





Expert evaluation network delivering policy analysis on the performance of Cohesion policy 2007-2013 Year 3 – 2013

Task 2: Country Report on Achievements of Cohesion policy

Estonia

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List of abbreviations

- AIR Annual Implementation Report
- ESTES Estonian Evaluation Society
- ERAC European Research Area Committee
- ETP Energy Technology Programme
- FEI Financial Engineering Instrument
- NSRF National Strategic Reference Framework
- OP Operational Programme
- SEN Special education needs

Executive summary

The economic recovery that began in 2010 continued into 2012 though at a slower pace. Local government revenues have also begun to show an increase, although the recovery rate is slower in less developed regions. No major changes have occurred in regional development policy in 2012 and there have been no shifts in priorities and/or the allocation of EU funding.

Implementation rate increased to 61.4% for the Operational Programme (OP) for the Development of Economic Environment and to 55.4% for the OP for the Development of the Living Environment by end-2012. Progress took also place in priorities with the lowest implementation and commitment rates – in the development of water and waste management infrastructure and in modernisation of R&D. 87% of the Financial Engineering Instruments (FEIs) have reached final recipients by the end of 2012.

In the case of enterprise support, achievements were related to better access to the capital required for productivity-increasing investment, the technological modernisation of businesses and successful internationalisation. For R&D and higher education infrastructure progress was evident in improving the research and higher education study environment and increasing the international competitiveness and business focus of the R&D supported.

For transport and communications three main projects were completed in 2012 but no evaluation is available regarding their impact. The reduction of travel time on the reconstructed railways has been achieved as well as reduction in accidents resulting in casualties on renewed sections of road and at junctions.

For environment and energy the outcomes accord with the targets and policy objectives set and are reported to be having the intended effects. For example, the number of contaminated sites treated has increased as well as the number of environmentally inadequate non-hazardous waste landfills cleaned up. The share of recycled solid waste (excluding oil shale and agricultural waste) increased too. A marine spill containment vessel was acquired increasing the capacity for detecting and cleaning up marine pollution. Moderate progress was visible on the 'development of water and waste management infrastructure' – the number of people connected to public water supply and sewage systems (as a result of the projects carried out during this programming period) has increased slower than expected.

In the case of territorial development, progress was reported on infrastructure improvement, e.g. the new or reconstructed space for providing nursing and care services, the number of family and activity houses opened, local public-service infrastructure units which have been improved. Progress was also reported on the number of beneficiaries, both individuals as well as companies, but details of the benefits concerned were not provided.

Three new evaluations were made publicly available between October 2012 and September 2013. The mid-term evaluation of the Energy Technology Program (2012), Evaluation of the contribution of EU funded projects to the implementation of the Baltic Sea Strategy priority areas (2013) and Impact assessment of the e-government services (2013).

Extensive investment co-financed by the ERDF and Cohesion Fund continued to take place in Estonia that would not have been possible. Regional differences remain significant, and there is a need for better coordination between the different policy areas and for a governance model that

brought decision-making to the regional (functional urban region) level. Attention should be paid to the ability of local governments to sustain the projects supported by the ERDF and Cohesion Fund. There is also a continuous need for additional evaluations and studies in the areas like environment and territorial development.

1. The socio-economic context

Main points from the previous country reports:

- Between 2009 and 2011 the socio-economic situation of Estonia was characterised by a successful converging economy with close links with other Nordic economies and high rates of growth in productivity and GDP per head for the period 2000-2007.
- Growth reversed following the financial crisis of 2008, the economy experienced one of the most severe contractions anywhere in the world.
- Recovery of the Estonian economy began in 2010 (See Excel Tables 1 and 2).
- The main challenge Estonia faced was to turn earlier domestically-led growth into exportled growth and also to increase competitiveness of its enterprises in global markets.
- Regional differences, in the standard of living and the competitive ability of different counties are significant.
- Contraction of the economy and wages, and increased unemployment reduced the income of local governments. As part of fiscal restraint measures, tighter controls were applied to local government finances and borrowing by the central government. Less developed regions have been affected more than others.

Developments since the 2012 report

The economic recovery that began in 2010 continued in 2012. GDP growth was 3.2% in 2012 (8.3% in 2011), driven by construction, transportation and storage. In 2012, exports of goods and services grew by 6% in real terms (25% in 2011) (Statistics Estonia 2013a). While the central government budget was in surplus in 2011 after three successive years of deficit, in 2012 the Estonian general government deficit was 0.3% and the gross debt level was 10.1% of the GDP.

Three types of problem areas can be distinguished in Estonia as at 2013, high growth in the capital city region and consequent overconcentration and problems with infrastructure; industrial area decline in North-East Estonia and single factory settlements characterized by high unemployment, underused infrastructure and emigration; and remote rural areas distinguished by a low income base, high unemployment and out-migration of youth (Raagmaa 1996, Roose et al. 2010, Raagmaa et al. 2013). Regional problems were most acute in North-East Estonia (Ida-Viru County, with 11% of population) where unemployment, for example, was 18% in 2012 (Annex Table F) and income levels were the lowest in Estonia (Annex Table E), indicating that labour-intensive manufacturing industries have not been replaced with new industries.

Since the economic crisis, fiscal consolidation measures have reduced the funds of local governments, especially in the weaker regions. Due to the better economic situation (growth in wages, increased employment) the income of local governments showed improvement in 2012: local government tax revenues increased from EUR 695 million (2011) to EUR 734 million, dominated by the growth of tax revenues in Tallinn. However, the recovery rate was slower in less developed regions (Ministry of Finance 2013a).

Economic development in the declining industrial areas in North-East Estonia has not been in the focus of the Cohesion policy. For example, within the framework of 2004–2009 development programmes for enterprise, tourism, technology and innovation, Tallinn received 52% and Tartu 28% of related national funding (Noorkõiv 2010, pp. 66–67). The focus of the Cohesion policy had

been on addressing national development problems and this focus has gained further strength with global economic crisis.

2. The regional development policy pursued, the EU contribution to this and policy achievements over the period

The regional development policy pursued

Main points from the previous country reports:

- The main focus of policy was developing a knowledge-based economy and basic infrastructure, increasing the effectiveness of environmental protection and developing the energy sector, and enhancing local development (Estonian National Strategic Reference Framework 2007-2013 [NSRF 2007], pp. 58-64).
- Estonia is a single Convergence Objective region. The total allocated funding for Estonia for the period 2007-2013 from the Structural and Cohesion Funds was EUR 3,400 million (see Excel Table 3).
- The OP for the Development of Economic Environment focused on enhancing the enterprise sector and improving the national R&D and innovation system, and the development of the transport system.
- The OP for the Development of Living Environment was mainly focused on the development of water and waste management infrastructure, integrated and balanced development of regions and the development of education, health, and social welfare infrastructure.
- In 2011, the allocation to the development of energy was reduced by EUR 58.4 million and redirected mainly (EUR 48.8 million) to enterprise support measures.

Developments since the 2012 report

No significant changes occurred in regional development policy in 2012. There had been no shifts in priorities and/or the allocation of EU funding and no significant changes in the EU co-financing rate in 2011 and 2012, except in support for energy where the national co-financing rate increased by over 24 percentage points (Annex Table H) as additional national public and private sector funds were used.

Foreign financing is very important for Estonia – the state budget for 2012 included foreign aid in the amount of EUR 1,300 million (EUR 995 million in 2011), accounting for 19.1% of the total State budget, while 78% of foreign financing came from various EU funds and programmes. Substantial investment co-financed by the ERDF and Cohesion Fund in the amount of EUR 771 million in 2012 – certified eligible expenditure increased by EUR 402 million for OP for the Development of Living Environment and EUR 369 million for OP for the Development of Economic Environment – especially in transport, water and waste management could otherwise have not been possible given implementation of national austerity measures.

FEIs for the period 2007-2013 funded by the ERDF in Estonia were related to first the innovation and growth capacity of enterprises (EUR 100.9 million; 7.0% of the total budget of the relevant OP) and second with energy efficiency (EUR 17 million; 1.1% of the total budget of the relevant OP) (Table 1).

First, extensive assistance had been provided to SMEs affected by the 2007 credit crunch. The private market in Estonia does not offer adequate capital to entrepreneurs who lack sufficient collateral and/or sufficient level of self-financing as well as an appropriate financial history. The FEIs addressed these market failures. These issues became much more acute given the global economic crisis, as credit insurance providers became more conservative. The highest demand for these FEIs occurred in 2009 and 2010. Since 2011 due to the more liberal credit policies of banks, the demand for FEIs decreased. A large share of the ERDF assistance has been paid to final recipients, except in the case of subordinated loans, but this loan measure was introduced only in April 2011. Since some funds might remain unused within subordinated loans, there are plans to come up with a new instrument – export loan – in 2013. The expectation was that all funds reach final recipients by the end of 2015.

Second, in the field of energy efficiency, the market failure targeted by the FEI relates to the high prices of loans for apartment building renovation. As of 2012 all funds have reached final recipients.

Name	ERDF assistance (EUR million)	ERDF assistance paid to final recipients (EUR million)
Temporary support programme to improve loan capital availability for enterprises	42.9	42.9
Loan guarantees and capital loans	27.9	27.9
Renovation loan for apartment buildings	17.0	17.0
Subordinated loan	17.3	2.4
Export credit insurance	12.8	12.8
Total	117.9	103.0

 Table 1 - Financial engineering instruments, end-2012

Sources: EC 2013, Kredex 2013.

Policy implementation

Main points from the previous country report:

- The overall assessment of the implementation of the ERDF and Cohesion Fund, based on the financial progress, was positive: The implementation rate¹ was 39% and the commitment rate was 86% for the ERDF and Cohesion Fund together at the end of 2011.
- The priority axes with the lowest commitment and implementation rates were 'Development of water and waste management infrastructure' and 'Enhancing the competitive ability of Estonian R&D through research programmes and modernisation of higher education and research institutions'.
- According to the Annual Implementation Reports (AIRs), the content of the programmes had been implemented in accordance with the OPs. There was progress in implementing the measures that previously raised concern.
- The main obstacles to progress in implementation have remained largely the same since 2010. These include the ability of funding recipients to guarantee co-financing, the "litigiousness" of the public procurement process and fluctuations in the price of public

¹ Measured by total amount of certified eligible expenditure paid by beneficiaries, divided by total funding of the OP (European Union and national).

construction contracts. Several initiatives have been undertaken to tackle these problems and to speed up implementation.

Developments since the 2012 report

Comparing commitment rates up to the end of 2012, further progress was achieved as regards the OP for the Development of Economic Environment and the OP for the Development of the Living Environment, as evidenced by the following:

- The overall commitment rate increased by 6 percentage points to 92%;
- The highest commitment rates are related to enterprise support (98%), territorial development (96%) and transport (93%).
- For transport, the environment and energy and territorial development, commitment rates increased by 3-7 percentage points (see Excel Table 4).

The priority axes with the lowest commitment and implementation rates were:

- 'Development of water and waste management infrastructure': the implementation rate (22.9% in 2011) increased to 46.8% at year-end 2012 and to 55% by end May 2013. By the end of May 2013, 89.6% of EU allocations were committed.
- 'Enhancing the competitive ability of Estonian R&D through research programmes and modernisation of higher education and research institutions': the implementation rate (24% in 2011) increased to 45.0% at year-end 2012 and to 54.5% by end May 2013. 97.4% of EU allocations were committed by the end of May 2013.

The implementation rate was 61.4% for the OP for the Development of Economic Environment and 55.4% for the OP for the Development of the Living Environment by end-2012, and increased to 67.2% and 61.3% respectively by May 2013 (Annex Table I). Thus, the overall assessment of the implementation of the ERDF and Cohesion Fund, based on the financial progress reported in the AIRs for the Development of Economic Environment OP and the Development of the Living Environment OP, is positive. The target levels (so-called N+2/N+3 levels) set in the OPs have been achieved for 2012.

The programmes were implemented in line with plans set out in the OPs. Among the measures planned in the two OPs, the 2012 AIR as well as earlier AIRs expressed concern about the following axes:

- Implementation of priority axis 2 of the Development of Economic Environment OP 'Enhancing the competitive ability of Estonian R&D through research programmes and modernisation of higher education and research institutions': in 2012 all of the measures for support of R&D activities in priority technology areas were being implemented.
- Implementation of priority axis 1 of the OP for the Development of Living Environment 'Development of water and waste management infrastructure and ambient air protection': Compared to 2011, more projects have reached from a long launch and preparation stage into real construction activities. Establishment of a waste treatment centre in South Eastern Estonia, however, continues to be problem as it is suspended due to disputes.

The main reasons for delays in implementing programmes have remained largely the same since 2010:

- Beneficiaries have been affected by the economic crisis, and consequently co-financing capacity has been reduced.
- Completion of projects will require more time than planned. The project approval process occurs in several time-consuming stages. The public procurement process tends to consume more time than expected.
- Some beneficiaries have not respected procurement regulations, because of either lack of competence or wrong interpretation of the legislation.
- Due to the recession, there has been intense competition among suppliers, especially regarding infrastructure construction. Sometimes attempts to lower costs have resulted in lower quality, implementation delays, or even cancellations of contracts. Procurement decisions have become increasingly litigious, causing further delays.
- Construction prices have started to rise since 2011, and plans made during the recession may no longer be valid.

Several initiatives had been undertaken over the past years to tackle these problems and to speed up implementation; these included increasing public procurement staff, provision of additional training and consulting on public procurement, provision of additional funds to address the problem of insufficient co-financing. AIRs report positive effects of these activities.

Thus, the overall assessment of the implementation of the ERDF and Cohesion Fund, based on progress reported in the AIRs for the Development of Economic Environment OP and the Development of the Living Environment OP, is positive. For 2012 the target levels (so-called N+2/N+3 levels) set in the OPs have been achieved. It is likely that all the planned expenditure will be carried out by end-2015.

Achievements of the programmes so far

Main points from the previous country report:

- Regarding support for improving the **enterprise environment**, the output and results of funding were generally in line with the targets and objectives set. Achievements include better access to the capital required for productivity-increasing investment, the technological modernisation of businesses and successful internationalisation.
- For R&D and higher education infrastructure progress was reported in improving the research and higher education study environment and increasing the international competitiveness and business focus of the R&D supported.
- Under-performance was noted in two areas: ensuring the competitive and sustainable development of the Estonian tourist industry and the implementation of R&D programmes.
- In **transport and communications**, of the more general impact indicators, the target growth in the number of passengers in regional ports and airports was achieved, while the total number of passengers carried by public transport will probably not be achieved by 2015.
- In **environment and energy**, there was considerable progress in some sub-areas, such as the preparedness for environmental emergencies and the maintenance of biological diversity. The result indicators of the largest measures relating to the development of water and waste management infrastructure, the treatment of contaminated sites and the closure

and clean-up of waste suggested limited progress because of significant delays in initiating the projects.

- In the case of **territorial development**, the main achievements were related to the number of local public-service infrastructure units which had been improved, business infrastructure facilities created or improved and the modernisation of vocational schools.
- Nothing significant can be deduced about regional development as such from what is reported on outcomes, results and impacts.
- It was not possible to assess the effects of the **Estonia–Latvia Programme 2007-2013** as the AIR for 2011 mainly described the operational side of the programme.

Developments since the 2012 report

The primary information relied upon are the AIRs for 2012 and relevant evaluations or research studies carried out. However, the AIRs are preponderantly indicator-driven and lack qualitative analysis and references to other studies and evaluations, making it difficult to summarise programme achievements in several policy areas. Some new evaluations have become available since the preparation of the 2012 report, but in a number of policy areas there are still no evaluation available. Nevertheless the main outcomes of expenditure in different policy areas as indicated in the AIRs are presented below and related to the quantitative evidence.

The AIR for the Development of Economic Environment OP reported notable progress and achievements by end-2012 in **enterprise support and research, technological development and innovation (RTDI)** (see Annex Table J for categorisation). Achievements (based on progress in meeting the targets set for indicators) and financial progress are good.

In the case of enterprise support, achievements were related to better access to the capital required for productivity-increasing investment, the technological modernisation of businesses and successful internationalisation.

Indicators reveal progress in the following areas:

- Inducing private sector investment in new machines and equipment amounted to EUR 190 million by the end of 2012, compared to EUR 125 million in 2011, with a goal of EUR 134 million in 2015;
- Private sector R&D investment induced by the projects supported stood at EUR 82 million, up from EUR 75.8 million in 2011 and exceeding the 2015 target of EUR 38.4 million²³;
- The "internationalisation" of enterprises as reflected in the number of firms involved in exporting was 11,281, compared to 10,538 in 2011, which exceeded the target set of 8,700 for 2015⁴;
- The overall positive developments are also reflected in the value-added per employee of companies receiving support, which increased to EUR 22,700 in 2011⁵ (EUR 20,490 in 2010). Although still low as compared with the 2015 target of EUR 32,000, it had been

² For comparison, private sector R&D investments amounted to EUR 154 million in 2011 (EUR 2 million in 2010) (Statistics Estonia 2013c). The rapid growth is due to investment in the oil refinery.

³ Data for 2011 has been modified as updated information became available from Enterprise Estonia.

⁴ For comparison, the total number enterprises, which were economically active in 2011 (having net sales, expenditure, etc.) was 65,032 (Statistics Estonia 2013c).

⁵ Data for 2012 will be available at the end of 2013.

greatly affected by the global economic crisis. The 2012 AIR considers achieving the target level by 2015 unrealistic, especially considering that according to preliminary data the value-added per employee growth has slowed down in 2012.

For R&D and higher education infrastructure progress was evident in improving the research and higher education study environment and increasing the international competitiveness and business focus of the R&D supported.

Progress in output, results and impacts of the intervention at end-2012 are summarised as follows:

- There were 392 R&D work places in new or upgraded facilities in R&D institutions (322 in 2011) with a target of 800 by 2015⁶; the number of students using new or upgraded facilities at higher education institutions was 2,632 (2,301 in 2011), exceeding the 2015 target of 1,500⁷;
- The number of centres of excellence co-financed by the ERDF remained 12 exceeding the 2015 target of 7 centres;
- 21,284 sq. m. of new or upgraded facilities in R&D institutions (17,061 in 2011; target of 25,000 for 2015).

In 2012, under-performance was noticeable in "Ensuring the competitive and sustainable development of the Estonian tourist industry": the increase in export earnings of tourism⁸ of 27% by end-2012 exceeds the 24% achieved by end-2011, but attaining the 55% increase expected by 2015 is unrealistic. The hoped-for decline in seasonality (visitors in the summer months relative to the total for the year) to 35% by 2015 did not occur, although seasonality declined to 37.4% from 38.5% in 2011⁹. The number of overnight visitors in accommodation increased marginally to 5.5 million in 2012 as against 5.4 million in 2011 (the target is 7.1 million by 2015).

In sum, in the case of improving enterprise support and RTDI, it can be concluded that the output and results of funding were in line with the targets and the objectives of the interventions. Achievements were related to better access to the capital required for productivity-increasing investment, the technological modernisation of businesses and successful internationalisation. Information on enterprise support was sufficiently detailed and additional qualitative information was provided to enable assessment. For R&D and higher education infrastructure, the information provided is rather brief. For both some statistical information for 2012 was not yet available. Progress was evident in improving the research and higher education study environment and increasing the international competitiveness and business focus of the R&D supported. There is no indication of the regional effect of the measures.

For **transport and communications** the output, results and impacts of the intervention at end-2012 can be summarised as follows:

⁶ For comparison, the total number of researchers in the higher education sector was 4,742 in 2012 (Statistics Estonia 2013c).

⁷ For comparison, the total number of higher education students enrolled in 2012 was 64,806 (Statistics Estonia 2013c).

⁸ Measured by growth of export revenues from EUR 970 million (2005).

⁹ Tourism in Estonia is highly seasonal: shortages of accommodation may occur during summer, but average occupancy is low in the winter. Thus, it is important to measure the share of summer months (June–August) in all overnight stays.

- Three main projects were completed in 2012. The Pärnu bypass road's project was completed. The reconstruction of the railroad between Türi and Viljandi enabled trains to pass that section up to 12 minutes faster (58 minutes before reconstruction). The project of the Tallinn-Tartu section of Rail Baltica was also completed.
- The objective for reduction of travel time on the reconstructed railways was 45% of the 2007 level by 2015. A decrease of 31% has been achieved as of 2012.
- 56% reduction in accidents resulting in casualties on renewed sections of road and at junctions (85% reduction target by 2015) occurred in 2012¹⁰. This might be due to several factors since no reductions occurred in 2011 and further impact assessment is needed.
- In total 44 km of new roads were opened in 2012 (61 km in total since 2007) and 13 km of roads were reconstructed (46 km in total since 2007). No target indicators have been set; no data are reported on time and financial savings from new and reconstructed roads (EC 2013).
- The use of public transport (number of trips made using public transport¹¹) increased to 191 million in 2012 from 162 million in 2011. The increase is partially related to changes in the calculation methods. Achievement of the 2015 target of 273 million remains unrealistic. The AIR states that public transport users in urban areas make up 80% of the total number, while the projects supported focus on improving regional not urban transport connections (p. 105).

Analysis of the main achievements for 2012 for the **environment and energy** shows that considerable progress took place in some areas, for example:

- The number of contaminated sites treated increased to 38 (35 in 2011; with a target of 53 by 2015).
- The number of environmentally inadequate non-hazardous waste landfills (39 in 2007) closed was 39 (as in 2011), but the number of those not cleaned up has declined to 10 (12 in 2010).
- The share of recycled solid waste (excluding oil shale and agricultural waste) increased to 88% (as at end-2011, data for 2012 not yet available) as compared to 58% in 2010 and the 60% objective by 2015.
- Three new or modernised environmental education support centres have been opened (target 15 in 2015) and sufficient projects are underway.
- 1 marine spill containment vessels was procured increasing the capacity for detecting and cleaning up marine pollution.

Slower progress on some of the main measures as at end-2012 can be noted:

• The 'Development of water and waste management infrastructure' had the largest budget (EUR 425 million). While there had been an increase in the number of properly functioning wastewater treatment plants (an increase from 29 in 2005 to 36 in 2011¹², but below the target of 49 by 2015) the result indicators show only limited progress—the number of

¹⁰ There were 34 casualties in those roads and junctions in 2007 and it dropped to 15 in 2012. For comparison, the total number of persons killed and injured was 1,783 in 2012 (Statistics Estonia 2013c).

 $^{^{\}rm 11}$ Measured by the total number of passengers carried by public transport.

¹² Latest data available.

people connected to public water supply and sewage systems (as a result of the projects carried out during this programming period) was 1,700 and 2,400 respectively. This was still far below the target number of 30,000 by the end of 2015. Simultaneously, the number of residents for whom connection points to the public water and sewage systems supply have been created had increased to 21,000 (target level 100,000 for 2105) and 23,400 respectively (target level 42,000 for 2105). The realisation of all additional connection possibilities created as a result of projects will take longer than end 2015 as the connection process comprises various activities: application for connection, issuing of technical terms and conditions, construction of the connecting party's own pipelines and the attestation of a connection contract.

- The number of non-environmentally friendly industrial waste dumps of the oil shale industry and oil shale based power industry (11 in 2007) that have been closed and/or cleaned up remained the same as in 2010 and 2011: 11 closed and 4 of these were cleaned up.
- The share of apartment blocks renovated with ERDF support in the total housing stock built before 1993 increased to 3.7% (2.8% in 2011), far below the 8% target for 2015, especially considering that ERDF resources were exhausted in 2012.

The 2015 targets for these important indicators are expected to be achieved (as projects are underway), except as regards the apartment blocks renovated, though the latter was largely due to failure of making a realistic cost estimate.

Overall, outcomes were in line with the targets and policy objectives set. The interventions have clearly addressed the Estonian environmental issues by treating contaminated sites, waste landfills and in increasing the capacity for detecting and cleaning up marine pollution, and connection points to the public water and sewage systems supply have increased. However, there were significant delays in starting the projects, and therefore progress towards achieving some of the targets set for 2015 has been slow. The delays in this policy area have been caused by difficulties of securing the necessary co-financing, "litigiousness" of public procurement and prices of public building contracts fluctuating (see Section 2).

In the case of **territorial development**, according to the AIR for the Development of Living Environment (2013) OP, the main achievements for 2012 were:

• In the sub-axis of 'Development of local public services', the number of local public-service infrastructure units which have been improved increased (from 135 in 2011) to 160 (the target for 2015 is 225). The number of local facilities that have diversified their use¹³ remained the same (51) and above the 50 planned for 2015. Some 126,000 people are reported to have benefited from this investment, above the 2015 target of 120,000 though this was less than what was archived the previous years (165,600 in 2011) due to changes in calculation methods. According to the new and more suitable approach, only regular beneficiaries are counted, e.g. regular visitors of sports clubs or acting clubs. Still, it remains unclear why, for example in the case of culture houses, total numbers of seats are considered (instead of visitors).

¹³ Measured by counting facilities having one or more additional functions after reconstruction (e.g. sports and leisure centres).

- In the sub-axis of 'Strengthening of the competitiveness of regions', the main achievement was the number of companies that have benefited from the business or visitor infrastructure created 187 up from the 159 in 2011, but still below 300 targeted for 2015. The output indicator reported 20 business infrastructure facilities being created or improved (the target for 2015 is 50), up from 7 in 2011. The number of projects enhancing regional traditional know-how increased to 12 (10 in 2011; 30 targeted for 2015). The number of visitor sites created or qualitatively improved decreased to 36 (64 in 2011; 100 targeted by 2015) due to changes in the calculation methods from now on a completed project contributes to one indicator only.
- In the sub-axis of 'Development of urban regions', the number of people benefiting from investment projects increased considerably (from 668 in 2011 to about 4,000 in 2012), closer to the target of 5,000 in 2015. The length of light traffic roads constructed remained at 9.5 km (with the target of 50 km in 2015) and no further progress was reported neither in increasing public green nor recreation areas. Output indicators remained the same in the number of projects for the development of sustainable urban transport (3 in 2012, 10 targeted for 2015).

Indicators relating to the balanced development of regions predominantly concern outputs (9 out of 12) making it impossible to assess results and impacts. Moreover the three result indicators need to be more detailed: two of them relate to the number of individuals benefitting from the intervention and they ignore the scale of the benefits involved (e.g. in the intensity of infrastructure use, the nature of benefits). Nevertheless there are plans to carry out an impact assessment (AIR for the OP for the Development of Living Environment 2013, p. 103).

In the development of education infrastructure, main achievements in 2012 relate to:

- The modernisation of vocational schools, 16 schools remain completed¹⁴; the target of 31 by 2015 will not be reached with existing funds. The proportion of study equipment upgraded in vocational schools rose by 6 percentage points to 64% in 2012 (90% being the target for 2015). The proportion of modern study places in such schools remained at 55%, above the target of 42% set for 2015.
- The improvement of the study environment in 13 Special Educational Needs (SENs) schools (through developing the relevant infrastructure and modernising facilities for students with SEN was completed (above the target of nine projects in 2015 that were already achieved by end-2011)¹⁵. The number of SEN students benefitting increased to 1,300 (up from 1,000 in 2011)¹⁶.

In the case of health infrastructure:

• The new or reconstructed space for providing nursing and care services increased to 42,263 sq. m. (from 12,437 in 2011) and the number of beds installed in the space created for nursing and care increased to 943 (344 in 2011)¹⁷.

¹⁴ For comparison, the total number of institutions providing vocational education was 48 in 2012 (Statistics Estonia 2013c).

¹⁵ For comparison, the total number of SEN schools was 43 in 2012 (Statistics Estonia 2013c).

¹⁶ The total number of students at SEN schools was 3,490 in 2012 (Statistics Estonia 2013c).

¹⁷ The total number of hospital beds was 7,165 in 2011 (Statistics Estonia 2013c).

- The number of family and activity houses opened increased to 47 (up from 13 in 2011) still below the target of 84 but several projects are underway.
- No projects were completed for acute care services in 2012, and the newly built/reconstructed space used for the provision of acute care services has remained the same since 2009 (29,807 sq. m.), below the 2015 target of 65,000 sq. m. But several projects are underway.

The targets will be achieved by the end of the programming period in spite of significant delays, associated with the considerable time taken for both the preparation and implementation of investment projects. Considering the size of this policy area budget allocation and that indicators predominantly relate to output (9 of the 12), detailed qualitative analysis would be expected to be included in the AIRs for 2012. However, similar to AIRs of 2010 and 2011, the information provided is very brief (1-1.5 page per priority axis) with little focus on the impacts involved.

Policy area	Main indicators	Outcomes and results
Enterprise support and RTDI including ICT and increased access to finance by SMEs	Value added per employee of recipient companies increased to EUR 22,700 in 2011 (EUR 20,490 in 2010). Although still low considering the 2015 target of EUR 32,000, it has been greatly affected by the global economic crisis.	Inducing private sector investment in new technologies and engineering amounting to EUR 190 million, compared to EUR 125 million in 2011, with a goal of EUR 134 million in 2015. Private sector R&D investment, induced by the projects supported, stood at EUR 82 million, up from EUR 75.8 million in 2011 and exceeding the 2015 target of EUR 38.4 million. The number of enterprises involved in exports increased to 11,281, compared to 10,538 end-2011, exceeding the target set of 8,700 for 2015. Five thematic R&D programmes are operational (4 in 2011; target of six programmes by 2015). 392 R&D workplaces in new or upgraded facilities in R&D institutions (322 in 2011) with a target of 800 by 2015. 21,284 sq. m. of new or upgraded facilities in R&D institutions (17,061 in 2011) with a target of 25,000 sq. m. by 2105. The number of centres of excellence co-financed by the ERDF remained at 12 exceeding the 7 centres target for 2015.
Transport	The total number of passengers carried by public transport increased to 191 million; achievement of the 2015 target of 273 million is unrealistic. 56% decrease of accidents, with human casualties or injuries, at renovated road sections and junctions (85% reduction goal by 2015; no reductions occurred in 2011).	The Pärnu bypass road's project was completed. The reconstruction of the railroad between Türi and Viljandi enabled trains to pass that section up to 12 minutes faster (58 minutes before reconstruction). The project of the Tallinn-Tartu section of Rail Baltica was also completed. In total 44 km of new roads were opened in 2012 (61 km in total since 2007) and 13 km of roads were reconstructed (46 km in total since 2007) (compared with 11 km of new road and 42 km of reconstructed road in 2011). No target indicators have been set; no data are reported on time and financial savings from new and reconstructed roads. The reduction of travel time on the reconstructed railways by 45% of the 2007 level by 2015, 31% decrease has been achieved as of 2012.
Environment and energy	Number of people connected to public water supply and sewage systems was 1,700 and 2,400 respectively far below the targeted number of 30,000 by end-2015. The number of residents for whom connection points to the public water and sewage systems supply have been created has increased to 21,000 (target level 100,000 for 2105) and 23,400 respectively (target level 42,000 for 2105).	Increase in the number of properly functioning wastewater treatment plants (increased from 34 in 2010 to 36 in 2011, but below target of 49 in 2015). The number of contaminated sites treated increased to 38 (35 in 2011; with a target of 53 by 2015). The number of environmentally inadequate non-hazardous waste landfills (39 in 2007) closed was 39 (as in 2011), but the number of those not cleaned up has declined to 10 (12 in 2010). 1 marine spill containment vessels was procured increasing the capacity for detecting and cleaning up marine pollution. The share of apartment blocks renovated with ERDF support in the total housing stock built before 1993 increased to 3.7% (2.8% in 2011), far below the 8% target for 2015, due to failure to make realistic estimate of the cost.
Territorial development	Number of people who have benefited from investments: 126,000, but limited information available on the nature and the actual impacts of the benefits. 187 companies benefited from business and visitor infrastructure, an improvement from the 159 in 2011, but only half of the 300 required by 2015. The number of people benefiting from investment projects in urban regions increased considerably	The number of improved local public-service infrastructure units increased to 160 (135 in 2011; 225 target for 2015). No further details are available on results and impacts. 20 business infrastructure facilities being created or improved (the target for 2015 is 50), from 7 in 2011. The number of projects enhancing regional traditional know-how increased to 12 (10 in 2011; 30 being target for 2015). The share of study equipment upgraded in vocational schools rose to 64% in 2012 (90% being the target for 2015). The new or reconstructed space for providing nursing and care services increased to 42,263 sq. m. (from 12,437 in 2011). The number of beds installed in the resulting space for nursing and care increased to 943 (344 in 2011). The number of family and activity houses opened increased to 47 (up from 13 in 2011) – still below the target of 84 – but several projects are underway.

Table 2 - Outcome and result indicators and main impact indicators in different policy areasas of December 2012 (unless otherwise indicated)

Policy area	Main indicators	Outcomes and results
	(from 668 in 2011 to about 4,000 in 2012, closer to the target of 5,000 in 2015. The number of SEN students benefitting increased to 1,300 (up from 1,000 in 2011).	

Source: Author compilation based on the AIRs for the OP for the Development of Economic Environment (2013) and the OP for the Development of Living Environment (2013).

It was not possible to assess the effects of the Estonia–Latvia cross-border Programme:

- The 2012 AIR, similar to 2011 AIR, mainly described the operational side of the programme, and proper (qualitative) analysis of the achievements was very brief. Information was presented by axis and it is difficult to relate this to policy areas.
- The indicators used are not informative. The mid-term evaluation of the programme (2010) stated that major methodological issues have been identified in relation to the definition and use of the Programme performance indicators. Most notably, the current indicators reflect programme operations, but are not appropriate for identifying outcomes and the impact of the Programme (p. 33).

3. Effects of intervention

Main points from the previous country report:

- EU funding was mainly planned (as reflected in the OPs) and used to strengthen the economic and social system generally (as opposed to being concerned about the regional dimension), and improvements took place in economic and social cohesion.
- Territorially coherent development in Estonia has remained unachievable and regional disparities have continued to widen.
- The considerable financial resources received from the ERDF and Cohesion Funds have been important in countering the recession and in helping to simulate recovery.
- Assessing the wider effects of intervention on regional development in the light of economic developments in the country is difficult as the effects of many measures co-financed by the ERDF and Cohesion Fund will only become evident in the long run.

Developments since the 2012 report

The latest additional evidence – from the commentary in the AIRs, the results of evaluations and research studies and information from interviews – continues to support the above conclusions.

Substantial investment co-financed by the ERDF and Cohesion Fund continued to take place (especially in transport, water and waste management) that would not have been possible without this support given national austerity measures implemented. The Structural Funds have helped regions to respond to major long-term challenges (such as the increased competition resulting from globalisation, demographic trends, climate change and energy security).

However, regionally balanced development (as aimed for by the Regional Development Strategy for 2005-2015) has remained unachievable and regional differences continue to widen:

- The share of the population living in Harju County is 43.2% in 2013 (and so above the base value of 41%, that was not intended to be exceeded). The internal migration of people into Harju County has been neither stopped nor reversed. Rather, inward migration has increased by 0.5% a year over the past few years (Annex Table C) and is expected to continue;
- As of 2012 only one county had an annual average employment rate below 45% as intended. However, there are major imbalances between counties, and no improvements were evident over time (see Annex Table D);
- In five counties the average income per household member was below 70% of the highest income county (Harju) at the end of 2011. Although the figure has not fallen below 61% (the policy target), imbalances between counties remain, and no significant improvements are evident over time (Annex Table E).

EU funding has been mainly planned used to strengthen the economic and social system generally (as opposed to being concerned about the regional dimension). The effects of intervention are well studied for enterprise support, technological development and innovation generally as well as on the level of individual measures (e.g., the use of FEIs). Support to tourism has more negligible effects. For the environment and energy the interventions have addressed the local environmental issues, although the number of people connected to public water supply and sewage systems has increased slowly. For transport and communications and in the case of territorial development the effects are less clear and studies are needed.

In view of the competitive advantages of the different regions and the way the economic crisis has affected regions differentially, a further concentration of economic activity in Northern Estonia is likely to occur. While some evidence on projects supported by the ERDF and Cohesion Fund shows that the capacity of regions to sustain economic development and to improve the quality of life has been strengthened, the extent of the evidence available is limited.

4. Evaluations and good practice in evaluation

The following evaluations as at September 2013 specifically relating to the ERDF and Cohesion Funds have been completed (Annex Table K):

- Two evaluations covering OPs at the national level: Evaluation of the OPs on the use of Structural Funds (2009) and Evaluation of the selection criteria of Structural Funds (2010);
- Impact assessment of enterprise support measures by National Audit Office (2010);
- Evaluation of the Estonia–Latvia Programme 2007-2013 (2010);
- Mid-term evaluation covering all OPs at the national level (2011);
- Mid-term evaluation of R&D and higher education measures (2011);
- Mid-term evaluation of enterprise and innovation policy (2012).

The main features of the strategy in place for evaluating the effects of intervention and integration into policy-making constitute the following:

• The importance of strategic planning in a holistic way and the inclusion of evaluations as part of the policy cycle has increased considerably with the accession to the EU and is increasing continuously;

- Evaluation activities are coordinated by the Ministry of Finance. Since 2008, evaluations have been coordinated by their plan "Programmiperioodi 2007-2013 struktuurivahendite hindamiste korraldamise põhimõtted ja tööplaan"¹⁸;
- Evaluations themselves are generally carried out by external organisations and quite often the inclusion of high-level foreign experts is requested in the tender documents;
- Evaluations undertaken have fed into policies¹⁹; evidence-based policy planning where evaluations serve as important inputs is most visible in the Ministry of Economic Affairs and Communications²⁰.

Developments since the 2012 report

These features were the same for 2012 as well. Furthermore, in 2011 some of the evaluation functions of the Structural Funds and personnel were moved into the State Budget Department at the Ministry of Finance. As a result, from 2012, evaluation results and recommendations are more strongly taken into account during decision making on different policy options. Also, the Estonian Evaluation Society (ESTES), in co-operation with several stakeholders, has become an active player in raising evaluation quality and creating a common understanding of the evaluation practice and standards between all stakeholders; furthermore, it has developed Good Practice Guidelines in Policy Evaluation²¹; public tender documents increasingly ask for these guidelines to be followed. Also, the Government approved guidelines on carrying out impact assessments²² in December 2012 that should further increase the linkage between evaluations and policy planning – the document describes the nature of impact assessment and its role in policy cycle, requirements to impact assessment and various approaches to implementation, thereby increasing awareness.

The most updated plan of the ERDF and Cohesion Funds related evaluations was approved in May 2013. The plan lists eight evaluations related to the ERDF and Cohesion Funds and most of them have been completed (Table 3). There are no plans to carry out an overall ex post evaluation. The Ministry of Economic Affairs and Communications is considering additional evaluations to those of listed.

¹⁸ [Principles and Action Plan for Evaluation of the Use of Structural Funds for Programme Period 2007–2013].

¹⁹ For example, in 2011, the allocation to the development of energy was reduced by 3.7% of the total budget of the initial OP for the Development of Living Environment and redirected mainly to enterprise support measures. The need for this change identified in the evaluation carried out in 2009 (see Kalvet 2010, pp. 22-23).

²⁰ Most evaluations undertaken in Estonia are related to the enterprise support domain. At the Ministry of Economic Affairs and Communications related competencies and connections with external evaluators as well as routines have been built up over time.

²¹ [Hindamiste hea tava].

²² [Mõjude hindamise metoodika].

Evaluation	Timing	Institution	Comment
Evaluation of the project selection criteria	2009 - 2010	Ministry of Finance	Evaluation of the selection criteria of Structural Funds (2010)
Mid-term evaluation: indicators, implementation system, results, impact	2011	Ministry of Finance	Mid-term evaluation (2011)
Evaluation of the implementation of the R&D measures	2010 - 2011	Ministry of Education and Research	Mid-term evaluation of R&D and higher education measures (2011)
Impact evaluation of several environmental measures	2010 - 2012	Ministry of Environment	Study focusing on the contribution of the OP to the EU Strategy for the Baltic Sea Region expected to be completed in 2013. Completed in 2012 (see below)
Impact evaluation of entrepreneurship measures	2010 - 2011	Ministry of Economic Affairs and Communications	Mid-term evaluation of Enterprise and Innovation Policy (2012)
Evaluation of the development plan of the information society	2010 - 2011	Ministry of Economic Affairs and Communications	Completed in 2013 (see below)
Mid-term evaluation of the Energy Technology Programme	2012	Ministry of Economic Affairs and Communications	Completed in 2013 (see below)
Update to mid-term evaluation of enterprise and innovation policy	2013	Ministry of Economic Affairs and Communications	To be initiated in September 2013

Table 3 - Evaluation Plan Regarding the ERDF and Cohesion Fund, 2007–2013, and currentstatus

Source: Author; based on interviews and data from the Ministry of Finance.

Three new evaluations and studies assessing Cohesion policy performance have become available since the 2012 report was prepared (Table 4).

					-
Title and date of completion	Policy area and scope (*)	Main objectives and focus (*)	Main findings	Method used (*)	Full reference or link to publication
Mid-term evaluation of the Energy Technology Program (2012) ²³	Energy (6)	Evaluation of progress toward overall objectives, evaluation of management system (2)	Energy Technology Program corresponds to the goals of the national R&D&I strategy and the measures applied are sufficient in order to fulfil the goals.	Web-survey and interviews (4)	http://www.mkm.ee/public/Inno energia 2012 pdf.pdf
Evaluation of the contribution of EU funded projects to the implementation of the Baltic Sea Strategy priority areas (2013) ²⁴	OP for the Living Environment (9)	Alignment of the intervention with the Baltic Sea Strategy priority areas (2)	According to analysis of financial data on the OP, the interventions make a significant contribution to the Baltic Sea Region strategy's objectives, mainly in environmental and regional development areas.	Financial analysis (3)	http://www.technopolis- group.com/resources/downloads/reports/KKM aruanne PUBLISH.pdf
The effectiveness and impact of Estonian e-services ²⁵ (2013)	Enterprise support and ICT (2)	Assess the impact of the intervention (3)	E-services have resulted in savings of time and costs, as well as increase in service quality, both to the users as well as suppliers.	Counterfactual (1)	http://www.ibs.ee/en/publications/item/116-e-teenuste-kasutamise- tulemuslikkus-ja-moju/116-e-teenuste-kasutamise-tulemuslikkus-ja- moju

Note: (*) Legend:

Policy area and scope: 1. RTDI; 2. Enterprise support and ICT; 3. Human Resources (ERDF only); 4. Transport; 5. Environment; 6. Energy; 7. Territorial development (urban areas, tourism, rural development, cultural heritage, health, public security, local development); 8. Capacity and institution building; 9. Multi-area (e.g. evaluations of programmes, mid-term evaluations); 10. Transversal aspects (e.g. gender or equal opportunities, sustainable development, employment)

Main objective and focus: 1. assess the arrangements and procedures for managing or administering programmes; 2. support monitoring, or check the progress made in implementing programmes, such as many mid-term evaluations; 3. assess the outcome or effects of programmes in terms of the results achieved and their contribution to attaining socio-economic policy objectives

Method used: 1. Counterfactual; 2. Cost-benefit analysis; 3. Other quantitative; 4. Qualitative. Source: Author.

²³ [Energiatehnoloogia programmi vahehindamine], full text only in Estonian.

²⁴ [Elukeskkonna arendamise rakenduskava raames elluviidavate projektide panuse hindamine "Läänemere strateegia" prioriteetsetesse valdkondadesse], full text only in Estonian.

²⁵ [E-teenuste kasutamise tulemuslikkuse ja mõju hindamine], full text only in Estonian.

The **mid-term evaluation of the Energy Technology Programme (ETP)** (2012) evaluated the Programme on the basis of document analysis, web survey (50 respondents), and group interviews (43 participants).

The ETP covers three major sub-sectors: manufacturing and processing of oil shale, renewable energy sources (primarily the development of second generation liquid biofuels) and high-growth energy technologies. With respect to R&D activities, the main goals are the establishment of internationally competitive human resources at research institutions and universities, the supporting of companies for the development and implementation of new technologies in the energy sector and the facilitation of networking to reach these common goals.

The study concluded that the ETP helped achieve the goals of the national R&D&I strategy – increased the intensity and quality of research and development and contributed to the growth of innovative enterprises creating new value in the global economy. Also, it concluded that measures planned – development of human resources, support to R&D project and technology transfer – were appropriate. The interviews revealed that co-operation between R&D institutions and enterprises had particularly improved in the fields of oil shale and in renewable energy sources.

Further focusing was suggested, namely on four sub-fields of oil shale (instead of eight so far). Also, one new priority area was suggested – sustainable environment, energy consumption and energy distribution - which draws energy saving, increase of production efficiency, environmental protection, development of transmission and distribution networks and energy systems optimizing areas together. Finally, it was suggested that nuclear energy based technologies should be deleted from priority development areas at least as long as there will be real necessity for nuclear knowledge and competence in Estonia.

Evaluation of the contribution of EU funded projects to the implementation of the Baltic Sea Strategy priority areas (2013) focused on the contribution of infrastructure projects financed by the Estonian OP for the Living Environment (funded by the ERDF and Cohesion Fund) to the objectives of the priority areas of Baltic Sea Strategy. This was a macro region strategy for developing the socioeconomic development in the Baltic Sea Region to save the sea, connect the region and increase prosperity. The study included infrastructure projects in the fields of environment and energy as well as education, health and regional development.

The study concluded that the interventions make a significant contribution to the Baltic Sea Region strategy's objectives mainly in environmental and regional development areas. Still, this study has only been able to map financial contributions made in certain directions. In order to get a deeper understanding about the real impact of infrastructure investments in the Baltic Sea Strategy, further analysis is needed.

The **Impact assessment of e-government services** (2013) identified and mapped the social and economic impact achieved with the development of public services in Estonia and the implementation of e-services. The study aimed at developing the numerical indicators that could be used to plan the further development of e-services as well as to improve the marketing of Estonian e-government solutions. The study also identified the technological, legal and organisational prerequisites that must be fulfilled for the successful implementation of e-services, and any obstacles to the achievement of greater impact. Another important objective was to develop an impact assessment method that could also be used in the future. The study also included a cost-effectiveness analysis of the IT systems of e-service providers.

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Fifteen (15) e-services with a different level of maturity and export potential were selected for the study. The development of these services has been co-funded by the Structural Funds (OP for the Development of Economic Environment).

The impact of Estonia's e-services was analysed on three target groups: users (citizens and enterprises), service providers and ICT enterprises as developers of e-services (especially in relation to export).

Users considered that the e-services analysed have had a positive impact on them: e-services have helped them to save a lot of time and made dealing with the government more accessible. Comparison of the 15 e-services indicated that users saved the most time when establishing a company, or submitting VAT or income and social tax returns to the Tax and Customs Board (EMTA). In both cases time saved was more than ten times as compared to off-line transactions.

In general, users have saved the most time with e-services whose use means that they no longer have to visit various government agencies or obtain information from previously separate information systems. The overall opinion of users was also that all of the 15 services have become more accessible and users found that e-services have also made the use of public services easier.

Generally speaking, Estonia has managed to save remarkable amounts of time and money by developing and updating e-services, although calculating the cost-effectiveness of e-government investments is very difficult as requisite data was generally not collected by public authorities.

The survey among the employees of public organisations also revealed that the introduction of eservices has had a clearly positive impact on service quality.

Most e-service providers have not analysed the amount of time and resources spent on various transactions within the scope of e-services and off-line services. As the dynamics of the number of persons who use services that are provided electronically or in offices and the details of IT investments and maintenance costs are often unavailable for specific types of transactions, the possible margin of error in the assessment of the increased efficiency (time and money saved) achieved in an organisation via the implementation of e-services is rather high. This makes any cost-benefit analysis as well as estimates of the time and money saved by all users highly inaccurate.

A more thorough analysis needs to be carried out before the initiation of new e-government projects and measurable goals with established for each development project. In future e-government projects, analysis of the total cost of ownership of an e-service should become one of the main selection criteria in making financing decisions. The expected impact and specific target levels that describe the future e-service, and the way of information collection for the cost-effectiveness should be determined in the preparatory stages of major new projects. While doing so, development of e-services that enable for greater cost effectiveness should be given priority.

In sum, no considerable changes had been made since the 2012 report was prepared on the strategy for evaluating the effects of interventions co-financed by the ERDF and Cohesion Fund, the resources made available and the capacity for undertaking the evaluations concerned.

The new evaluations provide updates and recommendations but not major urgent and immediately applicable information for policy changes. In the long run, though, the mid-term evaluation of the ETP (2012) could lead to a further focusing of the programme. The Impact Assessment of the E-

government Services (2013) also provides long-run recommendations on the manner to improve existing systems and plan new ones. All three new evaluations carried out are rather limited in scope and methodologically constrained (they do not apply, for example, counterfactual analysis) and fail to clearly distinguish the effects of the intervention from other factors, and thus do not exemplify best practice.

The following conclusions can be drawn on the basis of evaluations and studies assessing Cohesion policy performance since 2009:

- Most of the evaluations and studies carried out are related to **enterprise support and research, technological development and innovation** and empirical evidence generally suggests that the achievements were in line with the targets set and objectives of the interventions. The positive impact of FEIs has been recorded. It was also recommended to prioritise this policy field even further over investment in infrastructure, tourism and the environment (especially nature preservation).
- In the field of **transport and communications** there are no evaluations available regarding impacts. Although the reduction of travel time on the reconstructed railways had been achieved as well as reduction in accidents resulting in casualties on renewed sections of road and at junctions, the potential effects of other factors on the outcome are considered in a limited way.
- Regarding **environment and energy** the outcomes accord with the targets and policy objectives set and are reported to have intended effects. Positive impact of FEIs has been recorded. No detailed evaluations are available that would assess results and impacts, although recently the subject of more attention, especially due to moderate results on the development of water and waste management infrastructure.
- In the field of **territorial development** information available is mainly related to output, making it almost impossible to assess results and impacts.
- Nothing significant can be deduced about development from regional perspective on the basis of evaluations and studies assessing Cohesion policy performance since 2009.
- More complicated evaluation methods are rarely applied (like counterfactual analysis), the potential effects of other factors (e.g. the economic situation) on the outcome are hardly considered and there are no serious attempts made to distinguish the effects of the intervention from other factors, raising thus the question on the reliability of results.
- As credible evaluations are not available for transport and communications, environment and energy and territorial development, it is difficult to prioritise among different policy areas.
- Evaluations and studies on the management system concluded generally that a wellfunctioning management system was in place, but several deficiencies have been identified (e.g., on indicator system). Improvements, however, have already taken place in line with the recommendations.

The evaluation activity could be improved by the following:

• Carry out (more) impact evaluations in the fields of transport and communication, environment and energy, and in territorial development. Considerable resources are invested into those policy fields, while the effects remain unclear. Also, as regional differences, in the standard of living and the competitive ability of different counties within

Estonia are significant, more knowledge is needed on the effects of intervention from this perspective.

• The intervention logic of the measures could be improved. Better articulation of the objectives expressed in various strategy/tactical documents and with actual measures is needed, and proper indicator system should be an integral part of this. Only in this case the indicators will support strategic management.

5. Further Remarks - New challenges for policy

Main points from the previous country report:

- Estonia faced considerable challenges in meeting the objectives of the Regional Development Strategy 2005-2015, there was a need for better coordination between the different policy areas and for a governance model that brought decision-making to the regional (functional urban region) level;
- The AIRs continued to be very indicator-driven and lacked qualitative analysis and references to studies and evaluations. No evaluations have examined the regional dimension of interventions;
- Attention should be paid to the ability of local governments to sustain the projects supported by the ERDF and Cohesion Fund.

Concerns remained about meeting the objectives of the Regional Development Strategy 2005-2015 and about the ability of local governments to sustain these projects. As the evaluations intimate, this had become an even more pressing issue.

Finally, there is a continuous need for additional evaluations and studies on the environment and territorial development.

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Annex 1 - Tables

See Excel Tables 1 -4:

Excel Table 1 – Regional disparities and trends

Excel Table 2 – Macro-economic developments

Excel Table 3 - Financial allocation by main policy area

Excel Table 3cbc - Financial allocation by main policy area – cross border cooperation

Excel Table 4 - Commitments by main policy area (by end-2012)

Excel Table 4cbc - Commitments by main policy area (by end-2012) – cross border cooperation

Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Central	7.7	7.5	7.4	7.0	6.9	6.6	6.4	6.7	6.3	6.0
North	56.7	57.1	57.8	59.3	59.8	58.5	60.5	59.7	59.8	61.1
North-East	8.8	8.5	8.3	7.9	7.8	8.1	7.6	7.7	8.1	7.6
South	17.3	17.5	17.4	17.4	17.1	18.0	17.2	17.5	17.7	17.4
West	9.4	9.5	9.1	8.5	8.5	8.8	8.3	8.4	8.2	7.9
Whole country	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Annex Table A - GDP at NUTS 3 level, 2000-2009 - Share in National Output

Source: Statistics Estonia 2012c, authors' calculations.

Annex Table B - GDP at county level, 2000-2010 - Share in National Output

		-									
Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Whole country	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Harju county	57.6	57.9	58.7	59.3	60.8	59.7	60.9	59.9	59.6	61.0	59.7
Hiiu county	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4
Ida-Viru county	8.6	8.4	8.1	8.0	7.7	7.8	7.5	7.6	8.1	7.6	8.3
Jõgeva county	1.4	1.4	1.3	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2
Järva county	2.0	2.0	2.0	1.9	1.9	1.5	1.7	1.7	1.5	1.4	1.6
Lääne county	1.4	1.4	1.3	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.3
Lääne-Viru county	3.8	3.7	3.8	3.5	3.4	3.5	3.2	3.4	3.4	3.1	3.4
Põlva county	1.3	1.4	1.2	1.2	1.1	1.1	1.1	1.1	1.2	1.1	1.1
Pärnu county	5.4	5.5	5.2	4.9	4.8	5.1	4.8	5.0	4.7	4.5	4.4
Rapla county	1.8	1.7	1.6	1.6	1.5	1.5	1.4	1.5	1.4	1.4	1.4
Saare county	1.8	1.8	1.7	1.7	1.7	1.8	1.7	1.8	1.8	1.8	1.9
Tartu county	8.5	8.8	8.9	9.3	9.1	9.9	9.8	9.9	10.4	10.2	10.1
Valga county	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.2
Viljandi county	2.6	2.5	2.6	2.5	2.3	2.4	2.3	2.3	2.3	2.2	2.4
Võru county	1.7	1.7	1.7	1.6	1.5	1.5	1.4	1.6	1.5	1.5	1.5

Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Whole country	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Harju county	38.3	38.4	38.5	38.5	38.6	38.7	38.8	38.9	39.0	39.2	39.3	39.4	42.7	43.2
Hiiu county	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
Ida-Viru county	13.1	13.1	13.0	13.0	12.9	12.9	12.8	12.8	12.7	12.7	12.6	12.5	11.5	11.4
Jõgeva county	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.4	2.4
Järva county	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.4	2.3
Lääne county	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9
Lääne-Viru county	4.9	4.9	4.9	4.9	4.9	4.9	5.0	5.0	5.0	5.0	5.0	5.0	4.6	4.6
Põlva county	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.1	2.1
Pärnu county	6.7	6.7	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.4	6.3
Rapla county	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Saare county	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.4	2.4
Tartu county	10.9	10.9	11.0	11.0	11.0	11.0	11.1	11.1	11.1	11.2	11.2	11.2	11.6	11.7
Valga county	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.3	2.3
Viljandi county	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.1	3.7	3.6
Võru county	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.6	2.6

Annex Table C - Population by county - share in total population, 2000-2013

Source: Statistics Estonia 2013c.

Annex Table D - Employment rate by county, 2000-2012

F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5 F 5													
Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Estonia's average	54.7	55.2	55.9	56.7	56.8	57.9	61.6	62.6	63.0	57.4	55.2	59.1	61.0
Harju county	60.1	60.4	62.0	62.5	61.8	64.2	67.6	68.9	69.3	62.9	60.8	65.5	67.7
Hiiu county	59.8	60.8	55.0	61.7	61.0	64.2	67.6	71.3	70.6	54.9	49.2	56.7	54.6
Ida-Viru county	48.8	49.7	49.2	47.6	48.2	50.9	56.7	56.9	54.3	50.5	46.2	51.5	52.7
Jõgeva county	44.4	44.1	44.0	44.7	45.6	44.5	50.8	54.2	53.1	48.3	47.9	49.0	52.9
Järva county	56.6	55.9	54.7	52.2	59.7	59.6	58.3	60.6	63.5	59.6	51.4	55.8	63.0
Lääne county	53.1	51.2	53.1	51.9	58.1	57.6	53.5	60.2	61.1	58.1	51.3	59.3	60.2
Lääne-Viru county	49.6	56.5	55.7	54.8	52.7	57.2	59.3	55.6	57.5	49.6	53.4	55.0	59.1
Põlva county	39.6	46.1	42.4	43.8	45.2	46.6	46.4	47.6	48.0	45.2	43.0	49.2	49.6
Pärnu county	53.0	51.5	54.5	57.9	55.4	53.2	56.5	61.3	63.5	58.3	53.4	55.2	58.5
Rapla county	50.3	55.4	53.0	55.8	57.0	56.0	62.5	63.7	64.8	57.9	56.8	59.4	62.2
Saare county	55.8	56.3	55.1	55.9	55.7	52.6	54.6	57.1	56.2	53.3	55.1	55.8	59.3
Tartu county	54.4	52.3	54.7	59.2	60.0	57.5	62.5	63.7	64.9	57.9	54.5	58.9	59.2
Valga county	51.4	50.6	50.4	53.8	52.2	51.5	56.7	54.6	54.0	49.7	53.4	49.1	44.1
Viljandi county	56.3	54.3	55.8	56.1	55.5	55.3	60.6	60.2	61.5	54.8	56.8	60.7	60.3
Võru county	44.7	47.3	44.9	43.4	47.7	51.1	54.2	48.9	48.9	51.0	49.7	52.6	53.0

0000								
2003	2004	2005	2006	2007	2008	2009	2010	2011
79.7	79.1	80.8	80.1	83.3	80.8	82.8	84.2	83.8
100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
63.9	62.7	61.2	59.6	60.5	61.5	65.8	77.6	73.7
57.4	58.2	58.4	55.9	62.8	60.3	63.5	63.3	61.2
55.0	56.0	57.8	65.3	73.5	68.7	67.1	67.3	68.3
80.4	71.7	75.1	70.7	75.6	68.7	72.8	72.7	70.5
66.0	63.6	69.8	70.4	74.2	75.4	77.3	84.8	81.4
66.2	66.2	66.9	71.5	74.6	65.3	68.9	70.4	70.5
61.2	62.2	60.9	56.1	59.6	60.6	63.5	64.9	65.6
75.0	72.6	72.4	71.9	75.9	68.7	74.1	79.9	73.8
67.0	68.1	69.5	71.8	81.7	78.5	82.5	80.7	82.5
71.9	65.9	66.7	66.3	73.8	69.7	73.4	77.1	79.1
77.2	75.1	82.4	78.6	83.6	79.7	85.1	87.7	89.7
62.9	58.9	65.8	64.7	66.2	65.7	63.1	61.9	61.7
65.1	67.9	72.8	68.0	73.5	64.5	65.6	71.7	73.4
60.9	57.5	63.0	61.4	64.5	64.7	64.9	66.2	66.4
	79.7 100.0 63.9 57.4 55.0 80.4 66.0 66.2 61.2 75.0 67.0 71.9 77.2 62.9 65.1	79.7 79.1 100.0 100.0 63.9 62.7 57.4 58.2 55.0 56.0 80.4 71.7 66.0 63.6 66.2 66.2 61.2 62.2 75.0 72.6 67.0 68.1 71.9 65.9 77.2 75.1 62.9 58.9 65.1 67.9	79.7 79.1 80.8 100.0 100.0 100.0 63.9 62.7 61.2 57.4 58.2 58.4 55.0 56.0 57.8 80.4 71.7 75.1 66.0 63.6 69.8 66.2 66.2 66.9 61.2 62.2 60.9 75.0 72.6 72.4 67.0 68.1 69.5 71.9 65.9 66.7 77.2 75.1 82.4 62.9 58.9 65.8 65.1 67.9 72.8	79.7 79.1 80.8 80.1 100.0 100.0 100.0 100.0 63.9 62.7 61.2 59.6 57.4 58.2 58.4 55.9 55.0 56.0 57.8 65.3 80.4 71.7 75.1 70.7 66.0 63.6 69.8 70.4 66.2 66.2 66.9 71.5 61.2 62.2 60.9 56.1 75.0 72.6 72.4 71.9 67.0 68.1 69.5 71.8 71.9 65.9 66.7 66.3 77.2 75.1 82.4 78.6 62.9 58.9 65.8 64.7 65.1 67.9 72.8 68.0	79.779.180.880.183.3100.0100.0100.0100.0100.063.962.761.259.660.557.458.258.455.962.855.056.057.865.373.580.471.775.170.775.666.266.266.971.574.661.262.260.956.159.675.072.672.471.975.967.068.169.571.881.771.965.966.766.373.877.275.182.478.683.662.958.965.864.766.265.167.972.868.073.5	79.779.180.880.183.380.8100.0100.0100.0100.0100.0100.063.962.761.259.660.561.557.458.258.455.962.860.355.056.057.865.373.568.780.471.775.170.775.668.766.063.669.870.474.275.466.266.266.971.574.665.361.262.260.956.159.660.675.072.672.471.975.968.767.068.169.571.881.778.571.965.966.766.373.869.777.275.182.478.683.679.762.958.965.864.766.265.765.167.972.868.073.564.5	79.779.180.880.183.380.882.8100.0100.0100.0100.0100.0100.0100.063.962.761.259.660.561.565.857.458.258.455.962.860.363.555.056.057.865.373.568.767.180.471.775.170.775.668.772.866.063.669.870.474.275.477.366.266.266.971.574.665.368.961.262.260.956.159.660.663.575.072.672.471.975.968.774.167.068.169.571.881.778.582.571.965.966.766.373.869.773.477.275.182.478.683.679.785.162.958.965.864.766.265.763.165.167.972.868.073.564.565.6	79.779.180.880.183.380.882.884.2100.0100.0100.0100.0100.0100.0100.0100.063.962.761.259.660.561.565.877.657.458.258.455.962.860.363.563.355.056.057.865.373.568.767.167.380.471.775.170.775.668.772.872.766.063.669.870.474.275.477.384.866.266.266.971.574.665.368.970.461.262.260.956.159.660.663.564.975.072.672.471.975.968.774.179.967.068.169.571.881.778.582.580.771.965.966.766.373.869.773.477.177.275.182.478.683.679.785.187.762.958.965.864.766.265.763.161.965.167.972.868.073.564.565.671.7

Source: Statistics Estonia 2013c.

Annex Table F - Unemployment rate by county, 2000-2012

	-		-			-		-	-	-			
Area	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Estonia's average	13.6	12.6	10.3	10.0	9.7	7.9	5.9	4.7	5.5	13.8	16.9	12.5	10.2
Harju county	11.5	11.6	8.6	9.6	9.6	7.5	4.3	3.3	4.4	12.9	16.2	11.6	8.9
Hiiu county	9.5	7.8	10.8	5.9	5.7	7.2				11.1	11.5	5.0	11.8
Ida-Viru county	21.1	18.0	18.9	18.2	17.9	16.2	12.1	9.0	10.0	18.1	25.8	20.3	17.5
Jõgeva county	16.9	20.5	16.0	15.8	13.7	16.9	13.1	6.5	7.0	20.1	19.8	12.4	11.0
Järva county	15.8	15.7	13.9	13.2	9.5	5.6	6.2	4.7	4.8	11.9	17.1	13.2	7.7
Lääne county	14.8	15.4	15.1	11.3	5.3				6.1	15.5	22.3	12.9	10.3
Lääne-Viru county	13.6	9.0	7.3	6.4	7.4	5.8	5.7	5.4	5.6	16.4	12.4	11.1	9.5
Põlva county	22.8	17.6	14.8	13.7	14.9	12.4	8.4		8.9	12.0	15.8	12.4	11.5
Pärnu county	11.0	10.6	7.7	7.5	6.3	5.9		3.9	4.0	10.6	14.2	10.5	10.9
Rapla county	16.3	9.4	9.7	5.0	6.7			5.1	6.9	15.5	19.8	13.5	8.7
Saare county	12.0	9.4	7.4	6.5	4.1					10.4	9.3	10.2	9.2
Tartu county	11.4	9.5	5.8	5.3	5.0	4.5	6.0	3.9	4.3	11.9	15.8	11.0	8.2
Valga county	12.7	13.9	7.5	7.9	11.1		8.6	9.1	8.5	17.8	13.3	13.3	15.3
Viljandi county	11.4	14.8	13.1	9.2	9.1	4.9	4.6	3.6	5.6	11.9	11.3	9.1	7.1
Võru county	15.8	10.1	8.2	10.4	7.0			5.1	6.7	16.0	14.8	11.2	7.1

Area	2004	2005	2006	2007	2008	2009	2010	2011
Estonia's average	18.3	18.3	19.4	19.5	19.7	15.8	17.5	17.5
Harju county	10.9	11.9	11.1	11.1	11.3	10.1	10.4	10.6
- Tallinn	10.8	12.3	11.1	11.0	12.0	9.5	10.3	10.2
Hiiu county	22.4	27.3	24.0	36.8	31.7	20.5	17.9	25.0
Ida-Viru county	25.2	27.9	32.6	31.6	30.8	24.6	29.7	29.4
Jõgeva county	36.2	34.0	30.2	27.0	28.5	23.9	25.4	26.1
Järva county	26.0	23.0	23.7	28.3	23.7	20.8	25.1	18.1
Lääne county	22.9	21.9	21.1	21.3	17.2	19.0	12.7	21.0
Lääne-Viru county	23.1	24.6	23.8	23.0	26.5	18.8	24.0	22.9
Põlva county	27.0	29.0	33.2	27.8	26.3	21.7	25.8	21.8
Pärnu county	18.7	17.0	20.5	22.7	24.0	19.3	16.2	21.6
Rapla county	23.2	19.6	19.5	17.9	20.9	15.1	19.6	17.5
Saare county	20.5	22.1	24.1	25.0	27.4	18.9	17.4	14.0
Tartu county	17.4	12.8	15.3	19.3	16.4	11.9	16.0	16.7
Valga county	26.4	28.4	29.8	28.6	26.0	24.7	25.8	25.8
Viljandi county	23.9	22.8	26.6	21.7	29.5	19.2	22.2	19.9
Võru county	23.7	22.8	26.3	25.0	30.9	23.4	25.2	22.7

Annex Table H – Allocations and expenditures by the EU, Estonian public and priva	ate sector
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	Comm millior		007-2011	(EUR		ed eligible 2011 (EUR		re,	Comm millior	itments 2(1)	007-2012	(EUR		ed eligible 2012 (EUF	expenditu (million)	ire,	Change end 2012	2 – end 2011
OP/Priority axis	EU	EE public sector	EE private sector	EE co- fin (%)	EU	EE public sector	EE private sector	EE co-fin (%)	EU	EE public sector	EE private sector	EE co- fin (%)	EU	EE public sector	EE private sector	EE co- fin (%)	in EE co-fin of commitments %	in EE co-fin of expenditure %
OP for the Development of E	conomic	Environn	nent															
Priority axis 1: Innovation and growth capacities of enterprises	388.9	35.3	311.5	47.1	240.2	31.1	144.7	42.3	391.9	36.4	287.3	45.2	295.7	33.2	208.1	44.9	-1.9	2.7
Priority axis 2: Enhancing the competitive ability of Estonian R&D through research programmes and modernisation of higher education and research institutions	251.7	64.8	0.3	20.5	70.1	30.7	0.0	30.5	285.2	70.3	1.5	20.1	139.7	42.7	0.3	23.5	-0.4	-6.9
Priority axis 3: Transport investments of strategic importance	468.9	85.6	2.3	15.8	188.5	38.4	2.3	17.7	523.5	97.2	8.6	16.8	307.7	59.5	6.7	17.7	1.0	0.0
Priority axis 4: Development of regional transport infrastructure	110.4	2.7	0.0	2.4	77.4	1.7	0.0	2.1	110.5	5.2	0.0	4.5	87.8	5.1	0.0	5.5	2.1	3.4
Priority axis 5: Promotion of information society	50.9	0.6	0.5	2.1	40.5	0.4	0.5	2.4	58.9	0.7	0.6	2.0	48.3	0.5	0.6	2.2	-0.1	-0.1
OP for the Development of Li	ving En	vironment	t		-			-					-		-	-		
Priority axis 1: Development of waste and waste management infrastructure	503.0	132.9	16.3	22.9	143.4	37.6	2.4	21.8	523.3	135.7	18.5	22.8	292.9	76.4	5.5	21.9	-0.1	0.1
Priority axis 2: Development of infrastructure and support systems for sustainable use of the environment	84.1	9.5	0.4	10.5	31.3	5.5	0.2	15.4	88.2	9.7	0.3	10.2	59.0	7.8	0.3	12.0	-0.3	-3.4
Priority axis 3: Development of energy sector	27.8	35.2	10.9	62.3	22.6	10.3	4.1	38.9	28.8	35.1	12.1	62.1	26.7	34.9	11.2	63.3	-0.2	24.4
Priority axes 4: Integral and balanced development of regions	305.6	60.3	14.9	19.8	185.5	40.7	8.7	21.0	337.5	70.5	17.7	20.7	243.5	51.6	11.3	20.5	1.0	-0.5
Priority axes 5: Development of education infrastructure	193.9	4.8	0.1	2.4	100.5	1.5	0.1	1.6	191.5	4.8	0.1	2.5	141.3	1.9	0.1	1.4	0.0	-0.2

Estonia, Final

				Certified eligible expenditure, 2007-2011 (EUR million)						Certified eligible expenditure, 2007-2012 (EUR million)				Change end 2012 – end 2011				
OP/Priority axis	EU	EE public sector	EE private sector	EE co- fin (%)	EU	EE public sector	EE private sector	EE co-fin (%)	EU	EE public sector	EE private sector	EE co- fin (%)	EU	EE public sector	EE private sector	EE co- fin (%)	in EE co-fin of commitments %	in EE co-fin of expenditure %
Priority aces 6: Development of health and welfare infrastructure	167.6	31.0	24.9	25.0	52.7	27.7	5.1	38.3	166.5	27.0	29.1	25.2	77.8	29.8	9.8	33.7	0.2	-4.6

Source: Author based on Ministry of Finance 2012b.

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OP/Priority axis	Allocations, Commitments, 20 2007-2013 December 2012		007-31 Certified eligible expenditure, 2007 - December 2012		07 - 31	Commitments, 2007- May 2013	30 31	Certified eligible expe 2007 - 31 May 2013	enditure,
	EU contribution (EUR million)	EU contribution (EUR million)	%	EU contribution (EUR million)	%	EU contribution (EUR million)	%	EU contribution (EUR million)	%
OP for the Development of Economic Environment									
Priority axis 1: Innovation and growth capacities of enterprises	424.3	391.9	92.4	295.7	69.7	400.3	94.3	313.3	73.8
Priority axis 2: Enhancing the competitive ability of Estonian R&D through research programmes and modernisation of higher education and research institutions	310.2	285.2	91.9	139.7	45.0	302.2	97.4	169.1	54.5
Priority axis 3: Transport investments of strategic importance	525.4	523.5	99.6	307.7	58.6	496.6	94.5	340.8	64.9
Priority axis 4: Development of regional transport infrastructure	110.5	110.5	100.0	87.8	79.5	110.4	99.9	89.2	80.7
Priority axis 5: Promotion of information society	62.6	58.9	94.1	48.3	77.2	60.1	96.0	50.5	80.7
OP for the Development of Living Environment									
Priority axis 1: Development of waste and waste management infrastructure	626.3	523.3	83.6	292.9	46.8	561.3	89.6	344.2	55.0
Priority axis 2: Development of infrastructure and support systems for sustainable use of the environment	92.0	88.2	95.9	59.0	64.1	88.6	96.3	63.2	68.7
Priority axis 3: Development of energy sector	28.8	28.8	100.0	26.7	92.7	28.6	99.3	26.9	93.5
Priority axes 4: Integral and balanced development of regions	388.6	337.5	86.9	243.5	62.7	363.4	93.5	262.0	67.4
Priority axes 5: Development of education infrastructure	212.8	191.5	90.0	141.3	66.4	184.0	86.5	147.4	69.3
Priority aces 6: Development of health and welfare infrastructure	169.1	166.5	98.5	77.8	46.0	166.2	98.3	86.7	51.3

Annex Table I - Financial allocations, commitm	ents and expenditure	s by priority axes,	2007 - 31 May, 2013
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Source: Ministry of Finance 2012b.

Annex Table J - Broad policy areas and correspondence with fields of intervention (FOI)

Policy area		Code	Priority themes
1. Enterprise environment	RTDI and linked activities	01	R&TD activities in research centres
		02	R&TD infrastructure and centres of competence in a specific technolog
		05	Advanced support services for firms and groups of firms
		07	Investment in firms directly linked to research and innovation ()
		74	Developing human potential in the field of research and innovation, in particular through post-graduate studies
	Innovation support for SMEs	03	Technology transfer and improvement of cooperation networks
		04	Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)
		06	Assistance to SMEs for the promotion of environmentally-friendly products and production processes ()
		09	Other measures to stimulate research and innovation and entrepreneurship in SMEs
		14	Services and applications for SMEs (e-commerce, education and training, networking, etc.)
		15	Other measures for improving access to and efficient use of ICT by SMEs
	ICT and related services	11	Information and communication technologies ()
		12	Information and communication technologies (TEN-ICT)
		13	Services and applications for citizens (e-health, e-government, e-learning, e-inclusion, etc.)
	Other investment in firms	08	Other investment in firms
2. Human resources	Education and training	62	Development of life-long learning systems and strategies in firms; training and services for employees
		63	Design and dissemination of innovative and more productive ways of organising work
		64	Development of special services for employment, training and support in connection with restructuring of sectors
		72	Design, introduction and implementing of reforms in education and training systems
		73	Measures to increase participation in education and training throughout the life-cycle
	Labour market policies	65	Modernisation and strengthening labour market institutions
		66	Implementing active and preventive measures on the labour market
		67	Measures encouraging active ageing and prolonging working lives
		68	Support for self-employment and business start-up
		69	Measures to improve access to employment and increase sustainable participation and progress of women
		70	Specific action to increase migrants' participation in employment
		71	Pathways to integration and re-entry into employment for disadvantaged people
		80	Promoting the partnerships, pacts and initiatives through the networking of relevant stakeholders
3. Transport	Rail	16	Railways
	1	17	Railways (TEN-T)

Policy area		Code	Priority themes
		18	Mobile rail assets
		19	Mobile rail assets (TEN-T)
	Road	20	Motorways
		21	Motorways (TEN-T)
		22	National roads
		23	Regional/local roads
	Other transport	24	Cycle tracks
		25	Urban transport
		26	Multimodal transport
		27	Multimodal transport (TEN-T)
		28	Intelligent transport systems
		29	Airports
		30	Ports
		31	Inland waterways (regional and local)
		32	Inland waterways (TEN-T)
4. Environment and energy	Energy infrastructure	33	Electricity
and energy		34	Electricity (TEN-E)
		35	Natural gas
		36	Natural gas (TEN-E)
		37	Petroleum products
		38	Petroleum products (TEN-E)
		39	Renewable energy: wind
		40	Renewable energy: solar
		41	Renewable energy: biomass
		42	Renewable energy: hydroelectric, geothermal and other
		43	Energy efficiency, co-generation, energy management
	Environment and risk prevention	44	Management of household and industrial waste
	-	45	Management and distribution of water (drink water)
		46	Water treatment (waste water)
		47	Air quality
		48	Integrated prevention and pollution control
		49	Mitigation and adaption to climate change
		50	Rehabilitation of industrial sites and contaminated land
		51	Promotion of biodiversity and nature protection (including Natura 2000)
		52	Promotion of clean urban transport
		53	Risk prevention ()
		54	Other measures to preserve the environment and prevent risks
5. Territorial development	Social Infrastructure	10	Telephone infrastructure (including broadband networks)
		75	Education infrastructure
		76	Health infrastructure
		77	Childcare infrastructure
		78	Housing infrastructure
		79	Other social infrastructure
	Tourism and culture	55	Promotion of natural assets
		56	Protection and development of natural heritage

Policy area		Code	Priority themes
		57	Other assistance to improve tourist services
		58	Protection and preservation of the cultural heritage
		59	Development of cultural infrastructure
		60	Other assistance to improve cultural services
	Planning and rehabilitation	61	Integrated projects for urban and rural regeneration
	Other		Compensation of any additional costs due to accessibility deficit and territorial fragmentation
		83	Specific action addressed to compensate additional costs due to size market factors
6. Technical as	ssistance	84	Support to compensate additional costs due to climate conditions and relief difficulties
		81	Mechanisms for improving good policy and programme design, monitoring and evaluation
		85	Preparation, implementation, monitoring and inspection
		86	Evaluation and studies; information and communication

Title and date of completion	Policy area and scope (*)	Main objectives and focus(*)	Main findings	Method used(*)	Full reference or link to publication
Evaluation of the Operational Plans on the use of Structural Funds (2009)	Multi-area (9)	Evaluating the need for changes in support measures in the light of the global economic and financial crisis. (2)	The main problems of the Estonian economy in 2009 have not changed since the formation of the OPs. Although shares of investment in infrastructure, tourism and the environment (especially nature preservation) are large compared to other areas, they all have only a modest influence on the creation of knowledge-based economic structure and the growth of productivity.	Qualitative (4)	http://www.struktuurifon did.ee/public/Struktuuriv ahendite rakenduskava_hi ndamine.pdf
Evaluation of the selection criteria of Structural Funds (2010)	Multi-area (9)	To examine whether the criteria specified in the selection of projects to be supported from the Structural Funds and the Cohesion Fund correspond to the objectives set out in the strategic documents of the Structural Funds and the Cohesion Fund. (1)	Multiple levels regarding the objectives exist (from the overall goal of the Structural Funds and the Cohesion Fund to the specific activities of the measures), and the relationships between the levels are not always well considered or present in the OPs. Not all measures are sufficiently associated with the NSRF indicator system. In the selection of projects to be supported from the Structural Funds and the Cohesion Fund, the selection criteria used tend to be universal and do not take account of different specific features of the different measures. Horizontal priorities are not considered in policy areas that do not address those issues directly.	Qualitative (4)	http://www.struktuurifon did.ee/public/hindamine/ Valikukriteeriumide uurin guaruanne.pdf
Impact assessment of enterprise support measures by National Audit Office (2010)	Enterprise support and ICT (2)	To ascertain whether or not the productivity and value- added of supported companies had increased more quickly than for companies that had not received any support and whether or not the indicators of the overall competitive strength of the country has been affected. (3)	The productivity and export capacity of companies have not improved significantly. Only 20% of the supported companies saw significant productivity increase. There has been no significant impact on the emergence of new exporters. Enterprise support is ineffective due to the inflexible and fragmented support system.	Counterfactual (1)	http://www.riigikontroll. ee/DesktopModules/Digi Detail/FileDownloader.as px?AuditId=2148&FileId= 11131
Evaluation of the Estonia–Latvia Programme 2007- 2013 (2010)	Multi-area (9)	To assess the effectiveness, relevance, and performance of the programme as well as the possible need to change the OP. (2)	In terms of its daily operations, the programme is reasonably closely in line with the strategy, but needs a tighter focus, given the limited resources allocated (job creation and export-led economic growth as key horizontal priorities are suggested). The indicators and targets defined reflect the operational performance, not the expected results and impact, and need to be improved.	Qualitative (4)	http://www.estlat.eu/do wnload/evaluation of the estonia- latvia programme 2010 0 <u>6 07 5bb63.pdf</u>

 Table K - Evaluations and studies assessing Cohesion Policy performance, 2009 – September 2013

Title and date of completion	Policy area and scope (*)	Main objectives and focus(*)	Main findings	Method used(*)	Full reference or link to publication
Mid-term evaluation ²⁶ (2011)	Multi-area (9)	Evaluation of progress toward overall objectives; Evaluation of management system. (2)	Progress towards targets taking place, well- functioning management system.	Qualitative (4)	http://www.struktuurifon did.ee/public/hindamine/ Vahehindamise aruanne.p df
Mid-term evaluation of R&D and higher education measures ²⁷ (2011)	RTDI (1)	Analyse relevance, suitability, and sufficiency of measures for fulfilment of the objectives of strategies. (3)	Measures support effectively reaching the objectives. Indicators set will mostly be reached. Planning and implementation well conducted.	Qualitative (4)	http://www.hm.ee/index. php?popup=download&id =11565
European Research Area Committee (ERAC) Peer-Review of the Estonian Research and Innovation System (2012)	RTDI (1)	Support the development of Estonian policy and support coordination within European Research Area. (3)	Better integration is needed between the research and innovation systems	Qualitative (4)	http://www.hm.ee/index. php?popup=download&id =11652
Activities of the state in promoting key areas of research and development ²⁸ (2012)	RTDI (1)	Analyse if the measure contributes to the achievement of the state's R&D priorities. (3)	The role and objective of the measure is unclear; cooperation between ministers in development and coordination has been inadequate; insufficient attention to evaluation of results.	Qualitative (4)	http://www.riigikontroll. ee/DesktopModules/Digi Detail/FileDownloader.as px?FileId=11464&AuditId =2232
Mid-term evaluation of Enterprise and Innovation Policy ²⁹	Enterprise support and ICT (2)	Assess the impact, effectiveness and appropriateness of the measures, (3).	Economic performance of the beneficiaries was higher compared to the average of all enterprises	Counterfactual (1)	http://www.mkm.ee/publ ic/documents/inno 21.pd f
Mid-term evaluation of the Energy Technology Program (2012) ³⁰	Energy (6)	Evaluation of progress toward overall objectives, evaluation of management system (2)	Energy Technology Program corresponds to the goals of the national R&D&I strategy and the measures applied are sufficient in order to fulfil the goals.	Qualitative (4)	http://www.mkm.ee/publ ic/Inno energia 2012 pdf. pdf
Evaluation of the contribution of EU	OP for the Living Environment (9)	Alignment of the intervention with the Baltic Sea Strategy	According to analysis of financial data on the OP, the interventions make a significant contribution to the	Financial analysis (3)	http://www.technopolis- group.com/resources/do

²⁶ [Perioodi 2007-2013 struktuurivahendite vahehindamine]

²⁷ [Euroopa Liidu tõukefondide perioodi 2007-2013 teadus- ja arendustegevuse ning kõrghariduse meetmete rakendamise vahehindamine]

²⁸ [Riigi tegevus teadus- ja arendustegevuse võtmevaldkondade edendamisel]

 ²⁹ [Ettevõtlus- ja innovatsioonipoliitika vahehindamine]
 ³⁰ [Energiatehnoloogia programmi vahehindamine], full text only in Estonian.

Title and date of completion	Policy area and scope (*)	Main objectives and focus(*)	Main findings	Method used(*)	Full reference or link to publication
funded projects to the implementation of the Baltic Sea Strategy priority areas (2013) ³¹		priority areas (2)	Baltic Sea Region strategy's objectives, mainly in environmental and regional development areas.		<u>wnloads/reports/KKM_ar</u> uanne PUBLISH.pdf
The effectiveness and impact of Estonian e- services ³² (2013)	Enterprise support and ICT (2)	Assess the impact of the intervention (3)	E-services have resulted in savings of time and costs, as well as increase in service quality, both to the users as well as suppliers.	Counterfactual (1)	http://www.ibs.ee/en/pu blications/item/116-e- teenuste-kasutamise- tulemuslikkus-ja- moju/116-e-teenuste- kasutamise- tulemuslikkus-ja-moju

Note: (*) Legend:

Policy area and scope: 1. RTDI; 2. Enterprise support and ICT; 3. Human Resources (ERDF only); 4. Transport; 5. Environment; 6. Energy; 7. Territorial development (urban areas, tourism, rural development, cultural heritage, health, public security, local development); 8. Capacity and institution building; 9. Multi-area (e.g. evaluations of programmes, mid-term evaluations); 10. Transversal aspects (e.g. gender or equal opportunities, sustainable development, employment)

Main objective and focus: 1. assess the arrangements and procedures for managing or administering programmes; 2. support monitoring, or check the progress made in implementing programmes, such as many mid-term evaluations; 3. assess the outcome or effects of programmes in terms of the results achieved and their contribution to attaining socio-economic policy objectives

Method used: 1. Counterfactual; 2. Cost-benefit analysis; 3. Other quantitative; 4. Qualitative. Source: Author.

³¹ [Elukeskkonna arendamise rakenduskava raames elluviidavate projektide panuse hindamine "Läänemere strateegia" prioriteetsetesse valdkondadesse], full text only in Estonian.

³² [E-teenuste kasutamise tulemuslikkuse ja mõju hindamine], full text only in Estonian.