

Structural Policy Implications and Catching-Up Processes in the New Member States: A Case Study for Estonia

-Research project-

Author: Liis Lill

Project supervisor: Konrad Lammers

Tartu, February 2009

Table of contents

Abbreviations	4
1. Introduction.....	6
2. Estonian Economic Development in the Context of EU	8
2.1 Catching-up Processes in Estonia	8
2.2. Theoretical Concepts and Empirical Studies considering Equality and Convergence	11
2.3 Moving towards Convergence in EU and Estonia	14
3. Estonian Structural Policy and the SF	19
3.1 Strategic aims of Estonian structural policy in the context of EU	19
3.2 Overview on the SF.....	24
3.3. Operational programs for 2007-2013.....	29
3.4 Current Situation and Problems in the Priority Areas.....	38
4. Evaluation of the Use of the Structure Funds Resources.....	62
4.1 Criteria for efficiency	62
4.2 Evaluation of the activities planned for implementation of the SF resources	64
4.2.1 The “Energy” priority	65
4.2.2 The priority “Capacity for innovation and growth of business”	67
4.2.3 The priority “Administrative Capability”	70
4.2.4 The priority “Education”.....	72
4.2.5 The priority “Information society”	74
4.2.6 The priority “Water and waste management”.....	76
4.2.7 The priority “Development of infrastructures and support systems for sustainable use of the environment”	78
4.2.8 The priority “The Development of Human Research for R&D”	80
4.2.9 The priority “The Development of Health care and welfare system”.....	83
4.2.10 The priority “Transport investments of strategic importance”	85
4.2.11 The priority “Transport investments of regional importance”	89
4.2.12 The priority “Long and quality working life”	93

5. Conclusions.....	98
References	100
APPENDICES	105
Appendix 1. General framework for implementation of the SF resources in 2004-2006.....	105
Appendix 2. Descriptions of the activities included in measures under evaluation	107

Abbreviations

C	Complementarity
CAP	Common Agricultural Policy
CF	Cohesion Fund
E	Efficiency
EAFRD	European Agricultural Fund for Rural Development
EAGGF	European Agricultural Guidance and Guarantee Fund
EFF	European Fisheries Fund
ERDF	European Regional Development Fund
ESF	European Social Fund
EU	European Union
FIFG	Financial Instrument for Fisheries Guidance
GDP	Gross Domestic Product
GNP	Gross National Product
GR	Government of the Republic
ICT	Information and Communications Technology
ISPA	Instrument for Structural Policies for Pre-Accession
JASPERS	Joint Assistance in Supporting Projects in European Regions
JEREMIE	Joint European Resources for Micro to Medium Enterprises
JESSICA	Joint European Support for Sustainable Investment in City Areas
MAK	Estonian Rural Development Strategy
ME	Ministry of Environment
MEAC	Ministry of Economic Affairs and Communications
MER	Ministry of Education and Research
NEG	New Economic Geography
NSRF	National Strategic Reference Framework
OP	Operational Program
PE	Production Externality
PHARE	Poland and Hungary: Assistance for Restructuring their Economies
RE	Renewable Energies
RUE	Rational Use of Energy
SAPARD	Special Accession Program for Agriculture and Rural Development
SBS	State Budget Strategy
SF	Structural Funds

SME	Small and medium-size enterprises
SPD	Estonian Single Programming Document
TEN-T	Trans-European Network for Transport
USD	US Dollar
WE	Productivity externality

1. Introduction

One of the main goals set by the European Union (EU) structural policy is achieving convergence between regions, which consists in bringing the economies of the New Member States (NMS) up to the average levels of the EU-15. EU regional policy largely relies on the idea that balanced regional development is an inevitable prerequisite for social cohesion and a long-run increase in the competitiveness of the union as a whole, which states the necessity to improve economic and social conditions in every single region. The economic disparities between the EU member states and regions are currently very extensive. Moving towards convergence is a very challenging task and definitely not easily achievable but it is in every member state's competency to carefully plan allocation of the structural assistance provided by the EU in a way that brings the highest gains to the society.

Estonia became a member state of the EU on the 1st of January 2004, when the eastward enlargement of the EU brought ten new members into the union. During the membership, Estonia has experienced both – fast economic growth and success and deep fall due to overheating of the economy. The fall, even crisis, is still continuing and it is forecasted to last until 2010. Before the fall, Estonia experienced extremely fast growth and was one of the most successful NMS countries together with Hungary. Hard economic situation increases the responsibility for fulfilling the task of using the aid provided to each member state through the Structural Funds (SF) especially effectively even more.

During the period 2007-2013 the structural assistance is allocated from the following funds: European Regional Development Fund (ERDF); European Social Fund (ESF) and Cohesion Fund (CF). All the Member States receive support from these funds but the volume of support varies greatly by regions. The Eastern European countries receive the highest support, because their Gross Domestic Product (GDP) per capita is considerably lower than the average of the EU. In 2004-2006 Estonia received EEK 12.5 billion from the SF and Cohesion Fund. During 2007-2013 Estonia can use funds in the amount of EEK 53.3 billion, which makes nearly twice as much as in previous years.

The main aim of the present study is to estimate the efficiency of implementation (plans) of the structural assistance for 2007-2013 using the available information. The methodology of the study remains rather qualitative. Only the two first years have passed since opening the current funds and it is not enough for making conclusions on the quantitative basis. Thus we rather estimate the usefulness of the directions chosen than consequences of the actions already taken. The study consists of the three main sections and their sub-sections. The first part introduces Estonian economic development from the transition period until the recent years and gives an overview of the studies about regional disparities in EU and Estonia. The second part describes Estonian structural policy in the context of EU, its aims, opportunities and obstacles and provides an overview of the current situation in the priority areas. The third part concentrates on estimating the efficiency of the structural policy regarding the implementation of the SF resources.

2. Estonian Economic Development in the Context of EU

The eastward enlargement of the EU brought ten new members into the union; eight of them are post-socialist countries that have successfully passed economic transition. On 14 September 2003, the Estonian citizens gave their firm approval to Estonia's accession to the EU. Estonia became member of the EU at the 1st of May 2004. Nowadays the NMS have the task to move towards convergence. The task of convergence is even more challenging than the one of transition: it consists of bringing the economies of the NMS up to the average levels of the EU-15. In case of Estonia, in the period of the fast economic growth until 2007, it almost seemed that it may be the question of the next 5 or 10 years to reach the aim of convergence but the overall cooling down of the economies has had a severe impact on Estonia. While before the last elections in 2007, the winning party promised to lead Estonia into the top five richest countries in EU within the proceeding five years, the current situation is rather the opposite, because firms go to bankruptcy one by one or conduct collective dismissals and unemployment rates have increased enormously. The prospective for coming out the crises have been estimated extremely differently, thus only descriptive overview of the situation is given in this report and no new future forecasts will be calculated. The current chapter consists of three parts – Estonian development during the transition and the preparation period before becoming the member state of the EU; overview on the relationships between income inequality and growth on the basis of theoretical concepts and empirical studies and an overview on the convergence processes in Estonia and EU.

2.1 Catching-up Processes in Estonia

The economic transition in Estonia was a relatively rapid process, which created the institutional, legal and structural prerequisites of a functioning and potentially competitive market economy. The process of transition from a planned socialist economy to a capitalist market economy involved the privatization of state-owned enterprises and land and the movement of prices towards the market equilibrium. Culture and history also affect the path of transition and Estonia had not yet forgotten the experience of

independence during 1918-1940. Estonia achieved independence again at the 20th of August 1991 after the 50 years of the Soviet occupation. A new constitution was adopted by referendum already in June 1992. The new Estonian government immediately began the systematic reconstruction of the economy. Estonian trade policy was elaborated as one most liberal trade policies in the world and its' principles have remained about the same. The state budget is subject to the balanced-budget principle. Estonia is one of the few countries in the EU that has earned a budget surplus, which amounted to 2.9% in 2006 (Sepp 2006).

Estonian privatization mainly worked through the preliminary negotiation, which provided a chance to participate for all investors. This method made it possible to control the investors' background and their investment capacity. Also public sale of stock was used in several purposes and it was combined with the offering of preliminary negotiation. By 1998, 85% of companies were privatized.

The currency board system tied the Estonian currency, the Estonian crown (EEK), to the German mark (DEM) at a rate of 8:1. Estonia was the first of the former Soviet republics to issue its own fully convertible currency backed by a currency board (Hoag, Kasoff 1999).

Resulting from the prosperous economic reforms during post-soviet transition coupled with low-wage but comparatively skilled labor force, Estonia attracted large amounts of foreign direct investments and created good conditions favoring quick economic growth. At the end of the 2000 more than 44.5 billions of EKK of foreign direct investments head for Estonia and it exceeded several times the privatization benefit¹⁰. According to that indicator per inhabitant in CEE countries, Estonia was until 2001 on the second place after Hungary and Czech Republic but is the leader since 2003 (Sepp 2006).

Economic growth was positive from 1995 on (except in 1999) until 2007 (see table 1), and above the EU average. During the EU pre-accession period, Estonia achieved growth rates around 6.8% *per* year and after joining the EU the growth rates increased even more (7.5% in

2004; 9.2% in 2005 and 10.4% in 2006). During this period, GDP per capita and productivity grew from under a third of the EU average to 70 per cent of it in 2007. For year 2008 there was a decrease in GDP of 3.6 % and now Estonia has fallen into severe crisis in the context of overall economic recession.

Table 1.
Economic indicators of Estonia 1994-2008

Year	GDP in current prices	GDP rea l gr ow th	Volume index of industr ial produc tion, %	Foreign direct investment inflow (EEK mln)	Foreign direct investment outflow (EEK mln)
1994	31 349,4	-1,6	-3,0	2 819,2	-29,8
1995	43 182,4	2,2	1,9	2 312,9	-29,1
1996	56 727,3	5,7	2,9	1 814,4	-484,5
1997	69 886,1	11,7	14,6	3 694,1	-1 912,9
1998	78 426,7	6,7	4,1	8 071,4	-81,7
1999	83 472,6	-0,3	-3,4	4 448,0	-1 239,8
2000	95 491,0	9,7	14,6	6 644,5	-1 043,1
2001	108 218,3	7,7	8,8	9 429,6	-3 528,3
2002	121 372,2	7,8	8,4	4 800,2	-2 188,4
2003	136 010,1	7,1	11,0	12 865,3	-2 149,2
2004	151 012,1	7,5	10,4	12 060,9	-3 388,6
2005	173 530,2	9,2	11,0	36 021,2	-8 699,5
2006	205 038,0	10,4	9,9	22 401,5	-13 824,1
2007	238 928,9	6,3	6,4	30 702,1	-18 033,0
2008	248 149,0	-3,6	-6,3	21 374,3	-10 366,6

Estonia has generally succeeded in providing macroeconomic framework favorable for economic growth. In the current period, Estonia is about to adopt EURO as soon as the necessary criteria will be fulfilled. Until 2008 Estonia had met three of the five so called Maastricht criteria. There have been no problems with the state budget, public debt and long-term interests. But the criterion of inflation, which may not differ by more than 1.5% from the average of the three best EURO zone member states, has been far above the requested rate. High inflation rates are absolutely natural at the beginning of the

transition period but Estonian inflation rates have continued to be very high. Since 2006, inflation has significantly increased in Estonia. In 2006, inflation reached 4.4% and 6.7% in 2007. An increase in consumer prices in the first half of 2007 was caused by domestic factors, but in the second half, rather external factors as food and oil prices, which suddenly rose in the world market. Average inflation in 2008 was 10.7%. It is expected that the economic fall ends the increase in inflation and the last estimates confirm that tendency. In conclusion, Estonia has been one of the most successful transition countries until the crisis that begun in the 2nd half of 2008 and is still continuing. The long-run effects of the policy measures taken and economic choices made in the transition period are about to prevail just now and it is of extreme importance to conduct the economic policy in the way that leads the state of the crisis. Structural aid from the EU must be used wisely and allocated in the manner that provides the best balance between growth and convergence.

2.2. Theoretical Concepts and Empirical Studies considering Equality and Convergence

There has been a growing interest in exploring the relationship between income inequality and growth. A famous starting point of this debate is well-known as the Kuznets hypothesis (Kuznets 1955). In 1955 Simon Kuznets introduced the hypothesis of an inverted-U relationship between the economic development and inequality which has been called the Kuznets Curve ever since. According to this hypothesis, income inequality ordinarily rises in the early stages of economic development and declines in the latter. Similar results are obtained by NEG-Models. Krugman's Core-Periphery Model (1991) suggests that in the course of economic integration, decreasing transport costs to a medium level support the production in central places. However, when economic integration proceeds further to a higher level and transport costs become very low (zero) then the model predicts economic production to spread evenly across space.

Economic theory does not give a unique answer to what is the direction of the income convergence processes. Both convergence and divergence (the so-called negative convergence) may occur. Based on several theories, the optimistic (mainly neoclassical growth theory) and the pessimistic (mainly endogenous growth theory) approaches of explaining convergence processes can be distinguished. The former predicts a decrease in disparities of income levels because of decreasing returns of capital and the latter continually significant and even increasing inequality because of positive returns to scale. The endogenous growth theory considers government policy to be necessary in order to reduce inequality, while the neoclassical growth theory does not.

During the last decades, several theoretical models and empirical studies have been developed, which provide contradictory results (see overview by Ravallion 2005 or Islam 2003). Thus it is possible to argue that the relationship between income inequality and growth is not stable over time and depends on country's special characteristics. The development stage of a country is described by different role of capitals as the engines for economic growth. One of the widely accepted opinions is that in early stages of industrialization, the accumulation of physical capital is the prime engine of growth, which leads to the positive relationship between inequality and economic growth. Once the economy has passed the initial development stage, the accumulation of human capital becomes the prime engine of growth and therefore the relationship may be the opposite. A more egalitarian distribution of income allows more people to invest in education, which has nowadays become the most important issue for ensuring the country's welfare and competitiveness in the long perspective.

Following the Stolper-Samuelson theorem (1941), it is possible to predict that owners of relative rich endowment factors may be the winners from globalization and integration processes and of relative poor factors may be the losers of these processes. But there are several other theoretical explanations and plenty of empirical studies providing various conclusions that allow us to argue that globalization has not affected inequality on average. According to the World Development Report (2003), globalization has mostly reduced inequality between countries. At the same time, there are several empirical

studies emphasizing that inequality within countries is increasing. (E.g. Kanbur, Venables 2005; Chen, Sapshord 2005) Besides, the relationship between income inequality and growth is still a debated issue, which can be summarized by the Shakespearian-like dilemma “is inequality good or not good for growth”.

Thus there are still no clear theoretical explanations and/or overall accepted empirical evidence about this relationship that allow us to predict exactly what the consequences of increasing or declining income inequality may be. It is also not fully clear if regional income divergence is always something to fight against. Though, it cannot be argued that measures to alleviate poverty must be taken and achieving convergence is an essential issue until conditions for enabling the life quality that responds to the values of the European life-style, are provided to inhabitants of the each region in the EU.

Empirical studies show different patterns of the relationship between inequality and growth. Studies from the 1990-s have supported the view that inequality definitely reduces economic growth. (Alesina, Rodrik 1995; Deiniger, Squire 1996). But more recently, several other studies based on using larger data samples and more sophisticated econometric techniques provide explanations that the direction and strength of the relationship vary depending on the time period and countries under investigation as well as methods applied for analysis.

Additionally, more attention has been paid to the interaction between neighboring spatial units and spatial dependence. Among many other factors, the economic situation of a region depends on interrelations to its neighbors. Regions surrounded by rich economic units have usually better chances for development than regions situated in a relatively poor neighborhood. Paas and Schlitte (2007) estimated convergence considering spatial autocorrelation and spatial dependence between observations and resulted that the between-inequality has decreased but inequality within EU-25 countries on the NUTS-2 level has increased. They discovered important spatial influences - spillovers between the neighboring spatial units and also pointed out the necessity for strengthening over-border co-operation as a tool for increasing efficiency and fastening the economic growth.

Differences between the results based on the panel data analysis and cross-section data analysis could be explained as follows (see Paas, Schlitte 2007) 1) panel techniques look at changes within countries over time, while cross-section studies look at differences between countries with the possibility that the within-country and cross-country relationship might work through different channels and in different directions; 2) panel studies look at the issue from a short-/medium-run viewpoint, while cross-section studies may investigate the relationship in the long-run period (see also Arbia *et al.* 2005). While the role of spatial interaction was generally ignored by the empirical convergence literature for a long time, a growing number of convergence studies using spatial econometric techniques and emphasizing the importance of taking into account spatial dependence and spatial heterogeneity, emerged during the last decade (see Abreu *et al.* 2004; Niebuhr 2001, Rey and Montouri 1999).

Since regional convergence is a long run phenomenon, convergence studies usually observe longer time spans of 15 years or more. Analyses observing regional convergence over a couple of decades found varying rates of convergence over time, showing that the speed of convergence over shorter periods may deviate significantly from the long run average (see Barro, Sala-i-Martin 1995; Armstrong 1995). However, long run convergence analysis covering the enlarged EU is not feasible yet. Thus, also in the current study about the case of Estonia, a rather qualitative overview on the processes of moving towards cohesion is given.

2.3 Moving towards Convergence in EU and Estonia

While conducting regional income inequality or convergence analysis, it has to be pointed out that the choice for the level of regional aggregation may have an impact on the outcome. Applying same methods on different spatial scales may yield to different results. Spatial heterogeneity and spatial interaction may be covered when the observational units are relatively large. But using a very low level of regional aggregation there increases the danger of slicing functional regions into parts. In the latter case, economic activities within a

homogenous, functional region may be wrongly detected as spatial autocorrelation. (Le Gallo *et al.* 2003). In case of Estonia as a very small country, another problem occurs in the context of achieving comparable results. For example, on the NUTS-2 level, Estonia itself is just one region. Convergence data on the NUTS-3 level has been continuously enhanced by Eurostat. As soon as the data become sufficient for an objective spatial econometric analysis, the author plans to conduct a new convergence analysis on the basis of the EU NUTS-3 level data, distinguishing between the periods before enlargement and after to estimate the effects of the EU enlargement on cohesion. In the current study, an overview of the existing papers on convergence in Estonia and EU is given.

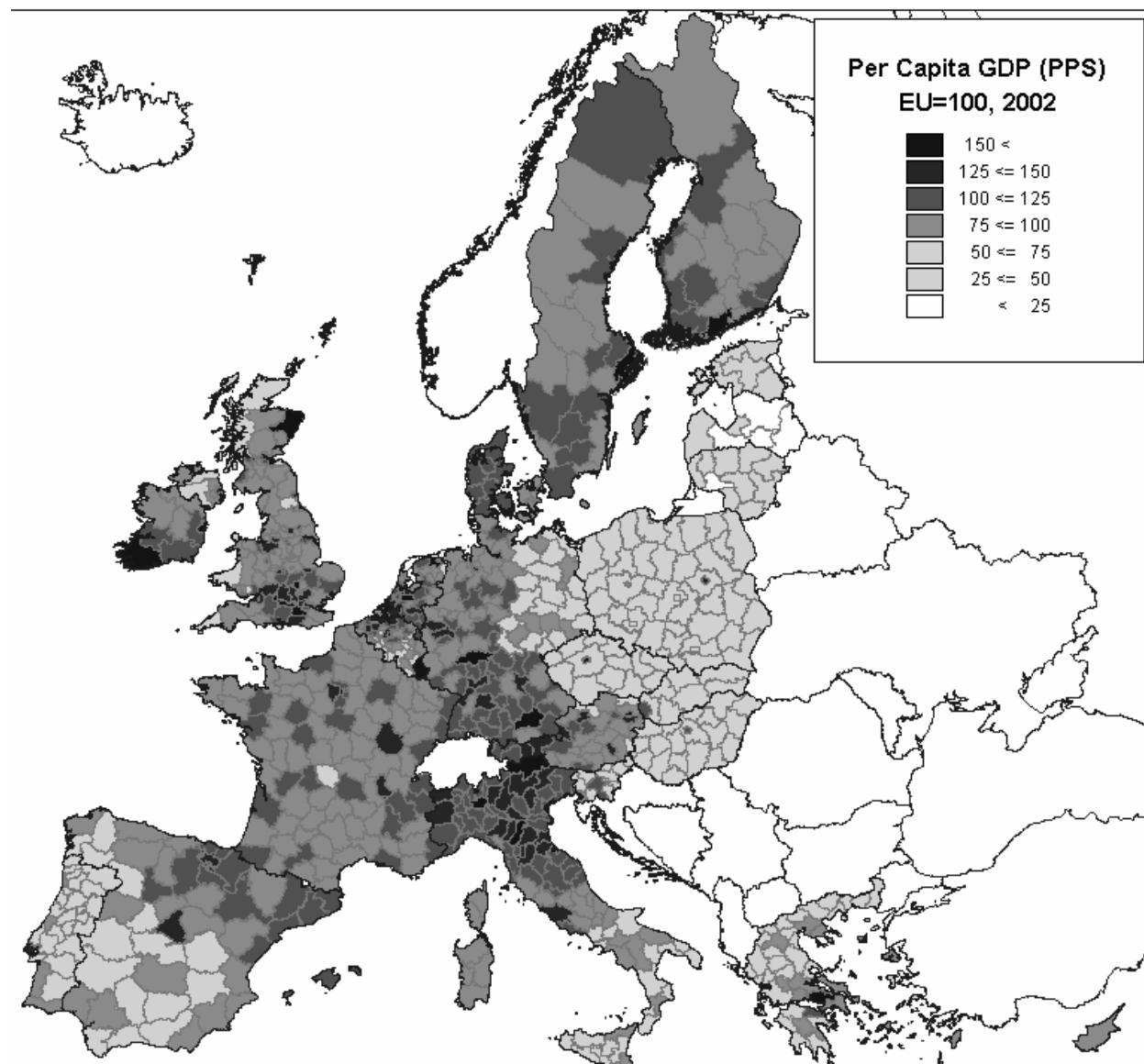
The results of the EU-25 regional income analyses during the EU pre-enlargement period (1995-2002) show significant regional disparities in case of the old member states as well as the accession countries. The differences between the highest and lowest income levels of regions in the EU-25 in 2002 were more than 30-fold. The relatively wealthy regions are usually the capital regions in the EU-10. Not only the differences were large but also the speed of regional income convergence was slow as shown by *sigma*- and *beta*-convergence analysis (see Paas, Lill 2008 for methodology). When spatial effects are taken into account in the estimation of *beta*-convergence, there is no considerable convergence found in none of the groups of the countries (EU-25, EU-15 and EU-10). The control for country specific effects reveals even a significant process of divergence across regions in the NMS (the EU-10).

The composition of the overall regional inequality measured by Theil index and divided into between-country and within-country components in the EU-25 and its groups of countries (EU-15 and EU-10), show a small decline of overall income inequality caused by the decline of between-country inequality, particularly in EU-10. But the share of the within-country component in overall regional inequality is increasing. The patterns of the overall inequality decomposition somewhat differ while observing different groups of the EU countries. The decrease of the between-country inequality is quicker in EU-10 than in other groups. The EU-10 experienced comparatively quick economic growth but the catching-up process at the national level was mainly driven by a few high growth regions and therefore regional income inequality within the EU-10 increased significantly. For measuring convergence, the data on GDP in purchasing powers standards (PPS), which are adjusted for national price levels, are

used. These GDP data, however, do not adjust for different price levels across regions within a country but unfortunately those data are not available.

The map in the figure 1 presents regional income levels in 2002 and regional per capita growth between 1995 and 2002 relative to the respective averages of the EU-25. The few dark spots in the area of the EU-10 in figure 1 show that regions with income levels above the EU-average are the exceptions.

Figure 1
GDP per capita, EU15=100



Source: Paas, Schlitte 2004

All of these richer regions – Prague (152.8%), Warsaw (132.0%), Budapest (124.0%), Bratislava (119.5%) and Ljubljana (106.6%) – are exclusively capital regions. The capital regions of the three Baltic States, Tallinn, Riga and Vilnius, were with the income levels of respectively 71.3%, 70.1% and 60.1%, which are clearly below the average of the EU-average but they

are still the richest regions of the respective countries. Overall, only a bit more than a third of the regions in the NMS had income levels that exceeded 50% of the EU-25 average in 2002. With the exception of regions in the Czech Republic, these regions were mainly agglomerative regions (cities and their hinterland) or they share a common border with an EU-15 country.

In Estonia, regional disparities in GDP *per capita* are rather high. The minimum and maximum level of GDP *per capita* differed more than three times and these differences increased slightly during the period 2000-2005. The level of the GDP *per capita* was the highest in Harju County and the lowest in Jõgeva County during all years under observation. The average value was higher than the median, which indicates that most counties in Estonia had GDP *per capita* under average. It is mainly due to the very high level of GDP *per capita* in Harju County compared to other Estonian counties. Economic growth in the period 2000–2005 was also quick in the counties of the country varying between 49 and 118%. The lowest economic growth occurred in the central part of Estonia, in Järva county. The growth rates now differ significantly from the situation during the high economic growth but no regional data for the period of economic fall are available yet.

The results of testing for the absolute convergence in case of GDP *per capita* in Estonian counties show that the convergence parameter is positive (referring to divergence) as assumed after taking a glance at the data but statistically insignificant. The value of the determination coefficient, $R^2 = 0.097$, is also very low. Evidently the sample of 15 Estonian counties is too small and/or homogenous for achieving statistical significance. But while using another proxy for people's disposable income, receipts of physical persons' income tax into the municipality's budget, the convergence parameter became negative (referring to convergence) and statistically significant in case of both the sample consisting of counties and municipalities, which leads to the conclusion that the differences in individual income measured by the receipts of physical persons' income tax have decreased on both levels, in counties and municipalities. Hence, the income convergence occurs.

In conclusion, regarding the GDP *per capita* measured on the level of counties, we noticed divergence but while regarding several personal income individual income indicators, we found evidence of convergence. We argue that divergence in GDP *per capita* on the level of

counties when the counties (or other observable units) are very small, may be a result of more effective distribution of production inputs and therefore, accumulation of capital in places, where production is more effective and all regions benefit from these developments due to spillovers when the distances between units are small enough. This aspect definitely deserves further investigation and may lead to the necessity for considering the size of the observable economic unit while elaborating policy implications.

The results of the convergence analysis assert continuing challenges for the EU regional policy. The choice for achieving the best balance between growth and equality is of critical importance while choosing measures for reducing regional income disparities in both - the old and the NMS. In the conditions of quick economic growth and increasing regional inequality within the countries, governmental intervention might be necessary, because even if in the later phases of economic integration and in case of high overall development, the spillover effects may prevail and foster convergence, the increasing inequality in the current development stages of the NMS, may produce dissatisfaction of people, weaken cohesion of society and thus lower the country's competitiveness in the longer perspective. Therefore it is important to establish opportunities for the poorer regions to stimulate their economic growth by giving them chances to effectively take over innovations created in the richer regions, keeping the country on the balanced development path. Systematic investments into local human capital, education, communication infrastructure and physical infrastructure and stimulating innovations, R&D and the mobility of highly qualified labor force are the necessary tools to accomplish that. Allocation of the SF resources accomplishes the task to provide necessary conditions for every member country to use these measures with the highest possible efficiency.

3. Estonian Structural Policy and the SF

3.1 Strategic aims of Estonian structural policy in the context of EU

Estonia has been a member of the EU for almost five years. During that period, Estonia has experienced rapid economic growth and felt the solidarity of other Member States of the

EU but also fallen into deep economic recession, which lasts since 2008. Estonian government still stands firmly on the opinion that an internally and externally strong EU is in the best interests of Estonia. The correctness of the chosen path has also been confirmed by the continuously high rate of public support for Estonia's membership in the EU. During the last fifty years, the EU has gone through impressive stages of development. But in order to cope with new challenges in a globalizing world, it is necessary to continuously anticipate problems and seek solutions to them. This chapter presents Estonia's suggestions on how to cope with the challenges that the EU and Estonia as its' member state face in different fields based on the strategic framework documents "Estonia's EU Policy 2007-2013" and "How to achieve the Lisbon Goals" (2005), which set very general principles of Estonian structural policy. The aims set by this document coincide with the Lisbon Strategy (2000). Though, now it has become quite clear that those goals will not be thoroughly reachable by 2010, Estonia believes that a stable macro-economic environment and the new financial perspective will be the key prerequisites for finally achieving the Lisbon goals.

Estonia wants to contribute to the strengthening of the EU. At the core of the EU must lay solidarity between Member States and every MS must make efforts to strengthen economic and social cohesion both within the MS itself and between the MS. The EU must contribute to the prevention and resolution of conflicts, especially in the neighborhood surrounding the Union. In its relations with the third countries, the EU must require substantive and institutional strengthening of the Common Foreign and Security Policy. In order to underline the positive experience of the enlargement of the EU so far, the Union must remain open to all European countries wishing to accede and meeting the accession criteria. Estonia also supports closer cooperation between the Member States in the field of justice and home affairs.

Over the course of half a century, the EU has contributed significantly to the improvement of prosperity and economic growth in its Member States. The old Member States have already found a functioning balance between the market and social protection and the NMS have successfully entered the common economic space with free movement of

goods, services, capital and skilled labor force. The Internal Market has been at the centre of European integration from the very beginning. Estonia must continue reforms to further interlink research and development with the economic operators, increase labor market flexibility and to continue with an active labor market policy.

New solutions must be found for creating jobs. Labor market objectives have become extremely relevant for Estonia in the current situation of rapidly increasing unemployment rates. That aspect could not have been forecasted by any experts or strategy makers but it has become a number one priority for Estonia by the last half of the year. One of the main challenges will be putting the goal of life- long learning into practice. In order to guarantee learning possibilities for all, Estonia must put more emphasis on developing flexible learning and support systems. Life-long learning means availability of basic education as well as possibilities and motivation for retraining as the needs of the labor market change. Also working should be made more advantageous than relying on welfare benefits. Using the system of unemployment insurance made it easier to stay unemployed for a while than to work for a low wage. The business environment should be simplified in order to encourage businesses to create more employment and the entrepreneurship should be encouraged.

In order to gain from globalization and increase the competitiveness of the Union, Estonia wants to contribute to sharing experiences regarding the use of Information and Communications Technology (ICT), including in the field of ICT security. Estonia has become a society that very highly values the developing of the ICT, especially in the relations between the State and its citizens, and has made impressive progress in this field.

Estonia strongly supported the Commission's proposals to increase the financing of research and development (R&D) from the Community budget in the financial perspective for 2007-2013. At the same time it should be kept in mind that increasing R&D expenditure does not automatically lead to practical application of scientific results by the business sector and Estonia is on the opinion that it remains the key weakness in Europe. Thus it is

also of great importance to create the necessary market conditions to make investments in R&D and make the use of outcomes of scientific research more attractive for private sector. R&D should be seen as related to innovation and its results should translate into increased growth and employment.

The EU must also be able to meet major global challenges, like climate change. To alleviate these processes, important changes in energy policy must be made, including taking measures to significantly reduce greenhouse gas emissions and increase the use of the renewable energy sources. Legal framework for green public procurement that will promote the development of practices giving businesses an incentive to come up with eco-innovative solutions and support the development of more environment-friendly production and consumption patterns. The EU largely depends on imported energy carriers, which has made it essential to speak with a single voice with the countries producing and supplying energy. At the same time, in order to make better use of resources, it is necessary to establish a real internal market of energy, ensuring free competition and creating connections between the peripheries of the EU and other regions. In order to strengthen the energy security of Estonia and the EU, it is important to continue with the diversification of energy sources. R&D in this field must be strongly endowed in order to adopt new technologies.

The EU has shown that it is also able to function with 27 members. Nevertheless, improving the functioning of the Union by increasing the efficiency of the decision making process, must be a priority. The necessary instruments for achieving those goals are provided by the institutional framework contained in the Lisbon Treaty. Many actions for achieving the Lisbon targets can only be undertaken at the Member State level. Therefore the commitment of all Member States and shared responsibility for the process of moving towards our goals are very important. The same commitment should be maintained when legislating jointly on the European level. Instead of constantly adding new targets we need to make more efforts towards achieving the existing goals.

The EU budget and consequently the funding of different policy areas are always subject to severe discussion. In the interests of the legitimacy and efficient functioning of the Union, it is necessary to make the budget framework simpler and more transparent. The process of reporting should be as simple as possible and the progress should be reflected in the regular national reports on Lisbon. Simplification initiatives should be focused on increasing the competitiveness of the Union. Also reducing the administrative burden on entrepreneurs and simplifying legislation will have to remain a priority for the Council and the Commission.

Estonia supports a comprehensive discussion over the future of the Common Agricultural Policy. Agricultural policy must remain a common policy of the Union. Estonia finds it necessary to update the Common Agricultural Policy and to adjust it to the market rules so that in the future the agriculture sector would be more competitive in the world market. The trend of reducing subsidies for farmers in order to lead the market of agricultural goods towards self-regulation probably makes most of the Estonian small farms to end production. It is not still clear how the agricultural policy will develop in Estonia but at the same time, the development of rural areas and the diversification of the rural economy should be supported by the government, preserving the traditions of rural life and the uniqueness of the landscape.

Estonia acceded to the Schengen Area at the end of 2007. The conversion to EURO is of primary importance to Estonia, in order to ensure sustainable economic growth. Though, Estonia has not succeeded in fulfilling the inflation criterion yet. Estonia will continue with a conservative fiscal and monetary policy to meet the Maastricht convergence criteria as soon as possible.

Estonia supports the movement of the EU towards greater openness and increasing the transparency of the institutions and expenditures of the EU. The legislation of the EU should be accessible to all citizens in an electronic and consolidated format. In accordance with the principle of openness, citizens should be engaged in the forming of Estonia's positions.

3.2 Overview on the SF

The goal of the EU regional policy (also known as the cohesion policy) is to reduce economic and social differences between and within the MS. The aim is to strengthen the EU as an economic unit and to increase its competitiveness in the world market. At the Member State and regional level, the goal of the regional policy is to support sustainable and balanced development and economic growth. The main sources of financing the regional policy of the EU are the SF and the Cohesion Fund, which distribute a considerable portion of the budget of the Union to the Member States and regions. Through 2000-2006, 34.4% of the budget of the EU was spent on the regional policy and through 2007-2013 the cohesion policy will get even more - 36% of the budgetary funds of the European Commission.

Solidarity and cohesion summarize the values serving as the basis for the regional policy of the EU:

- **Solidarity** – the goal of the policy is to benefit people and regions that are economically and socially worse off than on average in the EU;
- **Cohesion** – reduction of the income and prosperity gaps between the poorest and richest states is a necessary tool for balanced development.

The ESF and the European Agricultural Guidance and Guarantee Fund as the two first SF were established in 1958. After the accession of Denmark, Ireland and the United Kingdom the third Structural Fund, the ERDF was established. The goal of the Regional Development Fund was to support the NMS upon restructuring the industrial sector. The ERDF balanced the expensive agricultural support given to other Member States. The Financial Instrument for Fisheries Guidance and the CF were established in 1993. The CF was established by the Maastricht Treaty of the EU and CF centralizes the finances for large investments in the transport and environmental sector.

The CF is an instrument of the economic and social cohesion policy that provides financial contribution to the projects in the field of environment and trans-European transport infrastructure networks. Estonia received support in the amount of EEK 6.7 billion during the period 2004-2006 and is eligible for EEK 17.6 billion during 2007-2013. The Fund contributes to the strengthening of the economic and social cohesion in the MS and leads to the fulfillment of the convergence criteria. During the period 2004-2006 the CF was administered separately from the SF, but 2007-2013 the support allocated from the CF is part of the SF. CF helps to strengthen economic and social cohesion within the EU, aiming at reducing disparities between the levels of development of various regions and the backwardness of least-favoured regions in particular. The CF support is addressed to the MS, whose per capita gross national product (GNP), is below 90% of the Community average.

The projects financed by the CF should comply with the provisions of the Treaties be the tools for implementing policies concerning environmental protection, transport, trans-European networks, competition and the award of public contracts. The support from the CF is based on the co-financing. The minimal rate of the cost of projects, co-financed from this fund, is EUR 10 million as a rule and the aid, provided by the fund constitutes 85% of the project cost at the highest. Allocated finances are distributed equally between the environment and transport sectors. In Estonia mainly the building of roads, the modernization of ports and airports and the development of the water supply, waste water recovery and waste treatment infrastructures are funded from the Cohesion Fund. During the period 2004-2006, a supported project could not have benefit both from the CF and SF. The technical support may be financed at 100% of the total cost from the CF (based on the information from <http://www.strukturifondid.ee>, 15.11.2008).

ESF is the main instrument to support measures implemented within the framework of the European Employment Strategy and the annual Employment Guidelines. The support allocated by the ESF is coordinated by the European Commission's Directorate General of Employment, Social Affairs and Equal Opportunities. The initiatives are aimed at counteracting discrimination and inequalities on the labor market. Activities within the

framework of ESF should be targeted at preventing and combating unemployment and developing human resources and social integration into the labor market like supporting employment of the unemployed and young job-seekers, creation of new jobs and strengthening education and in-service training systems. The Fund supports the following:

- fight against unemployment;
- creation of equal opportunities (incl. equality of men and women) in the labour market;
- development of the skills, abilities and professional qualification of employees through vocational education;
- employment and job creation surveys and pilot schemes covering the entire EU;
- association of human resources with research and technology transfer;
- teaching teachers and instructors, establishment of connections between training centres and companies, development of higher and secondary specialised education relating to employment.

The ESF focuses mainly on support that people need in order to increase the employability but it may also help to improve systems and structures so that the labour market itself functions better. In the strategic objectives of the EU employment policy determined by the European Council, it was agreed that full employment would be achieved in the EU by 2010, which should be reflected in an employment rate of 70% (60% in the case of women). Particular attention must be paid to the role of vocational qualifications, mobility and access to lifelong learning, and the need to strengthen activities aimed at allowing women to combine their occupational and family functions. In the current situation, achieving full employment by 2010 is not realistic and measures should be taken to alleviate the increasing unemployment problem. Estonia received support in the amount of EEK 1.2 billion during the period 2004-2006 and is eligible for EEK 7 billion during 2007-2013 (see the ESF Estonian home site for further information at: <http://www2.sm.ee/esf2007/index.php?lang=2>, 15.11.2008).

The ERDF carries the task to support development of economic activities and infrastructure in MS and to balance the development of the different regions of the EU. Allocation of the resources from the Fund is allocated by the Directorate General for Regional Policy and Cohesion of the European Commission. Estonia received support in the amount of EEK 3.5 billion during the period 2004-2006 and is eligible for EEK 28.6 billion during 2007-2013.

The Fund supports activities concerning the following fields:

- investments in production in order to increase or preserve the number of jobs (investments, subsidies for partial coverage of loan interest, loans to small enterprises);
- construction or modernisation of infrastructure (transport, telecommunications, energy);
- local initiative and development of SMEs;
- counselling, market research and management services;
- innovation and technology transfer;
- improvement of access to capital markets (loan guarantees, increase of equity capital);
- capital support;
- development of research and technology relating to development of the labour market and human resources;
- preparation, monitoring and evaluation of projects;
- investments in the education and health care system in regions of Objective 1;
- investments in environmental protection (water and waste management)

(Based on information at <http://www.struktuurifondid.ee>, 15.11.2008).

The European Agricultural Guidance and Guarantee Fund (EAGGF) supports reorganization of agriculture and provides resources for rural-life development. The European Commission's Directorate-General for Agriculture is the coordinator of EAGGF support. Estonia was allocated EEK 888.7 million from the EAGGF. Supported fields are the mainly following:

- structural strengthening and reorganization of agriculture and forestry;
- elimination of conditions not suitable for production;

- development of secondary activities in rural areas;
- improvement of animal keeping and hygiene conditions, improvement of marketing and processing, improvement of the working conditions of farmers;
- establishment of sufficient living standards in farms along with improvement of the structure of buildings, investments in reduction of production costs and improvement of product quality;
- investments in the infrastructure of rural areas;
- environmental and landscape protection.

(Based on the information from <http://www.struktuurifondid.ee>, 15.11.2008).

The Financial Instrument for Fisheries Guidance (FIFG) has the task to contribute to attainment of the fishery goals of the EU. The Fund supports the following activities:

- coordination of activities in the area of fishery;
- modernisation of the fleet;
- restructuring, modernisation and update of the fishing fleet;
- protection of certain sea areas;
- modernisation of structures in fishing ports;
- production and marketing of fish products;
- improvement of fish processing conditions;
- advertising of products;
- discovery of new fishing sites, finding new markets;
- development of fishing ports;
- development of fish farming, marketing fish products.

(Based on the information from <http://www.struktuurifondid.ee>, 15.11.2008).

There have been various reforms over the history of the EU regional policy – substantively, the essence of the regional policy has somewhat changed at the beginning of each programming period. As a result of the reform of 1988, the present programming and partnership principles were established. According to the principles, the SF will be used

on the basis of long-term programs, and plans will be made and funds will be used in cooperation between the Member State, the region, the European Commission and the partners.

3.3. Operational programs for 2007-2013

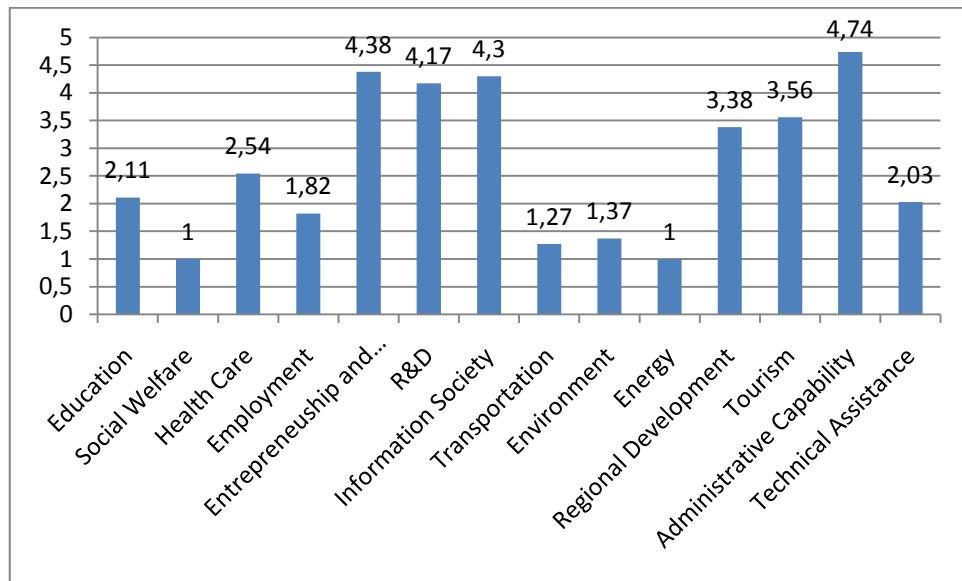
Implementation of the SF resources during 2007-2013 is based on the strategic document National Strategic Reference Framework. Three operational programs were prepared by socio-economic partners and the European Commission for implementing the strategy:

- 1) Operational Program for Human Resource Development;
- 2) Operational Program for the Development of Economic Environment;
- 3) Operational Program for the Development of Living Environment

The operational Programs together with the budgets of the operational Programs regarding the priority axes were approved by the European Commission. Estonia was allocated the SF resources in the amount of EEK 53.3 milliard, which is about twice as much per year than in the planning period 2004-2006.

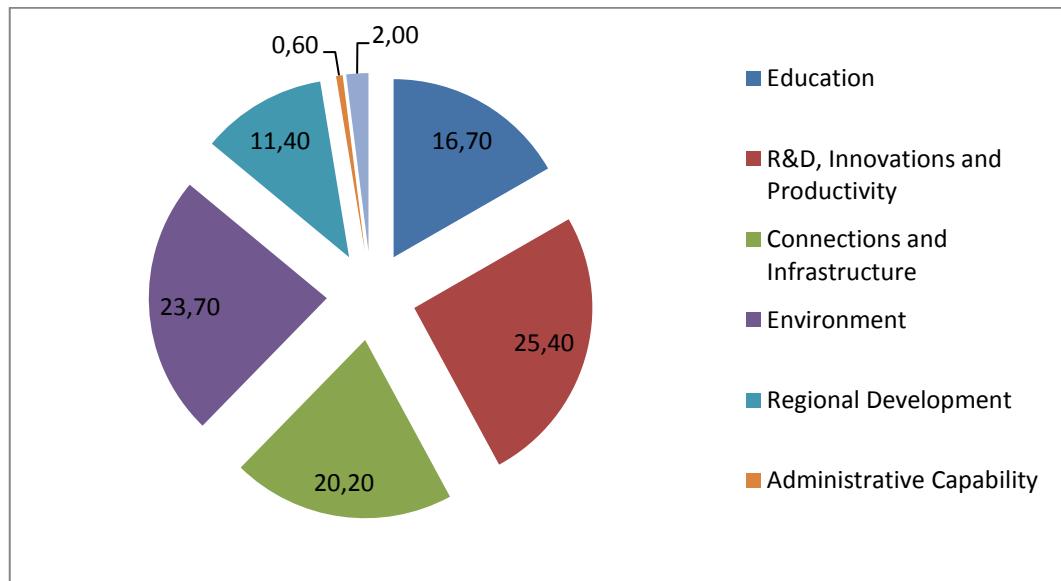
Figure 2

Increase in the SF resources allocated to Estonia in 2007-2013 compared to the planning period 2004-2006 by priority areas



Estonia is also eligible for EEK 12.5 milliard from the non-related funds for the development of rural life and fishery. A very general allocation of the SF resources by priority areas is the following:

Figure 3
SF resources allocated to Estonia in 2007-2013 compared, division by priority areas, %



Principles of implementation of the SF resources have stayed generally the same for applicants and final recipients:

Implementation is mainly project-based and a large portion of the support is distributed through

- open rounds of application (national investments and Programs are an exception);
- financing is based on the principle of compensation – thus, the final recipient must incur the all costs out of its own funds and a portion of the costs incurred will be compensated on the basis of expense receipts; this condition narrows the amount of possible recipients the most
- the applicant must usually contribute its own funds to the project – support is not usually given to the extent of 100%;
- property constructed or acquired with the help of structural support and project-related documents must be preserved for a prescribed period of time.

Operational Program for Human Resource Development

The operational Program for development of human resources for 2007-2013 has been made with the goal of planning activities promoting education, research and development, youth work, labor market, entrepreneurship and improvement of administrative capacity. All these measures contribute to movement towards knowledge-based economy and society. The activities are mainly financed from the ESF. Compilation of this operational Program has been coordinated and further implementation is led by the Ministry of Education and Research (MER).

The operational Program for development of human resources points out the following priority axes:

- Lifelong learning;
- Research and development;
- Development of human resources in higher education;
- Good-quality and long working life;
- Knowledge and skills for innovative entrepreneurship;
- Enhancing administrative capacity;
- Technical assistance activities.

The activities planned for implementation of the priorities of the operational Program based on the priorities of the National Strategic Reference Framework 2007-2013 such as “Educated and active people,” “Increase in the R&D capacity and in the innovativeness and productivity of the enterprises” and “Higher administrative capacity” but much more detailed as the three OP-s together contain about 80 measures.

For increasing the employability of employees, activities for creation and promoting of lifelong learning system, increasing the quantity and quality of learning opportunities, establishing flexible learning systems and improving the qualification system will be pursued in the area of education. Investments in raising the quality of youth work and conditions of employability of non-Estonian population in the labor market will be made.

Moving towards knowledge-based society and economy is supported by the area of R&D and higher education, where contributions to the development of natural and technical sciences are made and improvement of the qualification of employees and activities for developing an innovation-based economy are supported. For improving employability, measures for internationalization of higher education are taken, which ensures the mobility of students and teachers, modernization of the education system and an increase of education quality.

Unemployment and inactivity lower people's life quality and are cost-intensive for the state. Therefore it is necessary to invest in bringing people back to the labor market. For the purpose of increasing employment, activities aimed at increasing the supply of skilled labor have been planned. Attention will be paid to the improvement of the working life quality.

People's knowledge, attitudes, skills and mobility determine the competitiveness of business, because the competitive position of an enterprise in international markets depends on the skill of using new knowledge and technologies. For ensuring long-term competitiveness of Estonian companies, activities contributing to acquisition of knowledge and skills required for innovative entrepreneurship will be conducted in the area of business. Starting entrepreneur will also be supported.

Effective implementation of the measures set in the mentioned priority areas and transparency of the public sector are supported by increasing administrative capacity, where it is focused on the development of public sector organizations, non-profit associations and local authorities.

Operational Program for the Development of Living Environment

The operational Program for the development of the living environment sets out the following priority axes

- development of water and waste management infrastructure;

- Development of infrastructures and support systems for sustainable use of the environment;
- Development of energy sector;
- Integral and balanced development of regions;
- Development of education infrastructure;
- Development of health and welfare infrastructure;
- Horizontal technical assistance.

Estonia as a member of the EU participates in the regional policy of the EU, being eligible for support from the SF, which carry the task to achieve the convergence goal. Operational Program for development of the living environment for 2007-2013 directs the use of the resources of the ERDF and the CF, mainly conducting the support of areas of environmental protection, energy, local and regional development, education and health care and long-term nursing. This Program is based on the development plans of the involved ministries (the Ministry of Education, the Ministry of the Interior, the Ministry of Economic Affairs and Communications, the Ministry of Education and Research, the Ministry of Social Affairs) and the development strategies of the relevant areas. Representatives of the ministries, implementing agencies of the SF and social partners (associations of local authorities, non-profit associations, etc.) were involved in the work groups and steering groups of preparation of the plan. The operational Program for the development of the living environment underwent public commenting, pre-evaluation and strategic environmental assessment.

Operations in the area development of the water and waste management infrastructure will be concentrated on securing the required supply of drinking water and improvement of the status of water bodies, including construction of the water protection infrastructure and liquidation of pollution sources threatening the quality of ground water. Upon development of waste management, the main efforts will be made to decontaminate oil shale waste dumps and to construct new environmentally friendly industrial and municipal waste landfills. Old environmentally hazardous landfills will be closed or ameliorated.

The priority axis water and waste management infrastructure development is co-financed from the CF in the total amount of EUR 626,334,156. The priority axis development of the infrastructures and support systems of sustainable use of the environment covers different environmental protection activities: development of the environmental education, improvement of environmental monitoring and supervision, activities of preservation of biological diversity of nature and improvement of the readiness for environmental emergencies. This priority axis is co-financed from the ERDF in the total amount of EUR 92,032,774.

The priority axis development of the energy sector is aimed at making the use of energy more effective and environmentally friendly. Broader use of renewable energy sources and protection of ambient air are supported; saving energy in distribution networks and by final consumers, including the housing sector is promoted. This priority axis is co-financed from the ERDF in the total amount of EUR 87,175,488.

The priority axis integral and balanced development of regions is aimed at satisfying the needs concerning balancing regional development in Estonia. Three types of activities are conducted: development of local public services aimed primarily at improving living conditions in rural regions; solving the problems of urban areas and strengthening the competitiveness of all regions. In the case of all these activity types, one of the focuses is on increasing cooperation between rural areas and cities. The priority area of local development is co-financed from the ERDF in the total amount of EUR 388,582,823.

The priority axis of development of the education infrastructure is concentrated on activities related to the modernization of vocational schools, schools for children with special educational needs, open youth centers and hobby schools, information and counseling centers. This priority axis is co-financed from the ERDF in the total amount of EUR 212,765,713.

The priority axis development of the health and welfare infrastructure includes activities for modernization of acute and nursing care hospitals and state welfare institutions for children and people with special psychiatric needs. The priority axis of development of health and welfare infrastructure is co-financed from the ERDF in the total amount of EUR 169,110,222.

Horizontal technical assistance is co-financed from the ERDF in the total amount of EUR 2,759,833.

Operational Program for the Development of the Economic Environment

Due to the new challenges arising from the enlargement of the EU (EU) and globalization, development of the knowledge-based economy and society has become essential for increasing the competitiveness of the state. Changes in the demographic processes considering better life quality, attainment of long-term competitiveness, growth of productivity and strengthening social cohesion are main priorities regarding the growth-potential of the economies of the NMS.

In 2007 the use of the Estonian state budget and the use of the SF of the EU have been planned jointly in order to more successfully implement the policies determining Estonia's social and economic development. The NSRF for 2007-2013 included in the State Budget Strategy (SBS) 2007-2013 details a strategic approach to activities in the areas eligible for the SF. The compilation and implementation of the operational Program for the development of the economic environment is led by the Ministry of Economic Affairs and Communications (MEAC).

The operational Program for development of the economic environment covers the following priority axes:

- Supporting the development and productivity growth of enterprises;
- Supporting the development of the R&D and innovation capacity;
- Development of the creative industry;

- Development of national R&D Programs aimed at long-term economic development and initiation of national Programs in the priority areas;
- Development of the transport infrastructure of domestic as well as international routes; Development of the information society.

The areas related to the respective operational Program focus on implementation of the priorities set by the National Strategic Reference Framework like “Increase of the research and development capability and the innovation and productivity growth of businesses,” “Better communication”, “Sustainable use of the environment” and “Integrated and balanced development of regions.”

In order to achieve a higher employment rate, increase productivity and attain sustainable economic growth in the EU, it is important to make contributions for developing a competitive business sector. Therefore it is extremely important to ensure and improve product and service quality and safety in order to increase export potential. This operational Program includes also activities developing the tourism sector and creative industry. Tourism plays a considerable part in the overall economic development in Estonia. Culture and creativity are a new input in developing the creative industry and tourism sector, which have become highly valued just recently. Activities for making the economy more unique and increasing its competitiveness are worked out in the framework of the creative industry.

One of the important prerequisites for achieving sustainable economic growth is an effective and safe transport system. The transportation investments are of strategic importance and activities, which would increase or improve the possibilities of connection, operational efficiency of enterprises and people's work, are under focus in this OP. On the other hand, an essential prerequisite for participation in a knowledge-based society is citizens' and enterprises' access to the Internet and to other ICT solutions.

The areas in the given OP depend on each other's development and the effectiveness of activities for developing enterprise, R&D, transport infrastructure and information

society. All these fields strongly influence the progress towards sustainable economic growth.

In order to achieve the goals, it is important develop the cooperation networks and share knowledge about the best practice and experience during the periods of programming as well as implementing the OP-s.

3.4 Current Situation and Problems in the Priority Areas

The current sub-chapter is based on the information provided in the OP-s and at Estonian website <http://www.struktuurifondid.ee> about the situation in every priority area. The description of the circumstances considering the strengths and weaknesses in every supported field is given. The main problems are pointed out. The measures to resolve those problems are described and evaluated in the next chapter. Thus the current chapter serves as a basis for evaluation of the efficiency of the measures set by the OP-s to improve the situation in the priority areas with the use of the EU SF resources.

Energy economy in Estonia has depended mainly on the mining of domestic oil shale and its' processing. Oil shale has been the dominant energy resource in Estonia and during the Soviet occupation powerful industry was developed in Ida-Virumaa (an Eastern-Estonian region beside the Russian border). Now more than ever before, attention must be paid to the employment of renewable resources of energy and energy economy. The main positive aspects of extensive use of oil shale include the state's energetic security of supply and little dependence on the prices in the world market but the negative aspect lies in extensive environmental damage both upon mining and using oil shale as well as the low calorific value of oil shale. There must be kept in mind that oil shale is not renewable and reserves of the oil shale will end up during the next eighty years if not before. Energy economy is supported from the ERDF with EUR 87.2 million.

The effectiveness of using energy is low in Estonia. There are no large hydro power plants and over 90% of the electricity is produced by condensation power plants, which efficiency is evaluated to be approximately 30%. The efficiency indicator of the energy sector is also reduced by losses in power and distant heating networks, the small share of combined production of electricity and heat, and export of transformed energy. Estonia also experiences difficulties in meeting the requirements set by EU legislation on the energy use in housing stock. Since blocks of flats built between the 1960s and 1980s account for 70% of the Estonian housing stock, the large share of the stock needs special attention from the point of view of increasing energy efficiency. According to expert opinions, it is possible to increase the energy efficiency of at least 20-30% on average if the blocks of flats were properly reconstructed and renovated. This could save Estonia up to EEK 0.5 billion a year on the whole but especially in rural areas and small towns, the apartment blocks decay and even become inhabitable due to the lack of money for reconstruction.

Heat production has also been affected by the changes in Estonian society over the last decade. In comparison with 1991, the production of heat has decreased by approximately 2.4 times and stabilized at a level of about 10 TWh a year. The first problem of the Estonian thermal energy sector lies in heat networks, which do not correspond to the present consumption and huge losses. The estimated average calculated network loss is over 15% (in Finland approximately 6% for example). The possibilities of saving energy are considerable when it comes to production and transmission of electricity and heat. In recent years major investments have been made in the energy sector for the purpose of complying with stricter environmental requirements, attainment of energy efficiency and improvement of reliability.

The main problems in the field of energy economics can be summarized by the following:

- The structure of the capacities of production of electricity requires rationalisation (dispersion, coverage of peak loads).
- Combined production of electricity and heat is of minor importance.
- Renewable energy sources are of little importance.

- Little attention has been paid to developing electricity efficiency.

According to the current situation, the following key goals in the field of energy economics are set by the strategic documents:

- growth of the share of renewable energy sources in the energy balance;
- increasing the use of alternative transport fuels annually;
- reduction of emissions of air pollutants by the energy system;
- the housing stock has been made more energy efficient.

Entrepreneurship, initiative and creativity are not sufficiently valued in Estonian society yet due to the long planned-economy period under Soviet occupation. People's modest business experience and contacts with business, as well as little knowledge thereof, and a weak business culture reduce the number of potential entrepreneurs. The improvement of knowledge and the development of skills is a prerequisite for an innovative and enterprising environment. This field is supported from the ERDF for the enhancement of the competitiveness of the entrepreneurial environment and ESF for the development of knowledge and skills necessary for innovative entrepreneurship with EEK 501.1 million.

Division of companies by areas of activity has been relatively stable over the past years by the number of employed, manufacturing is way ahead of other sectors, employing almost a quarter of people. The sector of accommodation, catering and business services is the second largest in terms of the number of employed. Over the last five years the number of the employed has decreased in agriculture, transport and communications, mining, energy and slightly in retail trade. There will be seen in the next few years if the crisis will change the sectoral division of Estonian companies. The construction sector and the related sectors are mostly affected by the fall in terms of closing companies and lowering production volumes.

Although the productivity has increased on average by nearly a tenth annually and the value added generated in business has increased by a third during 2005-2007, the productivity of Estonian companies remains considerably below the respective indicators of the

developed Western countries, amounting to the about 58.6% of the average productivity per employee in the Member States of the EU. The achieved international competition position is mainly based on cheap production inputs but it will probably change in the next decade. The value added is divided very differently by diverse branches of the economy. Only sectors such as telecommunications, financial intermediation, air transport, electricity, gas and water supply, the generated value added exceeds the Estonian average but a large part of labour force in Estonia is engaged in sectors of relatively low value added.

Only 11.7% of all enterprises were exporters in 2005 and the share of export in the total turnover has decreased in recent years. The rise internal demand is temporary and a subject to cycles, thus enterprises should pay more attention to insuring their position in the markets abroad. Low productivity, small production capacities, high risks and high irreversible costs pose an obstacle to enter into foreign markets. To increase export volumes the companies must move from subcontracting to activities generating higher value added and to outsourcing subcontracting.

Low investments in R&D and innovation are characteristic of Estonian companies. The R&D investments of Estonian companies accounted only for 0.36% of the GDP in 2004 in comparison with 1.22% of the EU average. Various surveys indicate that the services rendered by Estonian science and technology parks to their tenant enterprises and the physical infrastructure require considerable development to provide the tenants with maximum value added. The numbers of creation of jobs and turnover growth remain below the European average, referring to the need to increase the number and quality of infrastructure and business development services provided by the parks, taking the needs of the target groups into account.

Tourism accounts for nearly 8% of GDP in Estonia and employs about the same proportion of people. In terms of export of services as well as regional business the tourism sector plays an important role in the Estonian economy.

The Estonian tourism sector has several shortcomings. Most of the foreign visitors are visitors from nearby states who are making a short-term trip (1-3 days). Short-term stay of tourists in Estonia can be attributed to the lack of interesting services, poor diversity and lack of information about places of interest and possibilities of spending leisure time, which would motivate foreign tourists to stay in Estonia longer. The very high dependence on the Finnish market (over 50%) is a serious risk factor.

The creative sector and policies targeted to its development have not been established in Estonia yet. About 3% of the working population are engaged in the creative industry. Creative enterprises or enterprises relating to the creative industry account for 6% of the total number of enterprises and these are mainly micro enterprises.

The main problems in the entrepreneurship sector may be summarized by the following:

- limited access to the start-up and investment capital, low productivity;
- weak strategic management of the small enterprises and little involvement of the employees in the work of the enterprise;
- clustering of enterprises, including tourism enterprises around Tallinn and other larger centres, the unsatisfactory situation of the infrastructure required for business in other regions;
- little cooperation between enterprises themselves and enterprises and the R&D institutions, which brings about little knowledge and technology transfer;
- little export capacity of small enterprises, insufficient knowledge of internationalisation and a weak international market position;
- low entrepreneurship, innovativeness and creativity of the population, society's disapproval of entrepreneurs;
- little awareness of Estonia as a travel destination and reputation in Europe and in the entire world;
- seasonal character and large regional differences in demand for tourism and strong dependence on short-term visits
- little awareness and development of the creative industry;

The following key goals are set in the field of entrepreneurship:

- Estonian enterprises have access to capital required for making investments aimed at increasing productivity;
- successful internationalisation of Estonian enterprises;
- technological update of enterprises and growth of their development capacity and productivity;
- successful transfer of knowledge and technology;
- supporting the development of the creative industry;
- competitive and sustainable development of the Estonian tourism sector
- knowledge of business and innovation is widespread and easily available.

The greater **administrative capability** is supported from the ESF by 20,6 million euros. The efficiency of the public sector and non-governmental sector is of great strategic importance. Poor administrative capability, the constantly increasing expenses of the government and excessive bureaucracy have been Estonia's weaknesses so far. Hence this field will need stronger emphasis.

About 28,000 state and local authority officials are in public service at the time in Estonia.

The staff turnover in Estonian public service is high in comparison with other Member States of the EU and does not support the goal of a stable and sustainable public sector. Therefore, it is necessary to support mapping and guiding the development of human resources in public governance. State and local authority officials and employees of the authorities administered by them account for approximately 14% of employment in Estonia.

The non-profit sector is becoming more organized and the non-profit associations have become reliable partners for the public sector in policymaking and planning strategic developments.

Strategic planning and management capacity and the ability to cooperate are modest in the Estonian public as well as in non-profit sectors. A good example is the high number of

strategic documents and political Programs. There are over 100 valid strategic documents approved by the government or the Riigikogu in Estonia, which are not always in compliance with each other or adequately covered with funds. The hierarchy of the strategic documents is unclear and there is often no supervision of the performance.

Developing impact assessment and analysis capacity is important to achieve their effectiveness. In addition to increasing the capacity to coordinate the public policy, it is important to support independent policy analysis outside governmental authorities.

Better legislative drafting is of key importance upon improving business environment as well as the overall functionality of public governance. Estonia's legislation has largely been developed while adopting the *acquis communautaire* when the pressure of time was very strong in legislative drafting. Therefore, the administration has not had enough resources or time for introducing involvement practices or ensuring the simplicity, understandability and security of implementation of legislation. The quality of public services provided by the public sector and cooperation of organisations upon provision of public services need improvement. Since management and liability have been decentralised in public service in Estonia, the budgetary funds foreseen for developing the special skills of civil servants should largely be used for improving the knowledge and skills of civil servants. It is wise to plan and lead development activities, which have a horizontal impact on the target group of civil servants and support the development of the management quality of the state on the whole, incl. ensuring better availability of public services at the national and local level.

The main problems in the field of administrative capability may be summarized as follows:

- There are many strategic development plans, which are not related to each other
- The development of inspection, monitoring and assessment systems is not integrated;
- Legislation (including administrative burden) is not systematic or sufficient;
- Non-profit associations are not sufficiently involved in the process of policymaking.
- The management capacity of state and local authorities varies. Quality management systems and environmental management systems are rarely used.

- High staff turnover (including a high share of people who quit service in the first year) and a large share of new civil servants, which can be attributed to the expansion of the administration of the SF
- The information system of SF needs further development in order to support implementation of the Programs of the programming period 2007-2013.
- The following key goals are set in this area:
- increasing the efficiency and effectiveness of policymaking and implementation
- increasing the competency and reliability of the civil servants and employees in the non-profit sector.

Education is the prerequisite for ensuring long-term development. For this purpose, the educational system must be adaptable. Everyone must be guaranteed the possibilities for access to education and learning in spite of their age, nationality, place of residence, social and economic situation or special educational needs. This field is supported from the ESF with EUR 269.2 million.

The share of people aged 25-64, who have acquired at least secondary education, is the highest in Estonia among the EU member states. But while regarding the age group 20-24, Estonia's position is only better than that of Latvia and Denmark. Acquisition of secondary education by young people of this age group is very important in terms of the future. Secondary education is the prerequisite for achieving higher education in the future in order to increase one's competitiveness in the labour market. Therefore, more attention must be paid to discontinuance of studies, because if one drops out of secondary school, it may not be easy to continue the studies at an older age.

The share of adult learners in Estonia is still too low – according to the survey conducted in 2006, only 5.9% of people aged 25-64 participated in adult education. Although the average of the EU has continued to increase in recent years, the respective figures in Estonia have fallen. The existing vocational qualification system must be developed in order to promote life-long learning and associated more with the needs of the labour market. The underlying reasons of the problems of vocational education in Estonia are

very complex. For a long time, vocational education was morally and materially undervalued in the society, resulting in negative attitudes towards vocational education and those students. Investments into vocational education have been impermissibly small over the last decades. As a result, the study environment does not correspond to modern requirements. The main concern is that Estonian labour market is out of structural balance - while there is lack of specialists like engineers, electricians, solderers etc, the unemployment rate in risk groups (young people, the long-term unemployed, non-Estonians) is very high.

The main problems concerning educational aspects in Estonia are the following:

- Dropping out of the general education and vocational education system is high among the youth.
- The output of the education system does not comply with the needs of society and the labour market.
- The in-service training and motivation system of teachers and school managers does not support the professional development of teachers sufficiently.
- Little participation of adults in education.
- The access to possibilities and student preferences according to studies may be affected by the area of residence, the socio-economic situation of the student, special educational needs or other factors, which increases inequality.
- Lower competitiveness of non-Estonians in the labour market.
- The infrastructure of schools is in bad condition and the investments allocated to schools have not helped to modernise the infrastructure of the schools or establishment of an academic and non-academic environment, which would meet the requirements.

The following key goals are set to alleviate these problems:

- Higher participation in lifelong learning according to abilities and needs.
- Studies in the general and vocational education system are of a high level and meet the needs of students and society.

The development of **information society** is at present undoubtedly one of the essential factors influencing economic growth, employment and people's behavioural habits. Thus evolving the principles of functioning knowledge-based economy, the good-quality operation of the public sector and the effective involvement of all citizens into the organisation of community life are especially important for Estonia as a small country with limited human resources. Estonia is one of the leading countries in the EU and partially also one of the leading countries in the world in terms of introduction of information and communications technology and development of the telecommunications network. People's level of knowledge and skills in infotechnology has contributed to the rapid development of ICT over the last decades. The promotion of information society is supported from the ERDF with 62,6 million euros.

Upon transition to the information society, Estonia has made considerable progress in the last decade. The communications network is well-developed and the availability of the Internet is almost one of the best in the EU. 90% of Estonian people live in the areas where broadband connections are available and where there is a well-developed WiFi network. Most schools, public sector institutions and companies in Estonia have Internet access. The network of public Internet points covers the entire territory of Estonia.

Information technology solutions of the private sector are at a good level, large share of the population are well familiar with internet banking and mobile applications. State portals are also available. Another positive aspect is that Estonia has the largest public key infrastructure in Europe, which is based on the use of certificates transferred to the identity card.

However, there are serious signs of a digital divide. The problem lies in the availability and quality of the Internet in various geographical regions, especially in border regions, islands, other market disturbance areas and among social groups who are worse off, as it is difficult for them to access the information society. Less than a half of Estonian households have the Internet connection at home (the use of computers is 47% and the Internet 36% at households), however the need for it is higher in rural areas where the

density of population is lower, distances are longer and the availability of services is more difficult. Using computers and the Internet is different in different sociodemographic groups. Age, education, place of residence and income greatly influence the use of a computer. Nearly two-thirds of those who do not use the Internet, especially older people and skilled workers, lack motivation to use ICT solutions, because there is too little information on the Internet that is of interest to and necessary for them and thus they do not associate the Internet with their life.

In spite of rapid economic growth, Estonia holds the third worst position in terms of productivity in the EU. Using ICT allows companies to increase productivity considerably but introduction of new technologies also requires readiness to change work processes, business and management models, as well as the way of thinking. Although the state and banking and telecommunications enterprises have changed their processes through the ICT and thus maximised their profits, the possibilities of SMEs in using ICT solutions in their key processes are a lot more limited. In many occasions, the Estonian SMEs are unable to take advantages that successful exploitation of the ICT would offer.

In sum, the following main problems may be pointed out in the ICT area:

- The competitiveness and productivity of the ICT sector are low.
- The share of young people choosing ICT studies at university is declining.
- The number of Internet users and home computers is low in comparison with the Nordic countries and the EU average and also in comparison with the availability of the Internet in Estonia.
- The organisational ability to cooperate does not correspond to the principles agreed on in the framework of the IT strategy of the state.
- People's awareness of the possibilities of the information society is low.
- Enterprises use little information technology solutions in their key processes and are not able take the advantages of the ICT solutions in order to increase productivity.

The following general key goals are set in this field:

- Each member of society leads a healthy and happy life, taking advantage of the possibilities of the information society in every way and participates actively in public life.
- The public sector is person-centred, transparent and efficient.

Environment protection is an important field especially from the point of view of the future generations. The field of water economy and waste management is supported from the Cohesion Fund. ERDF finances the development of infrastructure and support systems designed for the sustainable exploitation of the environment. The ESF supports the development of environmental protection. Environment protection is supported altogether with EUR 718.4 million.

The main polluters of ambient air in Estonia are energy and industrial enterprises, means of transport and, and to a lesser extent, agriculture. Ambient air pollutant limits are exceeded in Estonia primarily in Harju and Ida-Viru Counties, which are traditionally the areas with most concentrated industrial complexes. Although the condition of ambient air is still good, considering the small size of Estonian economy and population, the amount of pollution needs to be reduced. In comparison with the EU average, Estonia emits almost twice as much pollution per capita.

Estonia has a serious problem with insufficiently treated waste water, which is discharged to bodies of water primarily due to depreciated waste water treatment plants and pipelines. In spite of the reduction of the achieved pollution load only 65% of all bodies of water in Estonia were in good condition in 2004. In addition, various natural bodies of water have become “strongly changed bodies of water” in the course of prior land improvement work (rivers have been dug straight, the water level of lakes has been decreased). Although the condition of groundwater is good in Estonia, attention must be paid to the sources of residual pollution (sites of dumping the oil shale industry’s waste such as fly ash, semi-coke, etc., old asphalt concrete plants, oil residue storages), which continue to threaten surface water and groundwater. Estonia is also in the forefront considering quantity of

waste generated per capita mainly owing to our oil shale energy and oil shale chemical industry.

Estonia's forest resources have great potential in developing bio-energy. There are plenty of forests for obtaining wood as well as providing other benefits and that forest owners are quite active in managing their forests, which may be considered Estonia's strength. The sector's weakness lies in low profitability. Also sustainable management of forests is quite limited due to lack of awareness and joint activities by forest owners.

Estonia is quite poor by the diversity of mineral resources. The most important mineral resource is oil shale. The main environmental impacts of mining oil shale include a decrease of the level of ground water, spoilage of landscapes caused by mining and caving-in of ground above underground mines. Estonia is the world's third or fourth largest exporter of peat. There are difficulties with ensuring rational and ecologically advisable use of peat mines. According to the national register of mineral resources, there are over 8,000 ha of deserted peat mining areas where less profitable layers have not been extracted or the production areas have remained uncultivated since Soviet rule.

In comparison with several states in the middle of the EU, the diversity of nature has been relatively well preserved in Estonia. Estonia has considerable populations of large game (bear, lynx, wolf, etc.). 16% of mainland is covered with protected areas. One of Estonia's characteristics and riches is the cultural landscapes but their condition has worsened over the last decades. The areas of alvars, wooded meadows, flooded meadows, coastal meadows and wooded pastures have decreased considerably. Swamps constitute an important part of Estonian natural landscape. Unfortunately, most of them are not in a natural condition anymore. 2/3 of the swamps, which once covered over 20% of the territory of Estonia, have been or spoilt or destroyed by today.

In order to achieve or preserve the good condition of an environment, it is necessary to monitor and assess its changes, factors and trends.. The main source of obtaining the environmental data is environmental monitoring. Collection, processing, keeping and disclosure of environmental touches upon most international treaties and laws regulating

the area of environmental protection. More attention has been paid for readiness for environmental emergencies. The highest risks causing natural disasters in Estonia are storms, floods of coastal areas caused by them and floods caused by excessive precipitation (rain, snow). The most serious and frequent threat of causing an emergency is a forest fire (forest and peat fire).

The successfulness of environmental supervision and taking measures to improve environmental protection largely depends on cooperation between various institutions. Here the Environmental Inspectorate has the leading role as an environmental supervision institution. Cooperation has been developed with other state authorities, authorities organising environmental protection and local authorities. Environmental supervision exercised by the state plays an important role upon supporting the development of environmental supervision. Besides daily cooperation and instruction, the Environmental Inspectorate also conducts training for environmental employees of local authorities.

The following problems in the area of environmental protection may be pointed out:

- Growth of air pollution due to the increasing number of means of transport
- Ambient air does not comply with environmental standards in Tallinn or Ida-Viru County, which are the most industrialized regions
- The condition of bodies of water requires improvement
- All inhabitants cannot be provided with drinking water, which complies with the requirements
- Oil shale processing residues pose a threat to groundwater
- There are a few landfills, which comply with the environmental requirements; non-compliant landfills need to be closed and recovered
- Little attention is paid to prevention, reduction and reuse of waste
- Lack of organisation and professional counselling services of forest owners
- Little attention is paid to improving the condition of fish resources
- The infrastructure of nature protection requires development
- Little attention is paid to environmental management and availability of environmental information

The following key goals are set to improve environmental protection considering priority: development of the water and waste management infrastructure:

- Increasing the share of people provided with municipal water supply and improving the drinking water quality in order to be in compliance with the requirements
- Improving the condition of bodies of water
- Main residual pollution sources in former military and industrial areas are localized
- Bringing all oil shale industry and energy waste deposits into compliance with requirements
- Closing all municipal waste landfills, which do not comply with environmental requirements
- Ensuring handling of waste to be in compliance with requirements and increasing reuse of waste

Regarding priority: development of infrastructures and support systems for sustainable use of the environment, the following key goals considering environmental protection are set:

- Ensuring a favourable nature protection condition of endangered species and habitat types
- Establishing environmental education support centres in all counties
- Developing a monitoring framework of the living environment in accordance with the common European principles
- Increasing the capacity for detection and elimination of marine pollution
- Decreasing the pollution load on the environment arising from emergencies
- To ensure sufficient supervision of fishing

Balanced **regional and local development** is an essential pre-requisite for social cohesion.

The structure of Estonian society is being transformed. While 15 years ago a substantial part of the employment in the rural areas was tied to agriculture, today the importance of this sector of the economy has decreased as in most developed countries. Despite additional jobs in other sectors of the economy, the rural areas are at present

characterized by continuously low employment figures. Regional development is supported from the ERDF with EUR 338,1 million.

Differences in regional welfare indicators and conditions of business are large in Estonia.

The process concentration of the population and economic activities in larger centers and their periphery continues. A problem of urban sprawl expressed in the relocation of population from an urban centre to an agglomeration as well as in the growth of territories used by production and trade units in green areas near the city has occurred in Estonia. Expansion of construction activities to the periphery of cities is largely inevitable but it has occurred very rapidly and uncontrollably in Estonia. This results in unplanned land use, overload of infrastructures required for provision of local public services, impaired development of public suburban recreation areas and strong growth in transportation problems.

Also extensive daily commuting to work in county centers, sometimes also longer commuting from various counties to Tallinn, has developed. One of the key factors causing migration of labor from rural areas is the absence or poor condition of educational and health care services. Thereby the quality and availability of education is of vital importance.

Low unemployment rate despite of very low income rates in some rural areas, including the high portion of those who are not active at the labor market, clearly refers to failure to take advantage of the existing human resources. There are several problems considering labor market in the rural areas like structural diverse between the needs of the labor market and the labor supply, low entrepreneurship and modest creation of jobs, the large share of inactive people arising from long-term unemployment and low quality of labor force, limited spatial mobility of labor force or other factors arising from the structural specifics of the economy of the area.

The main problems considering balanced regional development are the following:

- Poor quality of education in the rural areas

- Problems with the transport infrastructure, exhaustion of the capacity of transportation nodes and connecting roads
- The poor quality of infrastructure providing services aimed at preventing and alleviating social problems and in certain areas (cities of Ida-Viru County)
- The lack of places in nursery schools
- Employment in rural areas is still relatively low and inactivity is high
- Labour force and young people continue to leave rural areas
- There is a spatial unevenness of satisfaction of people's basic needs and public services
- The network of regional competence centres is insufficiently developed in Estonia.

The following general key goals are set in this priority area:

- Improving the availability and effectiveness of use of public services in all counties
- Increasing the attractiveness of public urban space, which allows for a better living quality
- Increasing the attractiveness for investors, qualified labour and visitors

In the area of **research and development**, Estonia needs to elaborate a competitive research and scientific infrastructure. Increasing the capability of the research and development activities, a new generation of engineers and scientists needs to be educated. The development of the human resources for the research and development activities is supported from the ESF and the competitiveness of the research and development activities is enhanced by the modernization of scientific and higher education Programs and institutions from the ERDF with EUR 413 million.

The share of Estonian research and development investments in 2004 was 0.88% of GDP, which is more than twice smaller than the EU average. An insufficient working environment and a lower wage level do not promote concentration of labor force in research and development and do not help to prevent the emigration of well-prepared specialists. Natural and technical sciences have been strongly under-financed in Estonia. More attention should be paid to the availability of highly qualified employees. For example, the completion of doctoral studies has been only 40% in the average at Estonian

universities and 35% of the employees with doctorate degree are in the retirement age or reach the retirement age within five years. It has been noted that states should contribute to increasing the level of education of their labor force in order to cope with problems of employment.

In the situation of sectoral unemployment and a strong decrease in the number of young people in Estonia, it is important to involve top foreign specialists in the research and development activities and labor market of the state. Universities have begun opening master's Programs in English and launched cooperation with foreign universities for introduction of joint study Programs. But developing human resources is not enough – research and development specialists also need an attractive working environment and working conditions, which support high-quality research and applied research. Deficiencies of the physical infrastructure and lack of equipment are serious problems.

There are currently ten centres of excellence in Estonia, which produce approximately 50% of the research articles in Estonia. The state's investments in R&D and infrastructure of higher education have been small and limited to only single objects, thereby solving only emergencies (repairs, stopping further deterioration). The current level of financing by the public sector has not been able to regenerate or modernise the infrastructure of R&D. Study laboratories are in very poor condition or do not exist at all.

The main problems in the area of R&D can be summarized by the following:

- Underestimating research and development as a national priority continues.
- R&D financing is over seven times lower than the average of the EU 25.
- Human resources for research and development are insufficient.
- Possibilities for international cooperation and participation in international academic life are limited.
- The demand of entrepreneurship for R&D is low, which results in little cooperation between enterprises and R&D institutions.
- Lack of motivation for cooperation with (international) institutions and enterprises.
- Little attention is paid to applied research.

- Low capacity in issues related to intellectual ownership and to management of research and development.

The following key goals are set for the future:

- A new generation of researchers and engineers required for knowledge-based society will be accrued.
- Quality of higher education will be increased, which also increases generating value added.
- Working environment of R&D specialists, R&D institutions and higher education schools will be modernized.
- International competitiveness of Estonian R&D and effectiveness of work of the centers of excellence will be increased.

The task of the **healthcare and welfare system** is to support the individuals' ability to manage and to create equal opportunities for all members of the society. There are people in society, who because of old age, health condition or other circumstances cannot participate in the labour market. Hence the healthcare and welfare system has an important role in increasing social inclusion and prevent or alleviate poverty and social exclusion. The field is supported from the ERDF with EUR 185,1 million.

Although the average life expectancy has increased year by year, the health status of the people of Estonia is still much worse than in many other member states of the EU and the length of a healthy life is more than 10 years shorter than the EU average. For instance, the death rate caused by blood circulation organs is on average 3.5 times higher, the death rate caused by malicious tumours is 1.3 times higher and the death rate caused by external reasons is 4.7 times higher than in the "old" member states of the EU. The average life expectancy amounted to 66.25 years for men and to 77.28 years for women in 2004.

Estonia has a well-functioning health care financing system. 94% of the population of Estonia had medical insurance in 2005. Extensive restructuring has been carried out in

the health care system, which has contributed to more effective use of the resources. A family doctor system covering the entire country has been developed, the number of visits made to the family doctors has doubled and the number of referrals to a hospital and hospitalization has decreased.

Welfare services and long-term nursing services have been treated as separate services due to different organisation and different sources of financing. Though, the target group of these services is largely the same (mostly people over 65 years of age). Thus it is necessary to develop integrated nursing and to coordinate the activities of service providers in a more efficient way. Also large regional disparities occur – regarding the present location of welfare institutions in Estonia, it is not possible to provide people with high quality, effective and equally available welfare services on the basis of the existing welfare institutions.

The main problems in the health care and welfare area can be summarized by the following:

- The length of a healthy life of an Estonian is over ten years shorter than the EU average
- The availability of nursing and medical rehabilitation services is not sufficiently guaranteed
- Regional disparities in provision of services are large. A person should be able to receive the service in his or her rural municipality, city or county.

The following key goals are set in this priority area:

- Better quality and availability of nursing and welfare services
- The infrastructure of active treatment lays the foundations for functionally integrated operation of hospitals
- Children and people with special psychiatric needs have better living, studying and working conditions

A good quality **transport** system is a key component of the physical, social and entrepreneurial environment responding to the needs of the modern society contributing both national development and international competitiveness. The strategically important transport investments are supported from the Cohesion Fund. The development of the

regionally important transport infrastructure is supported from the European Regional Development Fund, altogether with EUR 626,3 million.

Although Estonia's road network is relatively dense, its' quality and the roads' passing ability do not meet the modern requirements and expectations of users. In the recent years, the condition of the main roads (which largely belong to the TEN-T network) has been improved considerably but the quality of the road network is strongly influenced by the shortage of material and labour force as well as rapidly rising prices. The growth of traffic density has decreased road safety. The number of people injured in traffic accidents and the damage caused to society by such accidents is still high and continues to grow. 18% of all traffic accidents and 44% of all road deaths were registered on the main roads. Although the reasons for the situation can be found in the weakness of traffic management and supervision, it is of primary importance to re-build road sections that have become dangerous due to the growth of traffic volume.

After accession to the EU, the share of foreign carriers among the transit transport passing through Estonia has strongly increased. It has meant a considerable increase also in the workload of border crossing points, which are currently unable to process a sufficient amount of cargo. In 2005, 47 million tons of cargo was transported through Estonian ports. Transit accounted for 78% of it, i.e. 37 million tons, of which 79% were oil and oil products. Over 99% of cargo moves out of the country (westwards) through ports and only less than 1% comes in. Such transit is of a very high risk, depending largely on the economic policy decision of the Russian authorities. For managing transit risks, the ports must become able to process goods of a higher added value (container goods). The majority of the international cargo and passenger transport proceeds through the ports belonging to the state-owned AS Tallinna Sadam. Ports in private property such as Sillamäe, Pärnu and the Northern harbour of Paldiski have potential as well. In addition to the ports, also reliable navigation conditions for vessels must be created.

The airports of Tallinn, Tartu, Kuressaare, Kärdla and Pärnu and the heliport of Tallinn City Hall are open for international air traffic. In 2005 1.4 million passengers passed through

the Tallinn Airport, which is the maximum capacity of the airport. Compared to the year 2004 the number of air traffic passengers went up by 35.2%, i.e. growing virtually just as much as last year. The infrastructure of airports must comply with the requirements established in aviation and their modernisation must be in compliance with the growth of air traffic and its forecasts. The airport airside area and terminal of the Tallinn Airport will undergo reconstruction through 2007-2008, which will enable the airport to service up to 2 million passengers per year. In passenger rail traffic, the problem lies in the lack of investments, which affects the permitted speeds, safety, attainment of environmental related goals and the competitiveness of the country as a whole.

Public transport has also importance in order to alleviate the negative environmental impact arising from the growth in traffic volumes. The rolling stock of public transport suffers shortness of investments and the technical condition of the rolling stock is generally poor. The average age of tram and train wagons in Estonia is 20-30 years and the average age of county buses is 17 years. The poor technical condition of the railway infrastructure does not allow passenger trains to move faster than buses, as a result of which the advantages of railway transport cannot be utilized.

The main problems concerning the transport area, may be summarized by the following:

- The quality of connections and their capacity do not meet the present requirements or the expectations of users.
- The level of traffic safety is low.
- The attractiveness and reputation of public transport is low.
- The transport sector load exceeds environmentally friendly limits.
- There is too little integration of various policies and insufficient supervision of transport management.

Key goals in the area of strategically important transport investments are the following:

- Preserving the share of public transport
- Increasing the share of environmentally sustainable passenger transport

- Improving the safety and security of road traffic has improved

Key goals considering regional aspects of the transport infrastructure are the following:

- Improving the regional transport infrastructure has improved
- Ensuring the connection with islands through regional ports and airports
- Improving the safety of rail traffic

Improving the labour market situation is included in several priority areas but it has also been brought forth as a priority itself. Unemployment and inactivity decrease people's quality of life. In addition to the individual-level problems, it causes the state bigger costs in order to bring people back to the labour market. The field is supported from the ESF with EUR 112.4 million. The Estonian labour market now faces a problem of enormously increasing unemployment rate due to the economic crisis. The current situation could not have foreseen while strategic framework for implementation of the SF was elaborated. A serious problem is that unemployment in Estonia is largely structural – the educational level, skills and work experience of our labour force are not often in compliance with the needs of the labour market. In comparison with other member states of the EU, Estonia has a relatively low rate of participation in lifelong learning.

The supply of labour force is negatively affected by the average life expectancy, which is considerably shorter than the EU average. Following the average life expectancy in various social groups, deepening gaps in the case of a different level of education, income, place of residence, gender and nationality appear. For solving the problems of the risk groups, integrated provision of social care, health services and active employment measures hold an important position, because in certain instances it is necessary to resolve social problems, which hinder the usage of the employment measures.

The number of persons participating in active employment measures offered by the state, has so far been modest in comparison with the total number of the unemployed. Considering the active measures, in 2005 the unemployed were provided with training and vocational

guidance the most (14% and 13% of the unemployed, respectively). The given indicators are not sufficient for achieving the employment goal established for 2014 (72%). New labour policy measures must be taken and the efficiency of the current ones must be increased in order to lead the state out of crisis. More attention must be paid to the gender inequality in the labour market, which results for example in differences between the average hourly wages of female and male employees (25-27%), being one of the highest in the EU (EU average was 16% in 2005).

The main problems in the Estonian labour market may be summarized as follows:

- Extremely rapidly growing unemployment rates have become the most serious problem
- The unhealthy lifestyles of the working age population and the bad health status, premature deaths, growing risk behaviour among children and young people
- Insufficient availability of nursing services and welfare services supporting employment and little cooperation between the welfare and employment systems
- Many severe and fatal occupational accidents
- Participation of adults in different occupational training and retraining programs is small
- The number of persons participating in active employment measures in comparison with the total number of the unemployed is small
- High share of structural unemployment
- Gender segregation in the labour market and big wage differences between men and women
- Low administrative capacity of the Labour Market Board and the Labour Inspectorate.
- Little flexibility of employment legislation and little share of analysis-based labour policy measures
- Little use of flexible forms of work

The following key goals were set in the labour market area while completing the strategical documents:

- employment rate 70% by 2010 and 72% by 2014;

- employment rate of women 68.3% by 2010
- supply of the qualified labour has increased;
- the quality of working life has improved.

4. Evaluation of the Use of the Structure Funds Resources

4.1 Criteria for efficiency

There are certain priority directions defined in the OP-s, which are partitioned to several areas of intervention. The planned activities for obtaining the goals set for every priority axis are called „measures“. There are about 80 measures defined by the OP-s made for implementation of the National Strategic Reference Framework for 2007-2013 and for many measures, there has been no action taken yet to put the aims into practice. Thus the „measures“ are not separately evaluated but rather the activities taken considering every group of measures in the respective priority area are under observation and estimation (the description of the groups in measures in every field is included in the next sub-chapter; the total list of measures is available in Estonian at <http://www.struktuurifondid.ee/index.php?id=13840&highlight=meetmed#>). The operational Programs detail the activities financed out of the SF 2007-2013 and their financial plans. Three operational Programs were drawn up in Estonia (see the sub-chapter 2.3 for a more detailed description):

- Operational Program for Human Resource Development - This operational Program has been made with the goal of planning activities promoting education, research and development, youth work, labour market, entrepreneurship and improvement of administrative capacity. The activities planned by the operational Program support implementation of the priorities of the National Strategic Reference Framework 2007-2013 such as “Educated and active people,” “Increase in the R&D capacity and in the innovativeness and productivity of the enterprises” and “Higher administrative capacity.”

- Operational Program for the Development of Living Environment - This operational Program for development of the living environment 2007-2013 directs the use of the funds of the ERDF(ERDF) and the CF(CF) in the area of environmental protection, energy, local and regional development, education and health care and long-term nursing development.
- Operational Program for the Development of the Economic Environment - This operational Program for development of the economic environment 2007-2013 directs the development of the knowledge-based economy and, the growth potential of the NMS, attainment of long-term competitiveness, growth of productivity and strengthening social cohesion.

For estimating the efficiency of implementing the measures, almost the same methodology (with slight modifications) as in the Romanian case study (Erdődi 2008) will be used. Every group of measures will be evaluated considering the following four criteria:

- *Production externalities (PE)*: Does it bring about increase in the amount of input factors? Does it enable to attract new homeland or foreign investors? Does it help to increase the competitiveness of the region or even overall national economy?
- *Productivity externalities (WE)*: Does it bring about increase in the quality of input factors? Does it provide any additional productivity gains or returns to scales?
- *Complementarity (C)*: Are there any complementary actions taken to increase the efficiency of the intervention? Does positive synergy occur while implementing it together with other measures? Is the measure one systematic part of the overall strategy?
- *Efficiency (E)*: Does the measure match the criterion „Strengthening of the strengths“? Is there real competition ensured for the granting of funds by that project?

➤ Measure groups' contributions regarding every aforementioned criteria will be estimated in the following way:

- 1 = low;
- 2 = average;
- 3 = high;

➤ Then the arithmetic average will be calculated for every group of measures;

➤ That number will be weighted by the financial share of the group of measures in the total budget for the respective priority axis

➤ This gives the evaluation of the usefulness and feasibility of the planned activities for the priority axis.

The described methodology gives an opportunity for reflecting the author's personal views and should definitely be complemented by quantitative studies while enough time will be passed since opening the funds and data become available. Also new indicators may be developed on the basis of the ones used in this study.

4.2 Evaluation of the activities planned for implementation of the SF resources

This section provides an overview of the concrete activities planned to reach the targets set for the priority areas. For more objective evaluation results and in order to estimate the compatibility of the EU-level and state-level strategic aims, a short overview of the strategical issues regarding every priority axis on the EU-level is given. Then evaluation of the activities as described in the previous subchapter will be carried out. Also ex-ante evaluations for estimating the achievability of the aims and efficiency of the measures will be given for the areas, where enough objective information is available.

4.2.1 The “Energy” priority

- Activities related to the priority axis Energy obtained 2.7 of the 3 maximal points.

The priority axis “Development of energy sector” will implement the priority “Sustainable use of the environment” under the National Strategic Reference Framework 2007–2013. Supporting the development of renewable and alternative technologies (wind, solar, biomass) can give the EU the leading edge and thus strengthen its competitive position. Such investments also contribute to the Lisbon objective of ensuring that by 2010, 21% of energy will be generated from renewable sources. Concentrating investments in traditional energy sources to develop the networks, where there is evidence of market failure is also set as a target. These investments mostly concern the convergence regions, including Estonia. More efficient production and use of energy also contribute to the synergy between protecting the environment and economic growth, which often contradict each other.

While only 1% of the resources of the Cohesion Funds (CF) were given to innovative energy actions in the period between 2000 and 2006, more attention has been paid to the energy priority in 2007-2013. By sustainable energy projects, cohesion policy turns environmental challenges such as air quality, climate change and management of resources into opportunities for regional development by making regions and cities more attractive places to invest and work. The MS should do their best to use the SF resources for reducing production costs, improving regional competitive advantages and exporting regional eco-innovation (Interreg III C 2007). Renewable Energies (RE) have been defined as a main priority within the Cohesion Policies. Moreover, besides the master projects, a stronger focus is drawn on decentralized and smaller Programs, which are more suitable for innovative energy actions. Still, the wider use of SF for RE and Rational Use of Energy (RUE) actions is still hampered by various constraints. The following challenges are to be tackled to overcome these constraints (WIP 2008):

- Larger resources for the project developers to prepare complete and bankable project proposals.

- Better knowledge about energy issues within the management staff of Structural Fund Programs on regional level.
- Focusing Cohesion Policies on RE and RUE actions with clear and proven benefits for the surrounding region.
- Careful adaptation of OP-s in view to the overall supporting schemes for RE and RUE.
- Decisive targeting of SF Programs to the most vital sectors e.g. the creation of infrastructure required for bio-energy projects.

The group of measures (see planned activities for every priority axis and information about their target levels from appendix 1) indicators for introduction of renewable energy sources (like all measures in this priority axis) is largely aimed at the protection of environment. Introducing renewable energy sources is of great importance for the future considering Estonian current dependence of the oil shale energy. Combined production of heat and energy reduces costs for both – private consumers and enterprises and thus also contributes to the attractiveness of the business environment.

Developing environmentally sound technologies in the area of energy economies contributes largely to the significant aim of protecting the environment. The priority axis “Development of energy sector” will also contribute to business development by improving the living conditions of work force through healthier ambient air. The operations planned to promote the use of biofuels, especially sustainable motor fuels, will contribute to improving the environmental performance of the transport sector.

Regarding the regional aspect, energy conservation in housing will primarily improve the living conditions of the urban population. The share of block houses in total housing stock much is bigger in cities and the concentration of knowledge about applying for the SF resources is also much higher in the urban areas. Though, the housing blocks in rural villages are usually in much worse condition (most of them do not correspond to the requirements of safety) and would need investments more. As no national-level programs or programs targeted to restoring the dwellings in rural areas are launched (the apartment associations or housing associations must be active themselves in every detail), there can

be assumed that a large part of the housing blocks in the rural areas becomes inhabitable quite soon, and the gains from this measure could have been much bigger for all the society if restoring the housing blocks in rural areas would be the main target. In the OP, there has been pointed out that increasing of the energy efficiency of block houses will have a more positive effect on the economic situation of people with lower incomes as heating costs account for a greater share of their expenditures but the problem occurs considering the knowledge of people and thus their capability to apply for the support. Especially less educated people in the rural areas are not well-informed enough to gain from these measures.

Most of the measures in the energy priority area will be open for applications since 2009. Thus no projects have been completed yet and the ones just launched are at the initial level, which makes it impossible to complement the current report with a case-study in the energy field. While completing the OP, no major projects were planned on the national level but in co-operation by the Archimedes Foundation (see <http://www.archimedes.ee>) and Energy 4 Cohesion (see WIP 2008), a master plan for restructuring energy economy in the Estonian biggest island Saaremaa (the territory of which is 2992 km² and population 35076) was launched.

4.2.2 The priority “Capacity for innovation and growth of business”

- Activities related to the priority axis “Capacity for innovation and growth of business” obtained 2.53 of the 3 maximal points.**

Estonia as a very small economic unit needs to pay special attention increasing productivity through innovations and support internationalization of the enterprises. Support to science and technology parks and cooperation between enterprises and different research institutions is driven by the need to create local development hubs for innovative entrepreneurship. In facilitating access to capital, cooperation with other Baltic states and creation of pan-Baltic investment fund is being considered. But especially in cases of new

support initiatives, it has been foreseen that before a full scale Program would be launched, a pilot action would be carried out, testing the value added of the mode of public intervention and the overall strategic concept of the Program itself. Experimentation or piloting would start with testing and discussing the ideas for a new measure with all relevant stakeholders after which they would be tested on a limited number of beneficiaries within a limited timeframe.

The regional division of R&D activities is very uneven in Estonia. Currently, most of the R&D and innovation capable business are located in three main regions of Estonia – North-Estonia (the capital area), South-Estonia (mostly around Tartu) and North-East Estonia. Increasing and spreading the relevant awareness, skills and capacities of both business and research sector across different regions in Estonia.

The priority axis of innovation and growth capacity of enterprises is related to all the other priority axes of the OP for the Development of Economic Environment, as the efficiency of the state's activities in developing energy, transport and information society has a strong impact on Estonia's economic environment and economic competitiveness. All these priority areas are strongly dependent on the success in the R&D and innovation sector.

The priority axis "Innovation and growth capability of enterprises" is also related to the Community strategic guidelines "Improving Knowledge and Innovation for Growth" and "More and Better Jobs". The development of businesses and their internationalization are preconditions for job creation. This priority axis contributes to the objectives of the "Estonian Action Plan for Growth and Jobs 2005–2007", especially in the field of innovation and enterprise.

This priority axis should strongly contribute to the measures provided by axis "Quality of life in rural areas and the diversification of rural economy" of the "Estonian Rural Development Strategy" (MAK), which are aimed at ensuring employment in rural areas through the creation of non-agricultural jobs. The activities are aimed at achieving

regionally balanced economic growth are supplemented by the activities, which aim at developing the businesses valuing local resources and diversifying their activities.

The goals and activities of this priority axis are in compliance with the "Estonian Enterprise Policy 2007–2013" and the "Research and development and innovation strategy 2007–2013". Enterprise policy has been prepared in accordance with the EU's common development objectives described in the Lisbon strategy.

The development of business and tourism is very closely connected with regional development and contributes to creating new jobs, reducing social stress and improving the quality of life among the populations of all regions. Various measures for supporting enterprise and tourism are founded to create growth conditions for businesses located in less-developed regions. In the framework of tourism Programs, preference is given to projects aimed at expanding the geographical scope of tourism services, which are currently strongly concentrated in Tallinn.

The development of business and tourism means a heavier load on the environment. Structural changes in the economy and the employment of new technologies foster more sustainable use of natural resources help reduce waste and emissions to the environment and improve the recycling and utilization of waste. Though, it can be assumed that the direct impact of this measure on the environment is rather not friendly.

Business and innovation policies as well as tourism and creative industries measures will foster the development of ICT sector. It will be achieved by supporting ICT-based innovation in enterprises, creating better export possibilities for Estonia's ICT enterprises and using information technology to implement the measures of this priority axis, including taking action for improving the Estonia's image as a tourist destination).

The overall development of enterprise and the economy will help reduce unemployment and increase income at all levels of society, thereby indirectly contributing also to the development of equal opportunities. The increase in business activity is partly targeted to

people in groups, who are supposedly worse off such as women, disabled persons, immigrants, etc., whose potential has not been fully utilized to date. It is important to offer the less-privileged social groups equal opportunities for economic participation through the diversification of support measures. All activities increasing employment and creating jobs are of extreme importance in the current economic situation of the state. More attention should be paid to supporting non-profitable organizations operating in specific fields of the social sector, which would be able to become stable small employers but lack the initial capital for starting or expanding activity.

4.2.3 The priority “Administrative Capability”

- Activities related to the priority axis “Administrative Capability” obtained 2.3 of the 3 maximal points.

The priority axis Enhancing administrative capacity in the Operational Program for Developing Human Resources contributes to the better application of Operational Program for the Development of Living Environment. Its third priority axis Integral and balanced development of regions supports local government investments in three spheres: improving the local government services in rural areas; developing urban areas and strengthening the competitiveness of areas. The measures of the Enhancing administrative capacity priority axis contain activities, which increase administrative capacity of local governments to carry out the projects. Several activities for both the policy making and implementation will be supported – including for the authorities in charge of rural development and fisheries policy. Second, several activities of the axis are aimed at increasing the administrative capacity and involvement of social partners and other NGOs related to policy making and implementation – incl. the NGOs involved in agricultural and fisheries sector.

The enhancing administrative capacity axis supports regional development primarily through the optimization of the structures of administrative organization; the training of public sector workers and non-profit association; and an increase in the management capacity of

state and local government institutions - since these activities target people in all regions and supports the equal development of all regions. These measures will also assist in creating equal opportunities for the people in the less developed regions.

Administrative capacity, and preparing knowledge-based decisions, rest on facts on women and men, boys and girls, as well as on less-favored groups of people. Training regarding the strategies and methods to reduce the inequality that has occurred due to gender or other reasons, the availability of information, and targeted information provision, increases the more precise provision of services to the customer and also increases satisfaction within the population. Projects that promote the introduction of the principles of environmental management and environmental management systems are supporting the integration of sustainable development into the context of public administration will be funded. Activities refer to increasing administrative capacity for policy formation (policy making process) and implementation by raising the qualifications of the personnel in institutions (including partners) that develop and initiate policies will be funded.

Environmental awareness will be raised by information and training activities for the public administration and environmental sectors. Sectoral analyses will be funded and law and legislation making process will be simplified. The promotion of the information society will be assisted by taking into account and using information technology opportunities in the activities targeting the optimization of public service processes and the raising of administrative capacity. The raising of awareness amongst public sector employees regarding the possibilities of the information society will also assist in the promotion of the information society. Development of civil society is encouraged through the development and training of non-profit associations, which help to create preconditions for the better participation of non-profit associations in knowledge-based policy formation. In addition, the capacity of non-profit associations in preparing legislation and in strategic planning will be strengthened. The special Program for social partners will strengthen the capability of social partners to participate in policy formation and implementation processes and develop civil society. The nongovernmental organizations are among potential beneficiaries of support provided for activities in the priority axis.

This indirectly supports the development of civil society, as the receipt of Structural Assistance should contribute to the rise of the capacity of receiving organizations to plan, manage and evaluate projects and finances – there-by contributing to the increase of organizations' capacity to be active in their respective area and development of partnership.

4.2.4 The priority “Education”

- Activities related to the priority axis “Education” obtained 2.66 of the 3 maximal points.

The activities in the Lifelong learning priority axis will create a basis for the activities in Developing the human resource for R&D, since the quality of higher education and Research & Development is directly dependent on the quality of the study at the lower educational level, as well as on the interest shown by young people towards technical specialties. Many activities targeting the development of the human resource in R&D and higher education, primarily teacher training, study Program development, development of the professional qualifications system, e-learning, development and popularisation of science and technology areas, will be implemented in cooperation with the activities of the Lifelong learning priority axis.

Better connection opportunities have an effect on the rationalisation of the schools network, and ensure a better access to educational institutions located at a distance from home. This increases the equal opportunities for access to education. The promotion of environmental education means that it will be possible to have an effect on the impact of human activity on the environment, and thereby to make the use of environment more sustainable with the help of changing people's habits. A population that is able to work and has an income, together with the existence of jobs and individual development possibilities, is an important development precondition for every region.

The lifelong learning priority axis is directly linked to activities that ensure regional development. Activities in the axis support regional development, ensuring that people living in less developed regions have equal opportunities for participating in further training, and that young people have access to non formal education and youth services. The language learning opportunities for citizens and immigrants also contribute to the uniformity of regional development. The axis supports environmental protection indirectly through an increase in the general educational level of people, which helps to bring about more environmentally aware behaviour, and more specifically, via the nature and environment education being initiated in schools to support sustainable development.

Promotion of the information society is directly ensured with the assistance of e-learning in formal education, and in area-specific further training; also via the provision of information and counselling services to learners, children, young people and adults. The ability of the state to participate in the utilisation of new technologies, and in the opportunities offered by innovation, depends on the education of the people, and their readiness for continuous further education. During the process of updating further training and making vocational education more flexible, and in implementing the measure to increase the popularity of vocational education, and other measures, and in order to ensure equal opportunities and reduce the existent educational inequality, consideration will be made of the need to extend the professional and job choices by women and men, to have more flexible movement between the various areas and jobs in order to ensure the greater competitiveness on the labour market for groups in a less favourable situation (non-Estonian speakers, people in the risk groups, with special needs). In raising the quality level in youth work, the interests and needs of both sexes will be taken into account equally, and attempts will be made to reduce outdated gender stereotypes.

The development of civil society will be encouraged by activities targeting adults and young people, which will be used to create bases for the development of socially-aware citizens, and they will be encouraged to participate in the processes supporting the development of society. The nongovernmental organisations are also among potential beneficiaries of

support provided for activities in the priority axis. This indirectly supports the development of civil society, as the receipt of Structural Assistance should contribute to the rise of the capacity of receiving organisations to plan, manage and evaluate projects and finances – there-by contributing to the increase of organisations' capacity to be active in their respective area and development of partnership.

4.2.5 The priority “Information society”

- Activities related to the priority axis “Information society” obtained 2.56 of the 3 maximal points.

Relations with the operational Program for developing the human resource are indirect, as this priority axis' activities for improving technical accessibility will contribute to achievement of the goals of curricula development posed by the operational Program for developing the human resource (development of new learning methods and systems) by creating a better access to education, especially e-education, and facilitating the dissemination of ICT competence and knowledge, more specifically through ICT training facilities for teachers and adults irrespective of their geographic location. The development of e-health depends on the success of information society development. Links with the operational Program for the development of the living environment are more obvious, as the "Integral and balanced development of regions" axis of that Program provides for measures improving Internet access in regions, which do not overlap with the activities of the development of information society priority, but facilitate the development of information society as a whole.

Information society activities of the operational Program for the development of the living environment, namely, investments in improving the quality of Internet connections, will contribute to the accessibility of public services on the local level. Local infrastructure and accessibility of services are crucial for the successful use of information society solutions achieved through activities implemented under this operational Program. This priority is directly related to achievement of the objectives of Priority 3 "Better

connection opportunities" of the NSRF, namely, the improvement of Internet access and Internet penetration and the accessibility of public e-services.

Priority 5 "Integral and balanced regional development", which includes activities aimed at improving Internet access in regions and development of local e-services, is connected to this priority objective due to the fact that its aims include local activities, the achievement of which has a significant impact on the success of the solutions developed in the framework of information society development. The planned activities of this priority axis also facilitate Priority 1 "Educated and active people", as information and communication possibilities and their development define the learning and working possibilities of persons. Priority 1 is aimed at developing Internet-based learning (elearning) possibilities at all levels of education and in life-long learning, thus supporting the overall increase of Internet use. On the other hand, information society's achievements help ensure the development and availability of healthcare (e-health) and welfare services. Therefore, a good connection therefore creates the conditions for Internet-based improvement of knowledge and qualifications, as the Internet is an increasingly important medium of knowledge transfer.

Development of the information society will have a significant impact on regional development by improving the accessibility of public services in Estonia's rural regions and offering possibilities for enterprise and participation in public life regardless of a person's geographical location. The development of information society will improve teleworking possibilities, thereby reducing the need to move from rural areas to regional hubs where enterprises and jobs tend to concentrate.

As this priority axis is identical to the horizontal theme, all activities will directly contribute to the development of information society. The development of information society, including Internet-based learning, teleworking and implementation of e-solutions will facilitate the economic participation of persons with different ways of life and persons with special needs.

The development of information society is directly related to the development of civic society, as e-solutions increase the possibilities for social participation. User-friendly e-involvement solutions, awareness of the involvers and the involved, the availability of adequate information and digital information sharing help improve the possibilities for persons to participate in decision-making processes on both local and national level. E-communication and the development of relevant communication channels facilitate the creation and development of associations, networks and institutions and will also foster the development of stable inter-sector forms of communication.

The non-governmental organisations are among potential beneficiaries of support provided for activities in the priority axis. This indirectly supports the development of civil society, as the receipt of Structural Assistance should contribute to the rise of the capacity of receiving organisations to plan, manage and evaluate projects and finances – there-by contributing to the increase of organisations' capacity to be active in their respective area and development of partnership.

4.2.6 The priority “Water and waste management”

- Activities related to the priority axis “Water and waste management” obtained 2.36 of the 3 maximal points.

The priority axis “Development of water and waste management infrastructure” is mutually complementary with the priority axis “Development of infrastructures and support systems for sustainable use of the environment”. Implementation of the two priority axes under the same operational Program enables good coordination between the priority axes. In the framework of the Human Resources Development Operational Program, the current priority axis is related to the priority axes “Development of environmental education and awareness” and “Strengthening of administrative capacity”, which are expected to have a positive impact on, in particular, the situation in waste management (source separation, reduced littering of landscapes).

Development of water and waste management infrastructure will contribute to the Operational Program for Development of the Economic Environment by improving the business environment both through reducing external costs for companies and creating more favourable living conditions for workforce. Achievement of a good ecological status of water bodies will be facilitated by the Estonian Rural Development Plan 2007–2013, which will promote organic farming, environmentally sound management and the use of best available techniques in agriculture through continuing the rehabilitation of land improvement systems, creating protection forests in water protection zones and promoting environmental awareness and active life style of agricultural producers, thereby reducing agricultural pollution. Potential overlapping in the waste recovery area with supporting agricultural producers' bioenergy projects under the Rural Development Plan will be prevented by the implementation system using information exchange between the implementing bodies.

Rehabilitation of inland water bodies will improve the chances of recovery of migratory fish stock, which will contribute to the objectives of the Estonian Operational Program 2007-2013 for the European Fisheries Fund. Overlapping of operations is prevented as the EFF support will only be directed in this area to rehabilitation of the spawning grounds and not migration routes for migratory fish – which will be dealt with under this OP axis. Rehabilitation of the spawning grounds is not foreseen to be supported in the course of rehabilitation of rivers funded under the present Program.

As a vast majority of the water and waste management projects prepared or being prepared will be implemented outside the capital region, investments in water and waste management have, in general, a regionally balancing impact, improving the living conditions of people and increasing the competitiveness of regions outside the capital region.

All projects are directly aimed at improving environmental protection. The non-governmental organisations (non-profit associations and foundations) are among potential beneficiaries of support provided for activities in the priority axis. This indirectly

supports the development of civil society, as the receipt of Structural Assistance should contribute to the rise of the capacity of receiving organisations to plan, manage and evaluate projects and finances – thereby contributing to the increase of organisations' capacity to be active in their respective area and development of partnership.

4.2.7 The priority “Development of infrastructures and support systems for sustainable use of the environment”

- Activities related to the priority axis “Development of infrastructures and support systems for sustainable use of the environment” obtained 2.61 of the 3 maximal points.

The priority axis “Development of infrastructures and support systems for sustainable use of the environment” is mutually complementary with the priority axis “Development of water and waste management infrastructure”, forming a framework for financing those environmental protection sub-sectors that are not funded from the CF: maintenance of biological diversity, development of environmental awareness, strengthening of preparedness for environmental emergencies, etc. In particular the improvement of monitoring and awareness will facilitate the desired developments in waste management. The current priority axis interlinked also with the Operational Program for Development of the Economic Environment through the development of nature tourism. While the latter

Operational Program focuses of provision of support to business operators, the Living Environment Development Operational Program will help to develop visitor sites and supporting infrastructures owned by the public and third sector. The priority axis “Development of infrastructures and support systems for sustainable use of the environment” has a nature tourism related contact area also with the priority axis “Integral and balanced development of regions” of the current Operational Program. Therefore the implementation rules for the Operational Program will establish a clear

division of work between the protected area management authority and local authorities in this issue in order to avoid overlap between support measures. The operations are divided between the two priority axes according to their beneficiaries.

The operations of local authorities will be supported only in the framework of “Integral and balanced development of regions”, while the operations of the State Nature Conservation Centre will be financed under “Development of infrastructures and support systems for sustainable use of the environment”. Of the priority axes under the Human Resources Development Operational Program, the current priority axis is related to “Development of environmental education and awareness” and “Strengthening of administrative capacity”. Development of environmental education infrastructure is planned under the current Operational Program. The priority axis “Strengthening of administrative capacity” will contribute, among others, to the introduction of environmental management systems in the public sector. The objectives and types of actions planned to be implemented in the area of capacity for extinguishing marine pollution are in line with the framework of the HELCOM Baltic Sea Action Plan that is under preparation. The Estonian Rural Development Plan 2007–2013 is in many ways complementary to the current priority axis. Provision of support to the maintenance of seminatural communities outside agricultural lands will be expanded compared to the period 2004–2006.

Investments in protected area infrastructure will, in general, have a balancing impact, improving the living conditions of people and increasing the competitiveness of regions outside the capital region. Other operations have no clearly expressed impact on regional development.

A vast majority of environmental investments from the ERDF are directly aimed at improving environmental protection.

Fostering impact on information society will come first of all from the development of environmental monitoring, under which a common computerised environmental information system will be developed.

The non-governmental organisations (non-profit associations and foundations) are among potential beneficiaries of support provided for activities in the priority axis. This indirectly supports the development of civil society, as the receipt of Structural Assistance should contribute to the rise of the capacity of receiving organisations to plan, manage and evaluate projects and finances – thereby contributing to the increase of organisations' capacity to be active in their respective area and development of partnership.

4.2.8 The priority “The Development of Human Research for R&D”

- Activities related to the priority axis “The Development of Human Research for R&D” obtained 2.46 of the 3 maximal points.**

Lifelong learning priority axis is linked to a number of activities in this axis: teacher training, study Program development, development of the qualifications system and e-learning. The activities in the Lifelong learning axis to popularise ST amongst young people will create a basis for students to be interested in these specialties in higher education, and further on, in R&D. High-quality and long working life axis reduces the danger to the economy caused by a possible shortage of specialists in certain areas. With the assistance of the activities in the Knowledge and skills for innovative entrepreneurship axis, an increase in the knowledge and skills of entrepreneurs is supported, which in turn creates the basis for the creation of an innovative enterprise environment. One of the preconditions of a knowledge-based society is good cooperation between R&D and the enterprise sector. The implementation of this priority axis influences all the other priorities in the National Strategic

Reference Framework 2007–2013. An example could be the development and implementation of environmentally friendly (avoiding pollution and reducing its impact) technologies within the framework of the environment priority, as well as the resulting

impact of R&D achievements and of the implementation of new technologies on the improvement of health care services and the quality of life. Such a result is only possible due to the human resource. There is a direct impact on the Increasing of R&D capacity and the innovativeness and productivity of enterprises priority since a high-quality educational and R&D system is the basis for innovative activity; the Operational Program for Human Resource Development, however, ensures the training of top specialists and influences the quality of education through higher education. Activities in the educational and R&D fields are also preconditions for achieving the objectives set for this priority since a knowledge-based economy and enterprise with a high value-added can only be constructed with a highly educated people.

Implementing this axis is in turn dependent on the better connection opportunities priority since better transport and communications opportunities have an impact on the reorganisation of the schools network and the network of research institutions, and ensure better access to educational and research institutions that are located further away from the place of residence. Sustainable use of environment is of more general assistance in the implementation of this operational Program, improving the general environmental conditions. In the development of the human resource, and in the resulting increase in capacity, is concealed the potential for the future reduction of the environmental burden – more environmentally friendly technologies will be developed, investments will be made in implementing them, etc. Since the Developing the human resource of R&D and higher education priority axis in the Operational Program for Human Resource Development creates jobs, it increases incomes and offers new challenges to both individuals and the regions as a whole. Within the framework of supporting regional development, the general environment is improved and opportunities are created for increasing local employment. This priority axis is closely linked to achieving Objectives 4 and 5 in the Action Plan for Growth and Jobs 2005-2007, i.e. “Increasing the quality of R&D, and the innovation, growth and long-term International competitiveness capacity of enterprise” and “Developing an enterprise environment favouring enterprise and entrepreneurship”, and with implementing the measures linked to these.

The activity areas of this Operational Program for Human Resource Development overlap to a significant degree with Measure 4.1 “Ensuring the sustainability of R&D and increasing quality” and 4.2 “Developing the necessary human capital necessary for the development of R&D and the long-term International competitiveness of enterprise” in the action plan. According to the Lisbon strategy, member states’ efforts must concentrate on resolving two main tasks - achieving a stronger lasting economic growth and creating more and better jobs. This has enabled a start to be made in the necessary transition to a knowledge-based competitive economy that is characterised by economic growth, employment, social cohesion and environmental sustainability.

The Operational Program for Human Resource Development creates a basis for a knowledge-based competitive economy. The updated Lisbon strategy or the so-called strategy for economic growth and employment will be implemented via the respective action plans of the member states. For the promotion of knowledge and innovation, the R&D and innovation strategy foresees the development and motivation of human capital. Achieving a sufficient number of people in R&D is one of the main challenges in the R&D strategy. The achievement of this objective is supported within the framework of this Operational Program, creating conditions for the development of human capital in order to ensure the sustainability and future growth of R&D, higher education and innovation, and for increasing the international competitiveness of the enterprise sector, and to meet the needs of a knowledge-based society.

The Development of human resource for R&D and higher education axis supports regional development, primarily through improving the international competitiveness of Tallinn and Tartu, where the majority of R&D and higher education potential is concentrated. However, the training schemes, study Program development and e-learning activities will contribute to the development of other regions since these activities target people also outside those centres. The axis supports the environmental protection through the development of high-level environmental sciences, also through the environment-themed training schemes. Activities bringing science closer to the people are to a great degree

targeting the popularisation of science and an increase in awareness in the area of natural and environmental sciences.

Development of the e-learning systems, and the training schemes, supports the promotion of the information society. Encouraging PhD studies in the ICT field will ensure experts in the field the opportunity for tertiary level study. In order to ensure equal opportunities there will be consideration of the need to balance the proportion of female and male researchers at the top level of research fields, and in the popularisation of science consideration will be made of the interests of women and men, and the need to extend these. The activities in the priority axis support the development of civil society via the society-themed research works, as well as the area-specific training schemes and the support of study Program development. The non-governmental organisations are also among potential beneficiaries of support provided for activities in the priority axis. This indirectly supports the development of civil society, as thereceipt of Structural Assistance should contribute to the rise of the capacity of receiving organisations to plan, manage and evaluate projects and finances – there-by contributing to the increase of organisations' capacity to be active in their respective area and development of partnership.

4.2.9 The priority “The Development of Health care and welfare system”

- Activities related to the priority axis “The Development of Health care and welfare system” obtained 2.31 of the 3 maximal points.**

The hospital network shall meet the needs of the population, by concentrating expensive specialized medical treatment into bigger centers and developing local level services tailored to local needs and possibilities and ensuring the consistency of treatment. Also the state welfare system for children (substitute home service) will be developed pursuant to the Welfare Concept approved by the Government in 2004, proceeding from which individualisation and subsidiarity are seen as important aims in planning the future of

children's welfare service, which can be most effectively provided to clients only at the local authority level.

The obligation of organising children's welfare service lies already now, as set out in the Social Welfare Act, with local authorities, whose tasks consist in resolving the cases of children, protecting their legal rights and providing counselling to them, and acting as a guardianship authority for children placed in foster care or welfare institutions. According to an important principle of the Welfare Concept, the financial resources intended for organising welfare service for children should be transferred to local authorities in order to raise their motivation to prevent children from being separated from their families and increase the efficiency of family-based support. Timely interference in resolving the problems occurring in a family facilitates the social and economic coping of families and supports labor competition, also preventing children from being placed in welfare institution. As separation from family cannot be prevented in all cases, the Welfare Concept also provides for different forms of child welfare service, also envisaging the transfer of presently state-owned welfare institutions for children to local municipalities.

Health and welfare services need to be evenly accessible across all regions of Estonia in order to achieve integral and balanced development of regions. Modernisation of health and welfare institutions will result in improved energy efficiency of the buildings, which will contribute to reducing environmental load. Possible environmental impacts need to be taken into account when planning and modernising the health infrastructure but these impacts tend to be rather small.

The opportunities offered by the development of information society, in particular the development of e-services, which create a favorable environment for advancing information exchange and cooperation between the providers of health services and for optimal use of resources (both human and technological resources), will be made full use of when planning and modernizing the health infrastructure. Access to health and welfare services needs to be fair and ensured equally for all groups of society according

to their needs. No attention is paid to making dentistry affordable for all people, which is currently a serious problem, because the health insurance does not even cover fixing one tooth per year.

4.2.10 The priority “Transport investments of strategic importance”

- Activities related to the priority axis “Transport investments of strategic importance” obtained 2.61 of the 3 maximal points.

First and foremost, this priority axis is related to the development of regional transport infrastructure priority axis (2.3) of this operational Program. Regional and strategic transport investments supplement each other by helping strengthen the impact of activities under different priorities. Notably, the proposed large-scale regional projects help ensure better operation of the transport links belonging to the TEN-T network by providing better connections between transport corridors and better access to ports. Improved living environment and passenger rail infrastructure complement the investments for improving electric rail services. In the framework of this operational Program, strategic transport investment will also have a positive impact on the development of enterprise (2.1) by creating more favourable conditions for the development of international freight traffic and helping improve Estonia's competitiveness. Operational Program for the development of living environment From among other operational Programs, this priority is related to priority (4.3) “Integral and balanced development of regions” of the operational Program for improving the living environment.

Activities aimed at developing urban and rural areas complement the activities proposed under this priority, and the activities proposed under this Program have a significant impact on regional development. In this context, investment in the passenger infrastructure of public transport, development of light traffic routes and promoting sustainable urban transport are foreseen under the regional development activities. These

activities supplement strategic transport investment and do not overlap. Investment in public transport helps achieve the environmental objectives of the living environment operational Program and facilitate social inclusion by providing for better coping of the socially underprivileged and persons with special needs.

This priority is directly related to Priority 3 "Better connection opportunities" of the NSRF.

The priority covers proposed activities for the resolution of transport bottlenecks, having regard to the development of infrastructure and public transport. The development of strategic infrastructure focuses on improving the safety of transport corridors belonging to the TEN-T network and the resolution of undesirable transport bottlenecks. Activities proposed under this priority help create conditions for reversing the relative decrease of users of environmentally sustainable public transport by investing in the development of high-capacity rail and electric transport. The establishment of this priority and its activities has been based on the "Transport Development Plan 2007–2013" and its sub-Programs, especially the "Infrastructure development", "Safety and security" and "Public transport" objectives. It is also in compliance with the "Public Transport Development Plan 2007–2010", which includes a more detailed description of public transport development measures, as well as the "Information Society Development Plan 2007–2010" and, more specifically, its objectives and measures related to developing ICT capacity, better public administration, efficient provision of public services and improving social inclusion. These development plans are in turn based on the EU White Paper on transport policy, the EU "i2010" information society strategy, the information society section of the framework Program for competitiveness and innovation and the guidelines on trans-European networks.

This priority is thus compliant with the said EU policies and strategies. This priority is also in compliance with the "Estonian Regional Development Strategy 2005–2013" and is aimed at implementing its objectives. Transport policy is a key factor of Estonia's regional development, providing the necessary connections between regions. The repair and development of infrastructure enables faster transport links, thus helping reduce the distances in time and space between regional hubs and surrounding areas. Improvement

of transport connections (roads, bridges, ports and airports, as well as bus, train, air and shipping traffic adapted to regional needs) enables to overcome the development gap between regions by facilitating enterprise and thus providing the inhabitants of less-developed regions with jobs in regional hubs as well as peripheral areas in question. Besides improving transport connections, more attention should be paid to influencing the transport needs of citizens through integrated planning, development of teleworking and other measures.

Efficient transport links help achieve the enterprise and tourism policy goals. Efficient air and shipping links facilitate tourist flows and contribute to the increased export of tourism services, which is one of the objectives of the "Estonian National Tourism Development Plan 2007–2013". In addition, the quality of transport links has an impact on the local business climate and, hence improves the competitiveness of regions and Estonia as a whole. This is important, as a competitive economy is the main objective of the Estonian enterprise policy 2007–2013.

The whole transport sector has a significant environmental impact (incl. impact on ambient air quality) and may give rise to various risks. Although the impact of developing new transport infrastructure is usually negative, the basic investment principles will be the minimising of potential damage to the environment and management of environmental risks. Meanwhile, activities proposed for the development of sustainable transport will directly contribute to achievement of the objectives of the "Estonian Environmental Strategy 2010" and are compliant with the "Sustainable Estonia 21" strategy.

High-quality transport infrastructure with sufficient capacity and an operational public transport system are the prerequisites for regional development, helping reduce the distances in time and space and improve the competitiveness of regions. They will improve the accessibility of public services and the quality of local living environment and will create better conditions for enterprise development, as connection possibilities are a significant factor in business strategies. However, the relationship between transport investment and regional development is also influenced by other factors, and where

connections are improved with disregard to the development of the local living environment, the overall effect may even affect regional development. For example, good connections may increase transit traffic, but the possibilities thus created could be left unused for the benefit of local development. Large-scale infrastructure investments in Tallinn and Tartu relieve the problems connected to sub-urbanization in those two urban areas.

As a rule, the development of transport infrastructure has a negative impact on the environment, even when using the optimal environmentally friendly solutions. However, environmental impact of the transport sector can be limited when developing the transport system. This can be achieved by developing public transport, selecting environmentally safer and more sustainable solutions, complying with environmental requirements, creating safe corridors for animals, erecting noise barriers, etc.

Transport investments may significantly contribute to the development of information society. The use of public transport can be facilitated and the level of service improved by making public transport information readily available and optimising public transport management with the help of ICT solutions. Information technology solutions help improve traffic safety as well. However, contradictions may arise in cases where ICT solutions are an alternative to using the transport system (e.g., promotion of teleworking).

The expenditure on developing the transport system, if in accordance with the habits and needs of different social groups, can lead to better opportunities for participating in education and economic life, but also for communicating and accumulating social capital. The development of public transport will create better mobility conditions and improve the accessibility of public services. When planning transport projects, the needs of persons with special needs will be taken into account.

4.2.11 The priority “Transport investments of regional importance”

- Activities related to the priority axis “Transport investments of regional importance” obtained 2.56 of the 3 maximal points.

First and foremost, the priority of regional transport infrastructure investments is related to the strategic transport investment priority (2.3) of the same operational Program. Regional and strategic transport investments supplement each other by helping strengthen the impact of activities under different priorities. Notably, the proposed large-scale regional projects help ensure the better operation of transport links belonging to the TEN-T network by providing better connections Estonian OP for the development of economic environment between the transport corridors and better access to ports.

Improved living environment and passenger rail infrastructure complement the investments for improving electric rail services. In the framework of this operational Program, regional transport investments will also have a positive impact on the development of enterprise (2.1) by creating more favourable conditions for regional development and helping improve the competitiveness of regions. From among the other operational Programs, this priority is related to priority (4.3) “The comprehensive and balanced development of regions” of the operational Program for developing the living environment. Activities aimed at developing urban and rural areas complement the activities proposed under this priority and the measures proposed under this Program have a significant impact on regional development. In this context, investment in the passenger infrastructure of public transport, development of light traffic routes and promoting sustainable urban transport are foreseen under regional development activities of the operational Program for the living environment. These activities supplement the activities of this operational Program and do not overlap. This priority helps create better connections with peripheral regions, enabling to reduce the distances in time and space between these regions and regional hubs.

Investment for increasing the share of public transport helps achieve the environmental objectives of the operational Program for the living environment and facilitates social inclusion by providing for the better coping of the socially underprivileged and persons with special needs. The establishment of this priority and its activities has been based on the "Transport Development Plan 2007–2013" and its sub-Programs, especially the "Infrastructure development", "Safety and security" and "Public transport" objectives. It is also in compliance with the "Public Transport Development Plan 2007–2010", which includes a more detailed description of public transport development measures, as well as the "Information Society

Development Plan 2007–2010" and, more specifically, its objectives and measures related to developing ICT capacity, better public administration, efficient provision of public services and improving social inclusion. These development plans are in turn based on the EU White Paper on transport policy, the EU's "i2010" information society strategy, the information society section of the framework Program for competitiveness and innovation and the guidelines on trans-European networks. This priority is thus compliant with the said EU policies and strategies.

This priority is also in compliance with the "Estonian Regional Development Strategy 2005–2013" and is aimed at implementing its objectives. Transport policy is a key factor of Estonia's regional development, providing the necessary connections between regions. The repair and development of infrastructure enables faster transport links, thus helping reduce the distances in time and space between regional hubs and surrounding areas. Improvement of transport connections (roads, bridges, ports and airports, as well as bus, train, air and shipping traffic adapted to regional needs) enables to overcome the development gap between regions by facilitating enterprise and thus providing the inhabitants of lesser-developed regions with jobs in regional hubs as well as the peripheral areas in question. Besides improving transport connections, more attention should be paid to influencing the transport needs of citizens through integrated planning, development of teleworking and other measures.

Efficient transport links help achieve the enterprise and tourism policy goals. Efficient air and shipping links facilitate tourist flows and contribute to the increased export of tourism services, which is one of the objectives of the "Estonian National Tourism Development Plan 2007–2013". In addition, the quality of transport links has an impact on local business climate and, thus, the improvement of competitiveness of regions and Estonia as a whole. This is important, as competitive economy is the main objective of the Estonian enterprise policy 2007–2013.

The whole transport sector has a significant environmental impact (incl. the impact on ambient air quality) and may give rise to various risks. Although the impact of developing new transport infrastructure is usually negative, basic investment principles shall be the minimizing of potential damage to the environment and management of environmental risks. Meanwhile, activities proposed for the development of sustainable transport shall directly contribute to achievement of the objectives of "Estonian Environmental Strategy 2010" and are compliant with the "Sustainable Estonia 21" strategy.

High-quality transport infrastructure with sufficient capacity and an operational public transport system are the prerequisites for regional development, helping reduce the distances in time and space and improve the competitiveness of regions. This current axis features transport investments that are directly aimed at advancing regional development. They will improve the Estonian OP for the development of economic environment connectivity of public services and the quality of local living environment and will create better conditions for enterprise development, as connection possibilities are a significant factor in business strategies. However, the relationship between transport investment and regional development is also influenced by other factors, and where connections are improved with disregard to the development of the local living environment, the overall effect may even affect regional development. For example, good connections may increase transit traffic, but the possibilities thus created could be left unused for the benefit of local development.

As a rule, the development of transport infrastructure has a negative impact on the environment, even when using the optimal environmentally friendly solutions. However, environmental impact of the transport sector can be limited when developing the transport system. This can be achieved by developing public transport, selecting environmentally safer and more sustainable solutions, complying with environmental requirements, creating safe corridors for animals, erecting noise barriers, etc.

Transport investments may significantly contribute to the development of information society. The use of public transport can be facilitated and the level of service improved by making public transport information readily available and optimizing public transport management with the help of ICT solutions. Information technology solutions help improve traffic safety as well. However, contradictions may arise in cases where ICT solutions are an alternative to using the transport system (e.g., promotion of teleworking).

The expenditure on developing the transport system, if in accordance with the habits and needs of different social groups, can lead to better opportunities for participating in education and economic life, but also for communicating and accumulating social capital. The development of public transport will create better mobility conditions and improve the connectivity of public services. When planning transport projects, the needs of persons with special needs will be taken into account.

The activities planned under this priority have no direct influence on the development of civil society, but may have a limited indirect influence. The planning and decision-making related to transport projects must involve (local) citizens and different interest groups, in order to find solutions that are most suitable for the needs of the society. On a general scale, the improvement of connections creates better conditions for social participation.

4.2.12 The priority “Long and quality working life”

- Activities related to the priority axis “Long and quality working life” obtained 2.41 of the 3 maximal points.

This priority axis is linked to the other axes of the Operational Program for Human Resource Development. Making general and vocational education more compatible with the needs of society and learners, within the framework of Lifelong learning, provides preconditions for achieving the objectives of this axis. In addition, increasing participation in lifelong learning assists in the supply of qualified labour, and in increasing the quality of working life. Development of e-learning possibilities planned in the other priority axis managed by the MER also assists in extending the learning opportunities, for example, for disabled people.

Training workers in enterprises, which is supported within the framework of the Knowledge and skills for innovative entrepreneurship axis, assists in increasing the supply of qualified labour, whereas the increase in the quality of management contributes to the increase in quality of working life in general. Increasing the capacity for policy formation within the framework of the Enhancing administrative capacity axis, including learning from the experience of other countries, also assists in the development of more effective labour policies, and the trainings for non-profit associations in order for them to participate in the policy formation process will increase the participation by non-profit associations that are active in the labour area in the formation and implementation of policy. Increase in the R&D capacity and in the innovativeness and productivity of enterprises

In conditions of a growing economy, both the qualification of the labour force as well as the general size of the labour force is important, and within this priority axis there is also emphasis on increasing the labour supply. While working out this measure, no-one could have forecasted the situation in the labor market now – at the beginning of 2009. Thus the

respective complex of measures works in the situation of economic growth but many challenges arise from implementing these measures in the circumstances of extremely rapidly rising unemployment and falling GDP.

The development of enterprises is supported by various activities targeting the development of working life. The productivity and competitiveness of enterprises is also affected by people's state of health – people who are educated, physically and mentally healthy, and managing well in their lives, are more productive and innovative. The accessibility of welfare support services enables those people who are currently engaged with caring for family members to also participate in the production of added value. The development of enterprises in turn will create preconditions for the improvement of employment, as well as for the creation of quality jobs that can offer proper utilisation of their skills.

A population that is able to work and earns an income, and the existence of jobs, is an important precondition for the development of any region. The availability of public services (including health care and welfare services) will help to also keep people from moving to the major centres.

The variety of job opportunities for people is also dependent on connection possibilities, since good connections with other regions or areas will alleviate structural labour market problems. Developing the state's e-services and the local roads and transport, will create preconditions for improving access to health care, welfare and other public services. As a result of the improvement in road safety accompanying the development of transport networks, the number of dead and injured from traffic accidents will be reduced, which will have the expected positive impact on the health indicators of the population.

The environment is an important factor affecting health, and the reduction of health risks resulting from the environment is very closely linked with the activities of the state in reducing the environmental burden. The priority axis is also linked to the Operational Program for Development of Economic Environment. Since the shortage of qualified labour is one of the main obstacles to development for a large part of Estonian

enterprises, the activities under the priority axis Good-quality and long working life 116 significantly contribute to the priority axis Innovation and growth capacity for enterprises success.

Supporting enterprises and R&D helps also to create new workplaces. But also R&D and innovation improves quality of working and living environment, which is an important aim of the priority axis. Activities under the Transport investments of strategic importance and Developing infrastructure with regional importance axis enable a better access to training institutions and workplaces, and increase labour mobility.

Within the framework of the Promoting the information society axis the objective of the activities targeting the extension of the technical access possibilities is to create people the technical possibilities for participating in the information society, supporting through that flexible working forms and will create preconditions for the better establishment of E-learning, which will also help to increase the disabled persons competitiveness on labour market. The activities of the priority axis are directly geared to follow the general guideline “More and better jobs”, where an important part is increasing and preserving employment, as well as increasing the flexibility of the labour markets. A large part of the activities planned in the measure are dedicated to fulfilling these objectives in particular. In Guideline 3.5, a healthy and work-capable population is determined as one of the key areas for achieving the employment objectives of the Community. Activities in the measure that are planned for the health care sector are in accord with the topics covered in the Community Strategic Guidelines on avoiding health risks and reducing their dangerous effects.

This priority axis supports regional development, emphasising the role of the local government level, and increasing the capability of the local level in resolving the described problems. Both the development of the mobility schemes and the provision of transport support increase the opportunities for people in remote regions to participate in labour market measures and to go to work, with the latter also being supported by the promotion of distance working. The services offered to the local inhabitants by the

regional departments of the Labour Market Board will raise the qualifications of the population as well as their readiness to participate in the labour market. The priority axis also supports increasing the labour supply, and the development of the economy of the applicable region.

Environmental protection is supported indirectly through the activities of the priority axis – primarily in raising awareness regarding the working environment. In implementation of all the planned actions environment protection principles will be considered.

Promotion of information society is supported through the development of the IT skills of the unemployed, also via the promotion of distance working and of innovative distance teaching and learning methods.

For ensuring equal opportunities, the axis supports lessening the disproportionate horizontal and vertical gender gap in the labour market, balancing the career opportunities of women and men, as well as balancing working and private life, including reducing the pay gap. In order for unfavourably positioned groups (e.g. non-ethnic Estonians, released prisoners, long-term unemployed, disabled persons, etc) to have access to jobs and to stay employed, the necessary measures will be implemented.

The development of civil society will be assisted by encouraging partnership and cooperation with non-profit associations, with the help of the selection criteria for projects. The development of civil society will also be assisted by activities supporting the quality of working life, and the promotion of clarity in labour relations. The non-governmental organisations are also among potential beneficiaries of support provided for activities in the priority axis. This indirectly supports the development of civil society, as the receipt of Structural Assistance should contribute to the rise of the capacity of receiving organisations to plan, manage and evaluate projects and finances – there-by contributing to the increase of organisations' capacity to be active in their respective area and development of partnership.

- Resources allocated to Estonia in the amount of EEK 53.3 billion have been used very moderately in the two first years of the funding period. In 2008, there were EEK 2.79 billion subscribed into the state budget but only EEK 633 million were actually used, which with the allocation of the EU money in 2007, makes a little bit more than 1% of the total SF resources during the first two years. The consequences of economic crisis need to be alleviated and the EU funding would be a great opportunity for helping the state to come out of it but the resources are standing still.

The representatives of the ministries and implementation units have accentuated the excessive administrative burden on the member states. The vice-chancellor of the Ministry of Finance Ivar Sikk said that all areas must be totally regulated by legislation and control systems must be very detailed, which takes too much time and resources at the beginning of the planning period. Sikk confirms that it is not only the problem of Estonia but also other NMS have been able to make payment around 1% of the total amount of the resources. The manager of the department of foreign finances of the Ministry of Finance Aino Siitam considered the changes in the system of implementation compared to the previous period 2004-2006 to be the main obstacles for running the allocation of the SF resources successfully. There were 47 measures in the previous period but now there are about 80 which significantly added the work that must be done. Another problematic administrative issue is the shared responsibility between ministries. In the previous planning period, all the implementation of the SF resources was under the control of the Ministry of Finance but during 2007-2013 it is shared between different ministries and institutions, which has currently ended up in the situation that nobody takes the responsibility and processes have slowed down in a dangerous way (composed from the press releases by Estonian Ministry of Finance at <http://www.fin.ee>). The next years will show Estonian capability for using the assistance provided by the EU. The future forecasts are very hard to make in the current situation.

5. Conclusions

Estonian has gone through the transition period successfully and become the member of the EU. Since then, the 1st May 2004, Estonia is eligible for the support from the EU Structural Funds and the first period of using the SF resources at 2004-2006 may be estimated as successful. There is a small risk that Estonia would not be able to use all the allocated resources before deadlines but the amount of the unused resources does not exceed 3% and also extension of time will be applied for.

One of the main goals set by the European Union (EU) structural policy is achieving convergence between regions and within the MS. The studies show that between-country differences have decreased (especially in the old MS) but the within-inequality has rather increased. Convergence must occur for both economic indicators and people's life qualities. Thus in addition to GDP per capita, attention is paid to providing equal opportunities for all inhabitants in every field of activity. Social cohesion policy is conducted at the highest institutional level of the EU and every MS must contribute to its successful implementation. Though, achieving goals set by the Lisbon strategy by 2010 will probably not be realistic, moving towards these goals must still be systematically pursued.

Until now, Estonia has used the SF resources for 2007-2013 very moderately, which makes it hard to estimate the success of the current activities or compare the achievements with other countries. Thus Estonian ability considering the implementation of the SF resources was estimated by evaluating the groups of measures regarding production externalities, productivity externalities and complementarity and efficiency principles. The author mainly took into account the emergency for changes and the extent of improvement compared to the current situation after taking the measures. The highest points were obtained by the measures in the priority areas "Energy" and "Education". The energy priority has the highest potential regarding the efficiency gains. Restructuring the educational system by promoting lifelong learning, other aspects of adult education

and creating efficient retraining systems has an essential importance considering changes in the labor market accompanied by the economic crisis.

The next few years will show how successfully is Estonia able to use the aid from the SF to run the country out of crisis and move towards the goals set by the Lisbon treaty.

References

Abreu, M., De Groot, H. L. F., Florax, R. J. G. M. (2004) Spatial patterns of technology diffusion: An empirical analysis using TFP. Tinbergen Institute Discussion Paper (Paper No. TI 2004-079/3), Amsterdam.

*Alesina, A., Rodrick, D. (1995). Distributive Policies and Economic Growth. *Quarterly Journal of Economics*, 109 (2), pp. 465–490.*

Arbia, G., Piras, G. (2004). Convergence in per capita GDP across European regions using panel data models extended to spatial autocorrelation effects. In preparation for the 44th Congress of the European regional Science Association, Regions and fiscal federalism, 25–29 August Porto, University of Porto, Portugal.

*Armstrong, H. W. (1995). Convergence among Regions in the European Union, 1950–1990. *Papers in Regional Science*, Vol. 74, pp. 143–152.*

Badinger, Harald / Tondl, Gabriele (2003), Trade, Human Capital and Innovation: The Engines of European Regional Growth in the 1990's, in European Regional Growth, Berlin, S. 215-239.

Barro, Robert J. (1997), Determinants of Economic Growth, Cambridge-Massachusetts-London.

Chen, J., Sapsford, D. The role of international institutions in economic development and poverty reduction in the developing world, 2005, 327 p.

Erdődi, Endre Sandor (2007), Beitrag der Strukturpolitik zur realen Konvergenz in der Europäischen Union, Masterarbeit, Europa-Kolleg Hamburg, mimeo.

European Commisson (2007), Growing Regions, Growing Europe - Fourth Report on Economic and Social Cohesion.

GR (2004), Estonian National Development Plan for the Implementation of the EU Structural Funds, Single Programming Document 2004–2006, in Internet: http://www.innovation.lv/ino2/publications/prog_taiend_eng.pdf (12.01.2009).

GR (2004), The Estonian Government's European Union Policy for 2004-2006, in Internet: http://www.riigikantselei.ee/failid/The_Government_s_European_Policy_for_2004_2006_FINAL.pdf (12.12.2008)

GR (2004), The Estonian Government's European Union Policy for 2004-2006, in Internet: http://www.riigikantselei.ee/failid/ELPOL_2007_2011_EN.pdf -(30.11.2008)

GR (2005), Estonian Action Plan for Growth and Jobs 2005–2007, 75p, in Internet: http://www.riigikantselei.ee/failid/1.October_2005_Estonian_Action_Plan_for_Growth_and_Jobs2.pdf (14.01.2009)

GR (2005), How to achieve the Lisbon Goals, in Internet: http://www.riigikantselei.ee/failid/2005_02_10_EE_PositionPaper_EN_final.pdf , (10.12.2008)

GR (2006), The State Budget Strategy 2007–2013, available in Internet in Estonian at: <http://www.fin.ee/index.php?id=16386>

GR (2007) KNOWLEDGE-BASED ESTONIA. Estonian Research and Development and Innovation Strategy 2007-2013, in Internet:
http://www.akadeemia.ee/_repository/File/ALUSDOKUD/Knowledge-based%20Estonia%20II.pdf (15.01.2009)

GR (2007), Estonia's European Union Policy 2007-2013, available in Estonian in Internet
http://www.riigikantselei.ee/failid/ELPOL_2007_2011_EN.pdf, (23.12.2008)

GR (2007), Estonian National Strategic Reference Framework 2007-2013, in Internet:
http://www.struktuurifondid.ee/public/Estonian_NSFR_21June07_ENG.pdf (22.01.2009)

GR (2007), Operational Program for Human Resource Development, in Internet:
http://www.struktuurifondid.ee/public/OP1_21juuni2007_ENG.pdf (30.12.2008)

GR 2007, Operational Program for the Development of Living Environment, in Internet:
http://www.struktuurifondid.ee/public/elukeskond_ENG.pdf

Goag, John; Kasoff, Mark (1999) Estonia in Transition. Journal of Economic Issues, Vol. 33, pp

Interreg III C (2007). Financing sustainable energy projects through the Structural Funds and the Cohesion Fund in 2007-2013, October 2007, in internet:
[http://www.interreg3c.net/sixcms/media.php/5/Financing+sustainable+energy+through+Structural+Funds+2007-2013+\(RUSE\).pdf](http://www.interreg3c.net/sixcms/media.php/5/Financing+sustainable+energy+through+Structural+Funds+2007-2013+(RUSE).pdf) (14.12.2008)

Islam, N. (2003) What have we learnt from the convergence debate? Journal of Economic Surveys, Vol. 17, No. 3, pp.1-54.

nbur, R., Venables, A. J. (2005) Spatial Inequality and Development. Ford University Press, 440 p.

Lill, Liis; Paas, Tiiu. (2008) Economic Policy in the EU Member States - 2008; Tartu-Värska, Estonia, pp 82-87

MEAC (2005), Estonian Enterprise Policy 2007–2013, in Internet:
http://www.mkm.ee/failid/Estonian_Enterprise_Policy_2007_2013.pdf (28.12.2008)

MEAC (2005), Sustainable Estonia 2001, in Internet:
<http://www.riigikantselei.ee/failid/Estonia SDS 2005.pdf> (28.12.2008)

Ministry of Agriculture (2006),
Estonian Rural Development Strategy 2007–2013, in Internet:
<http://www.agri.ee/public/juurkataloog/MAAELU/MAS/ERDPS2007-2013.pdf>, (14.12.2008)

Niebuhr, A. (2001). Convergence and the Effects of Spatial Interaction. □
Jahrbuch für Regionalwissenschaft, Vol. 21, pp. 113–133.

Paas, T., Schlitte, F. (2007) Economic Growth, Regional Disparities and Convergence in EU – The Challenges of the International Economic Integrations. International Conference, Contemporary Challenges of Theory and Practice in Economics, pp. 91–100, Belgrade.

Paul Krugman. (1991) Increasing Returns and Economic Geography. The Journal of Political Economy, Volume 99, Issue 3, pp 483-499

Puga, Diego (2002), European Regional Policies in Light of Recent Location Theories, in Journal of Economic Geography, Nr. 2/2002, S. 373-406.

Ravallion, M. (2005). Inequality is bad for the poor. Policy Research Working Paper Series from The World Bank, No. 3677, 50 p.

Rey, S.J.; Montouri, B.D. US Regional Income Convergence: A Spatial Econometric Perspective. The Journal of the Regional Studies Association, Volume 33, Number 2, 1 April 1999, pp.143–156

SEB Eesti Ühispank, Innopolis (2005) Kohalike omavalitsuste ootused ja vajadused Euroopa Liidu Struktuurifondide rakendamise programmperioodil 2007-2013, in Internet:
http://www.innopolis.ee/files/doc/K_sitluse_tulemused_210x260.pdf

Sepp, J. (2006). Estonia in Transition: Catching up under the Restrictions of European Institutional

Competition. European and Intercultural Discourses (1 - 29). Berlin: Free University Berlin

Sustainable Development in a Dynamic World. (2003). World Development Report, Washington DC.

WIP-Renewable Energies (2008) Sustainable Energy Actions within EC Structural and Cohesion Funds between 2007 – 2013, as part of the project Energy 4 Cohesion, 16 p., in Internet:

http://www.erec.org/fileadmin/erec_docs/Projct_Documents/Energy4Cohesion/E4C_2008.pdf (18.12.2008)

APPENDICES

Appendix 1. General framework for implementation of the SF resources in 2004-2006

Estonia gained access to the support given by the SF and the CF of the EU while becoming a member state at the 1st of May 2004. Through 2004-2006 Estonia received over EEK 5.8 billion from the SF and EEK 6.7 billion from the Cohesion Fund. In the period 2004-2006, the structural policy of the EU in Estonia was implemented via four SF (please see the previous chapter for the more detailed description about the SF):

- ESF(ESF), which helps to increase employment through development of human resources;
- ERDF(ERDF), which supports economic development and creation of new jobs;
- European Agricultural Guidance and Guarantee Fund (EAGGF), which supports reorganization of agriculture as well as rural development;
- Financial Instrument for Fisheries Guidance (FIFG), which is aimed at resolution of the structural problems of the area.

The use of the SF in 2004-2006 was based on the Estonian Single Programming Document (SPD), which is a framework for the strategy of using the SF resources. The document was evaluated and approved by the European Commission and contains a detailed description of the priority areas, which need to be supported. Being a multi-annual planning tool, the programming document covered national, regional and thematic priorities, measures and goals. The programming document was based on five priorities:

- Development of human resources, whose goal is to increase and take better advantage of the labor potential of Estonia (ESF).
- Competitiveness of enterprises, whose goal is to increase competitiveness of enterprises and employment (ERDF).
- Rural development, agriculture and fishery, whose goal is to ensure balanced and sustainable economic and social development of rural areas (EAGGF/FIFG).
- Infrastructure and local development, whose goal is to develop an infrastructure which supports sustainable and balanced economic development (ERDF).

- Technical Assistance, whose goal is effective and efficient implementation of the Program (ERDF).

The funds allocated for 2004-2006 had to be used by the end of 2008. In the case of the Cohesion Fund, payments will be made until 2010. By March 2007, 92.7% of the applications for the use of SF were found eligible and payments were made in the amount of 50.1% of the total available resources. The volume of the funds resources during the period 2004-2006 was the following:

- ESF – 1 083 927 759 EEK
- ERDF – 3 642 843 634
- European Agricultural Guidance and Guarantee Fund 888 699 999
- Financial Instrument for Fisheries Guidance 195 103 996
- CF – 6 744 594 950
- SF in TOTAL – 5 810 575 388

Appendix 2. Descriptions of the activities included in measures under evaluation

A. Activities related to the priority axis Energy

Introduction of renewable energy sources:

- supporting investments in construction of heat and/or power plants and boiler plants, which use renewable sources of energy; coverage of peak loads in the power network, and ensuring the security of supply of wind energy;
- supporting investments in construction of heat and/or power plants and boiler plants, which use renewable sources of energy, except hydro power plants, wind parks (more than one wind generator), combined heat and power plants with an installed capacity of over 2 MW and distant heating boiler plants with an installed capacity of over 4 MW.

The table provides an overview of the indicators and their target levels for achieving the goals for these measures.

Investments in the energy sector:

- Investment support for acquisition of infrastructure required for establishment of network connections of production equipment;
- Notification of consumers of aspects relating to using alternative transport fuels and possibilities of use thereof;
- Reconstruction of fuel systems of means of transport for using alternative transport fuels (hydrogen, bio-fuels);
- Investment support for renovation of distant heating networks;
- Acquisition and installation of cleaning equipment;
- Application of environmentally friendly technologies in production of energy;
- Investment support for construction of equipment of demonstrative production of energy based on innovative solutions and application of technologies offering local solutions.

The table introduces the indicators and their target levels for achieving the goals for regarding these measures.

Energy efficiency:

- complex reconstruction and renovation of the key structures (load-bearing and peripheral structures) as well as power systems, heating systems and gas installations, which increase energy efficiency in blocks of flats built before 1990;
- carrying out expert assessments and energy audits of blocks of flats;
- operation of the energy saving competence centre of the Kredex Foundation for the purpose of diverse notification and training of consumers in the possibilities and importance of increasing energy efficiency.

B. Activities related to the priority axis Entrepreneurship and the target indicators

Priority: Capacity for innovation and growth of business

Research and development

- financing R&D in specific areas in R&D institutions; • reorganisation of a structural unit in an R&D institution or creation of a new structural unit;
- activities strengthening the respective specialty in the university;
- at least 50% of the budget of the activities aimed at improving cooperation between enterprises and R&D institutions and increasing enterprises' capacity for innovation is allocated to financing national R&D Programs;
- financing national R&D Programs aimed at improving cooperation between enterprises and R&D institutions and increasing enterprises' capacity for innovation.

Entrepreneurship

- supporting R&D and innovation projects which have economic output in specific field;
- establishment of and/or supporting technology development centres in specific field;
- supporting introduction of new technologies (e.g. supporting introduction of ICT in enterprises in the framework of the national R&D Program aimed at ICT);
- supporting the development of human resources of enterprises (e.g. the mobility of the top specialists in the given field and involving them in Estonian enterprises, supporting training and counselling relating to a specific field of technology);

- increasing society's awareness of innovation in a specific area (e.g. awareness of e-commerce, ethical issues relating to biotechnology, etc.

Development of cooperation between entrepreneurs and R&D project institutions

- development of technology transfer units of universities and institutions of professional higher education;
- initiation and development of technology development centres operated jointly by public and private sectors;
- continuing to support projects aimed at developing products, services and technologies which have a high export potential;
- development of science and technology parks and incubators located therein; supporting searching for new technologies (international technology transfer) as well as introduction of new technologies;
- broadening training and financing opportunities for employees;
- it is important to introduce the cluster-based approach in less knowledge and technology-intense sectors and traditional branches of the economy

Making access to capital easier, developing export, creative industry and tourism

- supporting realisation of good business ideas, loan guarantees, attraction of loan capital required for starting business, development of knowledge and skills through respective training and information schemes;
- supporting the compilation of the export plan of already existing exporters or internationalising enterprising and supporting entry in foreign markets on the basis of approved plans through export and investments in the case of expansion; marketing assistance to novice exporters;
- supporting development of creative operation and general environment in order to increase awareness among entrepreneurs, creative artists, as well as among consumers, and making the general education system to develop more creativity; increasing awareness of Estonia as a travel destination in international target markets;
- launching marketing support Programs for the purpose of increasing the demand for Estonian tourism products;

- supporting enterprises' investments in tourism product development.

Priority: Knowledge and skills for innovative entrepreneurship

Research and development

- financing R&D in specific areas in R&D institutions; reorganisation of a structural unit in an R&D institution or creation of a new structural unit;
- activities strengthening the respective specialty in the university;
- at least 50% of the budget of the activities aimed at improving cooperation between enterprises and R&D institutions and increasing enterprises' capacity for innovation is allocated to financing national R&D Programs;
- financing national R&D Programs aimed at improving cooperation between enterprises and R&D institutions and increasing enterprises' capacity for innovation.

C. Activities related to the priority axis “Enhancing Administrative Capability”

Increasing the efficiency and effectiveness of policymaking and implementation

- Implementation of horizontal projects aimed at raising the strategic management capacity of the state, local authorities, umbrella organisations of the non-profit sector and non-profit associations related to provision of public services.
- Supporting the projects of ministries, unions of local authorities, local authorities, non-profit associations and non-profit associations who provide public services.
- Supporting researchers of universities and research institutions in carrying out research and analyses in the areas that are of priority from the point of view of developing the state.
- Planning measures for the purpose of increasing independent political analyses and strengthening cooperation networks.
- Supporting area-based analyses and research and consultation projects; establishment of a so-called smart decisions fund for supporting projects.
- Supporting the assessment of the effectiveness of policy measures, impact analyses, development of area-related performance indicators, and development of monitoring and assessment methods in priority areas.

- Implementation of projects related to developing the system of analysing the impact of legislation and assessment of the administrative burden and supporting the ministries in conducting analyses and surveys the goal of which is to assess the administrative burden of key legislation and analysis of the business, employment, environmental and other impacts of legislation.

Raising the professionalism of state and local government officials and employees of authorities administered by them and of non-profit associations

- Training civil servants and employees of state and local authorities and authorities administered by them and employees of non-profit associations in the areas of priority to public governance.
- Supporting training projects aimed at increasing the management capacity. Conducting various development activities in all profession groups of top executives; implementation of projects aimed at improving the quality of assessing and developing executives.
- Supporting the acquisition of knowledge and skills of developing public governance among civil servants in administrative bodies in foreign states.

Development of a high-quality and sustainable system for training public sector employees

- Supporting the increase of the institutional capacity of the training institution educating public sector employees (the Public Service Development and Training Centre of the Estonian Public Service Academy).
- Conducting training courses for raising the institutional capacity of non-profit associations.
- Strategic planning of local authorities and non-profit associations
- Using the support service of the network of county development centres for implementing joint actions necessary for targeted implementation of activity areas.
- In order to ensure that non-profit associations are strong partners for the public sector, counselling is provided in issues relating to establishment of new non-profit associations

and the growth of their institutional capacity through counselling in county development centres.

Strategic planning of local authorities and non-profit associations

- Using the support service of the network of county development centres for implementing joint actions necessary for targeted implementation of activity areas.
- In order to ensure that non-profit associations are strong partners for the public sector, counselling is provided in issues relating to establishment of new non-profit associations and the growth of their institutional capacity through counselling in county development centres.

D. Activities related to the priority axis “Education”

Lifelong learning

- To ensure higher participation in lifelong learning according to abilities and needs.
- The adult population is provided with modern study opportunities which are flexible, take into account the needs of adults and increase their competitiveness.
- Modern support measures are introduced and implemented for the purpose of increasing the possibilities for adults to participate in training, to cultivate their study attitude and to increase their motivation.
- The system of issuing training licences for adult educational institutions is modernised.
- The activities aimed at acquisition of advanced level of proficiency in the Estonian language at various levels of education, including in higher education, are supported.
- A competence-based national qualification system is developed for the purpose of successful participation in lifelong learning and increasing competitiveness.
- Effective practice in enterprises by vocational students is important from the point of view of achieving high-quality academic results.
- A complex notification Program introducing the possibilities of vocational education is launched.

Youth work

- Activities supporting development of various knowledge and skills of young people the purpose of which is better integration of young people into society and the labour market, are implemented in the framework of youth work.
- A youth worker training Program is developed.
- Quality criteria and indicators and an assessment scheme are devised by areas and services of youth work.

Counselling

- Development of integrated information and counselling system is continued in the framework of the integrated counselling model.
- Career studies and counselling is commenced in vocational education institutions.
- An intra-school counselling system is developed and implemented, supporting students with special needs, their parents and specialists working with them.

Environmental education

- For the purpose of making environmental education a lifelong and future oriented study it will be focused on the existing centres of environmental education which provide hobby education, in service training and practical training in nature.

Raising study quality

- Studies in the general and vocational education system are of a high level and meet the needs of students and society.
- Upon ensuring the quality and availability of studies, the main areas include development of quality assurance systems, professional development of teachers and updating study Programs.
- In general and vocational education quality assurance systems are developed and principles of quality management are applied at the national level and at the level of the educational institutions.
- Development of the study Program continues at all levels of education.

Sciences

- The share of sciences and technology is increased in schools.

Integration

- General education schools where the language of instruction is not Estonian are supported in implementing bilingual studies.
- Measures extending flexible forms of study to non-traditional product groups and to risk groups are taken.

Priority: development of education infrastructure

Vocational education

- Creation of modern conditions for professional and practical training in vocational education institutions.
- Renovation of and, where necessary, construction of new student homes for the purpose of ensuring the availability of vocational education.
- Renovation of and, where necessary, construction of new rooms for practical and theoretical training in vocational education institutions and of rooms, buildings and utility networks associated with the former.

Students with special needs

- Renovation of schools of students with special educational needs – bringing study and non-study rooms into compliance with the standards and adjustment thereof on the basis of the special needs of the students.

Youth work

- Renovation and construction of the premises and buildings of open youth centres, information and counselling centres for young people and hobby schools as well as the surrounding environment used for provision of services.

Development of the infrastructure

- Development of information technology infrastructures.

- Acquisition of modern equipment, inventory and tools for the purpose of ensuring the technical and material base supporting youth work.

E. Activities related to the priority axis “Promotion of the Information Society”

- To carry out development projects aimed at making the administrative operations of the state and local authorities more efficient, simpler and more transparent.
- To plan and to carry out development projects aimed at increasing the share and improvement of the quality of electronic services in the public sector.
- To provide all people with technical possibilities for participating in the information society.
- To implement development projects which would increase the people's possibilities of electronically using and creating information and actively participating in public life at the state, regional and local level.

F. Activities related to the priority area “Environmental Protection”

Priority: development of the water and waste management infrastructure

Drinking and waste water

- Construction and reconstruction of drinking water supply systems
- Construction and reconstruction of drinking water treatment plants
- Construction and reconstruction of waste water collection systems
- Construction and modernisation of waste water treatment plants

Protection of bodies of water

- Activities for the purpose of ensuring a near-natural condition, water quality and supply of surface bodies of water (rivers, lakes and coastal water), incl. liquidation of dams impeding movement of highly migratory species to their spawning areas or construction of fish ladders.
- Liquidation or recovery of residual pollution affecting the condition of bodies of water (surface water and groundwater).
- Activities for preservation of the quality and stock of groundwater.

Development of waste handling

- Liquidation, localization and recovery of sources of residual pollution.
- Closure and improvement of waste disposal sites of oil shale industry and energy, which do not comply with the requirements.
- Closure and improvement of landfills.
- Construction of new municipal waste landfills.
- Establishment of recovery enterprises (incl. burning waste and biological recycling of waste).
- Construction of waste stations (places of handling waste).
- Activities aimed at reduction of generation of waste.

Priority: development of infrastructures and support systems for sustainable use of the environment

Development of the policy of use of the environment

- Drawing up management plans along with preparatory applied research and carrying out inventory checks.
- Implementation of management plans and action plans, incl. restoration of semi-natural communities and other endangered habitats, restoration of habitats of endangered species, restoration of populations of endangered species, limitation of the number of introduced species.
- Assessment of the effectiveness of implementation of plans and an analysis of monitoring data

Development of protected areas

- Construction or reconstruction of the infrastructure required for preservation and restoration of habitats of protected areas
- Acquisition of equipment and a herd required for preservation and restoration of habitats of protected areas
- Construction or reconstruction of the infrastructure which creates possibilities of visiting protected areas

Development of the infrastructure of environmental education

- Development of the network of support centres of environmental education
- Expansion of the possibilities of exhibiting nature (nature study trails, permanent exhibitions, bulletin boards, etc.)

Environmental monitoring

- Drawing up monitoring Programs which are in compliance with environmental action plans at all levels
- Introduction of new methods for the purpose of improvement of the quality and frequency of monitoring
- Introduction of uniform methods at all levels of monitoring and modernisation of devices in order to ensure sensitivity of analyses; introduction of a quality and control system at all levels
- Modernisation of Programs for monitoring air, water, soil and natural diversity considering the requirements arising from directives, conventions, etc.

Improvement of availability of data

- Finding information technology solutions for the purpose of ensuring and improving the capacity of the environmental register
- Creation of a user-friendly system for forwarding, using and preserving monitoring data in the environmental register

Pollution abatement

- Increasing the pollution abatement capacity by improving the infrastructure, acquisition of technology and tools (incl. spill response vessels)
- Acquisition of equipment for abating coastal oil spills.
- Acquisition of remote sensory equipment for aircraft performing pollution monitoring
- Completion of an outdoor hospital for birds along with the required equipment and acquisition of means of transport required for the functionality of logistics
- Training in organisation of marine pollution in connection with prior activities

- Acquisition of equipment for localisation and abatement of oil spills on land and on inland bodies of water

Preparedness for natural disasters

- Acquisition of equipment for liquidation of the consequences of natural disasters
- Acquisition of equipment for combating forest, landscape and soil fires
- Acquisition of special equipment and technology for carrying out rescue work in areas that are difficult to access (small islands, forests, moors and swamps)
- Acquisition of equipment for liquidation of industrial, transportation and oil product accidents (incl. hazardous waste accidents)
- Acquisition of logistical reserves and management tools (incl. IT) for major accidents and construction/reconstruction and furnishing of the infrastructure (incl. training)
- Training in connection with prior activities

Development of environmental supervision

- Acquisition of a patrol ship in order to inspect trawling at sea.
- Acquisition of vehicles with special equipment (sampling equipment, weighs and other measuring instruments) for application of a sampling scheme.
- Acquisition of floating equipment for inspection of fishing in coastal waters, on transboundary bodies of water and inland bodies of water.
- Acquisition of weatherproof laptops and communications equipment in order to ensure operative access to databases (the fisheries information system, register of fishing vessels, register of recreational crafts, VMS).
- Acquisition of video and photo equipment for environmental supervision in order to record evidence in proceedings of offences.
- Acquisition of special equipment for environmental monitoring (net gauges, tools for measuring the thickness of net threads, the size of cargo bays, etc., and special clothing).

Other activities

- Construction of the infrastructure required for administration of nature protection and acquisition of equipment

- Development of the network of support centres of environmental education
- Expansion of the possibilities of exhibiting nature (nature study trails, permanent exhibitions, bulletin boards, etc.).

G. Activities related to the priority area “Regional and local development”

Investments in the development of regions

- Investments in general education schools (including sports facilities and student homes)
- Investments in childcare institutions
- Investments in leisure time and sports objects (community houses, hobby centres, community centres, libraries, gyms, sports fields, recreational sites, etc.)
- Investments in the social field (rehabilitation and activation centres, day centres, nursing homes, infrastructure required for provision of first healthcare services, social homes, children's homes, etc.)
- Investments in improving the availability of public transport (passenger service centres, public transportation stops)
- Investments in diversification and readjustment of the use of the existing public infrastructure for the purpose of diversification of public services
- Investments in improving the quality of Internet connections (data transmission connections in market disturbance areas, public Internet areas and points)

Improvement of infrastructure

- Improvement of transportation connections in urban areas (incl. roundabouts, bridges, light traffic roads, traffic control, public transportation organisation, etc.)
- Development of the public infrastructure relating to improvement of childcare
- Development of the public infrastructure relating to improving social security (rehabilitation and activation centres, shelters, day centres, nursing homes, social houses, children's homes, sports facilities, etc.)
- Development of the public urban space and recreational areas and improvement of greenery in cities and it areas in the proximity of cities (downtown areas, squares, parks, beach and coastal areas, lighting, etc.)
- Compilation of sub-division plats of areas for public use

- Development of the public technical infrastructure that is of importance from the point of view business

Development of tourism

- Preparation of former military, industrial and agricultural objects for reuse. Demolition of objects of a small value
- Adaptation of objects to new functions that are out of public use
- Development of culturally and naturally valuable objects into sight-visit places (incl. passenger ports, museums, theme parks, visiting centres, hiking and study trails, beaches, etc.)
- Development of the support infrastructure of the existing visiting objects (access and light traffic roads, dust removal, parking lots, sanitary and waste management conditions, signs, camping sites, Internet connections, etc.)
- Investments in developing major cultural and tourism objects which increase Estonia's competitiveness and awareness of Estonia as a travel destination

Other goals

- Creation of conditions for stimulating local employment (establishment of local work rooms, promotion of introduction of traditional expertise, etc.)
- Development of regional industrial parks and logistics centres
- Creation and strengthening of regional innovation systems and activities aimed at development of regional business networks and competence centres (primarily based on county centres)

H. Activities related to the priority area “Regional and Local Development”

Investments in the development of regions

- Investments in general education schools (including sports facilities and student homes)
- Investments in childcare institutions
- Investments in leisure time and sports objects (community houses, hobby centres, community centres, libraries, gyms, sports fields, recreational sites, etc.)

- Investments in the social field (rehabilitation and activation centres, day centres, nursing homes, infrastructure required for provision of first healthcare services, social homes, children's homes, etc.)
- Investments in improving the availability of public transport (passenger service centres, public transportation stops)
- Investments in diversification and readjustment of the use of the existing public infrastructure for the purpose of diversification of public services
- Investments in improving the quality of Internet connections (data transmission connections in market disturbance areas, public Internet areas and points)

Improvement of infrastructure

- Improvement of transportation connections in urban areas (incl. roundabouts, bridges, light traffic roads, traffic control, public transportation organisation, etc.)
- Development of the public infrastructure relating to improvement of childcare
- Development of the public infrastructure relating to improving social security (rehabilitation and activation centres, shelters, day centres, nursing homes, social houses, children's homes, sports facilities, etc.)
- Development of the public urban space and recreational areas and improvement of greenery in cities and its areas in the proximity of cities (downtown areas, squares, parks, beach and coastal areas, lighting, etc.)
- Compilation of sub-division plats of areas for public use
- Development of the public technical infrastructure that is of importance from the point of view business

Development of tourism

- Preparation of former military, industrial and agricultural objects for reuse. Demolition of objects of a small value
- Adaptation of objects to new functions that are out of public use
- Development of culturally and naturally valuable objects into sight-visit places (incl. passenger ports, museums, theme parks, visiting centres, hiking and study trails, beaches, etc.)

- Development of the support infrastructure of the existing visiting objects (access and light traffic roads, dust removal, parking lots, sanitary and waste management conditions, signs, camping sites, Internet connections, etc.)
- Investments in developing major cultural and tourism objects which increase Estonia's competitiveness and awareness of Estonia as a travel destination

Other goals

- Creation of conditions for stimulating local employment (establishment of local work rooms, promotion of introduction of traditional expertise, etc.)
- Development of regional industrial parks and logistics centres
- Creation and strengthening of regional innovation systems and activities aimed at development of regional business networks and competence centres (primarily based on county centres)

I. Activities related to the priority area “Research and Development”

Priority: development of human resources of research and development

- Development of the key areas in research and development, innovation strategy and educational science
- Starting cooperation projects in the business and educational sectors by areas. In the framework of the projects improvement of the learning and teaching process and the integrated model of research and development is supported
- Admission to doctoral studies is increased
- Development of doctoral schools is continued, incl. the activities of the existing doctoral schools is made more efficient according to assessment results through concentration of or expansion of areas of activity
- Recruitment of foreign doctoral students and participation of Estonian doctoral students in international doctoral networks is supported
- Systematic assessment of the quality of doctoral studies in Estonia is introduced.
- Possibilities for mobility of researchers and teachers are created

- The studies of Estonian students in higher education institutions of foreign countries are supported
- The activities of support structures relating to recruitment of teachers and students are supported.
- For the purpose of popularisation of natural and precision sciences and technology the establishment and development of interactive science centres, technology and interest centres and science schools for young people is supported
- For the purpose of increasing the attractiveness of research and engineering career among young people and the entire population initiatives popularising science in the media (incl. television, radio, films, printed matter), research news and introducing projects of research associations and other associations of research and development, to the public are supported
- For the purpose of popularisation of natural and precision sciences and technology the establishment and development of interactive science centres, technology and interest centres and science schools for young people is supported
- Focusing on strengthening the impact and role of educational science with the goal of training better teachers and making the area of education the pillar of shaping new values and cultivation of the idea of lifelong learning

Development of study Program

- Development of study Programs is intensified
- An analysis and forecast system is created for development of study Programs

Learning and training

- Training teachers and support staff in modern study Programs development and acquisition and assessment of teaching methods is ensured
- Regional e-learning centres are established on the basis of existing educational institutions in the framework of the e-learning Program
- A single e-learning information system covering a web-based registration system of courses offered in vocational and higher education, e-portfolio, the database of courses and study projects and constitutes a gate upon working and studying

J. Activities related to the priority area “Information Society”

Development of national R&D Programs which are aimed at long-term economic development

- ICT (incl. applications in health care)
- Biotechnology (incl. biomedicine and research of medicaments)
- Material technology
- Energy (incl. oil shale technology and energy saving technologies)
- National defence and security

Activities aimed at R&D institutions

- Financing R&D activities dealing in a specific area in R&D institutions and enterprises (in the case of underlying research as well as applied research)
- Reorganising or establishing a new structural unit in an R&D institution in order to ensure an institutional basis on the one hand and to establish a clear chain of responsibility upon performance of activities on the other hand; supporting R&D projects with an economic output in R&D institutions
- Development of centres of excellence and participation of the centres of excellence in research cooperation Programs of the EU and the Baltic Sea region

Modernisation of R&D institutions and the study and working environment in higher education

- Modernisation of the study environment of universities and institutions of professional higher education
- Updating the structural infrastructure of R&D institutions
- Creating the required conditions in the form of laboratory equipment and the service infrastructure for R&D and higher education

K. Activities related to the priority area “Development of the health care and welfare infrastructure”

Development of the health care infrastructure

- To develop units providing nursing services in active treatment hospitals located in county centres.
- To optimize the infrastructure of central hospitals and regional hospitals.

Development of the welfare infrastructure

- The overall goal of development of the welfare services is to ensure the best living, studying and working conditions for children and people with special psychiatric needs as well as to improve access to the public services and to broaden the possibilities of participating in social and working life.

Other activities

- To improve the living conditions of people who are receiving the service, to reduce the number of persons staying in the existing institutions and the maintenance costs of the institutions.
- Upon planning services and investments, to take into account that the optimum burden of the reconstructed buildings is ensured.

L. Activities related to the priority area “Transport investments of strategic importance“

Removal of impediments to international connections and improvement of safety

- Further development of roads belonging to the TEN-T network, keeping in mind the growth of the capacity of transport nodes and improvement of traffic safety as well as connection of transport corridors to one another and to ports and airports
- Ensuring operation of international passenger and freight traffic, keeping in mind the development of border crossing posts (stations) on roads and railways, improving the railways and ports to handle more diversified freight flows and the readiness of the waterways (and the Maritime Administration) for ensuring shipping traffic throughout the year and development of short sea transport

Development of environmentally friendly rail (electric) transport competing with automobile transport

- Development of electric rail transport in Tallinn helps to provide better connections between the airport, city centre, seaport and integrates different means of transport, increasing the number of public transport users in Tallinn.
- In order to ensure fast passenger train connection it is necessary to increase the technical level of the railways, modernise and extend the electric rail network and to introduce modern rolling stock.

M. Activities related to the priority area “Transport investments of regional importance“

Improvement of the bottlenecks of the regional transport infrastructure

- Investments in major objects of the transport infrastructure of regional importance, which contribute considerably to local development or operation of infrastructures of strategic importance

Ensuring a high quality connection with the peripheral regions

- Development of public transport information systems
- Investments in development of regional air traffic
- Investments in ensuring a connection with islands
- Investments in reconstruction of waterways along with renovation of the main port of the maintenance fleet
- To ensure the growth of passenger train travelling investments to the rail infrastructure and to the improvement of the living environment influence by the railway must be made
- To acknowledge preparation of transportation project as an important area

N. Activities related to the priority area “Long and high quality working life“

Increasing the supply of qualified labour force

- Steps are taken to prevent unemployment and inactiveness

- Measures are taken for increasing people's health consciousness and improvement of health behavior
- Case management is developed further and active employment measures are taken and support activities are performed on the basis of the needs of a specific person for the purpose of bringing the unemployed and the inactive to the labour market
- For better use of the immigration and migration potential of employees the awareness of the population working abroad is increased and opportunities are looked for in order to make returning to Estonia more attractive for migrants.

Improvement of the quality of working life

- For making working environment healthier for employees, the present activities aimed at improving the quality of the working environment will be revised.
- In order to increase the clarity and flexibility of employment relationships a detailed analysis of the impact of employment legislation must be carried out for the purpose of updating the legal regulation of employment relationships.
- To raise the quality of working life via increasing the satisfaction with the working life by the parties to the employment relationships.
- Policy analyses and research has to be done for increasing the administrative capacity to draft and implement policies,
- To develop the information systems of the Ministry of Social Affairs and its divisions.
- The qualification of the staff developing and implementing the policy is raised.