necessary to regenerate and grow state-owned forest stands in a way that permanently maintains an increased proportion of ameliorative and stabilizing tree species and tree species that are part of the native species composition. In the case of non-state owners, a similar objective needs to be pursued mainly through a suitable subsidy policy, awareness raising and education. The ecological stability of forest ecosystems needs to be improved through reducing the existing excessive populations of hoofed game and, for this purpose, hunting legislation also needs to be modified. The proportion of rotting wood, logging residue and trees that have undergone a natural aging process in forests must be increased in order to conserve biological diversity, and mechanisms to achieve this need to be established. At the same time, it is necessary to increase the proportion of native ameliorative and stabilizing tree species. Depending on the natural and stand-related conditions, the use of natural regeneration will be promoted while artificial regeneration will be reduced.*

#### **Priority 4.3: Adaptation to climate change**

It is necessary to responsibly plan and gradually implement adaptation measures to mitigate the impacts of climate change, including disaster preparedness and emergency response. It is also necessary to improve the landscape water regime and the efficiency of water resource management.

- **Objective 1: Ensuring readiness to deal with emergencies related to climate change**

*The measures to achieve the objective include developing a system to control and monitor the status of alert end devices, thus also ensuring the transfer of information about water levels in watercourses at selected sites. Another type of measures consist in implementing close-to-nature and technical flood-control measures (natural overflows, dry polders, etc.) while also ensuring that these measures help achieve a maximum improvement of the landscape water regime (see objective 4.3.3).*

*Measures to tackle drought effects on agriculture consist in supporting modern irrigation systems that minimize water consumption and water*

losses in irrigation. In the area of water supply, possible measures include searching for, protecting and eventually building new water sources, interconnecting existing water-supply systems, modernizing water supply systems and further reducing losses in the pipe network.

- **Objective 2: Ensuring sufficient quantity and quality of surface water and groundwater**

*The measures within this objective are designed to improve the retention capacity of the landscape, including urban areas, and to ensure sufficient resources of both drinking water and water for industry, the energy sector and agriculture. It is necessary to use and to promote the implementation of systems of retention elements, i.e. technical (reservoirs and polders) and especially natural and close-to-nature elements (wetlands, pools, floodplain forests), that will help to retain rainwater in the landscape, and to revitalize the existing retention elements including the floodplains of watercourses and their natural overflows. As part of the measures, it is necessary to improve the management of agricultural land as the most significant water reservoir in the landscape, i.e. to optimize the vegetation cover, the reserves of organic substances and humus and to promote the use of appropriate agricultural machinery. An equally important measure is the artificial enrichment of groundwater reserves (artificial infiltration), and the related identification of sites that are suitable from the hydrogeological, geological and hydrological perspective.*

*Due to the rise in new construction, the proportion of hard surfaces increases, especially in settlements. In new construction, it is necessary to strike a balance between hard, impermeable surfaces and permeable surfaces, so that as much rainwater as possible can soak at the site.*

*Finally, it is crucial to rationally manage water resources and reduce excessive water consumption.*

- **Objective 3: Improving the water regime in the landscape**

*The measures within this objective will be aimed at improving the landscape water regime (improving the retention capacity of the landscape – restoring small tanks and pond systems, restoring wetlands and spring areas, etc.), improving the overall ecological, hydrological and hydromorphological condition of aquatic ecosystems, restoring and conserving the surviving natural and close-to-nature condition of aquatic ecosystems, and promoting the non-production functions of water bodies. It is also necessary to support natural overflows in floodplains, build and restore retention areas, revitalize watercourses and wetlands and build polders.*

*In many areas, naturally wet surfaces have been dried up, including peatlands, fens and floodplain forests. Due to inappropriate alterations of watercourses, floodplains and possibly entire river basins and headwater areas, the retention capacity of the landscape has declined. As part of the*

measures, effort will be made to reduce the above adverse interference in the landscape.

- **Objective 4: Reducing the impacts of expected global climate change and extreme weather events on forest and agricultural ecosystems**

*In order to accomplish the objective, it is necessary to grow stands that are diverse (both spatially and with respect to species), while making maximum use of natural processes, varied tree species composition, natural regeneration and varied growing practices, to implement measures to maintain a high and stable production of wood, and to prevent the degradation of forest soil while maximizing the amount of carbon bound in soil. It is also desirable to assess the environmental impacts of the use of forest biomass for energy generation, including impacts on soil, water, biodiversity and the nutrient cycle.*

*In agriculture, it is necessary to focus on compliance with the conditions of good agricultural practices, i.e. compliance with the statutory provisions laid down by cross-compliance, in particular the GAEC standards (Good Agricultural and Environmental Condition).*

*In order to protect agricultural landscape from the negative effects of wind and water erosion, or surface runoff, it is necessary to implement measures especially through land management and land-use planning. These include in particular building combined facilities against water and wind erosion, implementing the Territorial System of Ecological Stability and implementing measures aimed at protecting the territory from the harmful effects of surface runoff in small agricultural and forestry river basins, revitalizing the hydrographic micronetwork, protecting water resources, including an integrated approach to the unsatisfactory condition of the landscape. It is also necessary to promote modern irrigation systems with minimal water consumption and to ensure sufficient water resources for such systems, even in areas where irrigation has not been needed thus far for reasons of climate.*

*In order to accomplish this objective, it is necessary to systematically support science and research in the relevant areas, thus allowing for a flexible response to changes in environmental conditions (changes in the precipitation regime, altitude zones of vegetation, etc.) Also, it is necessary to ensure sufficient protection against floods and, on the contrary, sufficient water resources for irrigation.*

**Priority 5.1:****Fostering social stability and cohesion**

Objective 1: Specifying and implementing the key principles of the preparedness of society and the state in terms of promoting the integration of foreigners

Objective 2: Strengthening the prevention of socio-pathological phenomena, crime, corruption

**Priority 5.2:****Efficient state, quality public administration (good governance) and civil sector development**

Objective 1: Ensuring the long-term sustainability of public finances

Objective 2: Developing human resources in public administration. Using eGovernment and targeted education to help improve the efficiency and quality of public administration and to develop the forms of its work in accordance with the requirements of sustainable development

Objective 3: Achieving the institutional arrangement of the non-profit sector with an organizational structure of its own, leading to more effective collaboration with public administration

Objective 4: Strengthening awareness raising and educational activities related to the development of cooperation between public administration and the non-profit sector

**Priority 5.3:****Improving the preparedness to cope with the impacts of global and other security threats and risks, and strengthening international ties**

Objective 1: Improving the preparedness for terrorist threats (including new forms of threats) through closer international cooperation, and adopting instruments for combating organized crime

Objective 2: Improving the preparedness of the population, public administration and the Integrated Rescue System to cope with the impacts of global and other security threats and risks.

Objective 3: Developing cooperation within the region and the EU, fostering active participation in international organizations and promoting the principles of sustainable development at all levels of multi- and bilateral relations and, in accordance therewith, strengthening international cooperation in the political, economic, social, environmental and cultural areas, and promoting increasing the amount and improving the efficiency of official development assistance in these areas.

Objective 4: Participating in the implementation of international commitments in the area of reducing greenhouse gas emissions

***Public finance and public administration***

Ensuring the long-term sustainability of public finances is a major challenge for the Czech economy. Even though the Czech Republic used the period of above-average economic growth to implement partial fiscal reforms, the main challenges – namely a comprehensive reform of the pension and the health care systems – are still there. The Czech Republic is facing an aging population and the associated growing proportion of mandatory expenditure in total state budget expenditure. The planned deficit reduction to the level of the medium-term fiscal target will be conditional on meeting the spending caps – these should ensure that the deficit targets would be achieved. However, given the current setting of social policies, the spending caps will be impossible to meet and will likely require further austerity measures.

In its fiscal reforms, the Czech Republic should also seek to shift the tax burden from labour to the resources and energy.

The reform of the pension and the health care systems is one of the Czech Republic's current priorities. It is therefore inevitable to reduce the sensitivity of public finances to demographic development and to adopt a strategic decision that will ensure long-term stable and efficient funding for both systems.

Efficiently functioning public administration is a prerequisite for sustainable development and for ensuring competitiveness in the international environment. Over the past 10 years, public administration has undergone a significant change. Since 1999, the public administration reform focused on restructuring public administration, which included the reform of municipal, regional, central and territorial governments, the regulatory reform and the still pending civil service legislation, the civil service education system and the completion of the administrative judiciary. Also, since that date, the combined model of public administration has been consistently applied. At the same time, the purpose of the reform was to harmonize the content and the organization of Czech public administration with generally accepted requirements for the functioning of public administration in EU countries. This included especially the requirements of public service, accountability to the public and the associated emphasis on social efficiency and the internal economic efficiency of public administration. There was also supposed to be emphasis on overcoming the unsatisfactory situation in law enforceability.

To a large degree, these plans have been implemented. The reform has brought results and remains a purposefully controlled process. Most of the processes through which public administration carries out its functions are cross-cutting in nature. The efficiency of the still incomplete public administration reform is, in this regard, further hampered by the existence and

the predominant influence of partial (departmental) views and by the fact that 'inter-departmental' coordination remains rather underestimated. This is also the reason why the plans within the reform fail to be consistently implemented. The restructuring of the municipal structure has not been completed – the main instrument must consist in motivating municipalities to merge their administrative activities without losing their legal independence. In practice, promoting the reform was largely narrowed down to institutional reform. It is therefore desirable – in the context of sustainable development – to promote especially the rational development of the economic proportions of the mixed model of public administration through macro regulation and through creating the necessary business environment, managing and financing the public service sector and developing public-private partnerships.

There is visible incoherence in management practices between decisions of the central political and administrative authorities and the regional and local levels of self-government within the scope of delegated government. At the central level, there is still tendency towards state dirigisme and an effort to retain detached state-level offices at the regional level in parallel to self-government municipal councils. Central management itself, which needs to be optimized in terms of the structure of authorities and other government agencies, is overloaded with operational tasks and has difficulty changing over to a conceptual management style. The decentralization of government, public authorities and responsibilities to privatized and publicly beneficial organisations has not been fully implemented in some departments such as health and social services. Such decentralization leads to a mixture of relationships between the public and the private sectors, which is particularly evident in performing state institutions' founding and control functions and in the tendency of some publicly beneficial organizations that draw on state subsidies on the one hand and generate profit through private business endeavour on the other. This distorts the very purpose of both public administration and service of general interest and opens the way to various objectionable interests. This is one of the reasons why it is necessary to ensure harmony of the content and the organization of our public administration with generally accepted requirements for the functioning of public administration in the EU.

The above is also related to the quality and the application of legal regulation. What is important is the effect of legal regulation on its addressees. Due to its opacity and lack of clarity, legal regulation is viewed as negative, especially by people in difficult life situations. Public administration is currently faced with many problems, especially:

- poor performance, lack of transparency, departmentalism and politicization;
- an opaque and unstable regulatory environment and an inappropriately set regulation that leads to excessive burden on citizens, businesses and organizations;
- absence of a stable and professional civil service;

- inefficient corruption prevention system;
- persistently inadequate use of ICT in public administration together with relatively low IT literacy among civil servants lead to unnecessary burden on entrepreneurs;
- inadequate efficiency in the functioning of the judicial system, lengthy judicial proceedings;
- lack of capacity and poor performance efficiency and quality in territorial public administration, the absence of strategic planning and a systematic and comprehensive approach to local development and its sustainability.

The international comparison shows that public administration effectiveness (as measured by international indicators) is low, which has a direct impact on economic competitiveness. In the Czech Republic, enterprise is still perceived as complicated, which is connected not only with the difficulties in establishing and terminating a business, but generally with the functioning of public administration, the quality of regulation (tax laws) and the legal environment (e.g. law enforceability) and the overall low transparency of official decision. Unclear and complicated formal rules lead to an unpredictable and inconsistent interpretation of the law, thus giving room for arbitrary and corrupt behaviour. It is necessary to pay attention to the issues of further shaping the rule of law, the situation in law administration and the judiciary, judicial efficiency, in this context also the increasingly inadequate law enforceability in the Czech Republic, and the low level of citizens' legal awareness.

A specific means of improving public administration efficiency consists in promoting the use of information technologies in public administration processes and building an electronic system of public administration (e-Government). The international comparison shows that e-Government services are used by citizens less than abroad. The appropriate means to promote public administration efficiency include introducing public administration quality methods (e.g. CAF – the Common Assessment Framework; BSC – the Balanced Scorecard, a system of balanced indicators of a business' performance, the local Agenda 21, etc.)

Political decision making has been isolated from the public and this isolation is reflected in the weakened participation of citizens in public administration. This hampers the initiative of civil structures, and paves the way for cronyism and lobbying by economic and other interest groups. This will degrade the results of the current democratic transformation of society and state. In implementing the Strategic Framework, it is therefore necessary to create opportunities for citizens' participation in preparing and initiating political agendas and analytical groundwork for political decision making in the context of sustainable development.

### ***Migration and security risks***

Since 1989, the number of foreign nationals in the Czech Republic has been increasing steadily. The Czech Republic's migration balance is positive (there are more immigrants than emigrants) and it shows an increasing trend. The largest groups are citizens of Ukraine, Slovakia, Vietnam, Russia and Poland. Immigration is mainly concentrated in Prague and major cities. The number of illegal immigrants in the Czech Republic has a steady downward trend. Migration issues must be addressed in connection with the areas listed in Priority Axis 1 (demographic development) and 2 (human resources).

Health, safety, environmental quality and good interpersonal relations are the basis for an economically prosperous society. The economic stability of the country can be jeopardised by rising crime, vandalism, racism, xenophobia and other negative phenomena in society, excessive risk and the related accident rate, and an increased risk of emergency situations, especially natural disasters, accidents and terrorism. Investment in human resources in the areas of common systematic and long-term education, training, risk prevention and preparation for self-protection and mutual assistance is and will always be much less expensive than dealing with the consequences of normal, everyday accidents and emergency situations. Moreover, such investment significantly affects the priorities and attitudes of the population, which is an important prerequisite for the sustainable development of the state.

External security risks are linked to the openness of the state and the economy. The problems include corruption, international organized crime trying to infiltrate the economy and the political representation, as well as economic crime that often abuses imperfect legislation. In parallel to the advancing technological development there is a rise in cyber crime. Given the current geopolitical world order, direct external risks are insignificant, with the exception of international terrorism. Indirect external risks are generally associated with the process of increasing globalization (the declining competitiveness of European economies compared to growing Asian economies), specifically with energy, raw material and food security and with the activities of international organized crime.

There is a certain risk of growing support for populist and extremist political movements, especially at times of economic recession. The high degree of state regulation and redistribution of public resources is one of the causes of the unacceptably high level of corruption.

Since 1999, the number of registered crimes has been declining. Following a temporary decline in the number of people in prison between 2000 and 2002, their number has been growing again since 2003.

### ***International relations and other commitments***

The continued existence and development of the Czech Republic's democratic system is conditional in particular on consolidating the political, security, economic, environmental and social stability, strengthening ties with democratic countries and organisations of democratic countries (especially

within the EU, NATO and the Organization for Security and Cooperation in Europe). Also, it is important to cultivate the political environment, reduce unnecessary regulation to minimum and improve its effectiveness (for example through digitalising public administration), develop both preventive and remedial measures in case of emergency situations (natural, anthropogenic and sociogenic), combat crime in general and corruption and organized crime in particular (in the area of prevention and sanctions), and combat anti-social phenomena (racism, xenophobia, ultranationalism).

The NATO and the European Union consider the possible use of radioactive, chemical or biological agents by terrorists for attacks against the civilian population to be a serious risk.

There is a lack of information about the behaviour of citizens in emergency situations. Half of people admit that they are not sufficiently informed about how to behave in emergency situations, almost nine out of ten deem it necessary to provide more information about fire protection to the public.

The frequency of natural emergency situations can be expected to increase, which is connected with the development of the Integrated Rescue System that ensures the coordinated approach of its components (the Fire Rescue Service of the Czech Republic, the Police of the Czech Republic, the emergency medical service, etc.) to preparing for emergencies and carrying out rescue and relief work.

The damage, disruption or destruction of critical infrastructure is one of the major threats that might result in an emergency situation i.e. a long-lasting outage of the electrical grid in a larger portion of or the entire country. Given the absolute dependence of all areas of both life and the economy on electricity, life in the affected areas could be paralysed within a few hours to days (depending on the extent of the outage). The Czech Republic's electric power system is directly interconnected with the neighbouring systems of Germany, Austria, Slovakia, Poland and Hungary and indirectly with others, which is why foreign influence (even quite remote) cannot be ruled out.

As a member of the UN, the OECD, the EU and other international organizations, the Czech Republic should ensure the strict implementation of international obligations arising both from the final documents of these organizations' important summits and conferences focusing on the issue of sustainable development, and from bilateral and multilateral agreements in all areas. It is especially important to make headway in fulfilling the obligations contained in the Millennium Development Goals, the conclusions of the World Summit on Sustainable Development and the processes related to the Monterrey Consensus on Financing for Development, the Doha Development Agenda and the Paris Declaration on Aid Harmonization.

In addition, the Czech Republic is also a party to international agreements on global climate change, under which the Czech Republic has committed itself to reducing greenhouse gas emissions by 20% by 2020. While greenhouse gas emissions per capita are decreasing slowly, emissions per unit of GDP

have decreased by more than one quarter since 2000. Given the current technologies, policies and measures, the outlook for 2050 appears to be problematic – national greenhouse gas emissions are supposed to be far below 50% of the 1990 level.

#### 4.5.2 *Priorities and objectives*

##### ***Priority 5.1: Fostering social stability and cohesion***

It is necessary to reduce negative social phenomena (social exclusion, pathological social behaviour, xenophobia and racism, corruption, crime) as a prerequisite for a cohesive and tolerant society that is also able to resist these phenomena more effectively. At the same time, it is necessary to prepare the country and the society for the increasing number of immigrants.

- **Objective 1: Specifying and implementing the key principles of the preparedness of society and the state in terms of promoting the integration of foreigners**

*It is necessary to achieve the preparedness of society in terms of the integration of foreigners in various areas of their life in the Czech Republic, develop relationships between communities and focus on preventing the disruption of social cohesion and the social exclusion of certain groups, taking into account the security aspects of immigration.*

*The objective is – in relation to the importance of integration in terms of demography – to create positive integration incentives for immigrants, especially in the areas of employment, housing, access to education and the participation of foreigners in the Czech Republic's social and political life, and to prevent negative phenomena that might (given the socio-cultural differences of immigrants compared to the majority portion of society) lead to their social exclusion and the escalation of xenophobia.*

*Another precondition is to improve the systemic measures used by the Police of the Czech Republic for working with minorities – especially through educating and training police officers on issues related to minorities; increasing the number of members of minorities working for the Police of the Czech Republic; successfully importing law and fairness into the specific environment of socially excluded communities. At the same time, it is necessary to make more effort to combat new forms of human trafficking (e.g. forced labour) – namely through educating law enforcement bodies, and to enhance awareness of new forms of human trafficking and adequately respond to them through targeted work with vulnerable communities.*

*It is crucial to strengthen and diversify the anti-extremist policy through:*

- *involving non-governmental entities in combating extremism – an interconnected, cooperating anti-extremist platform;*

- *providing specialists that are fighting against extremism with sufficient backing for exercising their powers – improving professionalism instead of repression.*
- *combating extremist propaganda through openness – using communication against demagogy.*

- **Objective 2: Strengthening the prevention of socio-pathological phenomena, crime, corruption**

*The objective will be pursued through implementing preventive programmes and activities against socio-pathological phenomena in society, combating corruption – anti-corruption programmes and codes of ethics. The successful implementation of the objective is conditional on the adoption of the Act on crime prevention, or possibly a broader law on the prevention of socially pathological phenomena, which will lay down a uniform definition of the concept of crime prevention, describe the competence of the various bodies of central government, territorial self-governing units and other types of legal entities and individuals, ensure mutual cooperation and availability of information, as well as the implementation of activities that precede the spreading of socially pathological phenomena.*

*One of the measures will also be an early intervention system functioning at the national level, i.e. implementing the national form of the Early Intervention System and the Young Offender Team project, which will have stable and mandatory financial backing and will be anchored in legislation. The system is aimed at the prevention and the early and effective redress and assistance in situations where a child, a juvenile and their family are either at risk or in the position of the perpetrators of unlawful activity. The system will be based on the timely and effective cooperation of authorities that are involved in criminal procedure, authorities in the social and legal protection of children, probation and mediation services and other legal entities. At the same time, it is necessary to educate children and the youth on healthy lifestyles and to encourage them to adopt positive social behaviour and pursue personal development. The younger generation must be guided in order to develop and reinforce moral values, increase the social competence of children and the youth, and further develop skills that lead to the rejection of all forms of self-destructive, aggressive and illegal behaviour. For the objective to be achieved, it is also necessary to improve the quality of preschool and school facilities in line with the principles of inclusive education with a view to ensuring the participation of all children (with some well-founded exceptions), including children from disadvantaged socio-cultural environments, in mainstream education. Segregation practices in education need to be eliminated, elements of early and timely care need to be linked with support for education, and linkage between social and educational interventions also needs to be ensured. It is necessary to continuously and systematically promote all activities that*

*result in particular in strengthening the preventive measures. Good social, legislative and financial conditions need to be created for children and the youth to meaningfully spend their leisure time. Support must be provided especially for activities that lead to the meaningful involvement of young people in leisure activities, thus diverting their attention from 'escapist' forms of behaviour. It is necessary to encourage the development of school facilities for non-formal education and – through these facilities – offer a range of leisure activities. The activities of NGOs that work with children and the youth need to be supported. It is important to create the conditions and wide possibilities for the involvement of the young generation in public and social life. The above-mentioned bodies need to be motivated through various grant schemes towards quality and meaningful leisure activities.*

**Priority 5.2: Efficient state, good governance and civil sector development**

One of the main preconditions for a functioning society is efficient public administration and self-administration of territorial self-governing units – municipalities, cities and self-governing regions that transparently manage consolidated public finances (a long-term balanced budget) and with minimum interference in the private lives of individuals. Unsustainable public finances pose a significant risk, especially in a situation where financial markets are unstable. Strengthening the possibility of citizens' participation in decision-making is a prerequisite for a cohesive society and a safeguard against abuse of power.

In the Czech Republic's civil sector, there is a generally slow or even stagnating trend in addressing problems, which is caused by a lack of political will to address the development of the state's relationship with civil society, especially with non-governmental, non-profit organizations. The sharp rise of these organizations (civic associations, generally beneficial companies, foundations, endowment funds) was not accompanied by adequate changes in the system of state aid and in the system of standards that regulate the activities of these organizations. The system of NGO financing from public resources is too centralized, lacks transparency and generally provides short-term financial resources.

• **Objective 1: Ensuring the long-term sustainability of public finances**

*The issue of long-term sustainability deals with the analysis of long-term trends in the development of public finances taking into account the revenue and the expenditure sides, i.e. taking into account the development of deficits and public debt. The main principle of sustainable development should be the maximum efficiency in public resource management that does not indebt future generations. In the long term, the expected demographic development associated with population aging plays an essential role – it will most likely bring negative consequences in the form of higher spending pressures in some areas of the social system (especially pensions, health care and long-term care). It is necessary to*

*implement reforms of the health care system (this will also help achieve Priority Axis 1), education and the pension system that will take account of long-term demographic trends, thus ensuring the financial sustainability of these systems.*

*The sustainability of public finances will be aided by using public procurement in a way that ensures synergistic effects. Public procurement is a public policy instrument for influencing the market and it leads to strengthening the economy towards sustainable development with a positive impact on economic prosperity. Public administration will use its purchasing power to buy services and goods in a way that promotes both social and environmental objectives, thus helping to reinforce social cohesion and sustainable development. In total, this will save public resources and improve the quality of life of society without raising taxes.*

- **Objective 2: Developing human resources in public administration. Using eGovernment and targeted education to help improve the efficiency and quality of public administration and to develop the forms of its work in accordance with the requirements of sustainable development**

*The aim is to improve the quality, effectiveness and transparency of public administration – with functioning quality management systems and performance monitoring at public administration authorities, effective communication in public administration, the synergistic functioning of different levels of public administration, while applying the principle of partnership.*

*The objective will be pursued through measures that are aimed at promoting the use of ICT in public administration, promoting e-Government with an emphasis on safe and easy access to public services through the Internet, establishing follow-up registers with links to central public administration registers, developing and modernizing the communication infrastructure in public administration, developing and modernizing the network of public administration contact points. Other measures will focus among other things on systemically introducing local Agenda 21 in municipalities and on creating a uniform human resource management system in public administration. It is also desirable to use public procurement for achieving synergistic effects in the social and environmental areas.*

*As an essential prerequisite, it is necessary in particular to stabilize public administration staff and to ensure a functioning education system for public administration staff.*

*The proposed objective will be pursued in particular through:*

- *supporting the education of civil servants on the issue of sustainable development, particularly in the areas that are aimed at improving the*

*ability of public administration to cooperate and to form partnerships of many different stakeholders;*

- *coordinating and providing education for employees of administrative authorities and civil servants in territorial self-governing units on the issue of sustainable development, particularly through using systemic solutions (anchoring in legislation);*
- *supporting the formation of specific educational programmes on sustainable development and strategic planning skills and the systematic and comprehensive approach to sustainable local development for specific target groups of public administration officials;*
- *applying the principles of sustainable development within the education themes that are intended for public administration officials.*

- **Objective 3: Achieving the institutional arrangement of the non-profit sector with an organizational structure of its own, leading to more effective collaboration with public administration and greater formalized cooperation between the public and the non-profit sectors**

*Cooperation with non-government, non-profit organizations needs to be developed and promoted from the state level and all levels of public administration, thus enhancing the development of civil society. Integration trends need to be encouraged that are currently already driving the non-profit sector towards a greater degree of coordination and competition for the partner position to public administration authorities.*

*Special care needs to be dedicated to more intensively establishing contacts and building trust between non-profit organizations with a view to ensuring their institutional security through setting up facilitation centres that provide for example assistance in the formation of community coalitions, member associations, umbrella organizations or informal groups of NGOs.*

*It is necessary to complete the internal infrastructure of the non-profit sector so that it can work harder on itself. It is also necessary to improve the quality and to expand the network of service organizations, activities, mechanisms and platforms, as these represent a tool that can be used by the non-profit sector in its further development into an even more respected partner and social actor.*

*As part of the promotion and development of cooperation of public administration with non-government, non-profit organizations and civil societies, it is necessary to develop the form of volunteer service through civil associations, generally beneficial companies and religious communities and churches, i.e. as an important force that contributes to solidarity with and integration of socially excluded social groups, as well as to the modern development of community life. Therefore, the aim is to build – for this purpose – an effective and sustainable volunteering infrastructure in the Czech Republic.*

- **Objective 4: Strengthening awareness raising and educational activities related to the development of cooperation between public administration and the non-profit sector**

*It is necessary to strengthen the awareness raising capacity of the non-profit sector and its cooperation with public administration, while also enhancing the development of civil society through building a network of service non-profit organizations that will deal with educational activities for the non-profit sector and offer professional PR activities suited to these organizations.*

***Priority 5.3: Improving the preparedness to cope with the impacts of global and other security threats and risks, and strengthening international ties***

Regional cooperation (the United Nations Economic Commission for Europe, the EU, the Central European Initiative, the Visegrad Group) is a way to maintain and improve the Czech Republic's current position in a globalized world. International cooperation is an essential prerequisite for addressing global risks and their impacts on the Czech Republic (terrorism, organized crime, energy security, environmental sustainability, climate change, etc.), and also an opportunity for the Czech Republic to contribute to the sustainable development of other countries and regions.

- **Objective 1: Improving the preparedness for terrorist threats (including new forms of threats) through closer international cooperation, and adopting instruments for combating organized crime**

*The objective will be pursued through measures that are aimed at strengthening the capacity of actors involved in counter-terrorism policy as part of combating existing and anticipated terrorist threats, and the further development of international cooperation and information exchange with foreign partners. The measures will include adopting legislative and non-legislative instruments to combat organized crime, i.e. it is necessary to identify and adopt new instruments that will serve to combat the various forms of organized crime (for example to introduce the administrative responsibility of legal persons for unlawful conduct into the Czech Republic's legal system; to strengthen the protection of the representatives of those authorities of the Czech Republic that are engaged in law enforcement and that investigate cases of organized crime).*

- **Objective 2: Improving the preparedness of the population, public administration and the Integrated Rescue System to cope with the impacts of global and other security threats and risks.**

*For the objective to be accomplished, it is necessary to implement measures in the area of ensuring a single and systematic dissemination of information, education, risk prevention and practical training in relation to the population, especially children and the youth, in the priority areas of health, life, environmental and property protection.*

*It is necessary to create good conditions for implementing preventive and educational activities and practical training for children and the youth on self-protection and mutual assistance. In this area, it is necessary in particular to deepen interdepartmental cooperation and cooperation and support in relation to regions (possibly also municipalities) that are responsible for safety and health, environmental quality and interpersonal relations within their territory.*

*It is necessary to improve the population protection system and to ensure the preparedness of health care for all basic types of health threats.*

*It is crucial to improve the population warning and information system, and the system for notifying crisis management authorities and individual components of the IRS CR. It is necessary to develop and promote the integrated rescue system (IRS) and its cooperation with other bodies at national and international level in addressing security risks.*

*In terms of coordinating the components of the IRS, support will be provided in the area of developing and practicing model procedures of IRS components. An important factor in developing the preparedness of the IRS is the establishment of the 'National Centre for Emergency Preparedness and Training of Integrated Rescue System Components' that is currently in preparation and that is aimed at achieving a major qualitative shift in both implementing the education system and building adequate infrastructure for the uniform and effective training of IRS components. In addition, pursuing the objective will contribute to improving the system of state response to health and safety risks. One of the important factors in fulfilling the above objective consist in preventing and minimizing the risk of extensive environmental damage, i.e. as a result of threats that are both anthropogenic and natural in origin.*

*It is also necessary to establish appropriate indicators for this objective and ensure their regular monitoring and evaluation.*

- **Objective 3: Developing cooperation within the region and the EU, fostering active participation in international organizations and promoting the principles of sustainable development at all levels of multi- and bilateral relations and, in accordance therewith, strengthening international cooperation in the political, economic, social, environmental and cultural areas, and promoting increasing the amount and improving the efficiency of official development assistance in these areas.**

*It is necessary that the Czech Republic fulfils its obligations in the area of foreign development cooperation that arise from its membership in the OECD and the EU as soon as possible<sup>17</sup>. Also, the aim is to make active*

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<sup>17</sup> Member states that have joined the EU after 2002 and have not yet achieved an ODA/GDP ratio of 0.17% will seek to increase their ODA in order to reach that level by 2010. Member

*use of the possibilities of international agreements in addressing global risks and dealing with their impacts on the Czech Republic, to develop further cooperation within the region and the EU, as well as international cooperation in order to strengthen the Czech Republic's position in the world. As part of pursuing the objective, it is also necessary to promote the principles of sustainable development at all levels of multi- and bilateral relations and – in accordance with these relations – to strengthen international cooperation in the political, economic, social, environmental and cultural areas.*

- **Objective 4: Participating in the implementation of international commitments in the area of reducing greenhouse gas emissions**

*The target under the Kyoto Protocol is to achieve a reduction in total greenhouse gas emissions of 8% from the 1990 level between 2008 and 2012. By adopting the climate-energy package, the EU committed itself to reducing greenhouse gas emissions by 30% from the 1990 level by 2020, provided that there is a global and comprehensive agreement for the period after 2012 and that other developed countries commit themselves to comparable emission reductions. A reduction of total greenhouse gas emissions by at least 20% from the 1990 level by 2020 is a unilateral commitment by the EU, regardless of the outcome of international negotiations on global reduction targets after 2012. To an adequate degree, the Czech Republic will also participate in financing measures to prevent climate change and promote adaptation in developing countries, including technological cooperation. Climatic aspects must be integrated into the Czech Republic's existing system of development cooperation.*

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States that have joined the EU after 2002 will strive to ensure that by 2015 they will have increased their ODA/GDP ratio to 0.33%.

The role of the Strategic Framework for Sustainable Development of the Czech Republic is to establish a consensual framework for the preparation of other materials of conceptual nature (sectoral strategies, policies and action programmes) and can thus be an important starting point for strategic decision-making within individual departments, self-governing regions and municipalities, as well as for interdepartmental cooperation and for collaboration with interest groups.

The government of the Czech Republic plays a key role in orienting the state towards sustainable development, as it determines the methods of promoting and introducing the SDS into practice, but the responsibility is on all citizens of the Czech Republic. However, the main 'driving force' of the SDS CR's implementation is the various departments and the regional and municipal levels of self-government. Sustainable development – i.e. the principles of sustainable development (see Chapter 5.2) – should be taken into account in all planning and decision-making processes.

Therefore, individual departments, self-governing regions, cities and municipalities should<sup>18</sup>:

1. respect the priorities and objectives of the SDS CR in relevant departmental, regional and local strategic documents (both newly created and updated ones);
2. carry out – as part of preparing strategic documents (i.e. binding government documents, departmental, regional and local programmes and plans, etc.) – an assessment of their compliance with the priorities and objectives of the SDS CR.

The Strategic Framework for Sustainable Development of the Czech Republic sets out the basic principles of sustainable development that need to be respected in creating all subsequent strategies and conceptual documents. Compliance with the following principles is key to achieving the sustainable development of the Czech Republic.

The principles are:

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<sup>18</sup> In parallel with adopting the updated SDS CR, the government of the Czech Republic will obligate individual departments through a resolution to implement these activities, and will recommend these activities in relation to self-governing regions and municipalities (and possibly other partners of the SDS CR).

- The principle of balancing the three pillars of sustainable development
- The principle of cohesion and integration of policies and management
- The precautionary principle
- The principle of generational and intergenerational responsibility
- The principle of equal opportunities
- The principle of partnership
- The principle of international responsibility

The essence of **the principle of balancing the three pillars of sustainable development** is to achieve and maintain a dynamic balance between the development of the economic, social and environmental dimensions of sustainable development. This principle is closely linked with the following principle of cohesion and integration of policies and management.

**The principle of cohesion and integration of policies and management** promotes policies and measures at local, regional, national, but also at European and global levels aiming to increase their contribution to sustainable development. It is intended to ensure that important political decisions are balanced and respect all three pillars of sustainable development; it includes for example the concept of proportionality, i.e. the need for regulation or restriction in a given area is assessed in proportion to the significance and importance of the objective.

**The precautionary principle** is based on the belief that caution needs to be exercised even in cases where there is no certainty how quickly or if undesirable phenomena will occur. Therefore, in cases of scientific uncertainty, it is expected that appropriate evaluation procedures and preventive measures will be applied. For example ensuring environmental protection through the sustainable use of resources is based on growing knowledge about the interactions between the biosphere, ecosystems and human activities. This knowledge is obtained in particular through science and research. The basis of the precautionary principle is the best available knowledge and technology.

**The principle of generational and intergenerational responsibility** is another principle with a broad application. In the narrow sense, it encourages the current generation to preserve and pass down the basic natural, cultural and civilization values to future generations. In a broader sense, this principle can be understood to include the effort to decouple the economic growth curve from the curve of negative environmental impacts and a set of ideas in relation to the biological and cultural diversity of rural areas and the landscape. In addition, it promotes dialogue between generations, facilitates mutual understanding among members of society and their effective participation in building an open society.

**The principle of equal opportunities** helps to achieve the objective of social equity and cohesion and is based on promoting social inclusion (i.e. combating the cases of social exclusion), upholding basic human rights and preserving cultural diversity.

**The principle of partnership** states that the relationships between environmental, economic and social entities must be built on the basis of partnership rather than confrontation. The objectives of sustainable development, including changing the production and consumption patterns, cannot be implemented without cooperation and coordination between the public sector, the businesses sphere, non-governmental institutions, the population, but also foreign entities. The successful response to the challenges of sustainable development requires improved transparency and responsibility of all entities involved.

**The principle of international responsibility** is exercised in particular through development cooperation and through honouring the commitments arising from international agreements and conventions and from the membership in organizations such as the United Nations (UN) and the Organization for Economic Cooperation and Development (OECD). However, while sharing the global and regional responsibility from the position of an economically developed country, the specific conditions and interests of both the Czech Republic and the EU need to be respected.

**The principle of diversity** is a prerequisite for sustainable development not only in nature (biodiversity), but throughout society, with special attention to cultural diversity. Diversity supports the development of a healthy society, a free market of ideas, the openness of democratic processes and civic participation in public life, reduces the impacts of consumption, helps improve the quality of life through creating numerous opportunities and offering a wider choice of options as well as through better utilization of the potential of both individuals and groups.

The principles of sustainable development can be used among other things to find clues for an adequate choice of instruments that will allow for accomplishing the objectives specified below in order to maintain the high quality of life of the population and economic progress in an atmosphere of social cohesion and in the undisturbed environment of the Czech Republic. The promotion of these principles is thus the starting point for the formation of long-term trends as well as a criterion in evaluating their character and balance.

### 5.3 *ADDITIONAL ACTIVITIES TO ENSURE THE IMPLEMENTATION OF THE SDS CR*

In order to ensure the effective implementation of the SDS CR, it is desirable to provide involved entities with methodological support, especially to:

- prepare methodological recommendations for preparing strategic documents at the national level, based on the principles of strategic planning (see Annex 2) and containing the aspects of (i) integrating the priorities and objectives of the SDS CR into the relevant departmental strategic documents (newly created or updated), (ii) assessing compliance of departmental programmes and plans with the priorities and objectives of the SDS CR;
- provide other necessary methodological consultations, guidance and other assistance for ministries, self-governing regions, municipalities and other partners of the SDS CR; and
- establish a comprehensive monitoring system for implementing the SDS CR while using the already existing information systems, indicators and available data sources.

In implementing the SDS CR into practice, emphasis need to be placed on progress within individual levels of public administration and on linkage between the levels:

- National (horizontal line – in relation to other strategic documents at national level)
- Territorial (vertical line – in relation to strategic documents of self-governing regions and municipalities)
- International (vertical line – in relation to strategic documents of the EU and international institutions).

#### 5.4

#### *SUBSEQUENT UPDATES OF THE SDS CR*

Experience thus far has shown that in the Czech Republic, it is desirable for the subsequent update of the SDS CR (as well as for other national strategic documents) to be prepared according to the 'principles of good practice in strategic planning'. In the future, the SDS CR should live up to the term 'strategy' as a basis for a binding choice between alternatives within a major complex problem. From the beginning, these alternatives must be transparently prepared by those that are concerned with the problem, must include the comparison of verified expected impacts, and must be managed by an independent coordinator according to a proven method.

In parallel to introducing good practices in strategic work, it is also desirable to consider further introducing sustainability impact assessment procedures<sup>19</sup> – i.e. assessing strategic documents in terms of their impact on sustainable development. In the Czech Republic, this assessment has thus far been legislatively imposed on the area of land-use planning (since 2007).

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<sup>19</sup> Abroad, this is also referred to as 'sustainability appraisal' (United Kingdom of Great Britain and Northern Ireland) or 'integrated assessment' (the UN Environment Programme – UNEP).

## **6. THE MONITORING OF THE SDS CR**

### **6.1 BASIC MONITORING PRINCIPLES**

In principle, the monitoring of the SDS CR is composed of two processes (systems):

1. The monitoring of the Czech Republic's sustainable development, i.e. of the condition and the trends in individual themes and areas of sustainable development through a set of sustainable development indicators (see Chapter 6.3 and Annex 1 below).
2. As part of introducing the principles of good practice in strategic planning, the monitoring of the situation in sustainable development will be part of the integrated plan for strategic work.

### **6.2 MONITORING THE ACCOMPLISHMENTS OF THE SDS CR**

It is proposed that in subsequent years, the "Report on the Implementation of the SDS CR" should be prepared periodically (every 2 years). It will assess the degree of integration of departmental strategic documents in terms of the individual priorities and objectives and strategic planning, briefly outline the main aspects of the SDS CR's implementation and present preliminary suggestions for possible revisions to the document. The report will be used for assessing the degree to which the SDS CR has been implemented – as part of the report, it will be possible to make suggestions for possible operational changes to the priorities/objectives through rewording them, and/or for removing or supplementing the priorities/objectives.

The reports will also take into account major analytical and strategic documents drawn up during the assessment period, both at the national level and in the international context (UN, OECD, EC, etc.) The assessment reports will use statistical indicators (see the below text with draft indicators), which will be presented in time series in order to allow for assessing possible trends. In its general part, the report will include the assessment of individual priority axes in terms of the balance between the three pillars of sustainable development. The reports will be critically reviewed by at least three independent experts and submitted to the Government of the Czech Republic, the Parliament and the public.

In order to ensure effective monitoring, it is necessary to establish a comprehensive monitoring system for the implementation of the SDS (i.e. to link the information that is required for monitoring and information dissemination on the part of the Government Council for Sustainable Development, the ministries, territorial public administration and other

interested parties) and, at the same time, it is desirable to make maximum use of existing information systems, indicators and available data sources.

The indicators are designed for individual priority axes. Maximum use is made of the existing indicators (the CSO, EUROSTAT, the OECD, the UN Commission on Sustainable Development) in order to allow for monitoring their trends in time (time series). Indicators that are used in reports by Eurostat, the OECD and the UN Commission on Sustainable Development will be used for international comparisons. A detailed description of each indicator is given in Annex 1.

#### 0.A Ecological footprint

##### ***Priority Axis 1: Population, people and health***

I.A Standardized mortality rate by disease group

I.B Population exposure to suspended particulate matter

I.C Life expectancy and healthy life expectancy

I.D Emissions, mineral extraction and biomass production that are associated with household consumption

I.E Household indebtedness

I.F The employment rate of older workers

I.G The old-age index and the dependency ratio

##### ***Priority Axis 2: Economy and innovation***

II.A GDP per capita

II.B Labour productivity

II.C General unemployment rate

II.D Transport intensity in transport

II.E Energy intensity of GDP

II.F Consumption of primary energy sources

II.G The proportion of energy from renewable sources

II.H Material consumption

II.I Surface water and groundwater extraction by sector

II.J Waste management according to the main management methods

II.K Education level structure

II.L Expenditure on research and development

II.M Access to the Internet

***Priority Axis 3: Spatial development<sup>20</sup>***

III.A GDP per capita

III.B General unemployment rate

III.C Expenditure on research and development and the number of employees in research and development

III.D Municipalities that are involved in implementing the local Agenda 21 method

III.E Migration balance of rural municipalities

III.F Total revenue per capita and debt service

III.G Passenger transport by public road and rail transport

III.H Access to the Internet

III.I The number of guests in collective accommodation establishments

III.J Public budget expenditure on culture

III.K The coverage of the territory with approved land-use planning documents of municipalities

III.L The proportion of built-up area in the total area

***Priority Axis 4: Landscape, ecosystems and biodiversity***

IV.A The indicator of changes in the territory and ecosystems

IV.B Index of common species of wild birds

IV.C Expenditure on environmental protection and public expenditure on environmental protection

IV.D Consumption of basic nutrients in mineral fertilizers

IV.E The proportion of organic farming

IV.F Defoliation

IV.G The intensity of logging

***Priority Axis 5: A stable and secure society***

V.A Corruption perceptions index

V.B Participation in elections

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<sup>20</sup> The indicators for Priority Axis 3 will always be monitored both for individual self-governing regions and for the entire Czech Republic (average).

V.C The population living below the poverty line before and after social transfers

V.D General government balance and debt

V.E The average length of judicial proceedings

V.F Total international development cooperation

V.G Greenhouse gas emissions per capita and per unit of GDP

V.H Foreign direct investment

7.1 *ANNEX 1: INDICATOR LISTS*

Indicator title and number: Ecological footprint (0.A)

Brief definition and units: The indicator is defined as the amount of bio-productive land per person expressed in global hectares that is needed to sustain the consumption of the given country's population (global hectares per person)

Data sources in the Czech Republic: Charles University in Prague

Indicator significance: Ecological footprint is a comprehensive standardized indicator that monitors people's demands on the regeneration capacity and the absorption capacity for waste within the biosphere. Ecological footprint expresses the degree of human appropriation of ecosystem products and services in terms of the area of land and sea that is needed to provide these services. This is a cross-cutting indicator that concerns multiple priority axes simultaneously.

7.1.1 *Priority Axis 1: Population, people and health*

Indicator title and number: Standardized mortality rate by disease group (I.A)

Brief definition and units: The indicator shows the number of deaths for various types of disease (malignant neoplasm, diseases of the circulatory system, etc.) (number of deaths per 100 000 inhabitants)

Data sources in the Czech Republic: The Institute of Health Information and Statistics

Indicator significance: The mortality rate is an important indicator reflecting the health of the population and the prevalence and severity of selected diseases.

Indicator title and number: Population exposure to suspended particulate matter (I.B)

Brief definition and units: The indicator shows the average exposure of the urban population to suspended particulate matter (micrograms per m<sup>3</sup>)

Data sources in the Czech Republic: The Czech Hydrometeorological Institute

Indicator significance: Suspended particulate matter is currently one of the riskiest environmental pollutants having a direct impact on human health. While the concentrations of many pollutants are decreasing or are achieving

below-the-threshold values, the concentrations of suspended particulate matter in cities are rising.

Indicator title and number: Life expectancy and healthy life expectancy (I.C)

Brief definition and units: The indicator shows the expected total average number of years and the number of years in good health that a persons of a given age may live if the current mortality rates remain unchanged for the rest of their lives (number of years)

Data sources in the Czech Republic: The National Institute of Public Health

Indicator significance: Life expectancy (median life span, expectation of life) is an indicator of the health of the population, based on the mortality situation in a given population. The indicator is widely used, easy to interpret and internationally comparable.

Indicator title and number: Emissions, mineral extraction and biomass production that are associated with household consumption (I.D)

Brief definition and units: The indicator shows air pollutant emissions (CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>10</sub>), the raw material extraction (fossil fuels, ores, other minerals) and biomass production that were induced in the manufacture of products consumed by households in the Czech Republic (million tonnes)

Data sources in the Czech Republic: Charles University in Prague

Indicator significance: Households are considered to be one of the main drivers of consumption and production in the Czech Republic. The production of products consumed by households is associated with a significant environmental burden (air emissions, raw material extraction).

Indicator title and number: Household indebtedness (I.E)

Brief definition and units: The indicator is defined as the proportion of the money lent by commercial banks to the household-population segment to GDP (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The indicator is used to assess the indebtedness of the population, which has become unsustainable over the recent years. From 1997 to 2007 it increased 14 times and, including loans to self-employed entrepreneurs and non-profit institutions that serve households, it has exceeded one fifth of the Czech Republic's nominal GDP.

Indicator title and number: The employment rate of older workers (I.F)

Brief definition and units: The indicator is defined as the proportion of employed persons aged 55-64 in the total number of all people in this age group (%)

Data sources in the Czech Republic: The Ministry of Labour and Social Affairs

Indicator significance: The indicator reflects the degree of employment in the age group that is more than other age groups at risk of increasing unemployment and poverty. The indicator is one of the structural indicators for the areas of employment and social inclusion.

Indicator title and number: The old-age index and the dependency ratio (I.G)

Brief definition and units: The old-age index shows how many people of retirement age there are in the population per 100 children aged 0-14 years. The dependency ratio indicates the number of people of retirement age per 100 persons of working age (index)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The indices show the degree of population aging and the degree of dependence of the retirement age population on the working age population.

#### 7.1.2

#### *Priority Axis 2: Economy and innovation*

Indicator title and number: GDP per capita (II.A)

Brief definition and units: The indicator is defined as the sum of gross value added of the sectors and industries of the economy (CZK billion, index)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The indicator shows the overall performance of the economy and serves as a benchmark for assessing the extent of internal and external economic imbalances. The indicator should not be used to assess the quality of life, as this is also affected by non-material factors.

Indicator title and number: Labour productivity (II.B)

Brief definition and units: The indicator is defined as GDP per the number of workers or per the number of hours worked (CZK thousand per worker, CZK thousand per one hour worked)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: Labour productivity is one of the most widely used indicators of economic performance. Its growth is crucial for the growth of GDP per capita and has a decisive impact on the population's improving

standard of living, because income per capita changes in direct proportion to changes in labour productivity.

Indicator title and number: General unemployment rate (II.C)

Brief definition and units: The indicator is defined as the proportion of unemployed persons in the labour force in the age group 15-74 years (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The indicator reflects the overall unemployment rate and as such is regarded as crucial for the social pillar of sustainable development.

Indicator title and number: Transport intensity in transport (II.D)

Brief definition and units: Transport intensity in passenger and freight transport is defined as the ratio between transport performance and GDP (pkm per CZK 1000, tkm per CZK 1000)

Data sources in the Czech Republic: The Ministry of Transport, the Czech Statistical Office

Indicator significance: The indicator is used to assess whether there is the decoupling of the GDP curve from the transport quantity curve. This decoupling is desirable because transport activities are associated with a significant burden on the environment.

Indicator title and number: Energy intensity of GDP (II.E)

Brief definition and units: The indicator is defined as the ratio of the Consumption of primary energy sources indicator to the GDP indicator (GJ/CZK thousand)

Data sources in the Czech Republic: The Ministry of Industry and Trade, the Czech Statistical Office

Indicator significance: The indicator of the energy intensity of GDP shows the efficiency with which the society is able to transform primary energy sources into economic output. The decline in energy intensity is connected with the introduction of new technologies, innovation and savings and a shift of the economy from heavy industry to light industry and services and economic recovery.

Indicator title and number: Consumption of primary energy sources (II.F)

Brief definition and units: The indicator is defined as the domestic extraction of all energy raw materials plus their imports and minus their exports (PJ)

Data sources in the Czech Republic: The Ministry of Industry and Trade, the Czech Statistical Office

Indicator significance: The indicator gives information on the burden imposed by the society on the environment in connection with the consumption of energy sources.

Indicator title and number: The proportion of energy from renewable sources (II.G)

Brief definition and units: The indicator is defined as the proportion of RES consumption (biomass, solar, water and wind energy) in primary energy consumption and in electricity generation (%)

Data sources in the Czech Republic: The Ministry of Industry and Trade, the Czech Statistical Office

Indicator significance: Renewable sources are the only energy sources that can be used over the long term. In the future, non-renewable sources therefore need to be gradually replaced with renewable sources.

Indicator title and number: Material consumption (II.H)

Brief definition and units: The indicator is the sum of the physical quantities of raw materials extracted and biomass produced, plus all imports and minus all exports. Material intensity is expressed as the ratio of material consumption to GDP (million tonnes, index)

Data sources in the Czech Republic: Charles University in Prague, the Czech Statistical Office

Indicator significance: Material consumption is considered an appropriate indicator of environmental pressure, because raw material extraction and processing are associated with a number of key environmental problems (structural changes in the landscape, global climate change, eutrophication, acidification, etc.)

Indicator title and number: Surface water and groundwater extraction by sector (II.I)

Brief definition and units: The indicator is defined as the quantities of annual surface water and groundwater extraction by main sectors (public water supply systems, agriculture, the energy sector, industry, others including construction) (million m<sup>3</sup>)

Data sources in the Czech Republic: The Ministry of Agriculture

Indicator significance: Fresh water is a necessary precondition for most human activities. The availability of surface water and ground water for extraction may decline below a socially acceptable level (among other things

due to climate change) – it is assumed that water will become a critical resource.

Indicator title and number: Waste management according to the main management methods (II.J)

Brief definition and units: The indicator is defined as the proportion of the main waste management methods (material recovery, energy recovery, landfilling) in the total quantity of waste that is managed in a given year (%)

Data sources in the Czech Republic: The Czech Statistical Office, the Ministry of Environment

Indicator significance: Individual waste management methods are associated with different environmental pressures. Monitoring this indicator suggests whether there is a decline in the management methods that are associated with greater pressure (landfilling, incineration) and whether the management methods that are associated with less pressure (especially material recovery) are gaining in importance.

Indicator title and number: Education level structure (II.K)

Brief definition and units: The indicator is measured as the proportion of the population that has reached a certain level of education in the total population in that age group (20-24, 25-34 and 25-64) (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: A better educated society has superior-quality and better-skilled human resources and is able to make better use of their potential. The level of educational attainment of the population is then reflected in the economic development of society and the quality of life of its people.

Indicator title and number: Expenditure on research and development (II.L)

Brief definition and units: The indicator is defined as the proportion of expenditure on research and development from various sources (public and private sources) to GDP (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: Expenditure on research and development reflects the level of support for research and development in the Czech Republic. Countries with advanced research are generally characterized by a higher level of economic competitiveness and a higher standard of living of the population.

Indicator title and number: Access to the Internet (II.M)

Brief definition and units: The indicator is expressed as the number of broadband Internet participants per 100 inhabitants by the type of connection (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: Without the use of information and communication technologies, such areas as economic performance, competitiveness, effective nature conservation, social cohesion, science or education are already hardly conceivable. The current global society and economy are largely built on the opportunities brought by these technologies.

### 7.1.3 *Priority Axis 3: Spatial development*<sup>21</sup>

Indicator title and number: Expenditure on research and development and the number of employees in research and development (III.C.)

Brief definition and units: The indicator is defined as the proportion of expenditure on research and development from various sources (public and private resources) to GDP (%) and as the proportion of employment in research and development in total employment (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: Expenditure on research and development and employment in research and development reflect the level of support for research and development in the Czech Republic. Countries with advanced research are generally characterized by a higher level of economic competitiveness and a higher standard of living of the population.

Indicator title and number: The proportion of municipalities that are involved in Local Agenda 21 programmes (III.D)

Brief definition and units: The indicator is defined as the proportion of municipalities that are involved in implementing the local Agenda 21 method (%)

Data sources in the Czech Republic: The Czech Environmental Information Agency

Indicator significance: Local Agenda 21 is a programme of municipalities, cities and regions, which introduces the principles of sustainable development into practice while taking account of local problems. It is formed with the participation and cooperation of citizens and organizations, and is aimed at

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<sup>21</sup> Note: The indicators that are listed in other priority axes for the entire Czech Republic are not mentioned again. Their definitions, data sources and significance are similar to those at the national level.

ensuring the long-term high quality of life and the environment in a given location.

Indicator title and number: Migration balance of rural municipalities (III.E)

Brief definition and units: The indicator is expressed as the difference between the number of arrivals and departures in rural municipalities in individual regions of the Czech Republic (number)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The balance of migration quantifies the geographical mobility of the population and is one of the main drivers of demographic redistribution. The negative balance of migration in rural municipalities tends to be associated with the loss of livelihood opportunities, rural depopulation and the increasing population of urban agglomerations.

Indicator title and number: Total revenue per capita and debt service (III.F)

Brief definition and units: The indicator shows both the total revenues of a municipality (both tax and non-tax) (CZK thousand per capita) and the ratio of the sum of principal and interest payments to tax revenues and subsidies actually received (%)

Data sources in the Czech Republic: The Ministry of Finance

Indicator significance: The level of a municipality's revenues is a key factor in terms of its ability to implement measures aimed at sustainable development and to allocate funds for building new housing, infrastructure, educational, cultural and sports facilities. The debt service indicator monitors a municipality's ability to settle its financial obligations.

Indicator title and number: Passenger transport by public road and rail transport (III.G)

Brief definition and units: The indicator is defined as the number of journeys by rail and public bus transport made per one inhabitant of a given region (number per capita)

Data sources in the Czech Republic: The Ministry of Transport

Indicator significance: Reduced transport accessibility in regions causes difficulties in commuting for work and for services. Public transport plays a key role in increasing the accessibility of transport services, because it is associated with a lower environmental impact per one transported person than road transport.

Indicator title and number: The number of guests in collective accommodation establishments (III.I)

Brief definition and units: The indicator is defined as the number of people that used the services of registered accommodation establishments for temporary accommodation (number)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: Tourism is a major segment of the Czech economy and may – at the regional level – be a significant source of income. In order to increase visitor numbers, it is necessary to promote the improvement of the environmental, technical and aesthetic qualities of infrastructure and to strive to preserve the natural and cultural attractiveness of individual regions.

Indicator title and number: Public budget expenditure on culture (III.J)

Brief definition and units: This is expenditure that is reported as expenditure on culture (according to the applicable budget structure) (CZK thousand per capita)

Data sources in the Czech Republic: The Ministry of Culture, the Czech Statistical Office

Indicator significance: Culture has a significant positive impact on social cohesion and quality of life in settlements and regions. For this reason, it should be supported with public budget resources.

Indicator title and number: The coverage of the territory with approved land-use planning documents of municipalities (III.K)

Brief definition and units: The indicator shows the proportion of cadastral areas with valid land-use planning documents of municipalities in the total area of the country (%)

Data sources in the Czech Republic: The Institute for Spatial Development

Indicator significance: Land-use planning documentation systematically and comprehensively addresses the functional use of land, lays down the principles of its organization and coordinates the material and time-related aspects of construction and other activities that affect territorial development. It thus creates the conditions for ensuring the lasting harmony of all natural, civilization and cultural values in the territory.

Indicator title and number: The proportion of built-up area in the total area (III.L)

Brief definition and units: The indicator is defined as the proportion of land plots within and outside developed areas (i.e. built-up building land plots, gap

sites, roads) with the exception of land plots with vineyards, hop gardens and gardening to the total area (%)

Data sources in the Czech Republic: The Ministry for Regional Development

Indicator significance: The indicator shows the pressure on one of the non-renewable resources – the territory. The larger the proportion of the built-up area, the less space is available for food and wood production, recreation and nature conservation. The significant increase in the proportion of the built-up area within the Czech Republic is a result of ongoing urbanization and suburbanization.

#### 7.1.4

#### *Priority Axis 4: Landscape, ecosystems and biodiversity*

Indicator title and number: The indicator of changes in the territory and ecosystems (IV.A)

Brief definition and units: The indicator is defined as the proportional (%) and the absolute change (ha) in the area and the movement of individual land cover categories that aggregate the main types of ecosystems

Data sources in the Czech Republic: Charles University in Prague

Indicator significance: The indicator reflects changes in the size of ecosystems and their causes. These include especially larger-scale changes that are associated with dominant processes such as growing urbanization, land appropriation and loss of natural biotopes. The benefits of the indicator lie in the spatial nature of the data, which allow for capturing the transitions between different categories of land cover and ecosystems.

Indicator title and number: Index of common species of wild birds (IV.B)

Brief definition and units: The indicator shows the relative changes in the populations of individual species at monitored sites and, above all, globally for the Czech Republic. Year-to-year changes in the populations of species are expressed relative to the base year (index)

Data sources in the Czech Republic: The Czech Society for Ornithology

Indicator significance: The indicator shows changes in the populations of common species of wild birds, which closely correlate with changes in land use and intensity of agriculture. Bird populations can be considered as appropriate indicators of biodiversity, not in the least because of their popularity among the public.

Indicator title and number: Expenditure on environmental protection and public expenditure on environmental protection (IV.C)

Brief definition and units: The indicator is defined as the proportion of expenditure and public expenditure on environmental protection to GDP (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The indicator allows the comparison of financial support for environmental protection and other industries and sectors of the economy.

Indicator title and number: Consumption of essential nutrients in mineral fertilizers (IV.D)

Brief definition and units: The indicator is calculated as the amount of fertilisers used, i.e. in kilograms of pure nutrients, per one hectare of agricultural land (kg of pure nutrients per hectare)

Data sources in the Czech Republic: The Ministry of Agriculture

Indicator significance: The consumption of essential nutrients in mineral fertilizers is considered one of the key indicators of the development of organic agriculture. Excessive use of mineral fertilizers reduces soil quality and is to a large degree responsible for water eutrophication and drinking water contamination.

Indicator title and number: The proportion of organic farming (IV.E)

Brief definition and units: The indicator is calculated as the proportion of the area of farmland categorised as organic farmland to the total area of farmland in the Czech Republic (%)

Data sources in the Czech Republic: The Ministry of Agriculture

Indicator significance: The proportion of organic farming is considered a fundamental indicator of the degree of development of organic farming. Organic farming is environmentally friendly and enhances biodiversity in the landscape.

Indicator title and number: Defoliation (IV.F)

Brief definition and units: Defoliation is defined as the relative loss of assimilation equipment in the treetop compared with a healthy tree growing in identical vegetation and habitat conditions (%)

Data sources in the Czech Republic: The Forestry and Game Management Research Institute

Indicator significance: The degree of defoliation characterizes the health status of trees, reflecting the effects of the negative changes in forest ecosystems as a consequence of the long-term excessive soil and air pollution with various pollutants (SO<sub>2</sub>, NO<sub>x</sub>, F, Cl, O<sub>3</sub>, heavy metals, particulate matter, etc.).

Indicator title and number: The intensity of logging (IV.G)

Brief definition and units: The indicator is defined as the proportion of total logging to total net wood growth (%)

Data sources in the Czech Republic: The Forest Management Institute

Indicator significance: The indicator is used to assess forest management sustainability in terms of the production functions of forests. If it is greater than 100 in the long-term, it means that there is deforestation and that the country loses its wood reserves and forest area.

#### 7.1.5 *Priority Axis 5: A stable and secure society*

Indicator title and number: Corruption perceptions index (V.A)

Brief definition and units: The corruption perceptions index is a composite index that is compiled on the basis of several corruption perception surveys (range 1 to 10)

Data sources in the Czech Republic: Transparency International

Indicator significance: The danger of corruption follows from its ability to undermine the principles on which economic competition, democracy and other values such as the rule of law and free access to information are built. Corruption erodes confidence in the legitimacy of existing state institutions and contributes to the creation of a parallel structure of power that may have close ties to organized crime.

Indicator title and number: Participation in elections (V.B)

Brief definition and units: The indicator is defined as the proportion of eligible voters that participate in elections for municipal assemblies, assemblies of self-governing regions, the Senate of the Parliament of the Czech Republic and the Chamber of Deputies of the Parliament of the Czech Republic (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The possibility to influence public affairs is one of the fundamental rights of citizens. Analysis shows that the level of civic and political participation increases in proportion to citizens' activities in other areas of life such as participating in the labour market and seeking their own housing.

Indicator title and number: The population living below the poverty line before and after social transfers (V.C)

Brief definition and units: The indicator shows the proportion of people at risk of poverty in the relevant age groups to the total number of people in those age groups (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The indicator shows the efficiency of the operation of social transfers, i.e. their impact on persons at risk of poverty. Persons at risk of poverty are those persons whose annual adjusted disposable income is less than 60% of the annual national adjusted median disposable income per consumption unit.

Indicator title and number: General government balance and debt (V.D)

Brief definition and units: The indicator is expressed as the proportion of the general government sector balance and debt to GDP (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: Both indicators are fundamental indicators of the long-term sustainability of public budgets and finances.

Indicator title and number: The average length of judicial proceedings (V.E)

Brief definition and units: The indicator is expressed as the average length of judicial proceedings in district and regional courts (days)

Data sources in the Czech Republic: The Ministry of Justice

Indicator significance: The indicator reflects the stabilization and efficiency of the judicial system. Although seemingly a quantitative indicator, it describes not only the length of judicial proceedings, but also the quality of the organization of the work of courts.

Indicator title and number: Total international development cooperation (V.F)

Brief definition and units: The indicator is defined as the amount of financial resources disbursed for international development cooperation to gross national income /GNI/ (%)

Data sources in the Czech Republic: The Ministry of Foreign Affairs

Indicator significance: A country's involvement in international development cooperation characterizes its readiness to assist in addressing global problems that are associated with poverty and the disparities in the socio-economic development of different parts of the world.

Indicator title and number: Greenhouse gas emissions per capita and per unit of GDP (V.G)

Brief definition and units: The indicator is defined as total greenhouse gas emissions (expressed as CO<sub>2</sub> equivalent) per capita and relative to GDP (tonnes of CO<sub>2</sub> eq. per capita, kg of CO<sub>2</sub> eq. per CZK 1000)

Data sources in the Czech Republic: The Czech Hydrometeorological Institute, the Czech Statistical Office

Indicator significance: Anthropogenic greenhouse gas emissions affect the energy balance of the Earth's climate system and magnify the 'greenhouse effect', which has considerable negative impacts on the economies of individual countries (impacts on agriculture, water management, biodiversity, health, etc.) Per-capita emissions show how the Czech Republic's population contributes to this magnification, while greenhouse gas emissions per unit of GDP express the emission (carbon) intensity of GDP generation in the Czech Republic.

Indicator title and number: Foreign direct investment (V.H)

Brief definition and units: The indicator is defined as the proportion of FDI to GDP, both for investment in the Czech Republic and for the Czech Republic's investment abroad (%)

Data sources in the Czech Republic: The Czech Statistical Office

Indicator significance: The indicator informs about the links (dependencies) between economies and about the vulnerability of the Czech economy to developments in foreign markets.