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COMMISSION STAFF WORKING PAPER

Impact Assessment

Accompanying the document

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on specific provisions concerning the European Regional Development Fund and the
Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006**

and

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006

and

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on specific provisions for the support from the European Regional Development Fund to
the European territorial cooperation goal**

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This report commits only the Commission services involved in its preparation and does not prejudge the final form of any decision to be taken by the Commission.

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Impact Assessment

1. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

This is the Impact Assessment of the legislative proposal for the regulations laying down provisions on the European Regional Development Fund (ERDF), the Cohesion Fund (CF) and the European Territorial Cooperation goal..

It is part of a package of Impact Assessments which also includes the Impact Assessment of the European Regional Development Fund, the Cohesion Fund, the European Social Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1083/2006 (Common provisions regulation), and the Impact Assessment of the ESF Regulation. The ESF Impact Assessment discusses issues of scope of the ESF as well as the articulation between the ESF and the other financial instruments available to the DG Employment, Social Affairs and Inclusion. More detailed ex-ante evaluations will accompany the Commission's proposal for a new integrated programme covering PROGRESS, EURES and the micro-finance facility, and the Commission's proposal for the EGF regulation. Ex-ante evaluations will also be carried out for each Operational Programme.

1.1. Organisation and timing

Work on the Impact Assessment began in September 2010 with the creation of the Impact Assessment Steering Group (IASG)¹.

1.2. Consultation and expertise

This Impact Assessment is based on: the results of the ex-post evaluations carried out on the 2000-2006 programmes; results of the public consultation which was summed up in the Fifth Progress Report on Economic and Social Cohesion adopted by the Commission in June 2008; the Budget Review²; the Fifth Cohesion Report³; results of the public consultation following the adoption of the Fifth Cohesion Report in November 2010; the proposals for the multi-annual financial framework⁴; and a broad range of studies and expert advice⁵. Expert advice was provided through the High Level Group reflecting on future Cohesion Policy, composed of experts from national administrations, with 10 meetings held between 2009 and 2011. This Impact Assessment also takes account of other consultations including the public consultation on the Budget Review and the TEN-T guidelines.

The public consultation and stakeholder meetings included:

¹ The following services participated in at least one meeting of the IASG: AGRI, BUDG, CLIMA, COMP, EAC, EEAS, ECFIN, ELARG, EMPL, ENER, ENTR, ENV, INFSO, JUST, MARE, MOVE, OLAF, REGIO, RELEX, RTD, SANCO, SG, TRADE.

² 'The EU Budget Review', COM (2010) 700, 19.10.2010.

³ Fifth Report on Economic, Social and Territorial Cohesion, November 2010

⁴ Communication 'A Budget for Europe 2020', COM (2011) 500, 29.6.2011.

⁵ The full list of studies can be found in Annex 6.

- (1) Public consultation following the Fourth Report on Economic and Social Cohesion in September 2007, results of which were summarised in the Fifth Progress Report: The Commission received more than one hundred contributions, mainly from stakeholders with a close interest in the management of the policy, representing more than half the Member States (accounting for almost 80% of the EU population); a large number of regional authorities; a majority of regional and local associations; economic and social partners; civil society organisations; academic and research institutions; and some citizens.
- (2) Council Presidency conclusions. Czech Presidency, Communiqué of Ministers for Regional Policy, Mariánské Lázně, Czech Republic, 23 April 2009; Spanish Presidency Conclusion Document, Informal Meeting of Ministers of Regional Policy, Zaragoza, 19 February, 2010; Belgian Presidency, Summary of the answers of the Member States to the Presidency questionnaire, Informal Meeting of the Ministers for Cohesion Policy, Liège - 22 and 23 November 2010; Belgian Presidency, Informal Meeting of the Ministers in charge of Cohesion Policy Liège, 22-23 November 2010, Presidency Conclusions; Hungarian Presidency, Conclusions of the General Affairs Council 21 February 2011; Informal Meeting of Ministers Responsible for Cohesion Policy, 20 May 2011, Gödöllő, Hungary.
- (3) Fifth Cohesion Report. Fifth Cohesion Forum on 31 January and 1 February 2011; public consultation from 12 November 2010 to 31 January 2011.
- (4) Consultation on the Future Trans-European Transport Network from 4 May 2010 to 15 September 2010.

1.3. Main results of public consultation

A public consultation on the Conclusions of the Fifth Cohesion Report was held between 12 November 2010 and 31 January 2011. A total of 444 contributions were received in response to a series of questions about the future of cohesion policy. A summary of the results was published on 13 May 2011⁶.

The results of this public consultation touched on some issues relating to the problems addressed in this IA. The results show that there is general agreement with the notion of concentration of funding. There is, however a concern about decisions on concentration not being taken at the right level. In particular, many contributions emphasise the need for flexibility and the need not to overlook territorial specificities. Moreover, several expressed concern that limiting priorities too much at EU level would not allow the flexibility necessary to define appropriate regional development strategies. Regional and local authorities, although generally in favour of a limited number of priorities, were concerned about any pre-defined thematic concentration at EU level which might constrain their individual socio-economic development strategies.

A public consultation was also held on the Future Trans-European Transport Network from 4 May to 15 September 2010⁷. A clear majority of stakeholders support the approach towards

⁶ 'Results of the public consultation on the conclusions of the fifth report on economic, social and territorial cohesion Brussels', Commission Staff Working Paper, SEC(2011) 590 final, 13.5.2011.

⁷ The results of the second round of consultation are summarised in the Commission Staff Working Document on 'The New Trans-European Transport Network Policy. Planning and implementation issues' adopted in January 2011⁷.

identification of infrastructural needs (removal of bottlenecks and missing links, efficient infrastructure management) from a genuinely European perspective. The majority of stakeholders, especially at Member State and regional level, also support better coordination between different financial instruments that fund TEN-T at EU level, namely cohesion policy, research funding, the TEN-T programme and the EIB's interventions. However, there is little support for a single fund. In the consultation, some stakeholders rejected it as putting transparency at risk, while some Member States emphasised the need to focus on the development needs of cohesion regions. Nevertheless, there is strong support among stakeholders including some Member States, for the idea of an integrated financial framework, guiding investments in TEN-T across the different funding instruments. Such a framework could contribute to an optimisation of the use of EU funding and remove the confusion that is sometimes felt when it comes to EU support.

Stakeholder views will be incorporated throughout the text linked to individual problems.

2. PROBLEM DEFINITION

Based on the evidence generated by successive evaluations, described below, the scope of this Impact Assessment is limited to three areas relating to the scope of the ERDF and Cohesion Fund. While both the ERDF and Cohesion Fund co-finance investments in a number of different areas, including environment and climate change, evidence from the evaluations suggest that while these areas still suffer from significant funding gaps⁸, in the next programming period, major changes are not required to the regulatory basis of the ERDF and Cohesion Fund in particular with regard to their scope of intervention in the area of environment and climate change. Moreover, concentration on a limited number of priorities has already been covered in the Impact Assessment for the Common Provisions Regulation, thereby highlighting the need for the different Funds to concentrate on Europe 2020 headline targets such as climate change.

⁸ See annex 6 and Institute for European Environmental Policy (IEEP) (2011), 'Cohesion policy and sustainable development'. The study of the IEEP examines environmental spending through cohesion policy in the current period. Although it does recommend a shift in focus in environmental spending towards interventions which provide both economic and environmental benefits, the study does not recommend discontinuing any of the current funding for environment. It also does not recommend spending in any new areas where cohesion policy is not already active. In particular, the study recommends that environmental spending focuses on the following areas:

- clean water supply, waste water treatment and waste management
- clean urban and railways systems
- energy savings investment
- renewable energy sources
- eco-innovation and environmental technologies
- climate change adaptation / natural hazards management
- green infrastructure and ecosystem services

The refocusing of environmental expenditure is addressed entirely through thematic objectives and earmarking for renewable energy and energy efficiency. These issues are dealt with in the IA of the General Regulation. There is no need for additional changes in the scope of the regulations, as the reasons for public intervention (i.e. market failure in the form of externalities and public goods) are not disputed. Planned environmental expenditure for the period 2007-2013 is contained in Annex 6 to this IA.

2.1. Description of the problem

Recent reports and studies have shown that there has been a paradigm shift in regional policy, focusing on the factors that generate growth at the regional level⁹. Determinants of growth at regional level can be summarised as follows:

- Accumulation of factors of production, usually physical and human capital, the productivity of which can be increased through innovation by developments in technology, knowledge and know-how;¹⁰
- Natural geography which includes the endowment in natural resources;¹¹
- Economic geography which includes aspects such as access to large product or factor markets or the density of economic activity within a region.¹²

This paradigm shift raises the following question: **Should regions simply strengthen selected factors such as improving human capital, upgrading infrastructure and offering adequate labour markets and business environments or must they improve across the board if they wish to become competitive (in the case of less developed regions) or remain competitive (in the case of more developed regions)?** Both the OECD and the World Bank have concluded that regions should promote their own economic growth by mobilising local assets and resources so as to capitalise on their specific competitive advantages, rather than depending on transfers and subsidies to help them grow¹³.

In this respect, European regional policy has an important role to play in mobilising local assets and focusing on the development of endogenous potential. However, as the Budget Review has highlighted, the ‘EU budget should be used to finance EU public goods, actions that Member States and regions cannot finance themselves, or where it can secure better results’.¹⁴ Thus, the key question is how best to focus interventions on European public goods. In this respect, the ERDF and Cohesion Fund can make an important contribution to three types of public goods:

⁹ World Development Report 2009 ‘Reshaping Economic Geography’, World Bank, November 2009; OECD report ‘How Regions Grow: Trends and Analysis’, 2009. Farole, T., Rodriguez-Pose, A., Storper, M. (2009) Cohesion Policy in the European Union: Growth, Geography, Institutions. Report Working Paper. February 2009. Barca, F (2009) An Agenda for a Reformed Cohesion Policy. A Place-Based Approach to Meeting European Union Challenges and Expectations D. Tarschys (2011) ‘How small are the Regional Gaps? How small is the Impact of Cohesion Policy ?’, European Policy Analysis, January 2011. Basile R, de Nardis S and Girardi A (2001) *Regional Inequalities and Cohesion Policies in the European Union*, Documenti di Lavoro, Istituto di Studi e Analisi Economica (ISAE), Rome. Boldrin M and Canova F (2001) Inequality and convergence in Europe’s regions: reconsidering European regional policies, *Economic Policy* 16(32), 205-253. Dall’erba S and Le Gallo J (2003) *Regional convergence and the impact of European Structural Funds over 1989-1999*, Discussion Paper, Regional Economics Applications Laboratory, University of Illinois. Bachtler J and Gorzelak G (2007) Reforming EU Cohesion policy: reappraising the performance of the Structural Funds, *Policy Studies*, 28(4), 309-32.

¹⁰ In the exogenous growth model the Solow residual depends on the rate of technological change and the rate of employment growth. Endogenous growth theory supports the finding regarding the importance of technological development and human capital for growth, which can be promoted with the appropriate policy incentives.

¹¹ The idea that long term development needs can only be met if some level of natural capital is preserved. See ‘Framing Sustainable Development - The Brundtland Report – 20 years on’, UN report, April 2007.

¹² Summarised in e.g. World Development Report 2009.

¹³ World Development Report 2009 ‘Reshaping Economic Geography’, World Bank, November 2009; OECD report ‘How Regions Grow: Trends and Analysis’, 2009.

¹⁴ ‘The EU Budget Review’, COM (2010) 700, 19.10.2010.

- delivering public goods in employment, R&D and innovation;
- providing necessary infrastructure in terms of both transport and environment;
- addressing cross-border problems and spill-overs.

There are other areas where the ERDF and Cohesion Fund have an important contribution to make to the provision of EU public goods¹⁵, but they are not all dealt with in this Impact Assessment. In particular, the important role of these funds in contributing to investments in the fields of environment and climate change is not addressed, despite significant investment needs in these areas¹⁶, as successive evaluations and academic research point to no particular problems in these areas as regards the scope of intervention of the funds. Thus, this IA focuses exclusively on the three areas where experience shows that particular problems have arisen.

The problems addressed in this Impact Assessment in terms of re-defining the scope of the Funds in relation to those activities with the greatest European added value should be distinguished from the issue of thematic concentration outlined in the Common Provisions Regulation Impact Assessment, which relates to how spending should be prioritised within Member States to achieve EU policy objectives.

General issues of coordination of Common Strategic Framework instruments (ERDF, ESF, CF, EAFRD, EMFF) with other EU policies and financial instruments are addressed in the Impact Assessment on the Common Provisions Regulation. Coordination with specific policies and instruments as they relate to the scope of the ERDF and Cohesion Fund, and as they relate to the European Territorial Cooperation Objective, is addressed in this Impact Assessment.

2.2. Major drivers of the problem

With regards to the ERDF in the 2007-2013 period, Article 3 of the ERDF regulation determines the scope of assistance available from the Fund. It defines the scope of the ERDF

¹⁵ The Funds acts as a lever for the implementation of other EU policies, in particular in the areas of energy, employment, education, research and development, innovation, creative industries linked to innovation, social inclusion, health, and industrial policy.

¹⁶ The transition to a low carbon economy, in particular in the area of energy efficiency of buildings and renewable and low carbon energy and heat supply will require significant funding according to PRIMES model results. Annual average investment needs for the period from 2016 to 2020 are presented in the table below (assuming an ‘effective technologies scenario with fragmented global action’ as analysed in SEC(2011)288).

€ billion (nominal prices, rounded)	Annual additional investments by 2020 cost effective pathway in the 2050 Roadmap
Power plants and industrial equipment (incl. CHP and steam)	23
Buildings and appliances (incl. services)	38
Total	61

Investment needs in the environment are also significant. Compliance costs of the Urban Waste Water Directive, the public and private investments for collection and treatment of urban wastewater, until full compliance with the requirements of the Directive are achieved, would amount to €45 billion for the 27 MS. Funding needs for municipal waste in the EU in period 2014-2020 are estimated at € 7-12 billion, of which € 2.5-6 billion should be funded from the EU (the rest by users and national budgets). Financing for implementation of the Natura 2000 is estimated to amount to € 5.8 billion, of which 50-75% could come from the EU budget.

as encompassing aid to productive investment to create and safeguard employment, primarily to SMEs, investment in infrastructure, the development of endogenous potential and technical assistance. Articles 4 and 5 of the ERDF regulation distinguish between the two main objectives, the Convergence Objective and the Regional Competitiveness and Employment (RCE) Objective¹⁷. The ERDF's broad scope in the area of aid to enterprises results in lack of leverage of funded investments and crowding out of private investment.

Article 2 of the **Cohesion Fund** regulation defines the scope of the Fund's assistance in the 2007-2013 period. The Cohesion Fund finances activities such as trans-European transport networks, notably priority projects of European interest as identified by the Union; or in energy and transport, projects in energy efficiency, use of renewable energy, developing rail transport, supporting intermodality, strengthening public transport, etc., provided they clearly present a benefit to the environment. Although the basis for the scope of intervention lies in Article 177 of the Treaty on the Functioning of the European Union (TFEU)¹⁸, the main problem with the scope of the Cohesion Fund has been two-fold, its focus (ability to deliver the most added value) and coordination with other EU policies and financial instruments, particularly the TEN-T programmes.

The **European Territorial Cooperation** objective is financed by the ERDF and supports cross-border, transnational and interregional co-operation programmes. Cohesion policy support for territorial cooperation has gone from being a EU Initiative (INTERREG) in the 2000-2006 period to a mainstream objective in the 2007-2013 period. Nevertheless, there is a continuing issue surrounding its ability to deliver maximum effectiveness and the most European added value. This relates also to coordination with mainstream ERDF national or regional programmes.

These issues, relating to the focus of the policy and coordination with other EU policies and financial instruments, are discussed in more detail below.

2.2.1. Scope of aid to enterprises funded by the ERDF

The provisions of the current regulation state that *'The ERDF shall contribute towards the financing of: (a) productive investment which contributes to creating and safeguarding sustainable jobs, primarily through direct aid to investment primarily in small and medium-sized enterprises (SMEs) [and] development of endogenous potential by measures which support regional and local development. These measures include support for and services to enterprises, in particular SMEs.'*

As highlighted by successive ex-post evaluations, ERDF support to enterprises has achieved some success. In practical terms, aid for productive investment has focused primarily on creating and safeguarding jobs. In some cases, this has been very beneficial to a particular area, attracting new businesses. In eastern Germany, an innovative study compared enterprises assisted to similar non-assisted enterprises. An average grant of € 8,000 per

¹⁷ According to the current regulation, regions targeted by the Convergence objective are those whose per capita GDP measured in purchasing power parities is less than 75 % of the EU average. Other regions are targeted by the Regional Competitiveness and Employment objective.

¹⁸ With regard to the Cohesion Fund, Article 177 of the TFEU stipulates: 'A Cohesion Fund [...] shall provide a financial contribution to projects in the fields of environment and trans-European networks in the area of transport infrastructure.'

employee generated around € 11-12,000 of additional investment, demonstrating the clear leverage effect.¹⁹ Studies have also shown that Member States and regions eligible for Convergence objective funding are particularly attractive to foreign multinationals, since ERDF support can create more favourable conditions for investments²⁰. However, there is potential to improve the effectiveness and efficiency of enterprise support through redefining the scope of eligible activities. In particular there is a strong consensus that the current scope of the ERDF is insufficiently focused on SMEs and innovation.

1. Support for SMEs

Empirical evidence strongly supports the case for a focus on SMEs, in particular in the case of investment support when low levels of access to financing are problematic, but other market failures are absent. A report of the European Court of Auditors justifies support for enterprises which have difficulty in accessing loans (start-ups and SMEs) in the following way:

‘For lenders it can be difficult to assess individual loan applications and the risks involved, especially if a borrower does not have an established track record (start-ups). In such a situation the borrowers can guarantee the loan to the lender through the provision of collateral, but those who do not have sufficient collateral may be denied access to credit even with viable business propositions.’²¹

The case for supporting large firms is different, as lack of access to finance typically does not apply to large enterprises. Empirical evidence shows that direct aid for SMEs is more effective, while ‘for larger companies crowding out of private investment may prevail over positive effects.’²² Moreover, recent evaluations on the impact of the economic crisis have shown that the distortive effect on competition in the single market of supporting large enterprises is also more significant than for SMEs, and that in times of economic downturn SMEs are particularly hard hit²³. The funding of productive investments of large enterprises where public intervention is not necessary has led to criticisms that funding is given to firms which do not actually need it, that they would have made the investment concerned even without financial help, and that the funding is therefore crowding out private investment instead of adding value.²⁴ In addition, large enterprises tend to be in a better position to relocate parts of their business in order to find an optimal mix of conditions for the whole enterprise, which has led to relocation of firms rather than additional investment²⁵.

¹⁹ Gefra & IAB, Work Package 6c: Enterprise Support – an exploratory study using counterfactual methods on available data in Germany (July 2010).

²⁰ Roberto Basile, Davide Castellani and Antonello Zanfei (2008) ‘Location Choices of Multinational Firms in Europe: the Role of National Boundaries and EU Policy’, *Journal of International Economics*, vol. 74, pp. 328-340.

²¹ European Court of Auditors (2011) Special Report No 4. The Audit of the SME Guarantee Facility. Paragraph 18.

²² The Role of Cohesion Policy in achieving Europe 2020 objectives. Evidence based conclusions. Warsaw, June 2011. p. 11.

²³ This is confirmed by the ongoing evaluations of ERDF programmes in Romania in the 2007-2013 period, which determined that half of Romania’s SMEs have been ‘catastrophically’ or ‘very highly’ affected by the current economic crisis, and only 2% declared that they had not been impacted.

²⁴ See e.g. ‘Multinationals reap the reward’ *Financial Times*, 02.12.2010. Further articles are available on <http://www.ft.com/eu-funds> under the section ‘Part 3 – Business’.

²⁵ Relocation of large firms is a recurring event which in number of cases is reported in the press see <http://www.ft.com/eu-funds> section ‘Part 3 – Business’.

Empirical literature on evaluations of state aid is relatively scarce. Nevertheless, the effect of enterprise support has been assessed by some studies, in nearly all cases concluding that only 10 to 20 per cent of the projects are not subject to total or partial deadweight loss through crowding out of private capital.²⁶ Therefore, effectiveness of support will increase for those investments where deadweight loss is lower or where capital market failures may operate; namely in start-up companies, in small businesses and for technological upgrading, research and development and human capital training.

DG REGIO has carried out three evaluations which have looked into the differentiated impacts of enterprise support according to the scale of firms:

- A study of various forms of ERDF support to enterprise in the Visegrád countries²⁷ found that ‘the bigger the company the smaller the job creation impact of the support’. Although only some schemes had enough observations for statistical significance, they concluded ‘all arguments considered it looks probable that greater specific impact can be expected from the supports targeting the SMEs than from the supports targeted at the larger/transnational companies’.
- An ongoing study of ERDF grants across Italy using rigorous econometric techniques²⁸ is finding significant differences in key indicators. For example cost per job is €80k for SMEs against €500k for large ones.
- A study of Danish subsidies for innovation and research co-operation²⁹ found significant impacts in terms of employment and investment for smaller firms (less than 150 employees), but could not detect impacts for larger firms. The latter may however be a result of small sample size – a recurrent problem in the rigorous measurement of impact on large enterprises.

2. Support for research, development and innovation

The focus of enterprise support varies between MS, with a strong investment support focus in some, and a strong emphasis on ‘softer’ measures such as innovation in others. In some MS support which is not linked to innovation still has a very strong role.

Figure 1 - Enterprise support structure from ERDF (% of total ERDF allocation) under Convergence and Competitiveness goals in the programming period 2007-2013 (as for 2009)

Member States

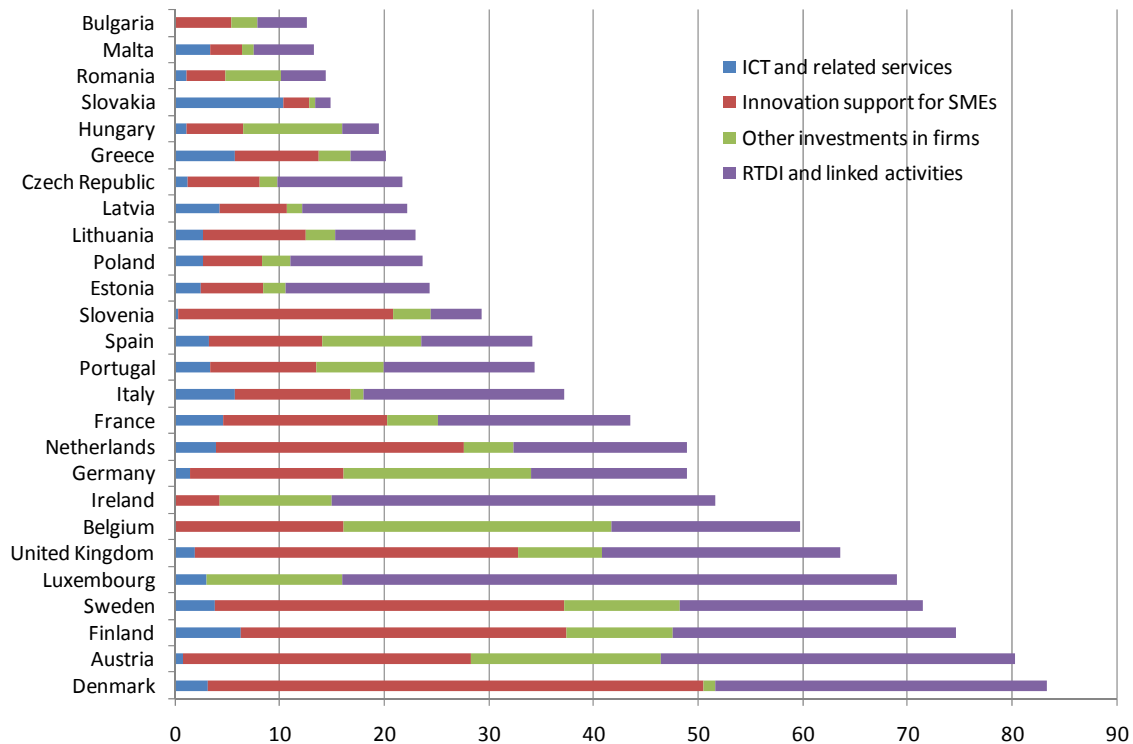
²⁶ For a literature review incl. a discussion of the methodologies applied see Gerling 2002. For empirical studies, applying heterogeneous methodologies and analysing different kinds of aid schemes see e.g. Honohan 1998, Barry 2003 and Lenihan 2004 for Ireland, Arup Economics and Planning 2000 for the UK or Gerling 2002 and Ragnitz 2003 for Germany.

²⁷ TARKI (2010) ‘Impact of Cohesion Policy on employment level and quality in the Visegrád countries’

²⁸ European Commission (forthcoming in Jan 2012) ‘Counterfactual Impact Evaluation of Cohesion Policy: examples from enterprise support’:

http://ec.europa.eu/regional_policy/information/evaluations/impact_evaluation_en.cfm

²⁹ Centre for Economic and Business Research, Denmark (2010) ‘An Analysis of Firm Growth Effects of the Danish Innovation Consortium Scheme’



As discussed above, the problem with the current scope of the ERDF is that the scope of aid to enterprises is defined too broadly and does not necessarily address market failure. The provisions for the current regulation allow for generic business support for stimulating entrepreneurship in all sectors, regardless of whether a market failure exists related to that sector, and irrespective of the sector’s contribution to growth and employment. The World Bank has argued that public support targeting specific firms in the hope that they become anchors in the local economy and have large multiplier effects, have for the most part not stimulated sustained growth in lagging regions³⁰. This has led to many countries across the world in shifting to regional economic development policies which focus more on ‘soft’ interventions, such as investing in innovation and supporting research institutes and science and technology parks, particularly in more developed regions. This also involves more targeted support measures to attract clusters of firms and focuses on the potential to develop the knowledge-based economy. Such a shift has started in cohesion policy interventions by the ERDF, however, this shift remains incomplete, with generic business support in the absence of identifiable market failures resulting in inefficiencies. Evidence suggests that the broad scope of current funding has led to inefficiencies, particularly where investment support has been given to large enterprises, such as multinationals or large hotels, where it is difficult to establish the EU added value.

Finally, there is scope to increase the role of non-grant based instruments especially in relation to investment support, as investment support is generally associated with lower risk and involves increased deadweight loss compared with investment in innovation and high risk activities. The Commission proposal for the MFF has also stated that ‘it is proposed that cohesion support for enterprises and projects expected to generate substantial financial returns

³⁰ World Development Report 2009 ‘Reshaping Economic Geography’, World Bank, November 2009;

will be delivered primarily through innovative financial instruments.³¹ By end of 2009 of the €8.2 billion allocated for SMEs³², €6.7 billion will be invested in the form of non-repayable grants.

2.2.2. Scope of infrastructure support funded by the ERDF and Cohesion Fund

Infrastructure financing is supported by various financial instruments at EU level, including the TEN-T budget, the ERDF and the Cohesion Fund, and loans from the EIB. Spending on various types of infrastructure from the ERDF and Cohesion Fund in 2007-2013 is around € 128 billion, including spending on RTD, ICT, energy, transport, environmental, cultural and social infrastructure. The contribution of cohesion policy to most types of infrastructure has been significant. In particular in the field of environment, cohesion policy interventions have brought substantial benefits.³³ The focus of this section is on transport infrastructure and in particular the relationship between the ERDF and Cohesion Fund on the one hand, and the recently proposed Connecting Europe Facility on the other.³⁴

Cohesion Fund and ERDF co-financed investments have made a major contribution to the development of transport systems across the EU, by facilitating the efficient movement of goods and people between and within Member States and by promoting economic and social development in both Convergence and Competitiveness regions. In the current period, 28% of the total ERDF allocated has been directed on transport investments, amounting to €34 billion. The contribution of the ERDF in the transport sector has been significant: 100.000 km of roads and 4.000 km of rail were built or reconstructed, accounting for 24% of motorway expansion and 13 % of high-speed rail expansion respectively in the EU over the 2000-2006 period.

To date, EU funding of infrastructure has clearly produced benefits. In a 2010 special report, the European Court of Auditors found that through co-financing the development of rail infrastructure, the EU has contributed to providing new possibilities for trans-European rail transport.³⁵ In terms of the contribution to physical accessibility of regions, accessibility analysis has shown the positive effects of transport investment on territorial cohesion in peripheral and rural areas³⁶. Connectivity is also important, allowing Member States and

³¹ A Budget for Europe 2020 – Part II: Policy Fiches (COM(2011) 500 final) p. 27.

³² Categories of expenditure 03, 04, 06, 09, 14, 15, 68

³³ An additional 20 million people have been connected to wastewater collection and treatment in the period 2000-2006 thanks to EU funds. Without EU funding, compliance with the *acquis* in waste water, water and waste would have been even more difficult. EU funds represented 38% of funding of environmental infrastructure in the cohesion policy countries (ES, PT, GR, IE) in 2000-2006, and 30% in the new MS.

³⁴ The Connecting Europe Facility will focus on investment in the area of transport, energy and ICT networks. However, as the focus of cohesion policy on energy transmission networks and on strategic ICT networks is very low, and therefore complementarity with the CEF investments in strategic infrastructure is ensured, this issue is not dealt with further in the IA.

³⁵ The Report found that EU co-financed infrastructure projects delivered the planned infrastructure to specification, and, once completed, created new and improved rail transport possibilities on key sections of the Priority Projects. Measurable improvements have been achieved on lines dedicated to high-speed passenger services that are operating fully as planned. European Court of Auditors, Special Report No 8/2010: 'Improving transport performance on trans-European rail axes: have EU rail infrastructure investments been effective?'

³⁶ TRACC, 2011, TRACC Transport Accessibility at Regional/Local Scale and Patterns in Europe, Interim Report, ESPON. Condeço Melhorado A., Gutiérrez J., Garcia Palomares, 2011, Spatial impacts of road pricing: Accessibility, regional spillovers. and territorial cohesion, Transportation Research Part A, 45, 185-203.

regions to fund infrastructure investments which connect secondary cities to major growth poles. Thus, transport infrastructure investments, in particular of a regional or local nature, have important implications for territorial cohesion and accessibility in countries where the transport network is limited and fragmented. The ex post evaluation³⁷ found that *‘In Spain, Greece and Ireland, in particular, the support provided by the ERDF to investment in transport led to significant improvements in the links between major centres both between and within regions and to substantial savings in travel time.’* Moreover, the ex post evaluation also found that *‘in a number of cities, Athens, Oporto, Lisbon and Dublin, especially, the expansion of public transport systems reduced congestion significantly below what it otherwise would have been, so cutting travel time as well emissions.’*

Financing of TEN-T (€billion)

	1993-1999	2000-2006	Share 93-06	2007-2013	Share 07-13
TEN-T budget	2.2	4	2%	8	2%
Cohesion Fund	8.3	17	7%	35	9%
ERDF	7.5	9	4%	8	2%
EIB	26.5	45	18%	54	14%
Other sources	63.4	208	69%	284	73%
TOTAL	107.9	283		389	

With regard to the Trans-European Networks, the ERDF and the Cohesion Fund have traditionally been the main source of finance from the EU budget. This has contributed to reducing imbalances in transport endowment in lagging regions across the EU. Cohesion policy contributes 11% of the overall finance. Another contributor from the EU budget is the TEN-T programme with 2%. It co-finances projects on the TEN-T network. However, EU financial instruments in their current form have so far not been able to bring about a full and timely completion of all projects involved.³⁸

This is why the Commission has proposed the establishment of a Connecting Europe Facility, the details of which are subject to a separate Impact Assessment. Nevertheless, the establishment of the Connecting Europe Facility has implications for the scope of the Cohesion Fund and ERDF in the area of infrastructure in particular with regards to European added value.

The main problem is that while TEN-T infrastructure has been significantly supported through the ERDF and Cohesion Fund, those parts which have been identified with the highest European value added have not necessarily been supported. For example, of the 15 TEN-T priority projects eligible for cohesion policy support, only 6 have received significant support.³⁹

³⁷ Applica (2010) ‘Ex Post Evaluation of Cohesion Policy Programmes 2000-2006: synthesis report’

³⁸ Commission Staff Working Paper. Impact Assessment Accompanying document to the White Paper ‘Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system’, Brussels, 28.3.2011, SEC(2011) 358.

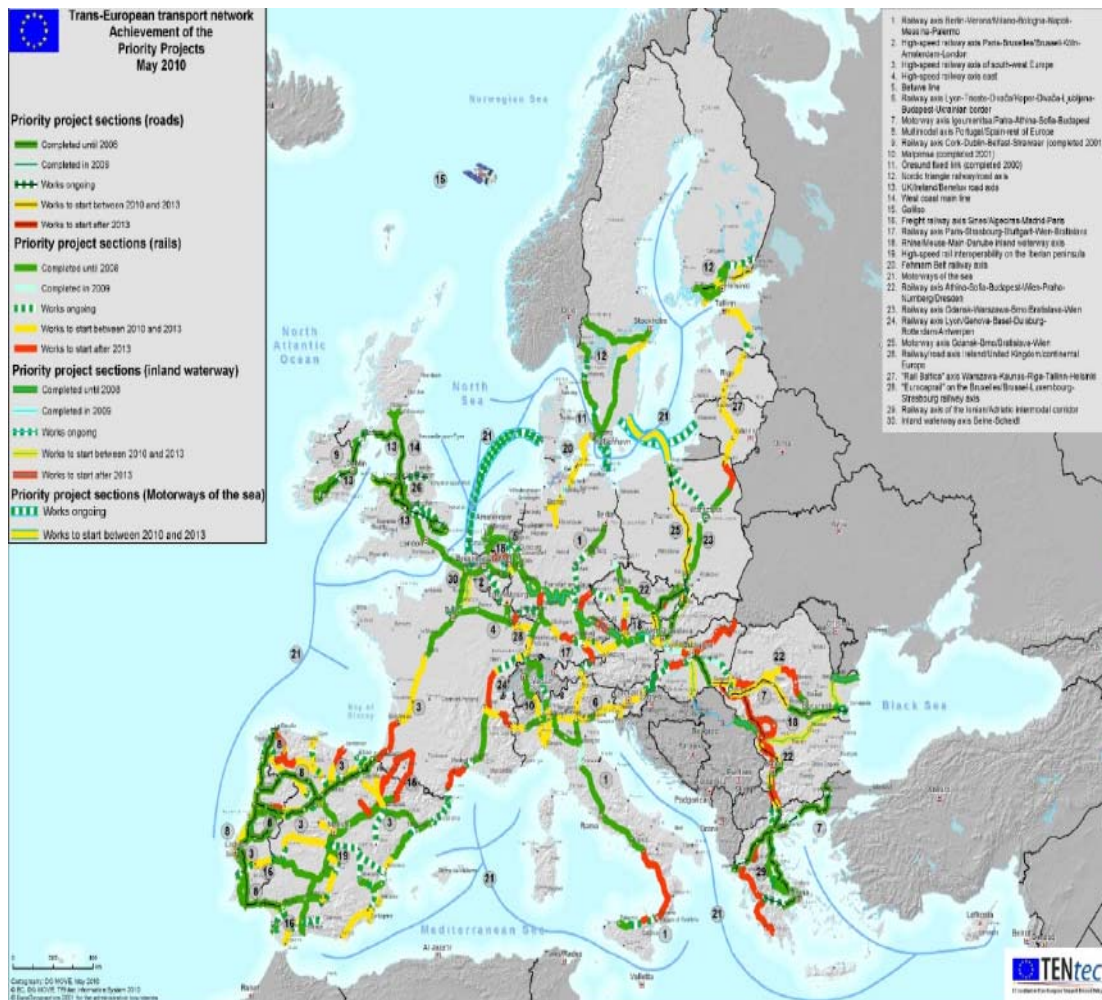
³⁹ These were namely: PP 3: High speed railway axis of South-West Europe - 1236 km financed by the Cohesion Fund, PP 6: Railway axis Lyon-Trieste-Divaca/Koper-Ljubliana-Budapest-Ukraine border - 173 km; PP No. 7: Motorway axis Igoumenitsa/Patra-Athina-Sofia-Budapest - 51 km; PP 8. Multimodal axis Portugal/Spain-rest of Europe - 141 km of road and 340 km of rail; PP 19: High speed rail interoperability in the Iberian Peninsula - 360 km; PP 22: Railway axis Athina-Sofia-Budapest-Wien-Praha-Nurnberg/Dresden - 436 km

Moreover, nationally and EU-financed infrastructure projects have also largely focused on developing individual priority projects rather than on creating a network. By 2010, only a total of 5 out of a total of 30 TEN-T priority projects were completed. Out of the nearly €400 billion in projected costs for the 30 priority projects, around €164 billion had been invested by end of 2009, and close to €80 billion is projected for the period 2010-2013. The remaining 37% of the investments are foreseen after 2013.⁴⁰ Substantial elements are missing in completing the core European transport network. As Figure 2 demonstrates, there are significant gaps, such as for example the cross-border interconnectors between Spain and Portugal or between Poland and the Baltic countries.

The TEN-T policy identifies infrastructure of high European value added and introduces a new concept of core and comprehensive TEN-T networks. This would allow for better prioritisation of investments according to European value added. Significant needs for investments into core European transport infrastructure exist in cohesion countries until 2020. Recent estimates increased these from €16.5 billion to €30 billion.

⁴⁰ Ibid.

Figure 2 - Progress on TEN-T priorities



A majority of stakeholders clearly support the approach towards the identification of infrastructural needs (removal of bottlenecks and missing links, efficient infrastructure management) from a genuinely European perspective. Although the ERDF and Cohesion Fund have contributed to financing infrastructure investment, this has sometimes been at the expense of investments in key European network infrastructure, with a bias towards infrastructure investment of national and regional rather than EU significance.

Moreover, the majority of stakeholders, especially at Member State and regional level, also support better coordination between different financial instruments that fund TEN-T at EU level, namely cohesion policy, research funding, the TEN-T programme and the EIB's interventions. To date the TEN-T programme has focused on soft measures such as the financing of feasibility studies, and the Cohesion Fund has focused on investment in infrastructure. The issue of coordination has become particularly relevant as the scope of the Cohesion Fund as defined by the Treaty covers physical investment in TEN-T, which the newly proposed Connecting Europe Facility will also finance.

2.2.3. Territorial cooperation

The added value of European territorial cooperation lies in the fact that it offers possibilities for joint action which are needed to address challenges that increasingly cut across national/regional boundaries⁴¹. Cohesion policy encourages regions and cities in different EU Member States to work together and learn from each other through joint programmes, projects and networks. In the period 2007-2013 the European Territorial Cooperation objective (formerly the INTERREG EU Initiative) covers three types of programmes:

- 52 cross-border co-operation programmes along internal EU borders. ERDF contribution: €5.6 billion.
- 13 transnational co-operation programmes covering larger areas such as the Baltic Sea, Alpine and Mediterranean regions. ERDF contribution: €1.8 billion.
- The interregional co-operation programme (INTERREG IVC) and three networking programmes (Urbact II, Interact II and ESPON) cover all 27 Member States of the EU. They provide a framework for exchanging experience between regional and local bodies in different countries. ERDF contribution: €445 million.

The European Territorial Cooperation objective is financed by the ERDF. The budget of €8.7 billion for this objective accounts for 2.5 % of the total 2007-2013 allocation for cohesion policy, including the allocation for Member States to participate in EU external border co-operation programmes supported by other instruments (IPA and ENPI). For European Territorial Cooperation, the ERDF regulation is applicable. Article 6 of the regulation sets out the priorities for ERDF assistance under the European Territorial Cooperation objective and provides for broad coverage of activities that can be financed.

The Territorial Cooperation objective addresses the following problems:

- **Transboundary problems.** These can only be solved with the cooperation of all regions concerned to avoid disproportionate costs for some, and freeriding by others (e.g. environmental pollution in transnational seas or rivers, development of sustainable transport concepts in broader geographical areas, sustainable and low carbon energy supply and distribution).
- **Sharing good practice and learning.** Territorial cooperation is an important instrument for enhancing competitiveness and cohesion. It can help spread know-how and sharing of good practice⁴².
- **Scale.** Territorial cooperation can help to target comparative advantages. Thus, the solution to a specific problem becomes more effective in a larger context due to economies of scale and the achievement of a critical mass, such as e.g. in the establishment of clusters to foster innovation or the joint use of cross-border health infrastructure. In transnational and transregional programmes, European financing facilitates the implementation of advanced projects such as technology transfers,

⁴¹ Commission Staff Working Paper (2011) 'The added value of the EU budget', 29.6.2011 SEC(2011) 867 final.

⁴² ESPON 2013 Synthesis Report, New Evidence on Smart, Sustainable and Inclusive Territories, November 2010.

environmental protection investments, development of renewable energy sources – types of projects that weaker regions could not afford⁴³.

- **Governance.** Territorial cooperation plays an essential role in improving the coordination of sector policies, actions and investments on a cross-border and transnational scale. It promotes joint governance of shared resources, and supports development of innovative solutions to common challenges. It offers possibilities for knowledge transfer and capitalisation among EU regions and Member States⁴⁴.
- **Relations with EU neighbours.** Cooperation programmes on the EU's external borders contribute to safety and stability, as well as friendly and mutually beneficial relationships with the EU's neighbours.

In addition, the 2007-2013 period has seen the emergence of new forms of territorial cooperation, tailor-made responses to macro-regional challenges. At the request of the European Council, two macro-regional strategies have been prepared by the Commission for the Baltic Sea and the Danube river basin⁴⁵. Macro-regional strategies are broad-based integrated instruments covering several Member States and regions and focusing on the alignment of policies and funding to increase the overall impact of public spending.⁴⁶

Based on evidence from successive evaluations and feedback from stakeholders, there is scope for improvement in European Territorial Cooperation programmes:

1. Lack of strategic focus

The main issue with territorial cooperation programmes, as confirmed by the results of the ex-post evaluation of the 2000-2006 period, is that they do not always focus on a limited number of priority topics, but adopt rather broad intervention strategies, making it difficult to achieve clearly-identifiable impacts⁴⁷. Although in the current period, a number of programmes have adopted a more strategic approach and developed strategic initiatives, there is considerable room for improvement in terms of the intervention logics of the programmes. In particular, some evaluations have noted that some territorial cooperation programmes 'foresee criteria and mechanisms for strategic projects, but so far such strategically generated projects have rarely been implemented. Several programmes would like to move more in the direction of strategic projects, but the main challenge seems to be reaching consensus between partner countries. The strategic importance of a project is often defined at the regional level rather than being based on common interests⁴⁸'.

⁴³ 'Added value of European Territorial Cooperation for regional development of Poland in the context of cohesion policy after 2013', Report commissioned by the Ministry of Regional Development of Poland November 2009.

⁴⁴ Evidence given by Professor Charles RICQ-CHAPPUIS, Scientific Director of COEUR (Observation Centre of the European Regions at Geneva University) at the hearing on the future design of the Territorial Cooperation Objective, REGI committee, European Parliament, 30 November 2010.

⁴⁵ Communication 'European Union Strategy for the Baltic Sea Region', COM(2009) 248, 10.6.2009 and Communication 'European Union Strategy for Danube Region', Brussels, 8.12.2010, COM(2010) 715.

⁴⁶ This Impact Assessment does not address specifically the question of macro-regional strategies.

⁴⁷ INTERREG III EU Initiative Ex-Post evaluation, p. 3,4.

⁴⁸ INTERACT Cross-programme evaluation of ETC programmes in South-East Europe - Operational aspects Final Report, June 2010, p. 3.

In addition, discussions in the High Level Group with Member States have highlighted the need for more coordination and strategic focus, both at general policy and individual programme level. The INTERACT position paper on European Territorial Cooperation post 2013 from July 2010 took the following view: ‘In the past INTERREG programmes have been criticised for lacking focus and as a result producing little visible effect. There are number of reasons for this ranging from a vague definition of objectives on the EU level, the limited funding available to cooperation programmes and their wide diversity, insufficient targeting of interventions on programme level and dispersed use of funds, etc. These factors arise for a number of good reasons but there is wide agreement to ensure greater focusing in future regardless of such issues.’ The same paper has taken the view that ‘due to the varied maturity of cooperation across the EU and its territorial diversity it is, however, quite impossible to limit the sectors or themes for European Territorial Cooperation. Flexibility is needed to respect the specifics of each programme area. Focus, however, must be ensured on the programme level by selecting a limited number of intervention areas and setting clear and measurable targets.’

2. Coordination

It is important to recognise the differences between the so-called ‘mainstream’ Convergence and Competitiveness objectives and the European Territorial Cooperation objective when it comes to the programme management and implementation framework. Cross-border, transnational and interregional cooperation programmes operate in a multi-country environment. This means finding effective and efficient compromises between the requirements of the EU regulations and the legal frameworks of the Member States involved. As a result, many ETC stakeholders have called for ETC-specific requirements either in a separate regulation or in a separate extended section of the Common Provisions Regulation. However, a major recommendation of the ex-post evaluations of the 2000-2006 period was the need to establish more pro-active and ongoing interaction with the Convergence and Competitiveness programmes and other territorial cooperation programmes operating in the programme area, to ensure complementarity, coordination and synergies. The evaluations also explicitly recommend that a more complementary and integrated approach should also be developed for the post 2013 period’.⁴⁹

2.3. Justification for EU action

Successive enlargements have dramatically increased differences across the EU in terms of levels of GDP per capita, productivity and employment⁵⁰. In this regard, the EU has an important role to play. Article 174 of the Treaty on the Functioning of the European Union (TFEU) states that:

‘In order to promote its overall harmonious development, the Union shall develop and pursue its actions leading to the strengthening of its economic, social and territorial cohesion. In particular, the Union shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions. Among the regions concerned, particular attention shall be paid to rural areas, areas affected by industrial transition, and regions which suffer

⁴⁹ INTERREG III EU Initiative Ex-Post evaluation, p. 9

⁵⁰ See Chapter 1 of the Fifth Cohesion Report.

from severe and permanent natural or demographic handicaps such as the northernmost regions with very low population density and island, cross-border and mountain regions. ’

The goal of economic, social and territorial cohesion is promoted with three EU funds, of which two, the ERDF and the Cohesion Fund are discussed in this IA.

As stipulated in Article 176 of the TFEU, the aim of the ERDF is ‘to help to redress the main regional imbalances in the Union through participation in the development and structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions’. As stipulated in Article 177, the aim of the Cohesion Fund is to finance ‘projects in the fields of environment and trans-European networks in the area of transport infrastructure’.

With regard to the Cohesion Fund, Article 177 of the TFEU stipulates: ‘A Cohesion Fund (...) shall provide a financial contribution to projects in the fields of environment and trans-European networks in the area of transport infrastructure.’ Articles 170 and 171 in turn define the goals of the EU in relation to trans-European transport networks (single market, cohesion and common foreign and security policy).

The EU’s right to act in the field of transport is enshrined the TFEU, especially in Title VI, which makes provision for the Common Transport Policy and in Title XVI on the trans-European networks. Article 192 TFEU also provides a legal basis for addressing the environmental sustainability of the transport system. Pursuant to Articles 90 and 91 TFEU, the common transport policy should contribute to the broader objectives of the treaties. The goal of the common transport policy is to remove obstacles at the borders between Member States so as to facilitate the free movement of persons and goods. To this end, its prime objectives are to complete the internal market for transport, ensure sustainable development, promote better territorial cohesion and integrated spatial planning, improve safety and develop international cooperation.

2.4. How would the problem evolve, all things being equal?

The need to encourage increased business investment in R&D in coming years will only grow. As highlighted in the accompanying document to the Innovation Union Communication, high R&D intensity sectors in the EU are generally smaller than in the US and Japan and contain proportionately more SMEs, which invest less per firm than larger companies. Bridging the gap between the EU and the US would require a substantial increase in the share of high-tech, high R&D intensity sectors in the EU economy, but this is hindered by the fact that few R&D intensive SMEs grow into large corporations capable of gradually shifting the structure of the economy towards large, high R&D performing and wealth creating sectors.⁵¹ This challenge calls for a strong focus of policy on innovation in SMEs and a concentration of resources on R&D of the available aid to larger companies.

In a no policy change scenario post-2014, a large proportion of **aid to enterprises** for productive investment would continue to go to SMEs making a significant contribution to growth, innovation and employment. In the 2007-2013 period, cohesion policy will support

⁵¹ SEC(2010) 1161 final Commission Staff Working Document. "A Rationale for Action." Accompanying document to the Europe 2020 Flagship Initiative Innovation Union

the creation and growth of SMEs, in particular linked to entrepreneurship, access to finance, research and innovation, technology transfer, access to information and communication technologies or environmentally friendly production. About €27 billion (7.9% of the total allocation) is allocated to such support dedicated specifically to SMEs. It is expected that these needs will be as great, if not greater, in the next period. Other investment support to both large and small businesses, including productive investment and the provision of aid to large enterprises providing services in the abovementioned areas, is expected to account for another €28 billion (8.1% of the total allocation). This indicates that significant resources are likely to be made available in the next period for investment support. However, given the scale of the challenge, there is a risk that much of the benefits could be lost if it is not targeted on investments that are most likely to enhance long-term growth.

With regard to **infrastructure**, the contribution of cohesion policy to investment would continue to be significant. In the period 2000-2006 cohesion policy contributed to financing 5 106 km of motorways and 7 260 km of railways.⁵² The cost of EU infrastructure development to match the demand for transport has been estimated at over €1.5 trillion for the period 2010-2030. Completing of the TEN-T network requires about €540 billion until 2020, out of which some €215 billion can be referred to the removal of the main bottlenecks. Cohesion policy investments in transport between 2007 and 2013 are concentrated in the Convergence regions, with funding split as follows:

- TEN-T projects across all transport modes have been allocated approximately €38 billion (11% of the total of cohesion policy investments and an increase of 65% over the 2000-2006 period). About half of that will be allocated to road infrastructure and the remainder to rail.
- Overall almost €41 billion (12% of the total) has been allocated for road infrastructure, including TEN-T and national, regional and local roads.
- For rail infrastructure, a total of €23.6 billion (6.8%) has been allocated, including TEN-T projects.
- Other allocations include: urban transport: €8.1 billion (2.3%), ports and inland waterways: €4.1 billion (1.2%), multimodal transport and intelligent transport systems: €3.3 billion (1%); airports: €1.9 billion (0.5%).

However, issues would remain in relation to the contribution to European networks and the EU added value of investment. In addition, the benefits of investments for regional development will not be maximised, as infrastructure investment will continue in richer regions where the added value in terms of regional development is small. Coordination between different EU instruments, in particular between cohesion policy, the TEN instrument and funding from the EIB would be less than optimal.

EU added value is substantial where the success of actions is heavily dependent on cross-border spill-overs e.g. in the development of a Trans-European Network, climate change, research and innovation. EU intervention through the ERDF and Cohesion Fund strongly incentivises cooperation and exchange of know-how between actors across the EU leading to the proliferation of innovative solutions and good practices beyond individual regions or

⁵² The figures include new infrastructure and reconstruction of existing infrastructure.

Member States⁵³. With regard to **territorial cooperation**, the ex-post evaluations of the 2000-2006 period acknowledge the difficulties of quantifying the impact of INTERREG programmes, although they do provide evidence to suggest that they have had an impact such as:

- creation or maintenance of 115 200 jobs and 5 800 start-ups and new businesses,
- more than 3 900 businesses enhanced or diversified,
- 63 000 agreements or conventions to facilitate co-operation along the borders
- 1 030 transport infrastructures built or supported,
- 18 000 km of roads, railways, routes and paths built or upgraded,
- 12 000 networks and co-operation structures created to further promote and intensify co-operation.

Thus, the baseline scenario foresees a prolongation of the current policy, which involves maintaining the current scope for the ERDF, Cohesion Fund and Territorial Cooperation objective. Investment from the ERDF and Cohesion Fund has resulted not only in significant positive impacts on economic growth but also in the reduction of socio-economic disparities across the EU. However, the lack of focus in terms of scope has been highlighted in numerous stakeholder consultations and ex-post evaluations. A continued lack of focus in terms of scope would result in fragmentation and lack of critical mass to achieve visible results, a crowding out of private investment and deadweight loss, as well as a lack of focus on real bottlenecks to growth. While the baseline scenario is a viable alternative and one which has evolved over a number of years in a process of incremental improvement, continuation of the current arrangements could perpetuate a number of deficiencies present in the delivery arrangements.

3. OBJECTIVES

The **general objective** of the ERDF is defined in Article 176 of the TFEU namely ‘to help to redress the main regional imbalances in the Union through participation in the development and structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions’. As stipulated in Article 177, the aim of the Cohesion Fund is to finance ‘projects in the fields of environment and trans-European networks in the area of transport infrastructure’.

The **specific objectives** are to assist Member States and regions to promote smart, sustainable and inclusive growth in line with the Europe 2020 strategy by developing the basic conditions for sustainable growth (removing bottlenecks impeding growth), facilitating processes of structural adjustment and fostering integration by removing cross-border and transnational barriers, including on the external borders of the EU. Given the scope of this IA, the specific objectives are to ensure that the ERDF and the Cohesion Fund are spent in:

⁵³ ‘EUROPE 2020 A strategy for smart, sustainable and inclusive growth Brussels’, COM(2010) 2020, 3.3.2010, p. 11.

- **an effective way** – which means that they are used in a way which helps to make a significant contribution to economic and social development;
- **an efficient way** – ensuring the efficient use of resources, concentrating them where public funding is necessary;
- a way which provides a **high European value added** – this can be ensured by either adding volume or scope to existing national activities – in line with EU priorities - or by refocusing national or regional funds according to European priorities.

The **operational objectives** relate to the individual issues discussed and are the following:

- Enterprise support to ensure that investment support to enterprises contributes to sustainable growth and employment and that support for innovation contributes to developing local and regional potential;
- Infrastructure investment: to ensure that there is a sufficient concentration on European priorities;
- Territorial cooperation: to ensure that there is a sufficient focus on European priorities, with flexibility for MS and regions to choose thematic objectives.

3.1. Consistency with horizontal objectives of the European Union

The origins of the ERDF and Cohesion Fund lie in the birth of the single market in the mid 1980s. With the expansion of the single market, all EU regions have experienced and will continue to experience a mix of opportunities and adjustment needs, as outlined in the Monti report on the single market⁵⁴. The Cohesion Fund in particular plays a key role in upgrading the infrastructure of lagging Member States, which is essential to ensure interconnection of the single market. The ERDF complements this by assisting structural change in regions.

As noted before, there is room for further improvement with regards to more focus and coordination with other European policies and financial instruments; the challenge being to ensure concentration on those investments within programmes that will best deliver results, and to ensure coordination of funding with other instruments.

Investments co-financed by the ERDF and Cohesion Fund act as a lever for the implementation of other EU policies, in particular in the areas of environment, transport, energy and climate, employment, education, research and development, innovation, creative industries linked to innovation, social inclusion, health, and industrial policy. The delivery system is also linked to other EU policies, e.g. it ensures that EU public procurement rules are respected. Funding from the ERDF and Cohesion Fund is complementary to other EU funding, e.g. with the ESF, EAFRD, EFF, TEN-T, research, innovation, and LIFE+. The complementarity and coordination of ERDF and Cohesion Fund support with other EU policies is therefore of particular relevance. In addition, the objectives of the funding need to be mutually compatible with the main aspects of EU external policy, especially the actions undertaken in the close vicinity of the EU borders (Balkans, ENP countries, Russian

⁵⁴ Mario Monti. ‘A New Strategy for the Single Market’, Report to the President of the European Commission, 9 May 2010.

Federation). The issue of coordination with other EU policies and financial instruments is addressed further in the Impact Assessment of the Common Provisions Regulation.

4. POLICY OPTIONS

The options appraised have been shaped by dialogue with stakeholders and results of the ex-post evaluations. Options have been formulated for each of the three issues identified in the problem definition. The different options have been included in the Impact Assessment to address the problem of scope in accordance with the defined objectives, reflecting alternatives ranging from moderate adaptations of the current arrangements to more fundamental changes.

On 29 June 2011, the Commission adopted a proposal for the multi-annual financial framework for the period 2014-2020. The relevant elements of the proposal are as follows:

- SME competitiveness and innovation are priority areas for investment through cohesion policy.
- It is proposed that cohesion support for enterprises and projects expected to generate substantial financial returns be dealt with primarily through innovative financial instruments.
- The Cohesion Fund and the ERDF will continue to be available for funding investment in infrastructure. €10 billion will be ring-fenced to finance core transport networks under the Connecting Europe Facility.
- A Connecting Europe Facility will be created to fund pre-defined transport, energy and ICT priority infrastructure of EU interest. The total budget of the facility will be €40 billion.

4.1. Scope of aid to enterprises by the ERDF

The options presented below range from the status quo to a more incremental option as well as a more radical option.

4.1.1. Option 1 – No policy change

- The scope of the ERDF continues to be broad focusing on productive investment and development of endogenous potential.
- Direct aid is given primarily but not exclusively to SMEs.

4.1.2. Option 2 – More targeted support to large enterprises focusing on R&D, innovation and key enabling technologies

- Aid for general productive investment to create and safeguard jobs is limited to SMEs.
- Support for development of endogenous potential (which can include aid to both large and small firms) by supporting regional and local development and research and innovation. These measures include:
 - fixed investment in equipment and small-scale infrastructure, support for and services to enterprises, in particular SMEs;

- support for public research and innovation bodies and technology and applied research in enterprises;
- networking, cooperation and exchange of experience between regions, towns, and relevant social, economic and environmental actors.

4.1.3. Option 3 – No grants to large firms; only loans and equity finance for SMEs

- All productive investment is supported through non-grant aid through innovative financing instruments.

4.2. Scope of infrastructure support through the ERDF and Cohesion Fund

4.2.1. Option 1 - Status quo

- The ERDF and the Cohesion Fund continue to finance major infrastructure in all regions of the EU, with funding concentrated in less developed regions. Funding from the Cohesion Fund is only available in poor Member States.
- In less developed regions the focus is on both priority projects of European interest as identified by the Union and within the new TEN-T framework (because of their cross-border nature, or the deployment of EU-wide systems), as well as on secondary infrastructure (including rail transport, supporting intermodality, strengthening public transport, roads etc.).
- More developed regions may use national funding for financing major infrastructure, if this is seen as major national priority. In addition, the TEN-T programme continues to fund infrastructure projects with high EU added value in developed regions, concentrating in particular on soft interventions (e.g. feasibility studies, etc.)
- National operational programmes cover the infrastructure investments, with priorities being set at national level.

4.2.2. Option 2 - Enhanced focus on European priorities in major infrastructure investments in less developed regions and Connecting Europe Facility in more developed regions

- The Cohesion Fund finances infrastructure investments in the area of strategic European priorities. The fund is only available in poor Member States, while the ERDF targets projects of national and/or regional interest.
- As in option 1, major infrastructure investments are covered by national programmes.
- Ex ante conditionalities in the area of strategic planning as well as in enhancing administrative capacities will accompany the focus on strategic investments in sustainable transport. Investments of national and regional significance would be prioritised according to their contribution to sustainability and their network contribution.

- The dedicated Connecting Europe Facility (CEF) covering energy, transport and broadband investments would complement cohesion policy investment in physical infrastructure, not only soft investments. The CEF would finance infrastructure projects with high EU added value in the areas of transport, energy and ICT € 10 billion would be ring-fenced inside the financial allocation for the Cohesion Fund for the Connecting Europe Facility in order to support investments in core TEN-T infrastructure.

4.2.3. Option 3 – Clear differentiation between the scope of the ERDF, Cohesion Fund and Connecting Europe Facility

- The Cohesion Fund finances infrastructure investments in the area of strategic European priorities in the area of core and comprehensive TEN-T, while the ERDF targets projects of national and/or regional interest.
- As in option 2, major infrastructure investments are covered by national programmes.
- Ex ante conditionalities in the area of strategic planning as well as in enhancing administrative capacities will accompany the focus on strategic investments. Complementing the conditionalities on administrative capacity building, continuous financial support would be given to build up capacities to implement the projects to ensure absorption of funds.
- The dedicated Connecting Europe Facility (CEF) covering energy, transport and broadband investments would focus its investments in the more developed Member States ONLY. The CEF would finance infrastructure projects with high EU added value in the areas of transport, energy and ICT, such as cross border infrastructure.
- The Cohesion Fund would fund TEN-T projects in the less developed Member States; while the Connecting European Facility would do so in more developed Member States. There would be no transfer of €10 billion from the Cohesion Fund to the Connecting Europe facility.

4.3. Territorial Cooperation

4.3.1. Option 1 – No policy change

- Priorities for cooperation programmes would continue to be broadly defined.
- No formal link would be established between cooperation programmes and future Convergence/Competitiveness programmes.

4.3.2. Option 2 – Thematic concentration and strengthened link to other programmes

- The number of thematic objectives that cross-border and transnational cooperation could choose from would be limited in number.
- Cooperation aspects would be an integral part of the overall strategic framework set out in the EU Strategic Framework and the Partnership Contract.

4.3.3. Option 3 – Integration of cooperation in the regional programmes

- No more separate Territorial Cooperation programmes.
- Cooperation activities would be carried out in the framework of the existing regional programmes. They would include an opening to provide for cooperative action to be undertaken with one or more regions from other Member States in order to address issues of common concern.

5. ANALYSIS OF IMPACTS

The analysis of the impacts of the different delivery options for the ERDF and Cohesion Fund has been developed by assessing their contribution to increasing the efficiency and effectiveness and EU added value of funding. The economic, social and environmental impacts of the ERDF and Cohesion Fund investments are mainly addressed in the Impact Assessment of the Common Provisions Regulation, as this is where the issues of coordination with other EU policies and financial instruments as well as thematic concentration are dealt with, which impact on the distribution of funds between economic, environmental and social objectives.

Much of the analysis of the potential impacts of different delivery options is based on ex-post evaluation reflecting past experience with delivery systems.

5.1. Scope of enterprise support funded by the ERDF

5.1.1. Option 1 – No policy change

Overall the continuation of the status quo will result in significant positive effects in regions, but at the same time will also result in a continued loss in efficiency and effectiveness. The effectiveness of this general approach is demonstrated by the ex-post evaluations, which concluded that over the EU as a whole, the growth in terms of gross employment was least 1 million jobs in Convergence and Competitiveness regions as a direct result of enterprise support over the period 2000-2006. (Figures on net employment impacts are not available, but are smaller, due to the crowding out of private investment by public funding.)

The advantage of a broad scope is that a relatively broad scope of intervention allows Member States sufficient flexibility to choose the areas of intervention that most meet their challenges.

The main drawback of is that the broad scope results in continued funding of interventions which do not address real bottlenecks to growth or market failure. The ex-post evaluations have shown that in Convergence regions in the EU-15, well over half of the finance from the ERDF for aid to enterprises went towards assisting SMEs either directly through investment grants or indirectly through the provision of various services. Most of the rest went on support for RTDI (28% of the total). However, a smaller but significant amount (16% - though totalling €3.4 billion) went towards supporting investment in large enterprises. Examples of past support where public intervention is not necessary includes funding of large-scale private investments in tourism in areas where there is no underutilised potential.

In the area of productive investment funding is given to firms which do not actually need it, that they would have made the investment concerned even without financial help. The

funding provided in such cases, therefore, is a waste of public resources, as it crowds out private investment instead of providing real added value. As the 2000-2006 ex-post evaluations concluded, this deadweight loss is most likely to occur in respect of support to large enterprises, which can be expected to have greater access to financing opportunities as well as to business expertise.

Under this option most support to enterprises would continue to be delivered in the form of non-repayable grants, which would result in a lower than optimal leverage of funding.

5.1.2. Option 2 – More targeted support to large enterprises focusing on R&D, innovation and key enabling technologies

Under this option, support for productive investment to create and safeguard jobs would be limited to direct aid to investment in SMEs. Large companies could receive aid, linked to specific investments designed to support the development of endogenous potential of the region, notably in the fields of innovation, new technologies and research. Such an approach would also provide multiplier effects through the development of stronger long term innovation capacities and skills-based linkages, cooperation and joint initiatives between large firms, SMEs and other institutions. For many regions this can be a key element in finding the right responses to policy challenges.

The main advantage of limiting direct aid to investment in SMEs to support for productive investment to create and safeguard jobs is that it avoids crowding out, as well as ‘deadweight’ loss which is most likely to occur in respect of support to large enterprises, as was identified by the 2000-2006 ex-post evaluation.

There are strong arguments for reinforcing the focus on R&D and innovation, particularly in the context of Europe 2020. Overall during the 2000-2006 period, the ERDF made a perceptible contribution to R&D expenditure in Convergence regions, adding some 12% to national spending in Portugal, 7% in Greece and 6% in Spain, and even more in some of the EU-10 countries, especially Estonia (where total R&D was twice as large in relation to GDP in 2006 as in 2000). An increased focus on R&D and innovation could support progress towards the relevant headline targets.

Increased focus on innovation for key enabling technologies⁵⁵

The economic downturn has affected investment in general and especially in technology-enabled sectors such as chemicals, automotive, construction and electronics. Lower industrial output and slower technology adoption reduces demand for basic technology providers. A key objective of public support for R&D and innovation in the EU Framework and Member State programmes should be to ensure that the flow of innovation is maintained and that technology adoption is facilitated. Publicly supported programmes should be reinforced to help key industries to maintain their long term innovation plans for enabling technologies and thus ensure their competitiveness in the subsequent economic upturn.

Furthermore, under this option there is scope to increase the role of non-grant based instruments especially in relation to investment support for both large enterprises and SMEs,

⁵⁵ Communication ‘Preparing for our future: Developing a common strategy for key enabling technologies in the EU’ COM(2009)512, 30.9.2009, p. 7.

as investment support is generally associated with lower risk and involves increased deadweight loss compared with investment in innovation and high risk activities. The Commission proposal for the MFF has also stated that ‘it is proposed that cohesion support for enterprises and projects expected to generate substantial financial returns will be delivered primarily through innovative financial instruments.’⁵⁶ By end of 2009 of the € 8.2 billion allocated for SMEs⁵⁷ the bulk, (€6.7 billion) was in the form of non-repayable grants.

The main drawback of this approach is that certain stakeholders and Member States consider that such a restriction would limit their flexibility in addressing regional disparities and influencing firm investment decisions.

5.1.3. Option 3 – No grants to large firms; only loans and equity finance for SMEs

Under this option, greater effectiveness and efficiency is achieved by further restricting the scope of funding.

The main advantage of this option is that by prohibiting grant-based support to firms, deadweight loss and crowding out of private investment are reduced, thus increasing the efficiency of funding. This option would also be in line with the results of the ex-post evaluation, which found that there is a need to make more extensive use of loans, equity finance and other forms of financial engineering. Nonetheless, the ex-post evaluations also suggest that non-repayable support is more effective for innovative, R&D-intensive projects far from the market, while financial engineering is more appropriate when lack of private financing is due to financial market failure. The main factor is the risk involved in innovative activities, and particularly in R&D activities, which sometimes cannot be resolved by repayable support alone.

A move from non-refundable to refundable forms of support for firms could entail a rise in administrative costs for managing authorities. The experience from the current period shows that although indirect forms of support through innovative financing instruments can have greater leverage effects, these often involve more complicated procedures and knowledge-intensive efforts by managing authorities.

Finally, some stakeholders have signalled that support to large firms, in particular in relation to innovation is important, as large enterprises are active in some of the areas relevant to delivering the Europe 2020 Strategy. Stakeholders have also argued that local branches of large enterprises and SMEs are similar in their decision making processes, and that investment support to large enterprises is warranted as it has a spillover effect on local economies.

⁵⁶ A Budget for Europe 2020 – Part II: Policy Fiches [COM(2011) 500 final] p. 27.

⁵⁷ Categories of expenditure 03, 04, 06, 09, 14, 15, 68.

5.2. Scope of infrastructure support funded by the ERDF and Cohesion Fund

5.2.1. Option 1 – No policy change

Under this option, approximately half of the Cohesion Fund allocations, i.e. €34 billion would be allocated to infrastructure investments with additionally about €6 billion from the ERDF invested in more developed regions.

The main advantage of this option is that EU funding would be available for a broad range of infrastructure projects. The broad scope of this option as well as the flexibility given allows Member States to choose the areas of intervention that best meet their challenges. This was confirmed by Member State responses to the public consultation in relation to the Fifth Cohesion Report, where a number of Member States noted that investing in infrastructure is important for the development of less developed regions in order to improve regional connectivity to national growth centres and to increase regional accessibility. Therefore, this option would ensure a maximization of regional development benefits. The drawback of this option is that at the same time there would be continued financing for basic infrastructure in regions with already high infrastructure endowment. These investments would consume a substantial part of the allocations in these regions which would not address real bottlenecks to growth and continue to fragment (the relatively limited) ERDF interventions in these regions.

The option continues to ensure investments in TEN-T infrastructure and would to some degree address key European priorities. However, the experience from the current and previous programming period suggests that Member States are reluctant to give sufficiently high priority to multi-country cross-border investments and tend to focus on these bits of TEN-T infrastructure most relevant in a national context.

Due to a continuation of national operational programmes within which priorities would be defined, and a limited role for the Commission to influence these priorities, this option would not ensure a sufficient concentration on key European value added investments. As a result, funding could fall significantly short of the €30 billion needs for core TEN-T infrastructure investments until 2020. EU funding for key European infrastructure would continue to be fragmented and unfocused⁵⁸

5.2.2. Option 2 - Enhanced focus on European priorities in major infrastructure investments in less developed regions and Connecting Europe facility in more developed regions

European added value:

As under option 1, under this option, half of the Cohesion Fund allocations would be available for investment in TEN-T. However, of this amount €10 billion would be ring-fenced inside the financial allocations of the Cohesion Fund for the Connecting Europe Facility. The remaining €24 billion would be focused with the help of ex-ante conditionalities on core TEN-T projects as well as on comprehensive TEN-T infrastructure which would be part of the

⁵⁸ The Report on TEN-T evaluation points to a number of shortcomings in the functioning of the programme. In particular, the Report notes that EU funding is fragmented between the TEN-T programme, the Cohesion and the Structural Funds and that greater coordination between the two would be beneficial for the future.

partnership agreement. Through the use of the partnership contract, this option would focus the financial resources needed to meet the demands for investment in the core TEN-T network in Cohesion countries, which are estimated at €30 billion.

The ex ante conditionalities would ensure realistic project pipelines with a prioritisation of investments according to European value added and sustainability. Furthermore, they would also systematically address bottlenecks in implementation capacities, particularly with weak beneficiaries such as many railway agencies in Cohesion countries.

The main advantages of the option are therefore that it concentrates funding as well as capacities towards high European value added projects without losing the necessary scope for maximising the benefits for regional growth and sustainability. It furthermore addresses concerns expressed by both stakeholders and the ex-post evaluations of infrastructure investment in cohesion policy. The ex-post evaluation makes the case for a holistic and coordinated approach to infrastructure funding, supporting both the development of EU priorities and the development of less attractive parts of the network.⁵⁹ This option would increase coordination between the different EU funding instruments.

At the same time this option would avoid too much centralisation and allow a significant role for shared management in infrastructure investment, which would be perceived as positive by stakeholders who are critical of a central fund. In the consultation, some stakeholders rejected the idea of a central fund as putting transparency and predictability at risk, while some Member States emphasised the need to focus on the development needs of cohesion regions. It would allow the targeting of the ERDF towards regional and local infrastructure investment. The main drawback of this option is the reduced flexibility for Member States and regions to invest in infrastructure of primarily national/regional interest. This option however provides for some scope for investing in regional connectivity to the core TEN-T network in order to support regional growth potential.

Improving the coordination of the different instruments of TEN-T financing:

This option offers a better focus on strategic investments by combining the CEF with a European focus and the Cohesion Fund which remains under shared management. The negotiations process for the strategic projects and the project pipelines would ensure complementarity in addressing European added value.

5.2.3. Option 3 – Clear differentiation between the scope of the ERDF, Cohesion Fund and Connecting Europe Facility

European added value:

As in option 2 about €34 billion, i.e. half of the Cohesion Fund allocations would be available for investment in TEN-T. However, the investments are entirely spent on those TEN-T bids which reflect most national and regional interests. Two Member States explicitly rejected the idea that sectoral funds for infrastructure investment should be created, and that cohesion policy should contribute to the creation of these funds. Several other Member States

⁵⁹ ERDF Ex-Post evaluation Work Package 5a. p. xii.

supported the idea that cohesion policy has been successful in investing in infrastructure and should continue to do so⁶⁰.

The main advantage of this option is it allows Cohesion countries full flexibility to address regional and national priorities in less complex projects, such as the non core TEN-T network.

Like under option 2, EU financed transport investments would be primarily concentrated on the least developed regions with positive effects on the concentration of ERDF interventions on bottlenecks for growth in more developed regions. This option provides clear benefits for Convergence regions, many of which still have significant infrastructure investment needs.

The main drawback of this option is the insufficient concentration of the Cohesion Fund on core TEN-T projects in poorer MS. There would be no funding available from the Connecting Europe Facility for strategic projects in Cohesion countries. Therefore it is unlikely that funding would meet the investment needs of core TEN-T projects in Cohesion countries until 2020.

Improving the coordination of the different instruments of TEN-T financing:

This option ensures strict complementarity of funding instruments, because the CEF would focus on more and the Cohesion Fund on less developed Member States. Although addressing cross border infrastructure may be insufficient in Member States covered by the Cohesion Fund.

5.3. Territorial cooperation

5.3.1. Option 1 – No policy change

The advantage of this option is that it gives cooperation programmes greater flexibility in choosing the policy areas they would like to tackle. The drawback of this option is, however, that it tends to lead to programme objectives not being defined with sufficient clarity, an overall lack of strategic focus and no clear definition of expected programme outputs and results. Such an approach thus makes it difficult to properly monitor and capture programme achievements as well as ensure complementarity with other EU programmes including transnational activities.

Continuation of the status quo would also not help to reinforce the link between cooperation programmes and other regional programmes operating in the same area. As noted by the ongoing evaluations of the 2007-2013 period, ‘many good programmes do not always add up to good policy, good programme documents do not necessarily translate into good projects and good projects do not always ensure the success of a programme’. Coordination and coherence between different funding instruments is key.

⁶⁰ The Czech Republic and Hungary expressed this view in the consultation of the 5th cohesion report.

5.3.2. Option 2 – Thematic concentration and strengthened link to other programmes

The advantage of this option is that it would more firmly align cooperation programmes with the Europe 2020 strategy and the thematic objectives derived from it. Concentration on a limited number of thematic objectives would also lead to an improved intervention logic within the programmes, from the setting of programme objectives to the definition of expected outputs and results and the means to monitor the outcomes and their contribution to European priorities.

The inclusion of cooperation priorities in the overall strategic framework and partnership contract would foster the development of a joint strategic vision for a region, also taking into account its linkages with neighbouring territories and broader geographical contexts. Furthermore, this option would be in line with the recommendations of the 2000-2006 ex-post evaluation, according to which cross-border and transnational programmes should establish more pro-active and ongoing inter-action with the Convergence and Regional Competitiveness and Employment programmes and other territorial co-operation programmes operating in their areas to ensure complementarity, co-ordination and synergies⁶¹. It would also cater for a suggestion from the European Parliament's report on territorial cooperation which recommended that 'regional operational programmes should have the option to take an interest and participate in the cross-border, transnational and interregional projects that concern them by defining a territorial approach to the allocation of funding'⁶².

The disadvantage of such an option is that it gives less flexibility in programme design and sets limits to the 'bottom-up approach' frequently adopted, especially in the cross-border context. Furthermore, as many stakeholders have pointed out, very few ETC programmes have the financial resources to directly contribute to achieving the Europe 2020 targets. In this respect, most of the funding for Europe 2020 priorities will come from mainstream programmes. There has been some experience in the past in limiting the number of priorities in ETC programmes, but this has sometimes led to perverse behaviour with one-size-fits-all priorities being included in the programmes with complete lack of focus. Where territorial cooperation can provide a significant contribution, is through 'joint governance' and 'regional integration'⁶³.

A final drawback of this option is that explicitly including territorial cooperation in the Common Strategic Framework and Partnership Contract could entail additional administrative burden for both the Managing Authorities and the Commission, as it would involve the appropriate follow-up to ensure that these priorities are properly reflected in each ETC programme.

⁶¹ Ex-post evaluation INTERREG 2000-2006. Furthermore, the experience with URBACT I and II in the 2000-2006 period and the RFEC Fast Track Networks in the current period confirms the need for a closer cooperation and more coherence between ETC programmes and mainstream programmes, but also clearly shows the need to include cities in all stages of the programming (especially also in the design) so that the local needs are effectively met and cities take a more strategic approach in their co-operation activities.

⁶² European Parliament Report 'Objective 3: a challenge for territorial cooperation – the future agenda for cross-border, transnational and interregional cooperation', Committee on Regional Development, 11.4.2011.

⁶³ INTERACT Discussion Paper on the European Territorial Cooperation Objective linked to the Consultation on the Conclusions of the 5th Report on Economic, Social and Territorial Cohesion: the Future of Cohesion Policy (COM(2010) 642 final).

Most ETC stakeholders agree that territorial cooperation programmes should focus on limited priority areas important for the participating regions/countries; areas where cooperation would present the highest added value potential. They stress the need to ensure the strategic focus of the programmes and that better links with the Convergence and Competitiveness objectives are needed⁶⁴. In this respect, stakeholders point to the territorial cooperation programmes as the testing ground for cooperation activities which can then be implemented in the framework of mainstream programmes.

5.3.3. Option 3 – Integration of cooperation in the regional programmes

The advantage of this option is that it would make cooperation part of the overall development strategy of a given region. This would lead to increased synergies and benefit the regional programme by adding an EU dimension to it. Indeed, some stakeholders argue that mainstream operational programme could ‘pinpoint priorities which could benefit from cooperation with other countries and seek to address them through ETC programmes’⁶⁵.

This could also address some of the points arising from the ex-post evaluation, which recommended that ‘more intense and durable cross-border, transnational and inter-regional co-operation processes should be established if future territorial co-operation is expected to achieve more concrete and tangible socio-economic development effects’⁶⁶.

The main drawback of this option is that it would only allow for cooperation on specific projects, and not foster the long-term development of an integrated strategy for a cross-border or transnational territory. In addition, there is a risk that the international dimension would be neglected in programming, given that there could be a natural tendency to concentrate primarily on ‘internal’ challenges. Joint projects would be more difficult to undertake without a support structure for developing and implementing them (diverging eligibility rules under different programmes, different application and selection procedures and timelines etc.), even if for some policies, this type of structure already exists⁶⁷. Finally, this option would make it difficult to address many stakeholders’ concerns that European Territorial Cooperation should be subject to a separate regulation to reflect the inherently international character of its activities⁶⁸.

6. COMPARING THE OPTIONS

The assessment of options uses a qualitative methodology. Quantitative assessment of the policy options is not possible due to the complexity of the delivery system, the difficulty of assessing initial starting points because of circumstances in different Member States, and the general nature of the options themselves. Thus, the options are assessed using the criteria relevant to each issue.

⁶⁴ ‘[ETC beyond 2013](#)’, INTERACT Position Paper, July 2010.

⁶⁵ ‘[ETC beyond 2013](#)’, INTERACT Position Paper, July 2010, p. 4

⁶⁶ Ex-post evaluation INTERREG 2000-2006.

⁶⁷ It is in particular the case in the education area, in which national agencies already exist in all MS, as the delivery mechanism in charge of the management of the Education Europe programme.

⁶⁸ European Parliament Report ‘Objective 3: a challenge for territorial cooperation – the future agenda for cross-border, transnational and interregional cooperation’, Committee on Regional Development, 11.4.2011.

The more restricted the scope of intervention, the more likely it is that investments would concentrate on the real bottlenecks to growth and that it will not crowd out private investment. Similarly, the more restricted the scope of intervention, the more likely it is that there would be funding gaps (i.e. that real funding needs will not be met) as well as restrictions on the flexibility available to Member States and regions to determine funding according to their own specific needs.

6.1. Scope of aid to enterprises supported by the ERDF

	Option 1 - No policy change	Option 2 – More targeted support to large enterprises focusing on R&D, innovation and key enabling technologies	Option 3 – No grants to large firms; only loans and equity finance for SMEs
Contribution to sustainable growth and employment (investment support)	0	++	++
Contribution to developing local and regional potential (RDI)	0	++	+
Leverage of funding	0	++	+

Under the no policy change option, a relatively broad scope of intervention allows Member States sufficient flexibility to choose the areas of intervention that best meet their challenges, with most of the support going to SMEs and RTDI. However, this can lead to the crowding out of private investment by public funding where firms would have made the investment concerned even without financial help. This deadweight loss is most likely to occur in respect of investment support to large enterprises.

Under Option 2, more targeted support to large enterprises focusing on R&D, innovation and key enabling technologies leads to decreased crowding out and deadweight loss as support for productive investment would be limited to direct aid to investment in SMEs. Support for large firms active in certain sectors such as research and innovation would contribute to the development of endogenous potential of the region. There would be greater focus on repayable support to productive investment, and non-repayable support to RTDI results in increased efficiency of spending. The leverage of funding would therefore be increased.

Under Option 3, a shift in productive investment from (non-refundable) grants to (refundable) loans and equity finance would further enhance the effectiveness and efficiency of funding, by reducing deadweight. Prohibiting grant-based support to large firms increases the efficiency of funding and leads to greater leverage effects. However, innovative and research activities necessary to achieve EU headline targets may be discouraged as the non-repayable support is more effective for innovative, R&D intensive projects far from the market. This could result in a negative impact with lower demand for RDI support. A move from non-

refundable to refundable forms of aid to large enterprises could also entail a significant rise in administrative costs for managing authorities.

On the basis of improving the effectiveness of support, as well as its contribution to local and regional potential and growth and employment, Option 2 (More targeted aid to large enterprises) is the preferred option.

6.2. Scope of infrastructure support funded by the ERDF and Cohesion Fund

Under the no policy change scenario, the benefits which EU funding for infrastructure has produced would continue, e.g. new possibilities for trans-European rail transport. The relatively broad scope of intervention allows Member States sufficient flexibility to choose the areas of intervention that best meet their challenges. Nevertheless, Member States would continue to be reluctant to give sufficiently high priority to multi-country cross-border investments. Without coordination between cohesion policy and the CEF, EU funding for infrastructure would continued to be fragmented.

Under Option 2, with an enhanced focus on European priorities in major infrastructure investments in less developed regions and ringfencing €10 billion from the Cohesion Fund for the CEF as well as additional funding in the CEF would enable concentration on EU priority projects. This option generates the strongest European network effect. The Cohesion Fund would also be available for investment in TEN-T and for regional and local infrastructure in order to enhance regional growth perspectives, though less than under the status quo and option 3. Among stakeholders, there is strong support for the idea of an integrated financial framework, guiding investments in TEN-T across the different funding instruments‘.

Option 3 would allow for the focus on infrastructure investments to remain in Convergence regions, where basic infrastructure needs are the greatest. Nevertheless, under this option, less developed regions are unlikely to develop sufficient key strategic infrastructure with the Cohesion, particularly cross-border connectors, necessary to ensure European network benefits.

	Option 1 - No policy change	Option 2 - Enhanced focus on European priorities in major infrastructure investments in less developed regions and Connecting Europe facility in more developed regions	Option 3 - Clear differentiation between the scope of the ERDF, Cohesion Fund and Connecting Europe Facility
Concentration on European priorities	0	++	+
Improving the coordination of the different instruments of TEN-T finance	0	++	0

On the basis of its contribution to European networks and better coordination with EU funding instruments Option 2 (Enhanced focus on European priorities in major infrastructure investments in less developed regions and Connecting Europe Facility in more developed regions) is the preferred option.

6.3. Territorial cooperation

Under the no policy change option, European Territorial Cooperation programmes have greater flexibility in choosing the preferred policy areas to be addressed. However, this option leads to programme objectives not being defined with sufficient clarity, an overall lack of strategic focus and no clear definition of expected programme outputs and results. Furthermore, this option makes it difficult to ensure complementarity with other EU programmes including transnational activities due to lack of clarity and focus.

Option 2, thematic concentration and strengthened link to other programmes, would more firmly align cooperation programmes with the Europe 2020 strategy and the thematic objectives derived from it. It would lead to an improved intervention logic within the programmes through the setting of programme objectives to the definition of expected outputs and results and the means to monitor the outcomes and their contribution to European priorities. Furthermore, there would be more pro-active and ongoing inter-action with the Convergence and Competitiveness programmes and other territorial co-operation programmes operating in their areas to ensure complementarity, co-ordination and synergies. Nevertheless, this option could lead to less flexibility in programme design and sets limits to the ‘bottom-up approach’ frequently adopted, especially in the cross-border context.

Option 3, integration of cooperation in the regional programmes, would make cooperation part of the overall development strategy of a given region leading to increased synergies and benefits for the regional programme by adding an EU dimension. Nevertheless, it would only allow for cooperation on specific projects, and would not foster the long-term development of an integrated strategy for a cross-border or transnational territory. There would also be a risk

that the EU dimension would be neglected in programming, given that there could be a natural tendency to concentrate primarily on ‘internal’ challenges. Joint projects would be more difficult to undertake without support structure for the developing and implementing them (diverging eligibility rules under different programmes, different application and selection procedures and timelines, etc.). This option would make it difficult to address many stakeholders’ concerns that European Territorial Cooperation should be subject to a separate regulation to reflect the inherently international character of its activities.

	Option 1 - No policy change	Option 2 - Thematic concentration and strengthened link to other programmes	Option 3 - Integration of cooperation in the regional programmes
Focus on European priorities	0	++	++
Clear programme intervention logic	0	++	+
Flexibility for MS and regions to choose thematic objectives	0	-	-
Synergies with ‘mainstream’ programmes	0	+	++
Added value (fostering joint approach)	0	0	-

On the basis of better focus on European priorities, developing a clear programme intervention logic and greater added value, Option 2 (Thematic concentration and strengthened links to other programmes) is the preferred option.

7. MONITORING AND EVALUATION

As outlined in the Impact Assessment for the Common Provisions Regulation, the monitoring and evaluation systems for cohesion policy will be reinforced in order to improve the focus on results and alignment with the Europe 2020 strategy. The proposed adjustments would — as called for by the budget review — provide for the definition of specific, measurable, achievable objectives. Such an approach would provide detailed information on progress towards the general, specific and operational objectives set out above.

Evaluations of past and current programmes show that while ERDF and Cohesion Policy interventions have a significant impact on the ground, this is sometimes difficult to capture and communicate. A lack of explicit focus on the results to be achieved can lead to dispersion of resources and a sub-optimal impact of the Funds. A clearer expression of intended results, linked to specific objectives, would help to ensure that all supported projects contribute to the

results of the programmes and, ultimately to the Union priorities of smart, sustainable and inclusive growth.

For the ERDF, Cohesion Fund and Territorial Cooperation, this implies in the first instance that the intervention logic for the programmes has to be strengthened, demonstrating the links from the regional to the EU level. In concrete terms, this would mean the following:

- Programmes would set out clearly the changes sought, how this would contribute to the Europe 2020 targets, and how spending the resources on particular interventions (outputs) will contribute to change (results). This will be expressed in result indicators, linked to the specific objectives of the programme, and output indicators, which reflect the products of interventions supported. A set of common indicators, aligned with EU2020 objectives, will be used where relevant allowing analysis of progress made at the EU level. These indicators will include mainly outputs, but also some intermediate results.
- Each programme would include a performance framework fixing quantified milestones for each priority axis. These milestones would be established on the basis of a limited number of programme indicators. These could be input indicators (amount of money committed to key TENs interconnectors), output indicators (number of cooperation projects between enterprises and research institutions) or results (number of new employer enterprises started). In all cases, the purpose of the milestones would be to provide a clear indication of progress towards delivery of investment priorities linked to Europe 2020. This framework would provide policymakers and programme managers with robust information on delivery.
- These milestones for the performance framework would be proposed by the Member State and agreed between the Commission and the Member States when the operational programmes are negotiated.
- The Partnership Contract would contain a summary of the milestones established for the performance framework under the operational programmes, together with the methodology and the key principles applied to ensure consistency across operational programmes.

The performance of operational programmes would be monitored regularly on the basis of the set of programme indicators. Annual Implementation Reports would contain information on outputs achieved compared to targets with analysis of reasons for under or over achievement of targets. Monitoring Committees would reflect on the need for any changes or other initiatives to ensure that the programme stays on course. Results will be monitored also and reported on as data becomes available and will be discussed in the Monitoring Committee and Annual Review meetings.

It is envisaged that there would be two formal review points to examine progress against the milestones defined in the performance framework. The Commission would undertake the first review of progress in attaining the agreed milestones in 2017 on the basis of the information provided by Member States in the Annual Implementation Reports of the preceding year. This review would be carried out in relation to the first set of milestones consisting of indicators which demonstrate the progress made in preparatory activities (e.g. the amounts allocated to operations indicate progress made in project selection) or absorption (e.g. payments made to/by beneficiaries), and in some cases first outputs. The aim here is to examine whether the implementation of the programme overall is moving in the right direction. It is an opportunity for the Commission to give an early warning if the milestones are not met, and to carry out close monitoring in subsequent years if necessary.

The Commission would then undertake the second review of progress towards the next set of milestones in 2019 on the basis of the information provided by Member States in the 2018 Annual Implementation Reports. This review would focus on the actual outputs and, where appropriate, results achieved and their contribution to the Europe 2020 targets and objectives.

The following graphic outlines how the common indicators could fit in with the EU2020 targets and objectives in a hypothetical region. In reality, regions will have specific needs and they will define specific objectives and indicators – which may be the common indicators but may require programme-specific result indicators – which will demonstrate intermediate steps towards the EU2020 targets.

**EU 2020
Headline targets**

Employment

- 75% of the 20-64 year-olds to be employed

R&D / Innovation

- 3% of the EU's GDP (public and private combined) to be invested in R&D/innovation

Climate change / Energy

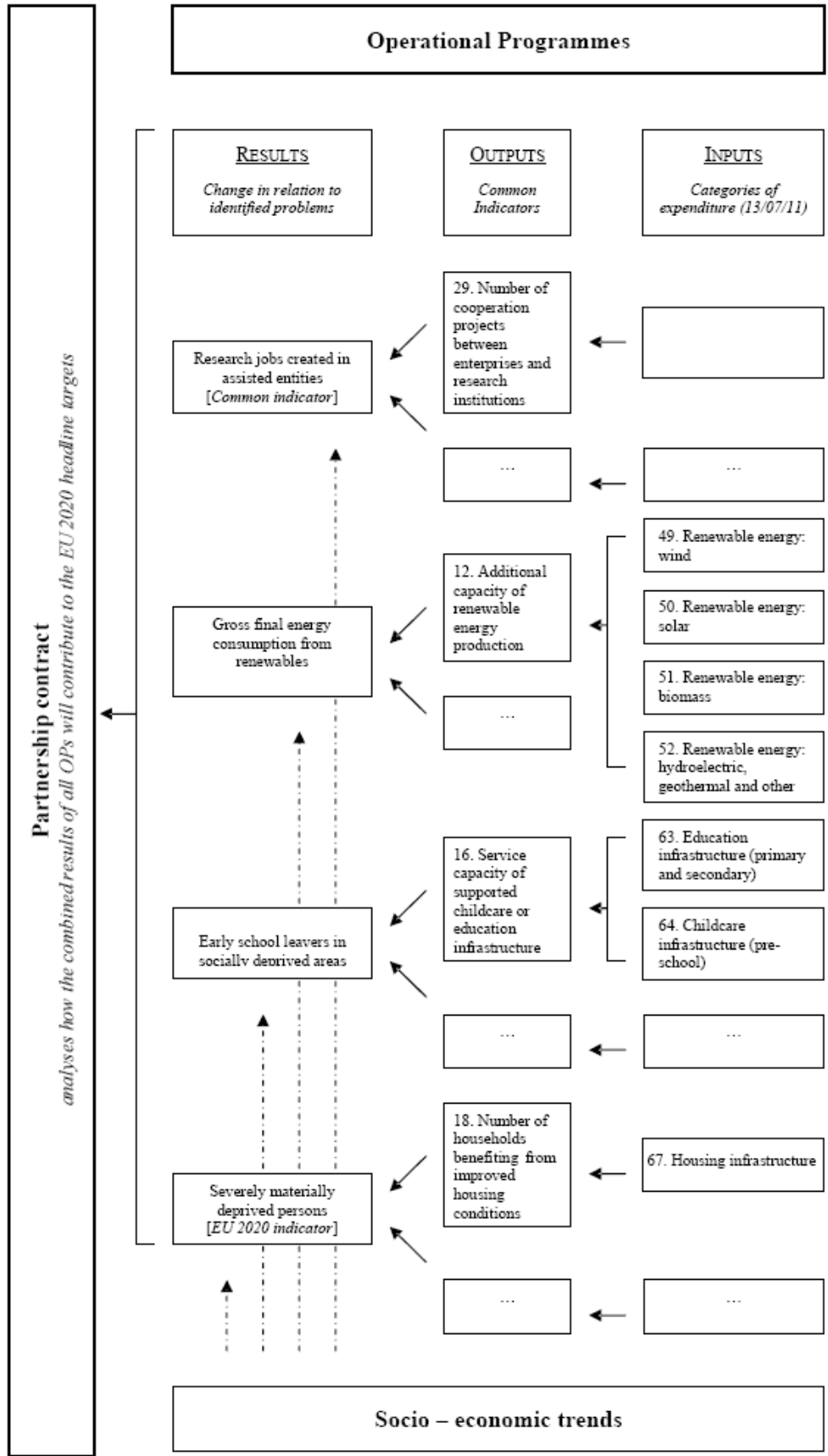
- greenhouse gas emissions 20% (or even 30%, if the conditions are right) lower than 1990
- 20% of energy from renewables
- 20% increase in energy efficiency

Education

- Reducing school drop-out rates below 10%
- at least 40% of 30-34-year-olds completing third level education

Poverty / social exclusion

- at least 20 million fewer people in or at risk of poverty and social exclusion



The intervention logic in this hypothetical region is as follows:

1. Intended Change: Increase of research activities to foster innovation

- Result Indicator: Research jobs created in assisted entities (Common indicator)
- Output indicator: Number of cooperation projects between enterprises and research institutions (Common indicator)
- Description of measure: Financial assistance to research projects. Projects carried out in cooperation between enterprises and research institutions are eligible.
- Intervention logic: the region has relatively high research infrastructure but the business R&D activity is still low. Supporting joint projects will enable enterprises to have access to the mainly public research facilities in the region while promoting applied research in the research institutions.

2. Intended Change: Increase the role of renewable energy

- Result Indicator: Gross final energy consumption from renewable energy sources
- Output indicator: Additional capacity of renewable energy production (Common indicator)
- Description of measure: Financial assistance to renewable energy production facilities. Only non-ETS (European Trading Scheme) sectors are eligible.
- Intervention logic: The measure supports the general shift to renewable energy sources by investing in adequate production capacity. The measure is part of a general policy where carbon based energy production will be discontinued as the renewable energy production capacity is installed so the use of additional capacity is ensured.

3. Intended Change: Increase the education level of population in socially deprived areas

- Result Indicator: Early school leavers in socially deprived areas
- Output indicator: Service capacity of supported childcare or education infrastructure (Common indicator)
- Description of measure: Developing education and childcare facilities in areas identified as socially deprived.
- Intervention logic: Renovating and, if necessary, enlarging education facilities will solve the problems originating from overcrowded schools. The infrastructure development will make various new extracurricular activities possible in schools. New facilities will be developed to decrease distance and travel time to schools.

4. Intended Change: Improve the living conditions of the poor

- Result Indicator: Severely materially deprived persons (EU 2020 indicator)
- Output indicator: Number of households benefiting from improved housing conditions (Common indicator)
- Description of measure: The measure is a part of an integral programme to improve the living conditions of severely materially deprived persons, focusing on developing social housing.

- Intervention logic: Severely materially deprived persons live in conditions that prevent them from getting out of their current social conditions. Housing created by this measure will give them an opportunity to live in healthier environment suitable for raising families or living with certain disabilities.

A Strengthened Role for Evaluation

The role of evaluation will be strengthened. With a stronger monitoring framework, described above, with a clear focus on results, the role of evaluation becomes much more clearly focused on providing evidence on effects. In the past, too many evaluations have focused on implementation bottlenecks rather than the effects of interventions. Building on the work undertaken in the ex post evaluation of the 2000-2006 programmes and the ongoing 2007-2013 period the quality of evaluations will be enhanced through the use of more rigorous methods, both qualitative and quantitative. The Commission will provide advice and guidance and support exchanges of good practice between Member State and regional authorities, evaluators and academic experts.

For the ERDF, Cohesion Fund and European Territorial Co-operation, this would mean the following:

- Ex ante evaluation will be obligatory for all programmes and its role will be to test and improve the intervention logic of programmes and the appropriateness of the indicators and targets set.
- Each Operational Programme will have a multi-annual evaluation plan, which will be reviewed and adapted over time. Evaluations will be discussed and debated by Monitoring Committees and the follow-up to evaluation recommendations will be strengthened. All evaluations will be made public in order to enhance transparency.
- A new requirement will be proposed whereby the effects and impact of each priority axis should be evaluated at least once during the programming period. And a synthesis report should draw together the results of all evaluations and other evidence in the final year of the programme. This will facilitate the Commission's ex post evaluation, which will examine the impact of the funds on economic, social and territorial cohesion and their contribution to smart, sustainable and inclusive growth.

The Commission will support this work through the following initiatives:

- Guidance on monitoring and evaluation, both Commission guidance and expert guidance through the Evalse website.
- Support for the use of counterfactual impact evaluation techniques, particularly for enterprise support measures and possibly area based initiatives. This will build on the Commission's 2010 innovative evaluation on enterprise support in East Germany and the ongoing evaluations of enterprise and innovation support in Italy and in selected other countries which will be presented at a Polish Presidency Conference in December 2011. In addition, the Commission's summer school on counterfactual impact evaluation (May 2011) for those in managing authorities tendering for and managing such evaluations will be continued on a bi-annual basis.
- Support for the use of ex post cost benefit analysis and more evaluation of unit costs for evaluating the effects and effectiveness of infrastructure investments. This builds on the recently completed ex post cost benefit analyses of selected transport and environmental projects carried out for the Commission and a forthcoming analysis of the longer term effects of infrastructure investments.

- Development of guidance and support for more rigorous qualitative evaluations, to capture in particular the effects of innovation support measures as well as local and EU based and cross-border initiatives. Such methods include network analysis, performance story reporting, focus groups, etc., all organised under the umbrella of theory based evaluation.
- Publication of Member States' evaluations on the Evalsed website, along with identification of best practice evaluations. The Commission is currently putting in place a peer review process whereby evaluation experts will identify some of the best quality evaluations being produced in Member States.
- Conferences on evaluation – following on from the Warsaw conference on evaluation methods in 2009 a major international conference will be organised in 2013 which will drive forward the message that more rigorous methods are required in evaluation if we are to ensure that the results oriented policy really delivers evidence based policy making and implementation.



EUROPEAN COMMISSION

Brussels, 6.10.2011
SEC(2011) 1138 final

Part II

COMMISSION STAFF WORKING PAPER

IMPACT ASSESSMENT - Part II: Annexes

Accompanying the document

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on specific provisions concerning the European Regional Development Fund and the
Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006**

and

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006**

and

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
on specific provisions for the support from the European Regional Development Fund to
the European territorial cooperation goal**

{COM(2011) 614 final}

{SEC(2011) 1139 final}

{COM(2011)611 final}

{COM(2011)612 final}

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ANNEX 1 - List of Abbreviations

CF – Cohesion fund
CGE - Computable General Equilibrium [model]
CIP - Competitiveness and Innovation Framework Programme
CSF - Cohesion and Structural Funds
EAFRD - European Agricultural Fund for Rural Development
EFF - European Fisheries Fund
EIB – European Investment Bank
ENP - European Neighbourhood Policy
ENPI - European Neighbourhood and Partnership Instrument
ERDF - European Regional Development Fund
ERTMS - European Rail Traffic Management System
ESF - European Social Fund
ETC - European Territorial Cooperation
ETS - European Trading Scheme
EU – European Union
EU-10 – The ten Member States that joined the European Union on 1st May 2004
EU-12 – Members States of the European Union that have joined the EU since 1st May 2004
EU-15 – Member States of the European Union before 1st May 2004
EU-27 - Members States of the European Union that have joined the EU since 1st January 2007
GDP – Gross Domestic Product
GMR - Geographic macro and regional modeling
GTAP - Global Trade Analysis Project
IA – Impact Assessment
IAB - Impact Assessment Board
IASG - Impact Assessment Steering Group
ICT - Information and Communication Technologies
INTERREG - Interregional Co-operation Programme
IPA - Instrument for Pre-Accession Assistance
MFF – Multiannual Financial Framework
MS – Member State
OECD - Organisation for Economic Co-operation and Development
R&D – Research and Development
RCE - Regional Competitiveness and Employment Objective

RTD - Research and Technological Development

RTDI - Research, Technological Development and Innovation

SMEs – Small and Medium Enterprises

TEN-E - Trans-European Energy Network

TEN-T - Trans-European Transport Network

TFEU - Treaty on the Functioning of the European Union

ANNEX 2 - Summary of evaluations, reports, studies and policy documents

1. EVALUATIONS

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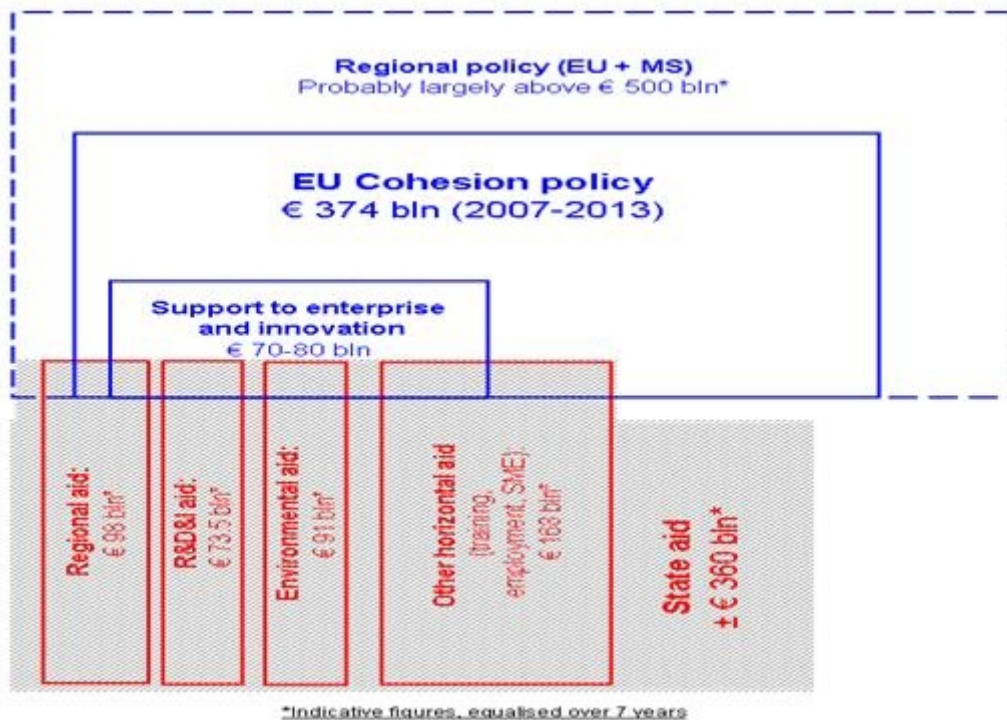
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ANNEX 3 – Regional state aid

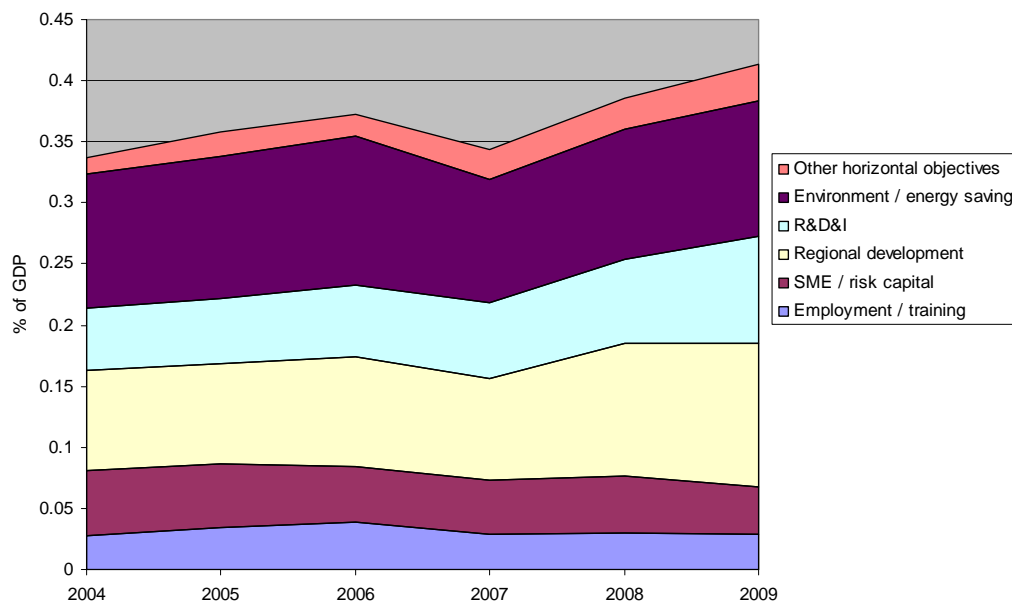


Scoreboard on Regional aid

Between 2007 and 2009, €7.5 billion has been disbursed in regional aid. Of this amount:

- 90 measures represent 90% of regional aid granted over the period 2007-2009 (€33.5 billion)
- 95,1% is granted under multi-sectorial schemes.
- 33% granted to outermost regions (€1.5 bn)

State aid for horizontal objectives as % of GDP, EU-27, 2004-2009 (crisis measures excluded), Source: DG COMP



ANNEX 4 - Transport and Cohesion Policy

As shown by several studies¹, the provision of *public infrastructure* has a potentially positive impact on productivity and growth.² The positive impact of infrastructure on economic growth is due to lower costs of transport and thus lower costs of intermediate goods, but also due to efficiency-promoting positive externalities, which are particularly strong in countries where infrastructure endowment is poor. Due to market failure, investment in infrastructure is below optimal levels without public involvement. An additional rationale for public investment in infrastructure, in particular into environmental infrastructure for water, waste water and waste, is the need to comply with EU directives.

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Cohesion Policy has already significantly contributed to investment in infrastructure. However, assessments of transport infrastructure endowment of Member States and regions show that large variations within the EU persist, with low endowments which can act as inhibitors of economic growth particularly in some Central and Eastern European regions and Member States.³ In addition, in relation to compliance with EU directives, gaps in particular in the areas of waste management, waste water collection and treatment and water management were very high.⁴ At the same time, some Member States and regions lack the public finding to invest in such infrastructure, and private financing is not able to raise the necessary funds. This constitutes the need for further intervention at EU level.

Trans-European transport network (TEN-T) policy aims at providing the infrastructure needed for the internal market to function smoothly and for the objectives of the Lisbon Agenda on growth and jobs to be achieved. It sets out to help ensure accessibility and boost economic and social and territorial cohesion. The Trans-European Transport Network policy has undergone several changes over the past decade, including being extended as a result of enlargement.

The €400 billion invested so far in a network that was established by Decision of the European Parliament and the Council in 1996, and last amended in 2004⁵, has helped to complete a large number of projects of common interest, interconnecting national networks and overcoming technological barriers across national borders. Almost a third of the amount invested so far has come from Community sources⁶. Positive changes resulting from the

¹ See for instance Aschauer, 1989, Fernald, 1999, Kamps, 2006.

² Nevertheless it is not always sufficient for enhancing competitiveness sustainable economic development. The return on investment in infrastructure can vary significantly from one region to the other; the outcome of such investment on performance is not trivial and generally depends on capacity to exploit and further develop its own comparative advantage. (see e.g. Egert *et al.* 2009, Crescenzi & Rodriguez-Pose, 2009).

³ 5th Report on Economic, Social and Territorial Cohesion

⁴ DG ENV analysis.

⁵ Decision No 1692/96/EC of the European Parliament and of the Council on Community guidelines for the development of the trans-European Transport Network, as last amended by Decision No 884/2004/EC of 29 April 2004.

⁶ Grants from the TEN-T budget, the Cohesion Fund and the European Regional Development Fund, plus loans from the European Investment Bank.

implementation of TEN-T policy are already visible. National rail and road networks have become interconnected at many points and railways across borders are beginning to become interoperable.

The impact on Transport Policy on cohesion

Transport is a complex system that depends on multiple factors, including the pattern of human settlements and consumption, the organisation of production and businesses. It is a crucial component for accessibility to goods, services and jobs and has an impact on the economic performance of regions, its environment and the well-being and welfare of individuals and regions.

Transport infrastructure is an important driver of regional development. An efficient transport network is essential for sustained economic growth as well as territorial balance. Efficient transport infrastructure is therefore a necessary base condition for linking regions to the single market and achieving economic, environmental and social cohesion.

The problems of economic development faced by lagging regions stem from having inadequate transport systems and poor links with other regions in the countries concerned and in other parts of the EU. It is not a coincidence that most convergence regions in the EU15 are located on the periphery of the EU or at old borders, away from the national and the old as well as the new EU centres of economic activity. The transport problems in the EU10 countries have been even more pressing. They consist of gaps in major infrastructure and in a poor state of existing road and rail infrastructure as well as a lack in multimodal transport. Evaluations show that cross border investments in infrastructure and TEN-T contribute significantly to enhancing growth⁷, which addresses a major bottleneck for growth and a major source of disparities in the EU.

At the same time, there has been a growing concern over the past decade to reduce the pollution and emissions from transport and to save energy. This has led to an increasing need to shift between modes of transport, in particular, from road to rail and, where possible, to shipping or waterways and their intermodal connections.

A high quality transport system affects economic, social and territorial cohesion in various ways. It increases the accessibility of regions and the ability of businesses there to compete effectively in internal and external markets.⁸

⁷ European Commission (2007); Ex ante evaluation of TEN-T multiannual programme. DG MOVE.

⁸ European Commission (2010) "Ex-post evaluation of Cohesion Policy programmes 2000-2006 co-financed by the ERDF (Objective 1&2)" Synthesis report.

Complementarities of Transport Policy to Cohesion Policy

A high quality transport system affects economic, social and territorial cohesion in various ways. It increases the accessibility of regions and the ability of businesses there to compete effectively in internal and external markets.⁹

Large variations in infrastructure within the EU persist, and in some cases particularly low endowments can act as inhibitors of economic growth.¹⁰ European intervention is justified because of a lack of public and private funding capacities, reflecting the wide differences in GNI levels of Member States. Cohesion Policy supports infrastructure investments including TEN-Ts in regions that are lagging behind, especially in the new Member States. In the current period Cohesion Policy supports investments in lagging Member States and regions with 37.7 bn EUR. It is the largest contributor to TEN-T finance among the European policies and contributes to a large part to the public investments in lagging Member States and regions. The Cohesion Policy support adds another crucial element to finance in these Member States and regions by building governance structures, institutions and capacities for planning and managing the highly demanding TEN-T projects.

The TEN T network provides European connections between the hubs and larger urban areas to strengthen polycentric development. Yet it is also important to secure more fine tuned, secondary networks and linking smaller cities and towns to the TEN T hubs and corridors in order to create functional areas which contribute to the economic, social and environmental development of regions. Typically, infrastructure investments need to be accompanied by investments in regional business environment and human capital in order to enable regions to fully reap its benefits. Cohesion Policy can establish through its programming such an integrated approach in all EU regions.

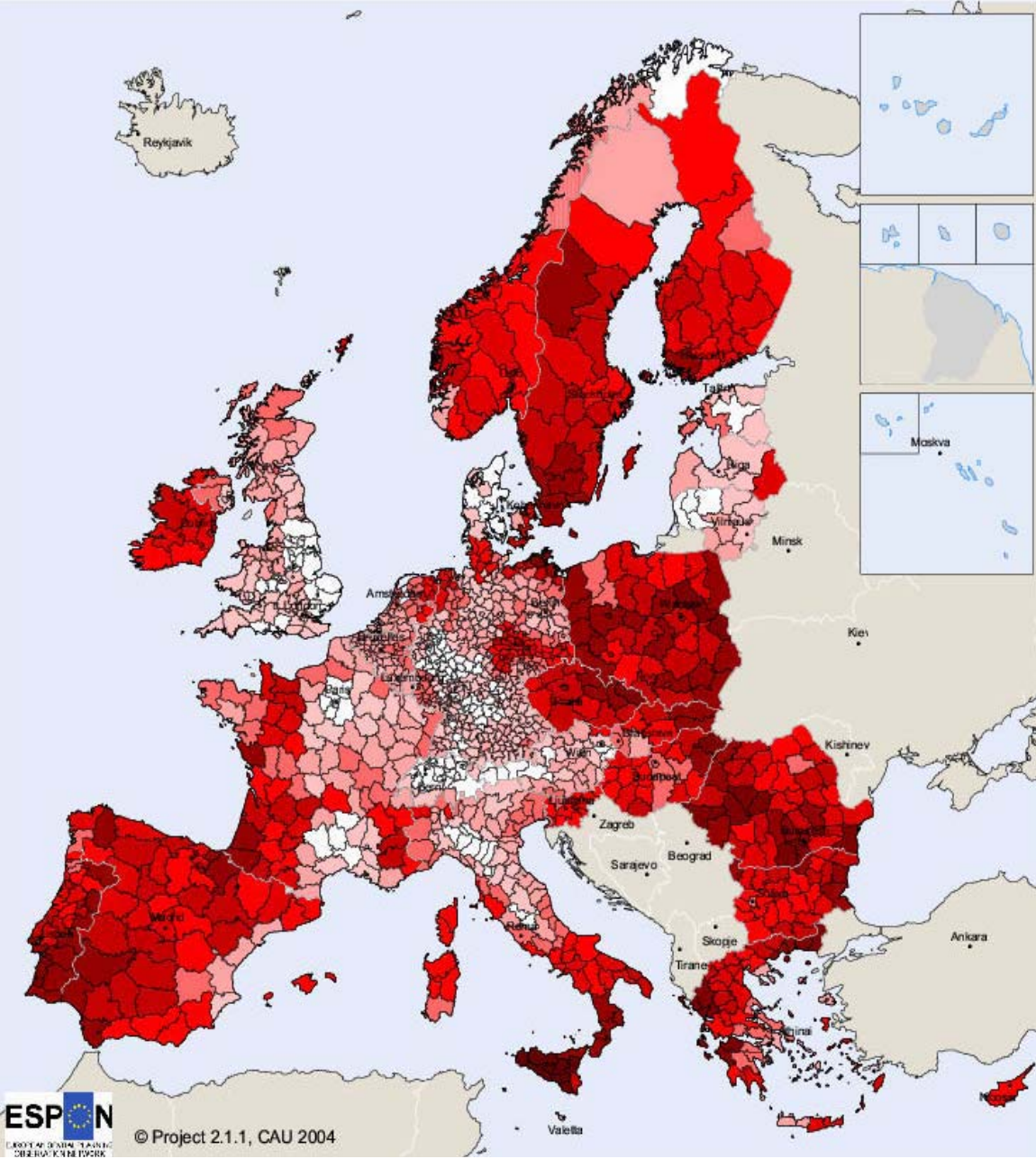
Urbanisation and urban sprawl is a main challenge for transport policy, urban transport accounts for 40% of CO₂ emissions arising from road transport.¹¹ The general congestion problems in urban areas as well as seeking more sustainable forms of transport have given rise to a need in cities to expand the public transport system in order to reduce the traffic on urban roads. Co-modality in urban passenger transport has contributed to sustainable transport pattern and more liveable cities. Developing efficient transport systems in metropolitan areas has become an increasingly complex task which has required better governance, coordination and exchange of good practices.

⁹ European Commission (2010) "Ex-post evaluation of Cohesion Policy programmes 2000-2006 co-financed by the ERDF (Objective 1&2)" Synthesis report.

¹⁰ Chapter 1 of the 5th Cohesion Report.

¹¹ European Commission. COM (2009) 279 Communication on Sustainable future for transport.

**Impact on regional development of Transport policies application
(measured in % change of GDP, 2000)**



(The darker the colour the higher the impact)

ANNEX 5 - Summary of ex-post evaluations on enterprise support and RDI

Summary - Ex post evaluation of Cohesion Policy programmes 2000-2006 financed by the European Regional Development Fund Work Package 6b: Enterprise and innovation¹²

This evaluation reviewed enterprise and innovation support in each EU member country – in both national and cohesion policy.

Main findings:

- SMEs were the main beneficiaries of ERDF support to enterprise, receiving 83% of the funding available for this area of investment. This is in line with national priorities given that enterprise policy focuses on SMEs in almost all EU countries.
- Direct instruments (i.e. financial support, mostly grants but also loans and equity) are still the mainstay of support to enterprise and innovation (69% of total spend).
- Emerging trends towards broader strategies with (i) a greater emphasis on innovation and (ii) a greater palette of instruments, including indirect, non-financial support (such as business services and clusters).

Member State and EU overview

A survey of the most recent activities in 25 of the EU Member States has been undertaken. The survey covers relevant policy developments, incentive schemes and framework improvements over the period 2000-2006, using both national and Structural Fund sources.

Main policy trends - National public support for enterprise and innovation

Productivity, competitiveness, economic growth and employment

The overarching national objective for supporting enterprises has been to increase productivity and competitiveness in order to secure economic growth and ultimately sustained or improved employment and living conditions. This is stated explicitly in all Member State policies. This mirrors the goals of the Lisbon Strategy (European Commission 2000); although the link is not usually made explicit in the text (at least Germany, Poland and Luxembourg do make this link explicitly, however).

Beyond this overarching objective, it is possible to identify a set of recurring priorities that address circumstances specific to particular countries and are perceived to constrain economic growth:

- *Restructuring or diversifying the economy.* Supporting the restructuring or diversification of the economy has been an important part of efforts to secure economic growth in several countries, particularly the EU10 Member States. In these traditional manufacturing economies, large scale modernisation or automation of production – and to some extent also deregulation of market entry and exit – has been viewed as essential to increase productivity and compete internationally. At the same time, rising wages combined with the removal of non-EU-approved trade barriers and

¹² Full report prepared by Mikkel Holm-Pedersen, Jeremy Millard, Kristian Pedersen (Policy and Business Analysis) and available on http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2006/wp6a_report_en.pdf

state subsidies have reduced their competitive edge compared to other low-cost manufacturing countries, leading to efforts to gradually shift production towards higher value-added and/or more knowledge-intensive products and services. For instance, the Czech Republic has increasingly supported investments in ‘new’ creative sectors such as marketing, design and consultancy, whilst Ireland has made conscious efforts to develop capabilities within ICT, biotechnology, pharmaceuticals and health care. Similarly, Malta has targeted ICT and Estonia biomedicine and materials technology. Government interventions are justified by leading and easing structural adjustments that might otherwise be slow and damaging, or may not happen at all because of lack of information or available resources. Other countries with notable policy aims related to economic restructuring or diversification include Cyprus, Greece, Hungary, Latvia, Slovakia, and Slovenia.

- *Encouraging innovation.* Supporting innovation and R&D processes and linkages has also been an important part of efforts to secure economic growth in many countries, especially among the EU15 Member States. Here productivity and labour costs already tend to be high and their catch-up potential is relatively low, so continually introducing new or improved products and processes is viewed as one of only a few means of allowing firms to remain competitive. Innovation allows firms to cover rising costs of production through higher prices or lower production costs through applying cutting-edge processes. While the establishment of basic research infrastructure was often the first priority, increasing emphasis has been placed on applied science and commercialisation potential in order to make more efficient the link between invention and profitable application. This shift in focus, for instance, is evident in Belgium, Finland, France, the Netherlands, Portugal, Sweden and the UK, as well as in Estonia (arguably one of the more advanced EU10 economies scoring high on the Lisbon Scorecard). This shift has coincided with greater focus on innovation and R&D in many other countries, including Austria, Denmark, Germany, Greece, Italy, Latvia, Luxembourg, Malta and Slovenia. It is also reflected in the renewed focus of the Lisbon Strategy following the mid-term review in 2004-2005 (European Council, 2005). The rationale for government intervention in innovation is to support high risk activities that might not otherwise happen because of the uncertain returns to individual firms.
- *Avoiding dual economies.* For a few countries, efforts to secure economic growth have involved not only increasing output in one part of the economy, but ensuring prosperity throughout the economy through effective backward and forward linkages. In Ireland, for instance, a major challenge has been to reap the benefits from supporting high-tech, high value-added industries dominated by foreign ownership, whilst preventing an income gap opening up with the surrounding lowtech, low productivity industries largely in domestic ownership. Likewise, Hungary and Malta have been conscious about embedding as well as strengthening foreign owned companies by developing supplier relations or even demanding partial re-investment of profits within national borders.
- *Achieving balanced growth.* Another economic objective has been to achieve at least some degree of balanced growth across regions in order to reduce regional disparities. This has been particularly prominent in countries with significant inequalities in income across regions, such as the Czech Republic (urban/rural), Finland (urban/rural), Germany (east/west), Greece (urban/rural), Italy (north/south), Poland (urban/rural) and Sweden (urban/rural). However, even relatively balanced countries

such as Denmark have had a regional focus on enterprise and innovation within their national support policies.

SMEs and entrepreneurship

Practically all Member States focus on SMEs in their national support to enterprise and innovation. This reflects the fact that SMEs are widely viewed as the economic bedrock of the national economy in that they constitute the vast majority of enterprises and provide a significant share of jobs. SMEs are also considered to be a key driver of economic growth by leading innovation and the creation of new jobs in emerging sectors. This perception of the importance of SMEs is most apparent among the EU15 Member States, with a particular focus on supporting entrepreneurship and start-ups within the SME group. SMEs and entrepreneurs/start-ups are also viewed as most in need of assistance given their limited internal resources and perceived vulnerability to external competition. Thus, supporting SMEs and start-ups in acquiring vital equipment or knowledge offers a potentially higher return on invested public funds than support for larger enterprises. However, large enterprises also receive support in many Member States, especially in large countries such as France, Germany, Italy, Poland, and the UK, as well as in some of the EU10 Member States more reliant on heavy industry, such as Slovakia.

Sector-neutral support

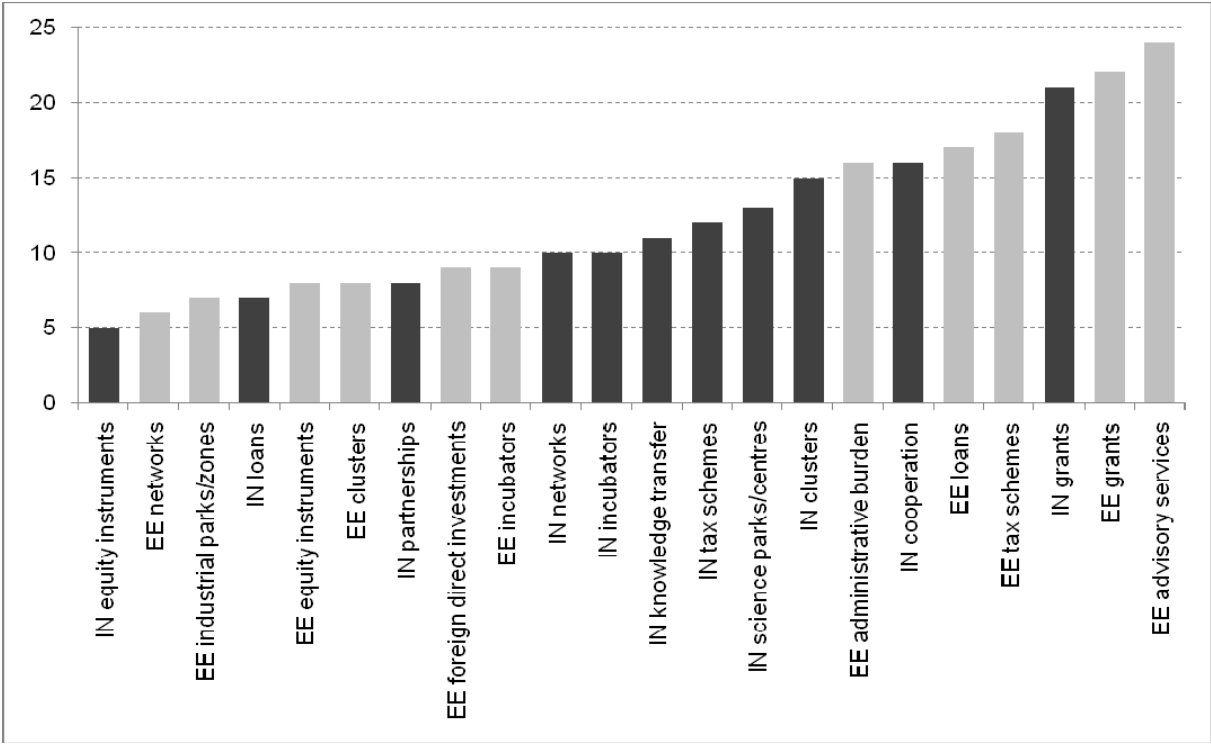
In terms of targeting particular economic sectors for support, *most Member States have a neutral, i.e. non-sectoral approach*. As mentioned above, however, some Member States have set aside specific funds to encourage activities within selected high value-added and/or knowledge-intensive sectors, such as ICT, biomedicine, and design. In addition, several Member States (as described in the following section) have promoted cluster formation and development within particular sectors. These sectors have not been entirely predefined by national policy, but also in accordance with regional strengths and/or enterprise feedback during implementation. Otherwise, the trend is for only very broad sectoral distinctions to be made, such as special support for R&D-intensive sectors in Estonia, Finland, France, Ireland and Latvia or for export-oriented sectors in Finland, Germany and Malta.

Main instruments used

The EU10 and EU15 Member States

A wide variety of instruments have been employed to meet national policy objectives. The use of investment grants and advisory services (either through subsidising private agencies or providing public services) have been pervasive. In addition, support for enterprise has ranged from tax incentives and loan funds to networks centred on shared business interests. Support for innovation has ranged from promoting cooperation between research institutions and businesses to providing equity capital for the development of profitable ideas. Administrative burden reductions, cluster initiatives, science parks and research centres to foster innovation are also popular.

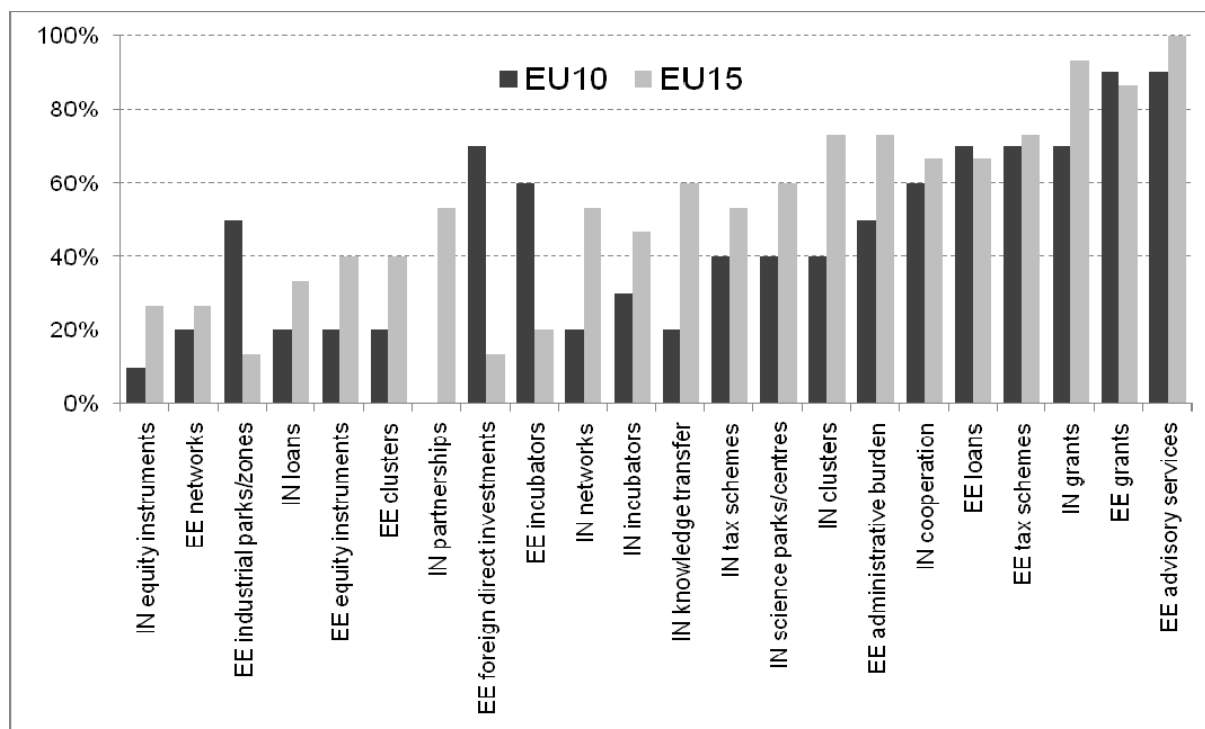
Frequency of support instruments across surveyed Member States



The figure masks some unevenness in the use of different instruments between the EU10 and EU15 Member States. Beyond similar use of the most common types of support, the EU15 seem to be rather more active overall, especially on innovation. However, the EU10 are considerably more active on three policy instruments: foreign direct investment (FDI), industrial parks/zones and enterprise incubators.

Thus, the use of instruments mirrors the general difference between Member States described above when considering the policy priorities for promoting economic growth. That is, the tendency towards a greater focus on encouraging innovation within the EU15 compared to a greater focus on restructuring and diversifying the economy within the EU10 (both of which may be assisted through the attraction of FDI).

Country use of support instruments within EU10 and EU15 Member States



Cluster analysis cuts across the simple EU15 – EU10 dichotomy

Dividing the surveyed Member States into EU15 and EU10 is instructive, but does not capture the diversity of approaches for supporting the enterprise and innovation themes, and whether particular instruments tend to go together. For example, Figure 2 says nothing about how attracting FDI relates to other instruments such as industrial parks/zones and cluster initiatives. Using cluster analysis suggests that it is possible to distinguish three relatively stable groups of countries which exhibit more similarities than dissimilarities in their use of different instruments:

- Cluster 1 - restructuring and/or diversifying countries: characterised by the combination of FDI, industrial parks/zones and incubators on the enterprise side, and cluster initiatives on the innovation side together with little emphasis on networks and knowledge transfer.
 - At its core this cluster consists of the Czech Republic, Greece, Hungary, Malta, Slovakia and Slovenia, all of which have a priority to restructure and/or diversify the economy. These countries have consciously used FDI to offset weak industrial bases and limited national financial resources in efforts to accomplish rapid economic transformations. Further, the establishment of industrial parks/zones with modern business facilities and services can be seen, at least in part, as a continuation of this policy by catering specifically to international firms looking for places to locate production facilities (besides providing a natural set-up for enterprise incubators). In addition, the relative prevalence of cluster initiatives within this grouping can in large part be seen as a reflection of the previously described priorities to lead production towards higher value-added and/or more knowledge-intensive sectors.
 - Cluster 1 also includes sub-cluster 1.2 covering Estonia, Italy, Luxembourg and Latvia. It is similar to sub-cluster 1.1 but tends to have slightly more emphasis

on innovation and R&D – in particular on partnerships, science parks and research centres – and is less focused on the attraction of FDI. Compared to sub-cluster 1.1, these countries have less in common and shift towards the middle cluster (cluster 3 below) when certain cluster sortings and algorithms are used (this is particularly the case for Italy). They cohere as a sub-cluster partly because of their non-use of particular instruments, especially knowledge transfer. This can be explained to some extent by the small number of instruments used within these four countries. It is noteworthy that two of these countries, Estonia and Latvia, also have explicit policy priorities related to the restructuring and/or diversification of the economy, and that Italy arguably faces similar issues in its Southern regions.

- Cluster 2 - innovation and R&D-intensive countries: characterised both by administrative burden reductions and cluster promotion initiatives on the enterprise side, and a broad palette of instruments featuring networks and knowledge transfer on the innovation side.
 - At the core of Cluster 2 are Finland, France, the Netherlands and Sweden (sub-cluster 2.1), all with strong encouragement of innovation, particularly within sectors of economic strength such as flowers and high-tech systems and materials in the Netherlands. These countries have funnelled vast resources into building integrated business networks and partnerships around internationally competitive research centres, whilst also ensuring incubator spaces and seed capital for potential spin-offs at the lower end of the eco-system. Known in France as ‘poles of excellence’, such networks and partnerships form the spearhead of innovation clusters, extending to the build-up of supplier linkages on the enterprise side as well.
 - Austria, Germany and Ireland form sub-cluster 2.2. They have adopted a very similar approach revolving around the initiation of networks and knowledge transfer, but are less focused on the identification of competitive research centres. Like sub-cluster 1.2, these countries and in particular Ireland will shift towards Cluster 3 under certain cluster sortings and algorithms. The apparent differences with sub-cluster 2.1 may just be a matter of time, as all three countries have taken steps to further the formation of innovation clusters.
- Cluster 3 - intermediate countries: intermediate position between the restructuring/diversifying approaches of Cluster 1 and the innovation/R&D approaches of Cluster 2, albeit with more affinities to the latter than to the former. Characterised by the combination of access to loans (in addition to grants rather than instead of grants as has sometimes been the case within Cluster 1), tax incentives, and reductions of administrative burdens on the enterprise side, and a somewhat narrower range of instruments featuring the availability of loans and tax incentives and the promotion of cooperation on the innovation side.
 - It is difficult to distinguish a core of countries exemplifying the approach of Cluster 3. Denmark, Spain, Lithuania and Portugal (sub-cluster 3.1) have relied most on tax incentives and rule simplifications to support enterprise and innovation.
 - Belgium, Cyprus, Poland and the UK (sub-cluster 3.2) have supplemented this with more formalised structures for innovative start-ups through science parks and research centres providing incubator services, and for knowledge transfer by creating networks.

The differences between Clusters 1, 2 and 3 may reflect separate stages in the changing focus of countries over time, moving from a strongly enterprise environment-oriented approach in Cluster 1 to a more innovation and R&D-intensive approach in Cluster 2 involving increasingly targeted and more integrated knowledge transfer and entrepreneurship support channels. Cluster 3 may be along the continuum from Cluster 1 to Cluster 2, depending on national economic circumstances and traditions for enterprise support.

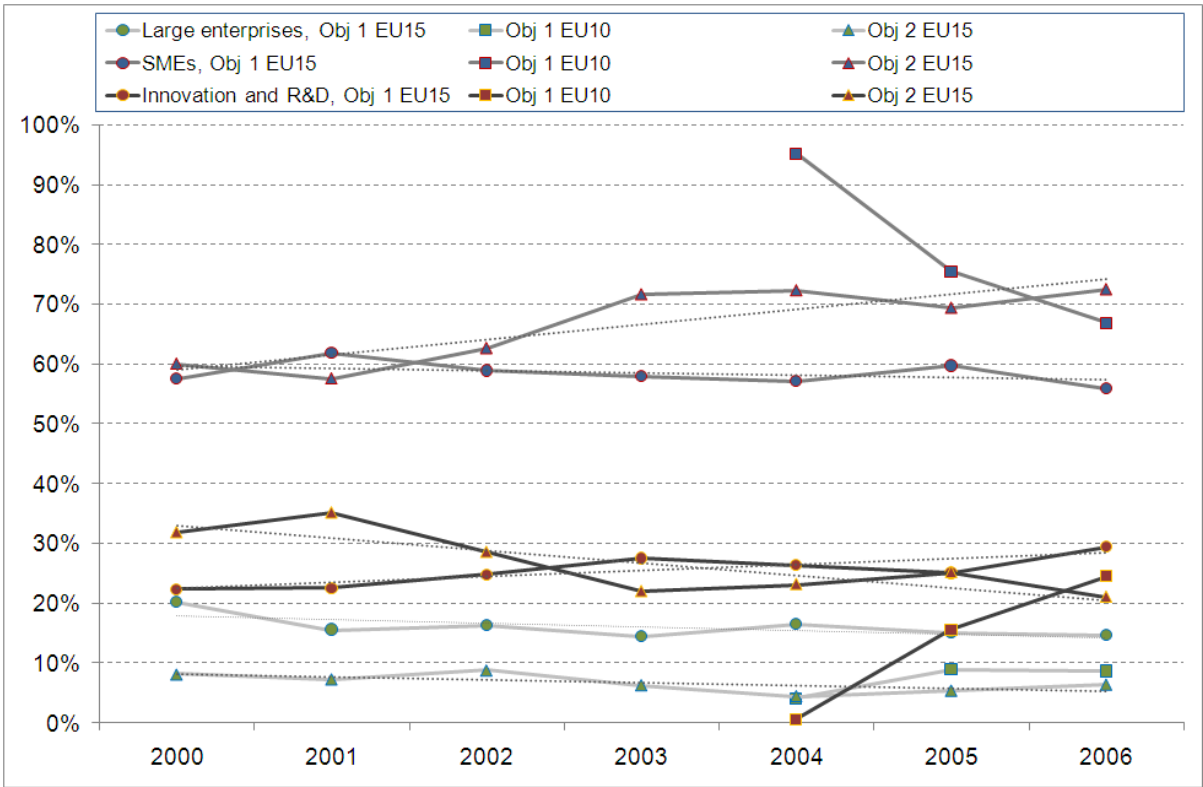
ERDF support to enterprise and innovation

Turning now to ERDF support for the enterprise and innovation themes, this section starts by considering the main policy trends in using ERDF funds, before proceeding to characterise the types of instruments used as evidenced by available expenditure data.

Supporting large enterprises, SMEs and innovation and R&D

In line with the focus of national policies on supporting SMEs, ERDF support has also been predominantly directed at SMEs. They received 62% of all funding during the period 2000 to 2006 and as much as 73% of allocated funds in Objective 2 regions within the EU15 Member States by the end of period. Of the remaining funds, 13% have been provided to large enterprises and 25% have been assigned to innovation and R&D without a clear demarcation of end recipients. The shares vary significantly by region and over time.

Distribution of ERDF support for large enterprises, SMEs and innovation and R&D

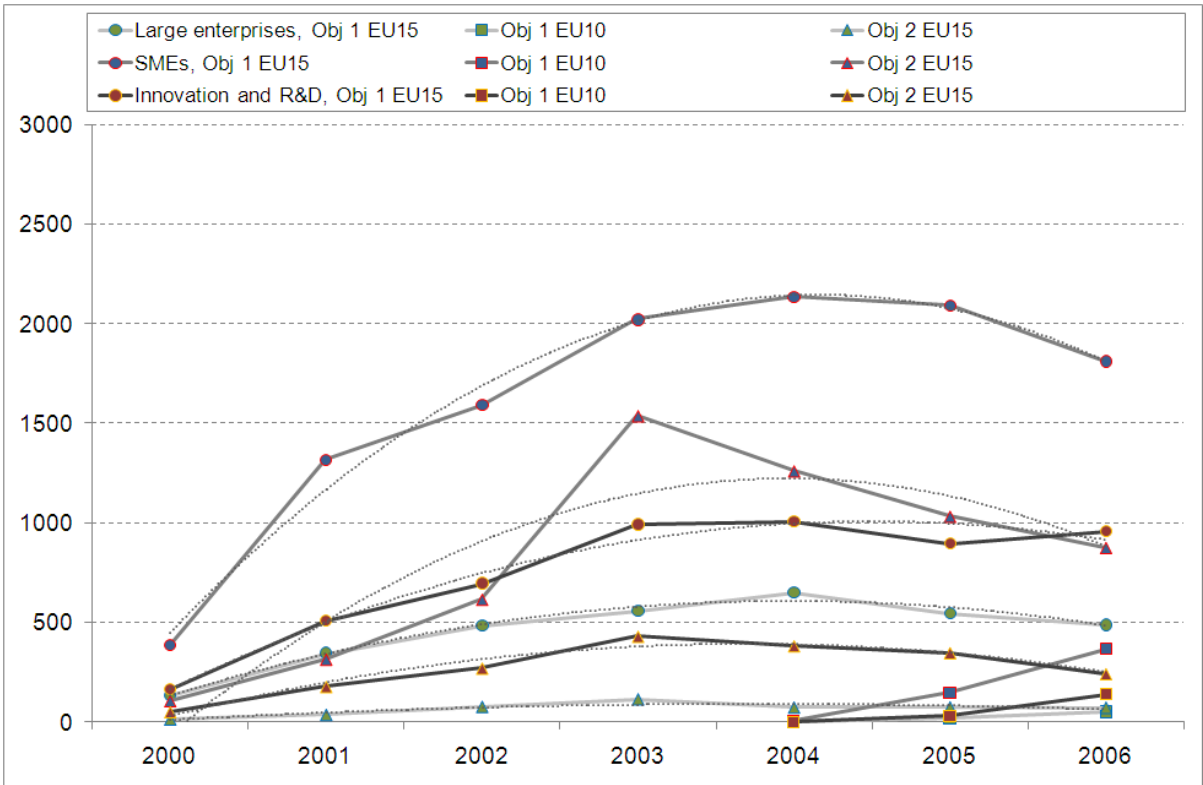


Large enterprises have received approximately 10% more ERDF support within EU15 Objective 1 regions than within EU15 Objective 2 regions. While the overall shares of support for innovation and R&D are relatively equal, they have been increasing slightly over the period within EU15 Objective 1 regions, but decreasing significantly within the EU15 Objective 2 regions, concomitant with more support allocated to SMEs. Following a brief

start-up phase, the distribution of ERDF support within EU10 Objective 1 regions has moved into line with EU15 expenditure patterns.

The reasons for the differences between EU15 Objective 1 and 2 regions are not clear. The declining support for innovation within Objective 2 regions is surprising considering the increased national and European emphasis on innovation as a route to prosperity. The declining shares are not simply an artefact of more rapidly increasing expenditures on SMEs or large enterprises as evidenced by the expenditure series in Figure 4, which shows generally decreasing funding from 2003-2004 onwards within the EU15. Note too the relatively small amounts of support for EU10 Objective 1 regions, which themselves dwarf support for EU10 Objective 2 regions amounting to approximately €6m altogether between 2004 and 2006.

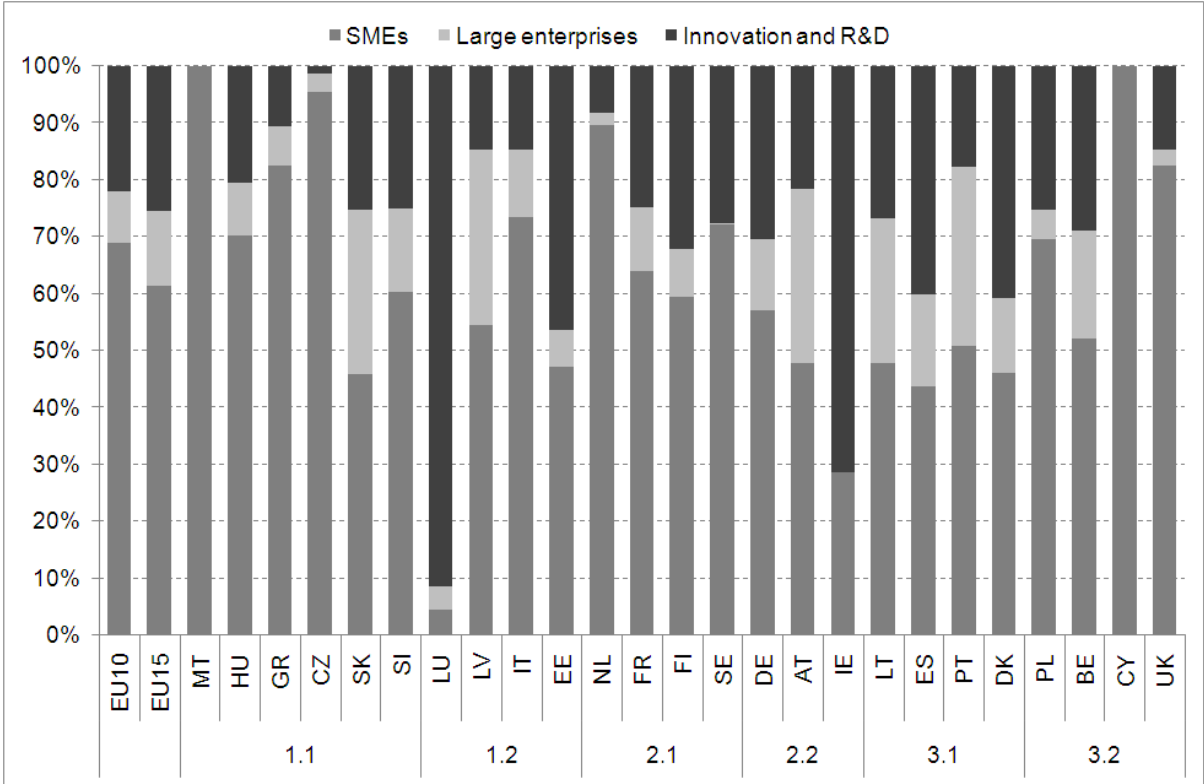
ERDF support for large enterprises, SMEs and innovation and R&D in €m



At the country level, ERDF support for SMEs is also dominant. Only two countries spent less than 40% of their European funding on SMEs. Figure 5 shows that SMEs received more support than anything else in all countries except Ireland and Luxembourg. Here innovation was the priority for ERDF funds (allocated 71% and 92% of total expenditures respectively).

No apparent patterns exist with regard to Member State status or association with the different clusters identified above. This may be because Member States have considerable discretion in allocating the funds, and some of them deliberately concentrate ERDF funds on a limited number of themes, and use their own resources for other policy priorities.

Distribution of ERDF support for large enterprises, SMEs and innovation and R&D



2.2.1 Main instruments used

Support for enterprise

By far the largest share of ERDF support for enterprise has been used for investment in physical capital such as acquisition of plant and equipment. 80% of all support for SMEs and large enterprises in Objective 1 regions within the EU15, and 50% of all support in Objective 2 regions, went for this purpose in the first year, probably due in part to the relatively quick set-up of financial support schemes. The shares stabilised by the middle of the period at around 60% and 30-40% respectively. These levels have been matched in Objective 1 regions within the EU10 since 2004. The level of support for advisory services and shared business services has been lower, receiving about 10% each within EU15 Objective 1 regions, and 20-25% each within EU15 Objective 2 regions. These differences between Objective 1 and 2 regions in their allocation of ERDF support are indicative of the persistent need for modernization of production facilities, especially within Objective 1 regions. It seems to replicate at the regional level the same divergence in focus noted above at the national level between restructuring and diversifying and encouraging innovation.

Support for innovation and R&D

ERDF funds for innovation and R&D have been equally split between (i) research projects based in universities and research institutes, (ii) innovation measures such as knowledge and technology transfer, and (iii) RTDI (Research, Technological Development, and Innovation) infrastructure such as buildings, labs and incubators. Figure 7 shows that the balance has shifted over time, however, from research projects to innovation measures. Thus, by 2006 less

than 25% was spend on research projects within either type of region in the EU15. Comparing EU15 Objective 1 and 2 regions meanwhile, a somewhat lower share was allocated to innovation measures and a slightly higher share was allocated to RTDI infrastructure within Objective 1 regions than within Objective 2 regions. Notably, this pattern is even more pronounced within the Objective 1 regions of the EU10, spending more than 60% alone on RTDI infrastructure in 2006, once expenditures started flowing (the initial distribution in 2004 should be disregarded due to the negligible amount of expenditure involved).

The declining shares allocated to research projects might at least in part reflect the relatively quick set-up of financial support schemes compared to the longer processes involved in planning and implementing networking initiatives or large-scale infrastructure projects. In this regard, the developments are similar to the initially declining shares in investment in physical capital evidenced above. However, it is notable here too that the change in funding patterns would seem to fit convincingly with the increased focus on knowledge transfer as well – especially considering that most lagging regions in the EU10's have continued to emphasize basic infrastructure over innovation measures.

Indirect versus direct support

An important overall trend in ERDF support for enterprise and innovation is the increasing use of indirect instruments. Sorting the expenditure categories according to whether they mainly involve financial mechanisms or non-pecuniary benefits,⁸ it is evident that the relative size of the latter has been growing throughout the period in both EU15 Objective 1 and Objective 2 regions (Figure 8). The figure also shows how funding for indirect instruments generally is more common within EU15 Objective 2 regions than within EU15 Objective 1 regions. The shares for indirect instruments are lowest within the EU10 Objective 1 regions, reflecting their need for investment in modern production facilities and infrastructure.

Here again, it is possible to observe the change in focus along the continuum from restructuring and diversifying to encouraging innovation, as these differences in the use of indirect and direct instruments also emerge across countries associated with the previously defined country clusters. Figure 9 shows that the countries within sub-clusters 1.1 and 1.2 respectively have applied 24% and 22% of ERDF funds to indirect instruments; sub-clusters 2.1 and 2.2 have applied 31% and 39%, and sub-clusters 3.1 and 3.2 around 30% and 48% of ERDF funds through such channels. These data show a close relationship between expenditures through indirect measures and a focus on innovation, even before adjusting any averages inflated by the very high shares in Slovakia, Estonia and Portugal.

Overview of instruments used

Moving a step beyond expenditure categories, Table 4 presents an overview of the types of instrument actually implemented within each Member State using ERDF funds. This has been generated by scanning all Member State notes for the use of different instruments and consulting the individual country experts for potential additional instruments. The resulting table comprises six types of instrument that use ERDF funds – evenly split between direct and indirect support. The table does not include tax incentives, which are not supported by ERDF.

1. Direct support – financial support to the firm, i.e. individual firms receive support in the form of some kind of financial contribution:
 - 1.1. *non-repayable grants* (one-off payments with no further financial obligations)
 - 1.2. *repayable loans* (including ‘financial engineering’ for additional loan resources)

- 1.3. *equity-based instruments* (i.e. acquiring a share in the capital value of the enterprise in return for an injection of investment).
2. Indirect support – non-financial support to firms, i.e. access to collective or third party facilities which are provided for several firms:
 - 2.1. *services* providing information, management advice, consultancy, business, financial advice
 - 2.2. *intangible mechanisms* such as technology transfer, knowledge transfer, collaboration, participation in partnerships and networks (sometimes made available through regional innovation systems, clusters or poles of excellence)
 - 2.3. *tangible ‘public goods’*, such as shared infrastructure and buildings, including business incubators (also sometimes made available through regional innovation systems, clusters or poles of excellence).

The use of grants and advisory services is almost ubiquitous, whereas the other four types of instrument are less widespread. Regarding direct support, five Member States (Hungary, Ireland, Luxembourg, Portugal and Slovakia) have relied exclusively on grants, whilst seven Member States (Belgium, Finland, Germany, Italy, the Netherlands, Poland and the UK) have used all three types of direct instruments. The use of multiple instruments is much more common in relation to indirect support, where all but three Member States (Belgium, Luxembourg, and Portugal) have implemented more than one instrument, and 13 Member States (Denmark, Estonia, Finland, Germany, Greece, Italy, the Netherlands, Poland, Slovakia, Spain, Sweden and the UK) have been relying on a combination of all three types.

At this level of detail it is more difficult to see country patterns. Yet it is notable that the prevalence of equity-based instruments and intangible mechanisms including networks and knowledge transfer are more prevalent among the EU15 (67% and 87% respectively of the EU15 have implemented these) than among the EU10 (where the corresponding figures are 33% and 56%). In contrast, the use of tangible ‘public goods’ is most prevalent among the EU10 (89% of these countries have implemented this type of instrument compared to 60% of the EU15). Moreover, all countries in sub-cluster 2.1 have used equity-based instruments and all countries in sub-clusters 2.1 and 2.2 have used intangible mechanisms as the only clusters to be so characterised. The frequency with which each type of instrument is used across the two Member State groups and three cluster families.

2.3 Typology of ERDF funded support instruments for enterprise and innovation

ERDF expenditures allocated on FOI codes (figures 8, 9 and 10) provides a concrete quantitative indication of what substantial uses ERDF funding has been applied to. Further analysis of these figures shows that almost 90% of this expenditure can be allocated to a two-by-two matrix distinguishing spending on enterprise from spending on innovation, and spending on direct instruments from spending on indirect instruments. Table 7 provides an overview of this four cell matrix, with the addition of relevant component details where these are available. Note that while the Structural Fund FOI codes may not be the way all Member States classify their own or even Structural Fund interventions in relation to enterprise and innovation, all Member States nevertheless are required to either use these categories or show how their own categories link to them when reporting, making the FOI codes a consistent basis for comparisons.¹⁰ Consequently, this typology is not an artificial construction imposed on projects, but rather reflects a classification that Member States have applied themselves.

Referring to Table 7, it can be seen that:

- almost three quarters of all expenditure was aimed at enterprise.
- almost 70% took the form of direct support.
- within the enterprise expenditure, only 16% was specifically aimed at large firms, almost all of which was support for investment in physical capital (plant, equipment, premises, etc.), with negligible amounts used for financial engineering and indirect support on services and networks. These are areas where large companies do not seem to need support. In contrast, the data for SMEs shows that almost one third was used for indirect support on services and networks. About half the SME funding for enterprise was devoted to direct physical capital investment, with 10% used for financial engineering and 5% for ICT services and applications.
- within the innovation category it is not possible to distinguish large and small firms. Here, almost two thirds was used for direct support, split

Typology of ERDF instruments

	DIRECT SUPPORT		INDIRECT SUPPORT		Total
ENTERPRISE ENVIRONMENT	<i>1) Large firms investment in physical capital</i> <u>Level 1:</u> <ul style="list-style-type: none"> • physical capital (FOI 151): 10% • financial engineering for additional loan resources (FOI 155): 1% <u>Level 2:</u> 1. a) grants, b) loans c) equity	52%	<i>4) Large firms access to services</i> <u>Level 1:</u> <ul style="list-style-type: none"> • business services (FOI 153): 1% <u>Level 2:</u> d) services, e) intangible mechanisms, f) tangible public goods	21%	73%
	<i>2) SMEs investment in physical capital</i> <u>Level 1:</u> <ul style="list-style-type: none"> • physical capital (FOI 161): 32% • financial engineering for additional loan resources (FOI 165): 6% <u>Level 2:</u> a) grants, b) loans, c) equity		<i>5) SMEs access to services</i> <u>Level 1:</u> <ul style="list-style-type: none"> • business services (FOI 163): 9% • shared business services (FOI 164): 11% <u>Level 2:</u> d) services, e) intangible mechanisms, f) tangible public goods		
	<i>3) SMEs investment in ICT</i> <u>Level 1:</u> <ul style="list-style-type: none"> • ICT services & applications (FOI 324): 3% <u>Level 2:</u> a) grants, b) loans, c) equity				
INNOVATION AND R&D	<i>6) Investment in research projects</i> <u>Level 1:</u> <ul style="list-style-type: none"> • Research projects (FOI 181): 8% <u>Level 2:</u> a) grants, b) loans, c) equity	17%	<i>8) Technology transfer and use of public goods</i> <u>Level 1:</u> <ul style="list-style-type: none"> • Innovation & tech transfers, networks, partnerships, etc. (FOI 182): 10% <u>Level 2:</u> d) services, e) intangible mechanisms, f) tangible public goods	10%	27%
	<i>7) Investment in RTDI infrastructures</i> <u>Level 1:</u> <ul style="list-style-type: none"> • RTDI infrastructure (FOI 183): 9% <u>Level 2:</u> a) grants, b) loans, c) equity				
Total	69%		31%		100% (€25,801m)

Expenditure not allocated to 3-digit FOI codes are excluded as these cannot be differentiated between direct and indirect instruments. Total expenditure not so allocated was €2,594m. (9% of total)

The value of the typology in Table 7 is that it:

- has been derived inductively and thus directly reflects the application of ERDF funds over the period 2000 to 2006
- can be quantified at the first level, whilst second level types have been widely used by Member States
- directly reflects many of the evaluation questions in the study, including:
 - the distinctions between direct versus indirect support, grants versus other direct support, SMEs versus large firms, long-term research (e.g. building research infrastructure) versus shorter-term technology transfer,
 - building poles of excellence and clusters.

2.4 Conclusion

This chapter has shown the wide range of policy instruments used to encourage the growth of enterprise and innovation across the EU25. Grants, loans and business advice are the most common tools and SMEs are the main targets of support. A broad distinction is apparent between:

- i. (regions and nations that are mainly seeking to catch up more advanced economies with an emphasis on the fundamentals (business infrastructure, advisory services and general financial support) without discriminating much between sectors, and
- ii. regions and nations that aim to be more innovative and closer to the leading-edge, using a wider range of policy instruments, including equity finance and various methods of producing and sharing new knowledge and information.

The theme of innovation has grown in importance over time, along with indirect (nonfinancial) forms of business support.

Summary - Ex post evaluation of Cohesion Policy programmes 2000-2006 financed by the European Regional Development Fund Work Package 6b: Enterprise Support¹³

This evaluation set out to measure the achievements of the programmes and assess the effectiveness of the different instruments.

Main findings:

- Support for enterprise contributed to the creation of a significant number of new jobs, increased production, and improved productivity. The 30 programmes assisted 800,000 enterprises, mainly SMEs, leading to 625,000 gross new jobs. An estimated 1 million gross jobs were created by cohesion policy enterprise measures in total.
- Monitoring needs to be improved. For example, the main intended effect of many instruments is greater productivity, but only 7 out of the 30 programmes collected data on this. Even for jobs created – an indicator planned by all the programmes – in 6 out of 30 cases figures were missing or judged unreliable. Programmes should determine which indicators most closely measure what they are trying to achieve and be consistent in collecting data.
- From the palette of instruments available (e.g. grants, venture capital, loans, business services), one size does not fit all. Some regions showed an over-reliance on grants, where other instruments would have been more appropriate. Conversely, some investments (e.g. start-ups or early R&D) are too risky for financial engineering.
- Policy makers should take a more proactive approach to implementation delays. This means enhancing administrative capacity to reduce unnecessary delay, but also accepting that some delay is inevitable and finding ways to manage this (eg getting an early start when setting up venture capital funds).

Outputs and beneficiaries – enterprises supported

The number of beneficiaries is generally measured as the number of enterprises benefiting from enterprise support. Most of the beneficiaries received indirect support, in particular support of low intensity. One example of such low intensity support is information to businesses (advice and support), where each recipient of information was counted as a beneficiary. Recipients of direct support were less numerous, but the financial support received by them can be expected to have larger impacts on their development, as they generally received support of higher intensity than beneficiaries of indirect support. It should however be noted that many beneficiaries receiving support from mixed measures may have benefited from the same support as the enterprises supported by direct instrument-only measures.

¹³ Full report prepared by Annegret Bötzel, Benita Kidmose Rytz, Xavier le Den, Johan Harvard and Thomas Westergaard-Kabelmann (Ramboll) and available on http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2006/wp6b_final_report_en.pdf

Number of beneficiaries per instrument and instrument type

Instrument type	Instrument	No. of enterprises supported (number of measures)	% of total
Direct	a) Non-repayable grants	54,862 (30)	7%
	b) Repayable loans	10,928 (7)	1%
	c) Equity-based instruments	114 (2)	0%
	Mixed instruments	74,693 (15)	9%
Direct Total		140,597 (54)	17%
Indirect	d) Advice and support	255,090 (15)	32%
	e) Networking and clustering	4,491 (4)	1%
	f) Infrastructure, especially business incubators	2,609 (6)	0%
	Mixed instruments	133,898 (12)	17%
Indirect Total		396,088 (37)	49%
Mixed	Mixed instruments	267,112 (46)	33%
Mixed Total		267,112 (46)	33%
Grand Total		803,797 (137)	100%

Source: Annual Implementation Reports for 2008 or 2007 of the respective programmes

Note: The figures in parentheses indicate the number of measures which have reported on beneficiaries. The total number of measures studied in this review is 262, which means many measures did not present data or number of beneficiaries.

Detailed monitoring information on the beneficiaries is limited. However, it can be seen that:

- Out of the 137 measures that have reported on the number of beneficiaries (262 measures analysed in total), only 54 measures offered indicators distinguishing SMEs from the total number of beneficiaries. Based on these 54 measures, 98% (500,203 out of 512,242) of the beneficiaries were SMEs.
- Based on the area of intervention codes, measures targeting SMEs supported 81% of the beneficiaries (639,651), measures targeting both SMEs and large businesses supported 9% of the beneficiaries (66,710), and measures targeting large enterprises only supported 10% of the beneficiaries (79,883). According to this data, this means that SMEs accounted for 81% to 90% of the total beneficiaries.

Based on this information, it can be concluded that SMEs constituted the vast majority of the beneficiaries of enterprise support within the 30 studied programmes. The finding that the majority of beneficiaries were SMEs is in line with the share of expenditures that was provided to this business size group.

Results and impact

Results and impacts were analysed in order to determine the programmes' achievements in terms of increased production, productivity and employment, as well as how these achievements compared with what they set out to achieve.

The review of achievements shows that the programmes have contributed to a significant number of new jobs, increased production and improved productivity. In total, the enterprise support measures within the studied programmes reportedly created more than 625,000 gross new jobs by spending close to €46 billion on the support of more than 800,000 enterprises, of which at least an estimated 80-90% were SMEs. In addition to the new jobs created, the seven UK programmes reporting on results in terms of increased production report having created about €15 billion in gross new turnover (£9,689 million) by spending only €7.5 billion.

Strategy

Although support activities varied within the programmes, enterprise support aimed first and foremost at helping to improve business activity (production) and enterprise competitiveness. This was seen as the basis for employment creation, which should ultimately lead to the overarching goals of improved competitiveness and social cohesion in the programme regions. Two main strands of activities were observed:

- Modernising and diversifying the existing enterprise structure. Many Objective 1 and Objective 2 programmes addressed the need to develop the sector structure from low value-added to high value-added sectors, and to support individual businesses in their attempts to become internationally competitive. Attempts at economic cluster development were mainly found in Objective 2 programmes.
- Fill the enterprise gap. Support in some cases was aimed at the development of microenterprises and at enhancing entrepreneurship. It was also crucial in some regions to integrate foreign companies into the domestic value chain, as well as to keep large enterprises in the regions. Support to investments by large enterprises was mostly found in Objective 1 programmes.

Employment

Out of the 30 programmes studied, quantitative data on job creation could be aggregated and further analysed from 24 programmes. In these programmes at least one of the studied measures reported on job creation in their monitoring systems. The relative importance of different types of support instruments in the created jobs reflects their different goals and foci. For instance, practically all jobs created by the German programmes were reported to have been created by direct support instruments (often grants), whereas in the UK programmes the indirect instruments played an important role in creating jobs, reflecting the focus of these programmes on indirect support.

Number of gross jobs created per instrument and instrument type

Instrument type	Instrument	No. of jobs created (number of measures)	% of total
Direct	a) Non-repayable grants	176,890 (22)	28%
	b) Repayable loans	16,201 (3)	3%
	c) Equity-based Instruments	987 (2)	0%
	Mixed instruments	60,835 (14)	10%
Direct Total		254,913 (41)	41%
Indirect	d) Advice and support	59,110 (9)	9%
	e) Networking and clustering	2,609 (2)	0%
	f) Infrastructure, especially business incubators	32,616 (21)	5%
	Mixed Instruments	75,254 (14)	12%
Indirect Total		169,589 (46)	27%
Mixed	Mixed instruments	200,482 (42)	32%
Mixed Total		200,482 (42)	32%
Grand Total		624,984 (129)	100%

Source: Annual Implementation Reports for 2008 or 2007 of the respective programmes

Note: The figures in parentheses indicate the number of measures which have reported on this indicator

Considering the relatively few beneficiaries of direct support, the number of jobs created by the direct instruments is considerable. Loans and equity-based instruments were to a high degree used together with other instruments, and it is therefore not possible to determine how many jobs these instruments specifically helped to create. In addition, it should be taken into consideration that loans and equity instruments may have been better at producing quality jobs rather than a high number of jobs.

With direct instruments supporting close to 141,000 enterprises and creating more than 255,000 gross jobs, close to two jobs per enterprise supported were created. Of the direct instruments, especially the results for grants were striking. Through the support of almost 55,000 enterprises, grants created more than three jobs per supported enterprise. The indirect support instruments contributed to job creation primarily in the UK programmes.

The few available figures on net effects indicate that the gross effects reported by the programmes overestimate the true impact of the programmes, with net additionality ratios for job creation ranging from 20% to 70%. However, even when taking the lowest calculated net additionality ratios into consideration, the total aggregated effects on employment and turnover are substantial. As the available net figures are derived from a small subset of programmes with specific characteristics, further studies will have to be carried out before any attempts of generalisation of net additionality rates can be made.

Tentative attempts at extrapolating total ERDF programmes job creation produce a figure of at least 1 million jobs created. The extrapolated estimates for all programmes are only rough indications of the actual values, but can serve as food for thought.

Production

Since activities to support businesses do not (and should not) always lead to an increase in employment, another important indicator is turnover (or sales), i.e. the sum of the value of all sales of services or goods. While an increase in turnover does not automatically mean an increase in employment, there are other positive regional effects to be gained from an increase in businesses' sales, such as strengthened local and regional supply chains.

Of the 262 measures studied, 53 had targets for increased production measured in absolute increase in turnover (sales). The same 53 measures reported actual achieved increases. Only seven programmes in the UK used this indicator. Below, the gross turnover created for these programmes is presented, together with the number of beneficiaries and total expenditures.

Gross turnover created (in million GBP)

No.	Programme	Gross turnover created (M GBP)
22	Herseyside (O1)	845
23	South Yorkshire (O1)	2,311
24	West Wales and the Valleys (O1)	151
25	West Midlands (O2)	936
28	North East of England (O2)	1,755
29	North West England (O2)	3,240
30	Western Scotland (O2)	451
Grand Total		9,689

Source: Annual Implementation Reports for 2008 or 2007 of the respective programmes

None of the abovementioned programmes reported large gross increases in turnover from measures using only direct instruments. Out of the total £9,583 million in new turnover

created, only £646 million GBP were created from direct instrument-measures. The achievements per instrument type reflect the focus of these programmes, and cannot be directly interpreted as an indication of direct support not being able to create increases in sales in supported enterprises.

Productivity

Productivity is an important indicator of success for the enterprise support activities supported by the Structural Funds, since many activities aim at increasing the competitiveness of enterprises. An increase in competitiveness in this case implies an increase in sales while maintaining the same number of employees, or a reduction in employees while maintaining sales.

Only a handful of programmes used any form of indicator to measure changes in productivity and none of the programmes attempting to measure results in terms of increased productivity consider themselves successful in capturing this change. The indicators were valid, but methodological difficulties and problems on the project level arose in obtaining the data from enterprises. The Hungarian programme made a good attempt at measuring the effects of the enterprise support on business productivity, using increase in Gross Value Added (GVA) per employee (in %). Unfortunately, they were not very successful as the projects did not report back on this in a uniform manner.

Other effects

It is important to acknowledge other effects of the programmes that are not visible in the effect indicators of employment creation, turnover creation or increase in productivity. For instance, the many hectares of land developed, and the many square meters of office space developed may be of use to numerous businesses for years to come. It is interesting to note that the achievements presented do not strongly correlate with the programme expenditures on enterprise support. The programmes reporting the highest achievements in terms of jobs created were West Wales and the Valleys, North West England and the Spanish competitiveness programmes, but they had very different expenditure levels. The Spanish expenditures were quite high while the UK programme expenditures were lower. The achievements also do not strongly correlate with the type of support on which the programmes focus. All this variation points to the importance of the programme context: differences in demography, economy and business demography; labour market; fiscal conditions and social policy all affect the effectiveness of the enterprise support instruments.

Summary - Ex post evaluation of Cohesion Policy programmes 2000-2006 financed by the European Regional Development Fund Work Package 6c: Enterprise Support - an exploratory study using counterfactual methods on available data from Germany¹⁴

This study compared enterprises in Eastern Germany which benefited from investment or research grants with similar, but unsupported, enterprises. There were two specific samples: the IAB Betriebspanel for enterprise support and Gefra's survey of enterprise R&D in Thuringia. To ensure robust results, various comparison methods were used (including propensity score matching, controlled difference in difference and instrumental variables).

Main findings:

- Investment grants induced strong investment effects. Average public support of €8,000 per employee led to €1,000-12,000 of extra investment. This implies a leverage effect, where every euro of public money generates up to €1.5 of total investment.
- R&D grants of €8,000 led to an additional €8,000 of investment. Although this 1-to-1 ratio is a little smaller than that for investment grants, it has an additional "spillover" benefit in terms of increased long term regional economic growth.
- A rough calculation of the direct employment effect from investment grants was some 27,000 extra jobs. While positive, this is lower than figures derived from monitoring data, suggesting that the main impact of such support is increased investment and productivity, with job creation a secondary impact.

¹⁴ Full report prepared by GEFRA – Gesellschaft für Finanz- und Regionalanalysen GbR and IAB – Institut für Arbeitsmarkt- und Berufsforschung, Forschungseinrichtung der Bundesagentur für Arbeit, and available on http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/expost2006/wp6c_final_report_en.pdf

ANNEX 6 – Environment and climate change

1. ENVIRONMENT

1.1 Rationale

The European Union Sustainable Development Strategy (EU SDS) states that "the main challenge is to change (...) the non-integrated approach to policy-making."¹⁵ Among the guiding principles of the EU SDS are policy integration, i.e. the "integration of economic, social and environmental considerations so that they are coherent and mutually reinforce each other by making full use of instruments for better regulation." Article 11 of the Treaty on the Functioning of the European Union (Treaty) states that "environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development."

There are several reasons for cohesion policy investment in environment:

- to help poor MS comply with "investment heavy" EU environmental *acquis*,
- potential contribution to eco-innovation and green growth,
- addressing negative externalities which can serve as an obstacle to local and regional development.

1.1.1 Supporting heavy investments in environmental infrastructure in Cohesion countries

Main focus of investments by the Cohesion Fund in environmental infrastructure is in the area of waste-water and waste infrastructure and management as well as to combat pollution. These investments are indispensable to safeguard future growth and quality of life in Cohesion countries. Investments needed as a result of obligations arising in the next financial period following the expiration of transitional periods in Accession treaties are of considerable scale and arguably impossible to meet without the EU solidarity. A large part of the financing provided by the ERDF goes to environmental infrastructure including waste treatment and waste water processing. Some EUR 50 billion has been allocated to environmental protection and risk prevention over the 2007-2013 period, with a further EUR 0.8 billion going to renewable energy and EUR 2.5 billion to help SMEs adopt environmentally friendly processes and develop environmentally-friendly products.

In fact, the largest programme is the Polish infrastructure and environment OP, with a total of EUR 28 billion coming from the ERDF and the Cohesion Fund. Although it includes infrastructure of various kinds, a majority of the operational priorities (7 out of 13) concern the environment, including energy efficiency, water and waste management, environmentally-friendly transport and habitat protection.

Traditionally the focus of support has very much been on environmental infrastructure (notably clean drinking water supply, waste water treatment and household and industrial waste management), especially in Objective 1, or Convergence, regions. Increasingly

¹⁵ Council of the European Union Brussels, 26 June 2006 10917/06 Renewed EU Sustainable Development Strategy, p. 2.

however the focus is also on renewable energy, green transport, the green economy and a greener governance of Cohesion Policy.

The ex post evaluation¹⁶ found "Tangible results [...] many villages, towns and cities being made more attractive places to live in [...] While the projects undoubtedly improved living standards and the quality of life, as well as territorial balance by encouraging more people to live in the places concerned and more businesses to locate there, unlike in the case of economic growth, there is no accepted set of indicators to quantify these effects.

Moreover, while their immediate impact on economic growth was limited, they almost certainly strengthened the conditions for long-term sustainable development by reducing social disparities between regions and territorial imbalances as well as by protecting the environment."

The following investment needs in Cohesion countries have been estimated:

- Investment in water or waste infrastructure also creates substantial benefits both for the consumers concerned and for society at large. Public intervention is justified by high expenditure needed, only partially recovered from user charges.
- Water. Financing needs to implement the Water Framework Directive and the other water acquis, like the Drinking Water Directive are estimated at some €30 billion per year. While a large part of it can be covered from user charges, substantial EU funding, mainly for infrastructure investment in the new MS, is needed from the Structural/Cohesion Funds and rural development funds.
- Waste-water. According to the recent study for DG ENV on the compliance costs of the Urban Waste Water Directive, the public and private investments for collection and treatment of urban wastewater, until full compliance with the requirements of the Directive is achieved, would amount to €45 billion for the 27 MS. This estimate is based on the status of implementation in 2005/2006, thus could somewhat overestimate needs due to the ongoing projects in this field. In addition to these figures on drinking water and waste water there are Water Framework Directive requirements that, based on the extrapolation of costs reported by Member States in the river basin management plans, are about 16 bn per year for the whole EU. From that, we estimate that about **8-10 bn per year** will be costs related to measures that could be potentially eligible under the cohesion policy. Mainly these refer to physical measures related to river restoration, installation of fish migration devices, etc.
- Waste. A study for DG ENV estimated funding needs for municipal waste in the EU in period 2014 – 2020 at €7-12 billion, of which €2.5-6 billion should be funded from the EU (the rest by users and national budgets). These figures relate to municipal waste only; the other needs in the waste sector, such as for disposal of industrial and construction waste, are being evaluated.
- Natura 2000. Financing for implementation of the Natura 2000 directives, including investment, such as land acquisition or habitat restoration, and the ongoing management costs of sites will be critical to make the network fully operational. The Habitat Directive explicitly requires EU financial support. MS estimates for the costs

¹⁶ Applica (2010) "Ex Post Evaluation of Cohesion Policy Programmes 2000-2006: synthesis report".

amount to €5.8 billion, of which 50 – 75% could come from the EU budget. This figure comes from replies of MS to a detailed questionnaire sent by DG ENV in 2009.

Cohesion Policy has a history of financing environmental interventions which are "investment heavy". In the 2007-2013 programming period Cohesion Policy is contributing EUR 28 bn to financing interventions which help MS comply with directives in the field of water supply, wastewater and solid waste. The ERDF and Cohesion Fund have co-financed 14% of total environmental investment in the EU in the period 2000-2006, providing up to 40% of funding in environmental investments in the 4 old Cohesion Countries (Ireland, Greece, Portugal, Spain).¹⁷

The ex-post evaluation of the ERDF 2000-2006 in the field of environment has shown that cohesion policy interventions brought substantial environmental benefits. For instance, 20 million of additional population has been connected to wastewater collection and treatment in the period 2000-2006 thanks to EU funds. Without EU funding, compliance with the *acquis* in waste water, water and waste would have been even more difficult.

1.1.2 Contribution to green growth

Investment in the environment generates demand for eco-industries, thereby promoting further development and innovation in these industries. A 2009 study¹⁸ has shown that "the size of the EU eco-industry has been estimated using methods which rely strongly on environmental protection expenditure data and which are consistent with the ones of previous studies." The same study estimates employment in eco-industries in 2008 to reach approximately 3.4 million. Total turnover is estimated to be more than EUR 300 billion. "While the average growth in nominal terms was about 2% p.a. in previous reports, the current study arrives at a rate of 7% to 8% p.a. In terms of micro-economic productivity the study found for a representative sample of companies, that on average for the period 2004-2006 the productivity of the EU ecoindustry was higher compared to manufacturing and that the growth rates were higher."

1.1.3 Addressing negative externalities which can serve as an obstacle to local and regional development

Economic drivers exist which result in the concentration or dispersion of economic activity. Concentration of economic activity has many potential advantages to economic agents, including decreased transport costs, increased economies of scale and knowledge spill over, labour market pooling and input sharing as well as demand and cost linkages.¹⁹

However, the concentration of economic activities also results in negative externalities such as congestion and pollution, lowering the quality of life in cities, and setting off processes which lead to a concentration of lower income households in some areas, and the formation of pockets of poverty and deprivation, also in Member States and regions with higher than average per capita income. In addition, the concentration of economic activity in larger agglomerations results in increasing differences in the economic performance of rural and urban areas, and increasing differences in the economic performance of large cities and capitals and other regions.²⁰

¹⁷ ADE (2009) p.

¹⁸ Ecorys (2009) Study on the Competitiveness of the EU eco-industry.

http://ec.europa.eu/environment/enveco/eco_industry/pdf/report%202009_competitiveness_part1.pdf

¹⁹ Marshall, 1890 and Krugman, 1991.

²⁰ 5th Cohesion Report.

As these negative impacts result from the functioning of market forces, public policy intervention is needed to address these issues. Potential public interventions includes integrated and cross-sectoral approaches to increase the attractiveness of cities by investing in integrated urban development which addresses the social, economic and environmental dimensions of urban regeneration.

1.2 Cohesion policy performance

Cohesion Policy is contributing heavily to improving the quality of the environment by funding environmental infrastructure and other interventions in the field of environment. Total planned spending in the period 2007-2013 on *environment* is EUR 104,7 bn if *indirect* spending (i.e. on sustainable transport, renewable energy, energy efficiency and other indirect spending) is also included in the figure.

The impact of cohesion policy has a strong environmental dimension. The ex-post evaluations for 2000-2006 reveal that cohesion policy contributed to improve the environment in line with EU Directives, especially in Objective 1 areas, making them more attractive places in which to live and work. In the 2000-2006 period, ERDF co-financed actions which connected 20.5 million additional inhabitants to waste water treatment to EU standards. This represents approximately half of the increase of the additional population connected over the period. An additional 14 million inhabitants were served by improved water supply thanks to ERDF co-financed projects.

In the 2000-2006 period, the European Regional Development Fund spent 21% of its total allocation, €25.5 billion, on environment-related interventions. Over 80% of environmental spending was concentrated in 7 Member States. The main sectors of intervention were rehabilitation and planning (45%) and environmental infrastructure (44%), while environment-friendly technologies (7%) and energy infrastructure (4%) were less important.

Main indicators of the 2000-2006 period:

- Water supply - Number of co-financed projects: 3913 and additional population served: 14.1 million.
- Wastewater - Number of co-financed projects: 6211 and additional population served: 20.4 million
- Solid waste - Number of projects: 2637; New capacity of waste treatment created: 231,649 m³/day; Number of unauthorised landfills closed/rehabilitated: 964

Factors that limited the effectiveness of environmental investments included oversized investments and not ensuring the financial sustainability of investments. The need to comply with European directives was the main driver of investments in environmental infrastructure. Environmental measures were often designed with a sole objective of making progress to meet the requirements of the aquis, without having regard to the development needs of the region.

Although the concept of sustainable development was not prominent in the 2000-2006 regulations and its interpretation varied across Member States, the ex post evaluation confirms that Cohesion policy delivery systems are fit-for-purpose to deliver sustainable development. The evaluation found out that an overall trend evolved from environmental inclusion towards a broader three-dimensional approach. A differentiated progress was made in accommodating sustainable development within delivery systems (e.g., programme design, selection of project, monitoring, evaluation and reporting), representing a significant learning curve for most authorities. There was a general increase in understanding/awareness of the issue;

however, the degree of its operationalisation was limited. Nevertheless, a momentum for integrating sustainable development was initiated in some Member States and good practice examples exist for individual management and implementation processes.

Regarding Sustainable Development in general, there seems to be a political preference for highlighting synergies between economic and environmental considerations, and in the current programming period Operational Programmes were in general more specific about the potential synergies among the pillars of sustainable development, rather than the trade-offs.²¹

An ex-post evaluation study of ERDF interventions in the field of environment and climate change comes to the conclusion that despite the successes potential synergies between the economic and environmental pillars of SD were not always taken advantage of. It concludes that the "main drivers for using the ERDF in environment have been the need to comply with environmental standards established in the relevant Community Directives."²² As a result, "the integration of environmental measures with other parts of the OPs has been generally weak."²³ Overall, "the contribution of ERDF environmental measures to economic development appears to have been rather limited and when observed, affecting mainly local areas without spillover effects into the regional economy."²⁴ The study attributes this to several factors including the guidance at the beginning of the programming period to give priority to compliance with EU directives,²⁵ and "the lack of vision at the EU, national, regional or local level of how environmental and regional development interact", due to the fact that "the integration of environmental investments as a factor of growth was understood neither in theory nor in practice."²⁶ The study concludes that this is due to weak institutional capacities, including lack of capacities for developing a vision, weak sectoral planning capacities, weak capacities for project development, lack of technical know-how, and difficulties in enforcing decisions.²⁷

2. CLIMATE CHANGE

2.1 Rationale

Several reasons can be given to justify cohesion policy investment in climate change:

- Financing win-win interventions with a potential benefit both for Cohesion Policy aims and climate objectives;
- Anticipating and managing structural change resulting from putting economies on a path towards a LCE, and from the impacts of unavoidable climate change on the economies of regions;
- Overcoming financial constraints linked to "investment-heavy" legislation, as a horizontal theme.

2.1.1 Financing win-win interventions

Several studies and policy documents have pointed out that there are potential win-win outcomes of investing in climate change mitigation and adaptation. Investments in the

²¹ Nordregio p. 82

²² ADE (2009) p. 135.

²³ ADE (2009) p. 136.

²⁴ ADE (2009) p. 136.

²⁵ ADE (2009) p. 137.

²⁶ ADE (2009) p. 138.

²⁷ ADE (2009) p. 139.

environment can increase the attractiveness of regions, investments in energy efficiency in housing can decrease energy costs of vulnerable social groups, investments in renewable energy and energy efficiency can positively impact economic growth and jobs, promoting eco-innovation can enhance competitiveness of regions, etc. Although all studies acknowledge the potential for win-win outcomes, there are different views on the size of co-benefits. Sustainable growth is one of the key themes of the Europe 2020 Strategy, which states that "improving resource efficiency would significantly help limit emissions, save money and boost economic growth" and emphasises the potential advantages in terms of job creation and competitiveness of clean energy technologies and combating climate change. The World Development Report 2010 also emphasises the potential for win-win solutions, stating e.g. that in 2006 2.3 million new jobs were created worldwide in the renewable energy industry,²⁸ but provides a more conservative estimate with regard to win-win outcomes, and states that win-win solutions are not enough to stay on a 2°C trajectory²⁹ stating the need not to "overplay" the win-win narrative and acknowledge adjustment costs which are likely to be substantial.³⁰

Article 177 of the Treaty explicitly allows for funding of environmental interventions through the Cohesion Fund. The Treaty does not specify which types of environmental projects could or should be supported. Article 174 of the Treaty sets out the aim of strengthening of economic, social and territorial cohesion as a means to promoting the overall harmonious development of the Community. There are investments which serve the goal of economic, social and territorial cohesion and other goals (e.g. climate change mitigation, energy security, reducing energy poverty, decreasing fuel costs of firms, reducing fuel costs of low income social groups, increasing competitive advantage through eco-innovation, etc.) simultaneously. Win-win³¹ investments can take the form of productive investments, or investments in R&D.

There are several European Studies which have demonstrated the positive impact of climate change interventions on economic variables. A recent study by Fraunhofer Institute has assessed the impact on GDP and employment in the EU of investments undertaken in order to meet the 20% renewable energy target for 2020. The study is based on a detailed macro-economic modelling of economic impacts using 2 models, NEMESIS and ASTRA, and four policy scenarios. The GDP increase by 2030 compared to a policy off scenario is expected to be between 0.36-0.44%, and employment is expected to increase by 60,000-656,000 net jobs.³² Other examples include a study by ETUC which found that extending the scope of the directive on energy performance of buildings would create between 30,000 to 90,000 additional man-years in the EU-15, and 90,000 man-years in the new Member States.³³ The same study also found that policies that restricted transport activity while rebalancing transport modes in favour of rail would lead to an overall average annual growth in employment of around 2% for passenger transport and 1.25% for freight transport.³⁴

²⁸ World Bank (2009) p. 192.

²⁹ World Bank (2009) p. 190.

³⁰ World Bank (2009) p. 236.

³¹ In models used for assessing the impact of climate friendly investments on economic variables, the alternative scenario does not take account of damages of continued climate change to economies. Therefore "win-win" outcomes are evaluated against a hypothetical baseline where there is a lower level of climate friendly investment but damages from climate change do not increase. A case for intervening in climate change can often be made even under these assumptions.

³² The lower estimate is a result of the ASTRA model, and is significantly lower than results for the NEMESIS model, as the ASTRA model takes the conservative view that other sectors are very sensitive to increases in the price of energy, reducing competitiveness and output of these sectors, resulting in reduced employment.

³³ GHK (2009b) p. 28.

³⁴ GHK (2009b) p. 30.

The economic impacts of investment in climate change mitigation are a multitude of first and second order impacts, which depend on the economic situation in a country or region. To illustrate this, the main conclusions of the study by the Fraunhofer Institute on the economic impacts of increasing the share of renewable energy are summarised below. Renewable energy support schemes set off diverse adjustment reactions among companies and households which are felt as structural effects on sectoral and regional level. These are caused by the impacts of investment in renewable energy, O&M, and renewable fuel use. The sum of these adjustment reactions change macroeconomic variables through the following mechanisms:³⁵

- *Price and cost effect*: the impact of increased energy prices on household consumption results in a modification of household consumption; the impact on industry is felt in the form of increased costs and decreased competitiveness (depending on various factors such as energy intensiveness and exposure to international competition); and the impact on the public budget may be felt through the reduction of other expenditure, or increase in taxation which may result in crowding out of investment or consumer spending.
- *Structural demand effects*: direct impacts such as increased demand for the products of different sectors, e.g. additional demand for investment in renewable energy (structural investment impulse) and in the case of biomass for agricultural and forestry products (structural O&M impulse) have a positive impact on GDP. Some indirect effects such as decreased demand for investment in conventional energy (structural investment impulse) and for conventional fuels (fuel demand impulse), and decreased consumer demand because of higher energy prices (structural consumption impulse) seem to offset positive impacts to an extent, but not entirely.
- *Multiplier and accelerator effects*: if conditions for Keynesian unemployment are met, positive employment and growth effects of a renewable energy policy can be felt through multiplier and accelerator effects. The impact on households through the multiplier effect results from higher income for those employed in the renewable sector, resulting in higher demand for consumption goods, higher production of these goods, higher revenues for sectors, and ultimately higher income for those employed in these sectors. The impact on industry results from an accelerator effect: higher demand for investment, O&M or fuels in the renewable energy sector results in higher demand in backward industries, higher production in these industries, and higher demand in their own backward industries.
- *Innovation/productivity effects*: The production possibilities of national economies increase due to growth and renewal of capital stock. Some empirical studies have shown that renewable energy may also contribute to an increase in production possibilities.³⁶ There are also first mover advantages in technology-intensive sectors where international trade success is greatly influenced by quality competitiveness. The size of these advantages depend on e.g. innovation ability, learning effects and early market presence.

The precise impacts which will be felt in a MS or region will depend on several factors, including e.g. the existence of sectors producing RES technologies (i.e. will a country be an importer or producer of the technologies it installs), initial conditions in the labour market (multiplier effects will be felt if Keynesian unemployment exists in an economy), the potential to produce biomass and generate income from the sale of fuels, national

³⁵ For a detailed description see Fraunhofer ISI (2009) pp. 10-24. The results are based on a model with neo-keynesian features.

³⁶ Fraunhofer ISI (2009) p. 21. refers to Walz (1999).

competitiveness to export renewable technology (depending in particular on the competitiveness of the manufacturing sector), inter-industry structure (depending on input-output relations of the energy sector and major sectors producing renewable technologies), etc.³⁷

The study concludes that an increase in renewable energy investment and production has the potential to contribute to growth and employment, but "a thorough analysis of which RES technology best fits each country in terms of the specific production cost is a pre-requisite for a successful renewable policy".³⁸ In addition, there is a need to tailor investment in renewable energy to specific economic goals, as different renewable energy technologies contribute to different economic goals to a different extent: e.g. biomass is a relatively low-tech high employment option, while photovoltaic and wind energy are highly technology intensive, and early investment in these can provide the potential for EU MS to become lead markets in specific renewable energy technologies, but create less jobs.

Other theories of economic growth, e.g. the neoclassical growth model and endogenous growth theory can also be linked to positive economic impacts of climate change interventions. Both theories emphasise the importance of learning and technological change for long-term economic growth. Some renewable and other low carbon energy technologies represent high-tech products which could potentially contribute to competitiveness of EU regions and MS. The market for these technologies is growing - 2008 was the first year when global investment in new power generation in renewable energies was greater than in fossil fuel technologies.³⁹ European MS (in particular higher income MS) have a leading role in innovative renewable energy technologies. The EMEA (Europe, Middle East and North Africa) region was the region with most technology incubators, driven by European governments setting aside funding for this purpose.⁴⁰

There are several considerations when deciding whether an intervention provides a true win-win outcome for a given region, e.g.:

- Contribution to economic priorities such as growth, jobs, competitiveness, etc. as well as other priorities such as energy security;
- Emission reduction potential;
- Timeframe of impacts and the contribution of an intervention to long-term economically, socially and environmentally sustainable development;
- Contribution of the intervention to positive (or negative) technological lock-in effects;
- The regional dimension of impacts and the need to build on regional assets and regional potential and to utilise underutilised resources within the given region;
- Cost-effectiveness in delivering positive impacts.

Taking into account the specific conditions in a country or region, and designing appropriate support schemes which can contribute to local development and fit into an overall national strategy are therefore of high importance.

³⁷ Fraunhofer ISI (2009) p. 146. and p. 168.

³⁸ Fraunhofer ISI (2009) p. 187.

³⁹ UNEP (2009) p. 11. Investment in renewables suffered a decrease due to the economic crisis. The figure for renewables includes large hydro.

⁴⁰ UNEP (2009) p. 26.

2.1.2 Anticipating and managing structural change

The transition to a LCE, and changing climate conditions will require restructuring of economies and not just marginal changes compared with business as usual. This structural change is economically similar to structural changes which have been witnessed previously in the EU, e.g. in the context of a declining coal industry in the UK, or the structural changes that took place in the transition economies of Central and Eastern Europe in the 1990s, but with a different driver. The driver is climate change policy and climate change impacts, which will lead to restructuring by impacting both the supply side and the demand side of businesses⁴¹ resulting in changes in the weights of sectors within total economic output. At a company level restructuring entails "a modification of a company's workforce that affects both the qualitative (skills and qualifications required) and quantitative features (number of jobs),"⁴² and results in changes in company structure, organization, products, production processes and technology. It is a process through which there is simultaneously creation and destruction of company value, with impact on distribution of income and jobs in the economy.

Several studies have shown that the overall net impacts on economic output of the transition to a LCE will be slightly positive at a European level. At the EU level climate change policy will have a modest aggregate economic impact on job growth in the EU. Climate change policies are more likely to lead to a redistribution of jobs within and across sectors than to changes in absolute employment levels.⁴³ The impact on regional employment and GDP will be highly differentiated. Heavy industries are regionally concentrated, and impacts on some industries will be stronger. E.g. "the iron and steel industry (...) could experience job losses of 50 000 of a total of 350 000 for EU-25 as a whole, due to relocating production outside the EU and lack of new investment in Europe."⁴⁴

It has been shown that not only the impacts of climate policy, but also the impacts of climate change will be differentiated across Europe, more highly concentrated in some regions. The Regions 2020 study on climate change has shown that climate change is expected to impact the EU asymmetrically, and the impact shows a core-periphery pattern for the EU. "Regions under highest pressure are generally located in the south and east of Europe, the whole of Spain, Italy, Greece, Bulgaria, Cyprus, Malta and Hungary, as well as most of Romania and southern parts of France. (...) In some cases severe impacts will be felt in regions with low GDP per capita and therefore lower capacity for adaptation to climate change. (...) In regions heavily impacted by climate policy, or climate change a structural adjustment response will be required which the heavily impacted region may not be able to deliver on its own."⁴⁵

In this respect, climate change and in particular climate change mitigation can be considered as drivers of structural change. Preparations have to be made to ensure that the transition to a low carbon, climate-adapted economy is as smooth as possible. Such a role is in line with the purpose of the ERDF, which, according to Article 160 of the Treaty is "intended to help to redress the main regional imbalances in the Community through participation in the

⁴¹ GHK (2009b) Companies have to adapt to regulatory changes (i.e. standards, carbon price, innovation policy, etc.) stemming from climate change policy, which will impact both the supply and demand side of businesses. On the supply side it will result in increased costs, e.g. higher compliance costs, increased costs of energy production, increased price of energy, increased price of transport. In addition, there will be demand-side changes, resulting from e.g. changing customer demands due to changed preferences or a decreased demand for high energy consuming products. Some sectors will be more susceptible to these changes than others, depending on e.g. employment intensity, competition intensity, and ability to respond to challenges.

⁴² DG EMPL (2008) p. 8.

⁴³ GHK (2009b) p. 14. citing studies of ETUC (2008), CERES (2008) and IEEP (2008)

⁴⁴ Cedefop

⁴⁵ Regions 2020 pp. 23-24.

development and structural adjustment of regions whose development is lagging behind and in the conversion of declining industrial regions."

Anticipating and managing the required change is important, as structural adjustments may not happen automatically. Even in cases where the net impacts of structural change are anticipated to be positive, such as in the case of an increase in employment as a result of an increase in production of renewable energy, there may be a role for managing structural change. The labour market recovers slowly when economic changes take place, and there may be a significant role in labour market matching through investing in human resources, so that those losing jobs in one sector are ready to enter the labour market with new skills, to be employed in an emerging sector. Several sectors are already facing skill shortages, and this could hamper the greening of the economy.⁴⁶ The lack of skills required could reduce the capacity of the economy to respond to government and EU incentives, and increase the likelihood of painful transition costs for EU MS.⁴⁷ "ETUC 2008 have suggested that the transition from high to low carbon employment is not without its difficulties. They argue the potential cost of the transition for employees in "losing" sectors is not appreciated, nor is the vulnerability of some categories of workers in relation to the opportunities of re-skilling. Because of this, irreversibility effects are underestimated: the employment of displaced workers could become structural if developments are not correctly anticipated and followed up."⁴⁸

So far most of the available literature on restructuring and climate change focuses on employment, skills and labour markets. However, structural change requires a complex response from actors, as it involves the formation of new companies, new orientations for existing companies, new products, production processes and technologies. There is a need to examine what potential role Cohesion Policy can play to assist the transition process.

2.1.3 Overcoming financial constraints

The polluter pays principle is the basic principle which applies within the European Union with regard to the internalisation of environmental externalities, in accordance with Article 191 of the Treaty. There has been a gradual application of the principle in Member States, with a transition from public support to user fees and charges. However, Article 192 of the Treaty states that "without prejudice to the principle that the polluter should pay, if a measure (...) involves costs deemed disproportionate for the public authorities of a Member State, such measure shall lay down appropriate provisions in the form of (...) financial support from the Cohesion Fund set up pursuant to Article 177."

As mentioned in Section 2.1, climate change is considered by the Stern Review to be a challenge where financial constraints may lead to suboptimal outcomes, which implies the need for intervention by the public sector. The estimate in section 3.2 on the costs of climate change mitigation and adaptation in the EU indicate an annual figure slightly above EUR 100 bn. Another source estimates cumulative capital expenditure in the period 2006-2030 is at EUR 1,535 bn for investment in renewable production of electricity and heat, and renewable transport fuels, in order to attain the 20% renewable energy target by 2020. The investment costs increase with time, from EUR 129.6 bn for first 5-year period and EUR 218.2 for last 5-year period.⁴⁹ Naturally not all of these costs would be borne by EU funds, and it is necessary

⁴⁶ GHK (2009b) p. 36.

⁴⁷ GHK (2009b) p. 37.

⁴⁸ GHK (2009b) p. 38.

⁴⁹ Fraunhofer (2009) p. 106. The figures do not include electricity generation costs.

to determine the amount of public funding, and within this the proportion of EU funding that is required.

The economic crisis, which has resulted in increased public debt, adds to the problem of financing investments in climate change, particularly in some of the poorer regions and MS of the EU. Cohesion Policy could play a role in financing interventions which would otherwise be largely financed by the public sector, e.g. energy efficiency in public buildings, or public transport.

2.2 Cohesion policy performance

Confirmed by ex-post evaluation, Cohesion policy has performed well in the area of investments in environmental infrastructure and in assuring the use of the environmental acquis in Cohesion countries. Planned spending in the current programming period on climate change in the form of direct and indirect spending amounts to 16.1 % of total Community financial contribution under Cohesion Policy, or a total of EUR 56 bn.⁵⁰ Absorption of funds is significantly lower than the average figure of 22.4 % in urban, multimodal and intelligent transport, inland waterways and renewable energy.

⁵⁰ Based on figures contained in the Strategic Report 2010

Table 1: 2007-2013 Cohesion and Structural Fund expenditures on climate change adaptation and mitigation

CSG Theme	Priority theme		EU Investment		
	Code	Title	Planned EU investment (m EUR)	Allocated to projects selected (m EUR) ⁵¹	Allocated compared with planned (%)
Rail	16	Railways	4.133.172	1.063.718	25,70%
	17	Railways (TEN-T)	18.428.295	4.088.511	22,20%
	18	Mobile rail assets	629.394	148.728	23,60%
	19	Mobile rail assets (TEN-T)	665.532	70.622	10,60%
Other Transport	25	Urban transport	1.660.211	229.902	13,80%
	26	Multimodal transport	1.628.786	570.442	35,00%
	27	Multimodal transport (TEN-T)	446.841	42.030	9,40%
	28	Intelligent transport systems	1.085.514	122.532	11,30%
	30	Ports	3.547.314	1.139.572	32,10%
	31	Inland waterways (regional and local)	268.088	44.733	16,70%
	32	Inland waterways (TEN-T)	603.973	83.907	13,90%
	52	Promotion of clean urban transport	6.126.565	1.982.867	32,40%
Energy	39	Renewable energy: wind	785.491	23.069	2,90%
	40	Renewable energy: solar	1.064.250	126.776	11,90%
	41	Renewable energy: biomass	1.786.119	212.912	11,90%
	42	Renewable energy: hydroelectric, geothermal and other	1.123.791	136.016	12,10%
	43	Energy efficiency, co-generation, energy management	4.270.266	894.408	20,90%
Environment	49	Mitigation and adaption to climate change	304.727	224.861	73,80%
	53	Risk prevention (...)	5.801.168	706.753	12,20%
	54	Other measures to preserve the environment and prevent risks	1.675.671	799.896	47,70%
Total Climate Change			56.035.167	12.712.257	22,68%

Source: Commission Staff Working Document accompanying the Strategic Report 2010

With regard to efforts to combat climate change, in the 2000-2006 period, 120 Operational Programmes supported investment in these areas with a total amount of €2.3 billion. These investments mainly targeted enterprises, either to create capacity for renewable energy production or to provide energy savings through new technologies. The results of the ex-post evaluations confirm that the wider economic impacts of these investments are mixed. On the

⁵¹ With the exception of 6 Member States, data was extracted for funds allocated by 30.09.2009.

one hand, they can both lead to increased competitiveness (e.g. improved energy efficiency); on the other, they can lead to decreased employment (especially in energy production, new technologies require less labour).

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Part III

COMMISSION STAFF WORKING PAPER

Impact Assessment - Part III: ERDF and CF Regulations IAB opinion

Accompanying the document

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on specific provisions concerning the European Regional Development Fund and the
Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006**

and

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006

and

**Proposal for a
REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on specific provisions for the support from the European Regional Development Fund to
the European territorial cooperation goal**

{COM(2011) 614 final}
{SEC(2011) 1139 final}

{COM(2011)611 final}
{COM(2011)612 final}

ERDF and CF regulations IAB opinion

Title	IAB Text	What we did
Overall assessment		
	<p>The report provides a sufficient evidence base to inform decisions on the scope of ERDF enterprise support and support for territorial cooperation. Certain elements should, however, be further improved, particularly the explanation and justification of the chosen infrastructure option and the rationale for only re-examining the scope of funding in limited areas.</p> <p>First, the report should better demonstrate the seriousness of the problems.</p> <p>Second, the context should be more clearly explained with a summary of evaluation findings and details on why no other problems or issues are addressed here.</p> <p>Third, the chosen infrastructure option should be better explained and justified through explaining the intervention logic and predicted effects.</p> <p>Fourth, an effort should be made to strengthen the analysis of impacts in terms of enterprise support including by more fully discussing the use of financial instruments other than grants.</p>	<p>These issues have been addressed. Details on how specific recommendations have been addressed can be found below.</p>
Main recommendations for improvements		
(1) Better demonstrate the seriousness of problems.	<p>The report should incorporate further evidence, using quantitative data where possible, showing why the identified problems require a response. Recent information should be used where available, with appropriate qualifying statements.</p>	<p>Several references to studies, evaluations and public consultations have been included in the report.</p>
	<p>On infrastructure, a strong effort should be made to underpin the claims about differing progress on cross-border and national sections of projects with data.</p>	<p>A map was already contained in the IA which shows that construction of infrastructure towards the EU periphery and cross-border infrastructure is not as advanced as infrastructure inside MS or connecting MS to the EU centre.</p>

	The concrete shortcomings of the previous approach to financing transport links (TEN-T) via ERDF and CF should be shown too.	The description of issues related to financing transport infrastructure has been rewritten and focused more clearly on EU added value and coordination of EU funding instruments.
	On the territorial cooperation issue, extracts from the evaluations should be incorporated to better substantiate the arguments and an annex could be used for context and a summary of evaluations.	Further evidence from studies and public consultation has been included.
	The reports that prompt concerns about the added value of ERDF enterprise support when used for generic grants for large firms should be more clearly summarised and perhaps quoted, not simply referenced in footnotes.	Additional references to evaluations have been included.
(2) Clarify the context explaining why only these aspects of rules are re-examined.	The report should open with a short summary of evaluation findings on ERDF and the Cohesion Fund. Where identified problems are being tackled via other proposals, this should be mentioned.	The summary of evidence from evaluations is included separately in the sections describing the problems.
	The rationale for not re-examining the scope of funding for certain other objectives within this report should be explained. Evidence should be used to show why it is not worth adjusting ERDF rules to strengthen synergies between, on the one hand, environment and climate change investments and, on the other hand, investments with different objectives (as suggested in evaluation).	A footnote has been included in the introduction to the problem definition (section 2) explaining why there is no need to re-examine the scope of interventions in the field of environment and climate change.
(3) Better explain and justify the chosen infrastructure option.	The infrastructure options should be carefully rewritten to remove technical jargon and to clarify their practical implications, including coordination arrangements and changes that will be seen from a beneficiary viewpoint.	The infrastructure options have been shortened, rewritten and structured more clearly. The focus is now on EU added value and coordination of EU funding instruments.
	For the preferred option, the key rules that will govern scope and other matters should be separately listed for: the share of CF to be ring-fenced in the Connecting Europe Facility, other CF allocation, other EU instruments. It should be clear which funds will be governed through the standard cohesion policy mechanism of the partnership contract. It should also be	The share of the Cohesion Fund to be ringfenced for the CEF has been made explicit (€10 billion). It is mentioned in the options that the Cohesion Fund is only available to poor MS.

	recalled that CF is restricted to less developed Member States.	
	The impact analysis on these options should outline the intervention logic perhaps using a diagram, e.g. changes to CF rules, expected shifts in the mix of types of supported projects, expected changes in delivered outputs (roads), subsequent impacts in travel terms, impacts over the relevant pillars. Tentative predictions should be made about the likely outputs or effects where possible, or a stronger justification for not attempting this should be supplied.	The thematic shift in expenditure is contained in the General Regulation IA. Expenditure in areas outside the scope of investment (e.g. investment support in large enterprises and basic infrastructure in richer regions) would be 0. However, it is difficult to predict how the funds freed up by limiting expenditure in these areas would be programmed by MS.
(4) Justify the chosen enterprise support option with more reference to evidence.	The predicted advantages of the selected enterprise support option are underpinned by logical reasoning with reference to evaluations which judged large firms as being more able to invest than SMEs in the absence of public support. The report should clarify the methodology used in the evaluations concerned, including whether any empirical evidence was found about whether funded firms would have probably been able to find funding from elsewhere.	References to empirical evidence from evaluations have been added supporting a focus on funding for SMEs.
	As problems with competition are mentioned in the problem section, likely impacts in this regard should be mentioned too.	There is no data available on this.
	The report should also provide arguments under the baseline option about why the established mechanisms that direct programme supervisors to make proven growth-enhancing investments would be insufficient.	There are no mechanisms currently which ensure that support to enterprises concentrates on areas where there are market failures to be addressed. This was already mentioned in the report but has been further substantiated with evidence from evaluations.
	A fuller analysis should be supplied about the use of financial instruments other than grants, to clarify the aims of interventions that would use these, the likely nature of	The IA does not contain a detailed analysis of the potential to use financial instruments, however, references to financial instruments

	these instruments (e.g. loans, guarantees, equity investments) and the expected results.	have been added in two places.
(D) Procedure and presentation	Operational objectives should be formulated in more specific terms, consistent with the appraisal criteria used.	Operational objectives have been aligned with the assessment criteria used to compare options.
	The baseline option should be scored as zero, with other options shown as relatively better or worse than this.	This has been done.