Report on
Synergies between the
Transport component of
Horizon 2020 and the
Cohesion Policy 2014-2020

Issued by 7th Research Framework Programme
Transport Programme Committee experts group
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EXECUTIVE SUMMARY

The Seventh Research Framework Programme Transport Programme Committee (FP7 TPC) produced the present Report on the synergies between the transport challenge of Horizon 2020 and the Cohesion Policy 2014-2020 to investigate new approaches to improve the use of EU resources for stimulating transport research, development and innovation in Europe. Its main focus is to enhance exploitation of synergies between the Research Framework Programme Horizon 2020 and the Cohesion Policy funds - called European Structural and Investment Funds (ESIF\(^1\)) - to multiply the potential and impact of EU resources in terms of research and innovation.

With the purpose of raising awareness on existing funding sources and on the importance of exploring synergies, the Report analyses past approaches under the EU 7\(^{th}\) Research Framework Programme and suggests ways to improve exploitation of transport research and innovation funding opportunities, by combining Horizon 2020 and ESIF, within the next programming period 2014-2020. This opportunity is supported by the increased flexibility of both programmes and must be implemented in a framework of coherent programming, common prioritisation and strategic policy coordination.

Transport remains one of the main priorities of the Cohesion Policy for the next programming period, while also being one of the major societal challenges identified by Horizon 2020. In this context, Member States cooperation with the European Commission in facing societal challenges related to transport require a pro-active approach linking Horizon 2020 and Cohesion Policy to maximise their impacts. A holistic approach, covering cross-cutting issues, competitiveness and sustainability aspects of transport, calls for the active and harmonised involvement of all actors and agents at European, national and regional levels. Common planning and strategic prioritisation of the two programmes are of critical importance for maintaining transport sector’s competitiveness and achieving results in overcoming major incumbent challenges.

With clearly defined seven year programme architecture, Horizon 2020 addresses major societal challenges, including smart, green and integrated transport. As a funding instrument, Horizon 2020 provides seamless support for the development of activities from idea to market. Conversely, the Cohesion Policy provides increased investment for research and innovation capacity building as a basis for regional development, and supports research results market deployment. The concept of Smart Specialization Strategy, as a prerequisite for accessing Cohesion Policy funds, is introduced as a central component linking the two policies with the objective of stimulating competitive advantage of countries and regions. A significant number of regions have already acknowledged their intents to specialise in transport related sectors.

\(^1\) ESIF refers to: ERDF – European Regional development Fund, Cohesion Fund, ESF - European Social Fund, EAFRD - European Agricultural Fund for Rural Development and EMFF – European Maritime and Fisheries Fund
The Report aims to inform national and regional transport research authorities and stakeholders about the possibilities offered by the research and cohesion policies legislative framework 2014-2020, about the Smart Specialisation concept and support platform. It provides suggestions on how to overcome the barriers identified, promotes drivers such as strategic coordination of policies and programmes and enhanced communication between actors, and indicates potential transport areas where synergies could bring added value.

The analysis is based on knowledge, experience and reflection of the FP7 TPC working group experts, as well as on the results of two consecutive sets of questionnaires. The first questionnaire, addressed to the delegates to the FP7 TPC and summarised in Annex I of the present Report, allowed the identification of the national authorities responsible for strategic planning and operational implementation of the Research Framework Programme and the Cohesion Policy. The second questionnaire (see Annex II), addressed to these identified national authorities, provided an insight on the perceived barriers and drivers for synergies, as well as indication on transport research sectors where synergies could be further exploited.

The main barriers to synergies identified mainly concern different policy aims and scope, lack of harmonisation of programmes implementation, including complex legal and financial rules, insufficient coordination of responsible authorities at all levels, leading to deficits of global analysis and often resulting in duplication of efforts.

Nonetheless, drivers are equally recognized - Smart Specialisation Strategies aiming to identify specific areas where synergies can be exploited, strategic policy planning and coordination, common programme planning and prioritisation, enhanced access to EU financial instruments and SME internationalisation, etc. The coordination of national and regional strategic planning and prioritisation within the EU framework is central for an integrated approach of research, development and innovation activities, requiring a pro-active attitude of national and regional authorities and main stakeholders (industry and research institutions) involved in transport research, development and innovation. Synergies are triggered by enhanced multi-level interaction, alignment and coordination of independent policies and programmes, allowing increased impact and better achievement of objectives.

Cohesion Policy funds’ investments in transport and research infrastructure led to increased national and regional capacities, paving the way to excellence by supporting actors’ participation (in particular SMEs but not only) to the EU research programme, or by enabling market deployment of EU funded research results. In parallel, research results provided solid scientific basis for the Cohesion Policy to invest where added value for its objectives could be achieved by deploying innovative solutions into the market.

Compelling examples of past successful synergies in the area or transport support the idea that Member States cooperation with the EU in facing transport related challenges requires a more pro-active approach linking Horizon 2020 to Cohesion Policy to stimulate innovation, economic growth and regional convergence and cohesion in Europe. These examples deal with, for instance, sequences of research projects deploying their results at national/regional level using Cohesion Policy funds, or Cohesion Policy support to infrastructure further used within the framework of research projects, etc. The fields concerned by the identified examples cover electro-mobility, road infrastructure, energy efficiency and smart grids in rail

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2 The stakeholders include potential beneficiaries, as well as authorities and agencies responsible for managing the different programmes at European, national and regional levels.

3 See Annex III ‘Working Group Experts’
transport, transport corridors, aeronautics regional research infrastructure, etc. These examples indicate that, within the current programming period 2007-2013, synergies occurrence has been rather limited. For the next period 2014-2020, as research is central to Europe 2020 strategy and the Cohesion Policy, and that synergies are explicitly mentioned by the legislative texts of both Cohesion Policy and Horizon 2020, further awareness must be raised towards these opportunities of joint or sequential use of research and cohesion funds expected to maximise the impact of research in innovation on EU competitiveness.
1. INTRODUCTION

1.1 Rationale

1.1.1 Closing the Innovation Divide

European countries and regions currently underexploit their potential in terms of research and innovation due to large national and regional disparities in terms of funding intensity and competitiveness levels of this field. Multiple reasons exist for such disparities, many of them of structural nature, underlying issues such as lack of research and innovation investment, insufficient capacities, and a low participation in international networks.

Continuous commitment from Member States is decisive to ensure national research and innovation systems multiply impact in terms of growth and jobs. Increased national investments and leveraging the maximum value from public money invested in research are key elements for closing the gap in performance levels across the EU.

"Member States need to speed up their efforts to use the EU resources. As we look ahead to the new programming period, we expect Member States and regions to focus the policy even more on results and priorities that will have the greatest impact." Regional Policy Commissioner Johannes Hahn⁴

Instruments such as those in the framework of the Cohesion Policy 2014-2020, as well as the EU Research and Innovation Framework Programme Horizon 2020 will support the closing of the innovation divide between European regions.

On one side, Horizon 2020 addresses major societal challenges, including transport, aiming to maximise the competitiveness impact of research and innovation and to raise the level of excellence in the research base. The seven years programme - main funding instrument to implement Europe 2020 Innovation Union flagship initiative - is designed to broaden access for participants through major simplification - new financial instruments, new opportunities for SMEs, etc. It brings together all existing research and innovation funding, providing support in a seamless way from idea to market, through simpler programme architecture and Rules for Participation.⁵

On the other side, Cohesion Policy provides increased investment for research and innovation capacity building - building a stairway to excellence - as research is a crucial factor for regional development. Strategic investment in research and innovation is one of the eleven priority thematic objectives of the Cohesion Policy 2014-2020, as Europe 2020 put research and innovation in the driver's seat for taking the Union out of the economic crisis. Moreover, the upcoming Cohesion Policy has identified the promotion of sustainable transport and removing bottlenecks in network infrastructure as a priority thematic objective.

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By including the possibility to combine funds from the Research and Cohesion Policies, the next programming period 2014-2020 marks a major evolution as it provides the opportunity to streamline economic development efforts on regional strengths, where EU funding impact and added value can be maximised. This new opportunity is supported by increased flexibility of both programmes, and must be implemented in a framework of coherent programming, common prioritisation, and strategic coordination. Combined funding enables ‘bottom-up’ strategic innovation development process in Member States and regions.

The development of Smart Specialisation Strategies is meant to identify the unique research and innovation characteristics of each country and region leading to competitive advantage. The Smart Specialisation Strategy is vital to ensure efficient conditions for research and innovation investment, and is an ex-ante conditionality for using the European Regional Development Fund. Cohesion policy galvanises Smart Specialisation to act as a capacity building instrument, based on learning mechanisms and supporting skills in regions and Member States. According to the Smart Specialisation Platform\(^6\) data, numerous European regions had already expressed their intention to specialize in transport related issues: sustainable transportation, intermodality and logistics, etc.

1.1.2 Smart, green, and integrated transport in Horizon 2020 and the Cohesion Policy

The quality and cost of transport services has a major impact on the mobility of people and goods and subsequently on the ability of business to compete, on economic growth, and on quality of life. Transport is fundamental to a more efficient European economy struggling to exit the current economic crisis. Efficient management of transport systems requires a holistic approach integrating multiple cross-cutting issues such as climate action, energy, infrastructure, etc. Technology developments and innovation in this sector substantially increase the competitiveness of the European industry, create jobs and sustain Europe's leading role in world markets. Smart mobility enhances industrial capability and further integrates European single market, while responding to the climate imperatives.

Horizon 2020 Transport component aims to achieve a sustainable-socially inclusive-resource efficient transport that respects the environment, supports better mobility, targeting less congestion, more safety and security; and maintains and increases global leadership for the European transport industry. With transport accounting for about 60% of oil consumption and

\(^6\) [http://s3platform.jrc.ec.europa.eu](http://s3platform.jrc.ec.europa.eu)
more than 25% of all CO₂ emissions and still growing, the greening of the transport system and smart mobility have become urgent imperatives if Europe is to meet its ambitious energy and climate goals for 2020 and 2050, and to promote growth. To achieve Europe’s targeted 80% CO₂ reduction by 2050 compared to 1990, oil consumption in the transport sector must drop by around 70% from today’s levels, implying extended use of alternative energy sources, and radical change of our travel behaviour and mobility patterns.

Transport remains one of the main priorities of the Cohesion Policy for the next programming period with funding allocated to national infrastructures funded via the Trans-European Transport Network⁷, and substantial contribution to investments in projects supporting transport carbon emission reduction, urban transport facilities, etc.

During the period 2007-2013, FP7 provided around 4 billion Euros⁸ for transport research and innovation activities. In the same period, the Cohesion Policy has allocated around 65 billion Euros for overall research activities in all areas, including transport, representing over 25% of total Cohesion Policy budget. Around 75 billion Euros have been allocated to transport projects⁹- infrastructure, studies, and research activities. The opportunities raised by combining research and cohesion funds are thus of great magnitude.

1.1.3 Scope and aim of the Report

The European Commission and the 7th Research Framework Programme Transport Programme Committee experts working group, in the light of the opportunity to combine Research and Innovation and Cohesion Policy funding, and based on previous programmes experience, has investigated the potential to further exploit synergies between the two policies and programmes in transport research and innovation field. Each Member State and region, as well as the European Commission, is encouraged to examine the recommendations of the present Report and adopt them taking into consideration local specificities.

Creating synergies is important from a research policy point of view. Synergies are expected to fill in the research and innovation gap by attracting cohesion funds to support for e.g. deployment of close to market innovative research results; research infrastructure providing solid basis for participating in Horizon 2020, etc. Synergies are vital for many areas of research and innovation, but in particular for transport where development and deployment of innovations is generally a lengthy and resource intensive process. Transport is facing several major challenges in managing a sustainable development towards an increased and demanding mobility. This situation calls for new and innovative approaches and for a new strategic view, for European, national and regional harmonized initiatives refocused on intermodal and multimodal approaches, as well as on new socio-economic realities.

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⁸ http://cordis.europa.eu/fp7/transport/
⁹ http://ec.europa.eu/regional_policy/thefunds/funding/index_en.cfm
The aim of this Report is to raise awareness among transport research and innovation actors - including authorities managing programmes at European, national and regional levels - on existing funding opportunities for transport research and innovation within Horizon 2020 and the Cohesion Policy and to emphasise the crucial importance of common planning and strategic prioritisation of the programmes to stimulate synergies creation and impact on competitiveness.

The Report provides indication on the general legislative framework and existing pre-conditions, as well as useful basic information aimed to facilitate access to both sources of funding – e.g. whom to address, at national and European level, in order to explore practical opportunities for combining funds and other resources; links to available information and guidance, etc.

The Report is not meant to detail the concrete functioning of a scheme combining funds from both sources, nor to draft an exhaustive list of cases where the scheme is applicable, but to draw the attention of the interested stakeholders to the very existence of this opportunity. Nevertheless, it must be reminded that the European Commission will provide further guidance for practical implementation of projects and activities combining both sources of funding at a later stage and in a specific regulatory framework foreseen for autumn 2013.

1.2 Approach

Synergies require better understanding of the European, national and regional priorities, of the existing barriers, of the drivers supporting them, as well as awareness on authorities involved in European, national and regional programmes, at strategic and operational levels, and on previous projects experience. The Report equally identifies transport research and innovation areas and actions suitable to trigger and optimise synergies, and supports the creation of communication fora or channels streamlining the information flow between actors involved.

Two consecutive sets of questionnaires have been addressed to Member States FP7 Transport Research Programme Committee delegates, as well as to Cohesion Policy and Transport Research and Innovation national authorities. The first questionnaire aimed to identify the national authorities responsible for the strategic and operational aspects of both policies and programmes; while the second questionnaire (see Annex II) enquired about the potential barriers and drivers for synergies, as well as about the sectors where synergies could be best exploited. The conclusions of the latter have been feeding the core of the Report, whilst the first set of replies has been compiled in a 'Who's Who' Annex I to the Report.

This Report is illustrated with project examples in the field of transport where synergies supported research capacity building stimulating participation to EU Research Framework Programme, or contributed to the deployment of research results at national or regional level.
2. LEGISLATIVE FRAMEWORK FOR DEVELOPMENT AND EXPLOITATION OF SYNERGIES BETWEEN THE COHESION POLICY AND HORIZON 2020

2.1 Europe 2020

The current economic and social crisis exposed structural weaknesses in Europe's economy, while long-term challenges such as globalisation, resources scarcity, or ageing keep intensifying. In response, EU prepared the Europe 2020 strategy for Europe's social market economy for the 21st century. Based on knowledge and innovation, the strategy is enabling a collective action pulling Europe out from the crisis, turning it into a smart, sustainable and inclusive economy, generating employment, productivity and social cohesion. The Commission proposed seven flagship initiatives to streamline progress under each priority. Among them, of interest for the present Report are ‘Innovation Union’ and ‘Resource efficient Europe’, as well as the Commission's Communication on the ‘European Research Area’.

2.1.1 'Innovation Union' Flagship Initiative

The aim of Innovation Union Flagship Initiative is to create a single innovation market by setting the right conditions for investment in research and innovation, while re-focusing research and innovation policy on the current societal challenges, such as climate change, energy and resource efficiency, health and demographic change, improving access to finance and ensuring innovative ideas can be turned into products and services that create growth and jobs. The Commission commits to support research and innovation investment by strengthening the role of EU instruments such as the Cohesion Policy funds or the Research Framework Programme, and streamlines administrative procedures to facilitate access to funding, particularly for SMEs.

Ideally, at national level, Member States will streamline national and regional R&D and innovation systems to foster excellence and smart specialisation, reinforce cooperation between universities, research and business, implement joint programming and enhance cross-border co-operation in areas with EU added value.

2.1.2 European Research Area

The European Research Area embraces 'a unified research area open to the world based on the Internal Market, in which researchers, scientific knowledge and technology circulate freely and through which the Union and its Member States strengthen their scientific and technological bases, their competitiveness and their capacity to collectively address grand challenges.'

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12 http://ec.europa.eu/research/era/joint-programming_en.html
13 http://ec.europa.eu/research/era/index_en.htm
ERA is at the heart of the Europe 2020 strategy and its Innovation Union flagship initiative, and is expected to be completed by 2014.

One of the key aims of ERA is to reduce regional disparities in research and innovation performance, supporting excellence through Smart Specialisation. It is vital that Member States and regions shape their research systems in line with their own strengths identified in the Smart Specialisation. ERA's goal is to have a unified interconnected and interoperable research European research system, capable to play a leading role in addressing the grand challenges. Cooperation will enable the necessary breakthroughs to tackle these challenges and will prevent duplication of effort at national level. Nevertheless, this goal does not exclude competition, as competition ensures best value for public money in research.

"Completing ERA will bring efficiency, quality and impact gains and new opportunities for all Member States. It is an opportunity for less well-performing Member States to take responsibility for reforming their research systems, driving a process of Smart Specialisation, and helping to close the innovation divide. Horizon 2020 and the Structural Funds will support this."\(^{14}\)

2.1.3 'Resource efficient Europe' Flagship Initiative

The aim 'Resource efficient Europe' Flagship Initiative is to support the shift towards a resource efficient and low-carbon economy, decoupling economic growth from resource and energy use, reducing CO2 emissions, enhancing competitiveness, modernise the transport sector and promoting greater energy security.

At EU level, the Commission mobilises financial instruments such as the Cohesion Policy funds and the Research Framework Programme as part of a consistent funding strategy pooling EU and national public and private funding. EU Transport sector 'decarbonisation' and increased competitiveness are stimulated by measures such as early deployment of grid infrastructure of electric mobility, intelligent traffic management, better logistics, pursuing the reduction of CO\(_2\) emissions for road vehicles, aviation and maritime sectors including the launch of a major ‘European Green Vehicle Initiative’\(^ {15}\) promoting new technologies including electric and hybrid vehicles, setting common standards and developing necessary infrastructure support. For Aviation, the Joint Technology Initiative ‘Clean Sky’ is accelerating the demonstration of innovative emission reducing technologies.

At national level, Member States need to develop smart, upgraded and fully interconnected transport and energy infrastructure, integrated in major European transport corridors and gateways, to make full use of ICT, as well as to focus on the urban dimension of transport where much of the congestion and emissions are generated.


2.2 Horizon 2020

2.2.1 Objectives

From 2014 to 2020, Europe will be running the world’s largest collaborative programme for research and innovation, Horizon 2020\(^{16}\), providing user-friendly, simple access and management for the participants.

The programme is a modern funding instrument designed to deliver on the policy priorities of Europe 2020 strategy and of the Innovation Union initiative. It provides a challenge-based approach responding to the economic crisis and creating employment and growth by an effective coordination between the three main pillars of the programme:

1. Scientific excellence
2. Societal challenges
   - Health, demographic change and wellbeing;
   - Food security, sustainable agriculture and the bio-economy;
   - Secure, clean and efficient energy;
   - **Smart, green and integrated transport**;
   - Climate action and resource efficiency, including raw materials;
   - Inclusive, innovative and secure societies

Around 38% of Horizon 2020 budget will be further invested in research and innovation to tackle climate change, transport competitiveness and sustainability, resources scarcity, safety and security. Transport amounts around 22% of the societal challenges budget, meaning up to 8% of Horizon 2020 total budget.

3. Industrial leadership.

The novelty resides in the fact that Horizon 2020 unifies European research and innovation funding by integrating all the existing programmes - the Framework Programme for Research and Innovation, part of the Competitiveness and Innovation Programme\(^{17}\), and the European Institute of Innovation and Technology\(^{18}\) - in a seamless one, thus coupling research to innovation, with a focus on societal challenges. As a result, applicants and participants will deal with fewer, more-flexible and more user-friendly funding schemes and procedures.


\(^{17}\) [http://ec.europa.eu/cip/index_en.htm](http://ec.europa.eu/cip/index_en.htm)

Coordination of activities funded through Horizon 2020 with those supported by other EU funding programmes is vital for the achievement of Europe 2020 ambitious objectives. This includes an appropriate articulation with ESIF in the context of national and regional research and innovation Strategies for Smart Specialisation. Horizon 2020 drive for excellence, combined with the capacity-building features of the Cohesion Policy, stimulates economic development and raises international attractiveness of regions concerned.

Cohesion support to research and innovation capacity building at regional level, such as the establishment of regional centres of excellence, may help close the innovation divide in Europe; while support to large-scale demonstration and pilot line projects aids in achieving the objective of EU industrial leadership.

### 2.2.2 Transport in Horizon 2020

Parallel to the competitiveness issue, Europe also needs to achieve green growth and energy efficiency, goal passing through the achievement of smart, green and integrated transport. Transport research is essential for meeting EU climate related goals and to boost sector’s competitiveness, thus generating growth and jobs.

The main priorities for transport research under Horizon 2020 are:

- Making transport more sustainable: resource-efficient transport that respects the environment;

- Making transport and transport systems seamless: better mobility, less congestion, greater safety and security

- Keeping transport competitive: the European transport industry as a global leader

- Making transport research responsive: socio-economic research and forward-looking activities for policy-making.

Transport, the backbone of European economy, is crucial for the economic crisis recovery. Research and technology provide solutions for sustainable transport - intelligent transport systems, new generation vehicles, alternative energy and propulsion systems - are just some of the solutions on offer to make mobility greener and more efficient.

Transport component of Horizon 2020 strikes a balance between the holistic view - transport systems, cross-cutting issues such as intelligent transport systems and urban mobility - and the specificities of each transport mode, between competitiveness and sustainability, and between technology and socio-economic aspects.
2.2.3 Specific measures for less performing regions and supporting widening participation to the program

Horizon 2020 societal challenge "Inclusive, innovative and secure societies" indicates that "Specific measures shall be taken to unlock excellence in less developed regions, thereby widening participation in Horizon 2020".19

Under this challenge, in the Specific Programme implementing Horizon 202020, the following supporting measures are mentioned with the objective of articulating research and cohesion funding programmes and contribute to the closure of the innovation divide between European regions:

- Policy Support Facility - policy learning to reform research and innovation policies and to support the development of smart specialisation strategies;

- Teaming schemes - enhancing the connections between researchers in all Member States and regions and supporting their access to international networks for excellent innovators;

- Twinning schemes - linking centres of excellence and innovative regions in less developed Member States to international leading counterparts elsewhere in Europe; supporting innovative clusters and recognising excellence in less developed regions;

- ERA Chairs21 – attracting outstanding academics to institutions with a potential for research excellence.

Particular attention should be given to these instruments by the transport research community given their clear synergy potential with the transport challenge of Horizon 2020 and transport related investments using ESIF.

2.3 Cohesion Policy

2.3.1 Objectives

Cohesion Policy 2014-2020 aims to a more strategic concentration of resources on key priorities and more focus on results and impacts. The Common Strategic Framework for the Cohesion Policy 2014-2020 established strategic guiding principles to facilitate the programming process and the sectorial and territorial coordination of Union intervention under the Cohesion Policy. To promote the harmonious, balanced and sustainable development of the Union, coordination with other relevant Union policies and instruments has also been foreseen.

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21 http://ec.europa.eu/research/era/era-chairs_en.html
The eleven thematic priorities of the Cohesion Policy\textsuperscript{22} from 2014-2020 are:

1. **Strengthening research, technological development and innovation**

2. Enhancing access to, and use and quality of, information and communication technologies

3. Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector and the fisheries and aquaculture sector

4. **Supporting the shift towards a low-carbon economy in all sectors**

5. Promoting climate change adaptation, risk prevention and management

6. Protecting the environment and promoting resource efficiency

7. **Promoting sustainable transport and removing bottlenecks in key network infrastructure**

8. Promoting employment and supporting labour mobility

9. Promoting social inclusion and combating poverty

10. Investing in education, skills and lifelong learning

11. Institutional capacity and efficient public administration

The Cohesion Policy 2014-2020 plays a key role in implementing Europe 2020 strategy. In line with the objectives and targets of the strategy for smart, sustainable and inclusive growth, and taking into account the key territorial challenges, the thematic objectives 1, 4 and 7 are relevant for transport research.

During the current programming period 2007-2013, support from the Cohesion Policy to research and innovation reached around € 65,000 million Euros. In this sense, *Cohesion Policy has become a major source of European support for research, rivalling the budget of both FP7 (EUR € 50,500 million) and CIP (EUR € 3,600 million)*\textsuperscript{23}.

In the new programming period 2014-2020, the total proposed budget will be EUR 375 billion, including funding for Connecting Europe Facility, designed to enhance cross-border projects in energy, transport and information technology. A total of up to 100 billion Euros of Cohesion budget will be allocated to research and innovation, and more than 20% to transport.\textsuperscript{24} The objectives mainly concern improving the accessibility of regions, supporting Trans-European Networks, and investing in environmentally sustainable transport facilities, particularly in urban areas.

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\textsuperscript{22} http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2012:0496:FIN:EN:PDF - Article 9 ‘Thematic Objectives’, Title III ‘Strategic Approach’, Chapter I. Annex I, article 4.3 ‘Horizon 2020 and other centrally managed EU programmes in the areas of research and innovation’


\textsuperscript{24} Cohesion Policy legislative proposal
2.3.2 Instruments


The legislative architecture for the Cohesion Policy comprises an overarching regulation setting out common rules for the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund, the European Agricultural Fund for Rural Development (EAFRD), the European Maritime and Fisheries Fund (EMFF), generically called European Structural and Investment Funds (ESIF).

Cohesion Policy main principle is the shared management between, on one hand, national Managing Authorities responsible for local impact assessments, implementation of Operational Programmes and payments, and on the other hand, the European Commission responsible for individual national Operational Programmes’ negotiation, implementation monitoring and financial control, as well as for major projects approval.

Three Funds are directly involved in research and innovation funding:

- **ERDF**[^27]: European Regional Development Fund - managed by European Commission Directorate-General for Regional Policy[^28]. Research and innovation investment is proposed to be the most important thematic priority for the ERDF, along with SMEs, ICT, infrastructures, territorial cooperation;

Energy Efficiency and Smart Grids in Rail Transport

FERROSMARTGRID project (on-going regional project Andalusia, funded with ERDF via the INTERCONECTA Spanish Programme): aims to the migration of the conventional rail power system to electric smart grid. An important activity to note is exploring the optimal use of kinetic and potential energy of the trains on the assumption of the existence of all procedures and devices that allow profit thereby tending to create the intelligent network (eco-driving, networking of power nets, accumulators, own generators, intermittent consumption and reversible power supply stations that connect with smart public networks).

The on-going FP7 MERLIN project (Sustainable and intelligent management of energy for smarter railway systems in Europe: an integrated optimisation approach), coordinated by UNIFE, aims to investigate and to demonstrate the viability of an integrated management system in achieving a more sustainable and optimised energy usage in European electric mainline railway systems. Multiple operational scenarios add complexity to the development of suitable and appropriate energy management solutions, for both operators and infrastructure managers alike. Existing assessment tools require an integrated approach and instead focus on only singular elements of the system in isolation, e.g. Rolling Stocks, Substations etc. Network models tend to also be assessed separately without considering their links to other networks or any potential alternative scenarios. Critically, these tools tend to neglect the variation in emission levels, energy usage and other associated costs that occur over different periods of the timetable.

The added value of the synergy created by both projects leaded to energy saving in the railroad through the inclusion of new technologies in electric railway. The regional project is led by the Spanish rail infrastructure manager ADIF, who is also one of the core partners of the FP7 project.

More info:

- **Cohesion Fund**[^29] - managed by European Commission Directorate-General for Regional Policy - is aimed at Member States whose Gross National Income (GNI) per inhabitant is less than 90% of the EU average. The Cohesion Fund finances the trans-European transport networks and supports projects related to energy or transport with a benefit to the environment such as energy efficiency, use of renewable energy, developing rail transport, supporting intermodality, strengthening public transport, etc.

- **ESF[^30]**: European Social Fund - managed by European Commission Directorate-General for Employment, Social Affairs & Inclusion[^31]. The ESF is ‘Europe’s main instrument for supporting jobs, helping people get better jobs and ensuring fairer job opportunities’.

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**Polish university uses ESF funds to train skilled workers for the aviation industry**

A new career opportunity is on offer to students at the Polish University of Information Technology and Management in Rzeszow, Poland. The ‘Fly to your career – study aviation management’ programme will train up to 50 students a year in the field of commercial aviation; will bring experts from Germany, as well as local expertise, and will provide a strong ‘mobility’ element. According to Professor Ulrich Desel from the University of Bad Honnef in Germany – one of the external teachers – graduates will meet the growing demand for trained employees in the sales and marketing departments of major airlines, in the operational divisions of commercial airports across Europe, with companies that charter aircraft, and in the field of air transport logistics.

More info:

[^30]: [http://ec.europa.eu/esf/home.jsp](http://ec.europa.eu/esf/home.jsp)
Policy support will be provided for national and regional governments on research and innovation policy design to raise the excellence of their science base and support competitiveness of their industries. Member States and regions will be strongly supported in the effective implementation of the new research and innovation programmes under the Cohesion Policy, in line with the Smart Specialisation Strategies. They are invited to work closely with the authorities responsible for implementation of both policies at European and national level to deliver coherent and streamlined funding opportunities for the beneficiaries.

The Cohesion Policy foresees support for all types of innovation including key enabling technologies\textsuperscript{32} and strong support to research infrastructure. The Smart Specialisation Strategy activities listed in the Cohesion Policy legislative acts mainly target:

- Upstream actions - capacity building - preparing regional players to participate to Horizon 2020 by identifying opportunities for joint financing of research and innovation of European interest.

- Downstream actions - providing the means to exploit and diffuse research and innovation results into the market, by creating an innovation-friendly business environment for SMEs.

\textsuperscript{32} \url{http://ec.europa.eu/enterprise/sectors/ict/key_technologies/}
Suite of FP6 projects leading to Cohesion Policy investments to optimize infrastructures

The FP6 projects CERTAIN, SPENS, and ARCHES formed a cluster of almost 7 million Euros, tackling the measures necessary to reduce the gap between the levels of road infrastructure systems in the New Member States and other Central European countries. These three projects together contributed to enabling partners from New Member States to play a much more active role in the future of European research activities, as a result, narrowing the gaps in their integration. Moreover, the technologies and solutions developed by this cluster can be implemented at national and regional level using Cohesion Policy funding in countries among those receiving the highest share of the Cohesion Policy funding.

CERTAIN - the project relates to the development and use of best practice in road infrastructure maintenance and construction to be applied to EU 12 countries where financing new projects and refurbishment is not of a high level but where techniques can be used to improve the networks in a cost efficient manner but have a very positive enhancement of the performance of that infrastructure. It is aimed to facilitate integration of the EU New Member States and other Central and Eastern European countries into the established research and development community of the European Union. [http://certain.fehrl.org/](http://certain.fehrl.org/)

SPENS - the objective of this research project was to develop appropriate tools and procedures for the rapid and cost-effective rehabilitation and maintenance of roads in the EU New Member States. The project searches for materials and technologies for road pavement construction and rehabilitation that would behave satisfactorily in a typical climate, have an acceptable environmental impact, be easy to incorporate within existing technologies, be cost-effective and easy to maintain. [http://spens.fehrl.org/?m=1](http://spens.fehrl.org/?m=1)

ARCHES - the overall goal of the project was to develop ways to raise the standard of the highway structures of New Member States and Central and Eastern European Countries to the level necessary for their full economic integration into the EU and for the future development of the EU. The project developed more appropriate tools and procedures to avoid unnecessary interventions (repairs/replacements) in structures, prevent the development of corrosion by simpler and less expensive techniques, implement faster, more cost-effective and longer lasting rehabilitation techniques (repair or strengthening) of sub-standard and unsafe bridges. [http://arches.fehrl.org/](http://arches.fehrl.org/)
3. SYNERGIES BETWEEN HORIZON 2020 AND THE COHESION POLICY

3.1 Concentrating Resources to Maximise Impact

The current policy framework, including Europe 2020 strategy that aims to increase R&D spending to 3% of European GDP by 2020, provides a comprehensive set of actions for stepping up research and innovation performance. The Commission's proposals for the post-2013 research and cohesion policies reflect its ambition to invest in Europe's innovative future.

Cohesion Policy funds act as multipliers paving the way to excellence for more actors towards Horizon 2020, while locally exploiting EU funded research results. Horizon 2020 is focussing on excellence at European level, regardless the geographical location, with the aim of fostering the European Research Area, while the Cohesion Policy is mainly targeting less developed countries and regions, providing support for research and innovation capacity building as a *stairway to excellence*. Funds can complement each other either from the geographical perspective or from the side of the innovation chain, bringing ideas towards maturity.

The major objectives of the Cohesion Policy are to support economic cohesion, reducing socio-economic disparities between European regions, promoting growth and employment, and addressing sustainability issues. Research, technological development and innovation are crucial for regions’ economic performance, especially when they have an impact on their socio-economic development. Thus, Cohesion funding can only support research projects contributing to these policy objectives.

Synergies ensure that policies are aligned and don't overlap, contributing to effective achievement of Europe 2020 objectives. In the post-2013 period, investment in the field of research and innovation from ESIF and Horizon 2020 should be complementary, therefore it is necessary for the policies to work in tandem, and common governance and priority alignment at all levels is vital.

Synergies can be envisaged at three different levels:

- at policy level, Cohesion Policy supports research in identified priority fields, serving its own purposes in terms of competitiveness, growth and jobs;

- at programme level, authorities in charge of implementing operational programmes should timely and closely cooperate on designing operational programmes;

- at project level, impact on and added value for regional economy should be demonstrated.

At policy level, Cohesion Policy supports, inter alia, capacity building, development of research and innovation systems, demonstration and deployment of innovative research results, knowledge transfer, thus providing support to innovative business creation and fostering cooperation between enterprises and research institutions. Investment in modern and innovative research infrastructure or in SMEs support in Member States receiving most of the Cohesion Policy funds will enable their enhanced participation to the EU Research Framework Programme, thus attracting supplementary funds in those regions.

Article 60(2) of the Cohesion Policy Regulation, offering the possibility to invest up to 10% from an Operational Programme budget in other EU regions, provided the measure benefits
the territory corresponding to this Operational Programme, is important for cross-border research infrastructure (including ESFRI Roadmap), for cross-border science networks or clusters, and supports value chain networking investments. Enhanced budget share for territorial cooperation under the next Cohesion Policy also incentives trans-national cooperation between regional innovation actors, clusters, networking of procurers or innovation agencies, and integrates less advanced regions in a targeted manner.

Research and cohesion policies are distinct programmes, with independent modus operandi, but their interaction can generate converging effects. Therefore synergies should be looked for where they are possible and bring further added value. Horizon 2020 Communication\(^{33}\) proposes a clearer division of labour between Horizon 2020 and the Cohesion Policy, while strengthening interactions as, even though the two policies have distinct objectives, they do have the same strategic goal of serving the purposes of Europe 2020. Better integration of the two policies and implementing programmes depends on increased and efficient cooperation between the actors in the Member States at European national and regional level.

At programme level, Member States Cohesion Policy managing authorities should ensure appropriate provisions are timely foreseen in the respective Partnership Agreements and Operational Programmes, enabling sequential funding schemes such as cohesion funding at national or regional level, followed-up by results integration in an international setting under a Horizon 2020 call for proposals. Common programming period of seven years eases the synchronisation of funding and supports better planning, thus strengthening the potential for synergies. To enable the synergy mechanism to produce real results, transparency and clear, seamless information flows between the managers of the two Union funding programmes, as well as common planning and common implementation are of utmost importance.

At project level, each funding instrument will maintain individual rules. Article 31 of Horizon 2020 Regulation allows cumulative funding, provided added value for research and innovation is created. Nevertheless, Horizon 2020 and Cohesion Policy funding may not be used for the same expenditure item, and Horizon 2020 grants will not be divided in segments funded separately from both research and cohesion funds. The general co-funding obligation applicable for EU research framework programme grants will be maintained in Horizon 2020 and synergies between the two programmes should not be interpreted as a possibility to substitute the share of co-funding requested from the consortium within a Horizon 2020 grant with funds from the Cohesion Policy. Member States and regions will be provided with specific EU Guidelines\(^ {34}\) setting the regulatory framework for combining EU funding sources.

From an operational perspective, synergies can be envisaged as streams of projects building on each other - e.g. ERDF builds up research and innovation capacities and/or infrastructure – the latter are being used in Horizon 2020 projects – the results of these Horizon 2020 projects are being further developed in a national/regional level ERDF co-funded industrial projects.


\(^{34}\) Guide 2014-2020 available in autumn 2013

TIGER and TIGER DEMO\textsuperscript{35} projects paving the way to transport corridors financed by TEN-T

TIGER “Transit via Innovative Gateway concepts solving European - intermodal Rail needs” project is a Large Scale Integrated Collaborative Project for the development of Rail transport in competitive and co-modal freight logistics chains. TIGER DEMO and TIGER are two separate projects, but are part of the same overall initiative funded by FP7. TIGER DEMO is the continuation of the TIGER project and is set to take the four TIGER pilots into a full scale demonstration for subsequent market uptake commercial exploitation. TIGER DEMO objective is the demonstration of innovative technological and management solutions, capable of optimising the containers traffic flows to/from major European ports. The project defined new production processes, technological alternatives, new business models supported by management tools in order to improve the effective performances and competitiveness of the rail connections between seaports and their near and distant hinterlands. During the Full Scale Demonstration, TIGER DEMO will manage the various services fine tuning, as their effective performances are fundamental for achieving the full commercial exploitation in the market place. TIGER DEMO is planning co-modal solutions for maritime traffic flows in four different geographical locations in Europe. Among TIGER DEMO four demonstrators, Genoa Fast Corridor – Corridor 24 Rotterdam - Genoa\textsuperscript{36}, aiming to reduce congestion in Genoa Harbour, is further funded at regional level in cooperation with Liguria Region, Autorità Portuale di Genova, Rivalta Terminal Europa and Terminal San Giorgio by Cohesion Policy. Thus, it contributes to optimize and increase the productivity of new and existing infrastructure included in the TEN-T and partially funded by the Cohesion Policy funds. The results of these pilots, after validation, are reproducible in other EU ports and will be ready for full market exploitation.

http://www.tigerproject.eu/
http://www.tigerdemo-project.eu/

\textsuperscript{35} http://www.transport-research.info/web/

\textsuperscript{36} The rail freight corridor Rotterdam – Genoa is expected to be one of the first among six major rail freight corridors to be equipped with the European rail traffic management system (ERTMS)
3.2 New Features of 2014-2020 Programming Period

The policy framework 2014-2020 facilitates synergies between Horizon 2020 and Cohesion Policy investments. The main novelties in this regard can be summarised as follows:

- Research and innovation have been placed at the heart of Europe 2020 and Cohesion Policy 2014-2020, accompanied by consequent funding allocation for the next programming period.

- Newly created legislative possibility to combine Horizon 2020 grants and ESIF within the same project, provided that they fund different cost items.

- The Smart Specialisation Strategy, designed to streamline research and innovation priorities to regional capacities, is an ex-ante conditionality for cohesion funding.

- The possibility to use up to 10% of Cohesion Policy funds outside the receiving region enables transnational cross-border projects, essential to combine Horizon 2020 and ESIF.

- Enhanced support from both policy instruments to knowledge intensive innovative clusters, thus to knowledge transfer between regions, represents a major opportunity for less performing regions to ‘climb’ the stairway towards research and innovation excellence.

- Financial instruments supported by Horizon 2020 allow leveraging Member States or regions Cohesion Policy funds financial resources.

Despite the existence of opportunities supporting synergies within the previous programming period, namely the territorial dimension of FP7 and CIP, synergies observed had only a limited scope. New features embedded in the next legislative framework reiterate and reinforce the European legislator determination to achieve policy coherence and subsequent reinforced impact on raising the scientific excellence and generating growth.

3.3 Smart Specialisation Strategy

Research can be used as a tool for regional cohesion and a way to transform the economy of our regions through entrepreneurial discovery. The Smart Specialization Strategy\(^{37}\) is the key instrument for the synergies between research and cohesion policies as it crystallises a strategic approach to economic development through research and innovation targeted support.

Annex I of the Innovation Union flagship initiative outlines Smart Specialisation as a ‘multi-annual strategy (that) defines a limited number of priorities, preceded by an analysis of strengths and weaknesses at national and regional level and of emerging opportunities and market developments, and (that) provides a predictable policy and budgetary framework. The strategy duly reflects EU priorities, avoiding unnecessary duplication and fragmentation of efforts, and actively seeks to exploit opportunities for joint programming, cross-border cooperation and exploiting the leverage effects of EU instruments.’

Smart Specialisation Strategies identify within a country or a region a limited number of priority fields of economic and industrial strengths, research and technology excellence, innovation capacities, competitive advantages and future market potential. They seek comparative advantages in specific research and innovation areas, fostering innovation via

\[^{37}\] http://s3platform.jrc.ec.europa.eu/s3pguide
entrepreneurship and technological adaptation of regions to the knowledge economy. Specialisation is to be understood in this context in a broader sense, and in any case it should not lead to lock-ins. The Strategies aim to avoid duplication and fragmentation of efforts financed with scarce public resources within the EU, while developing the single market through inter-regional connections. They imply a careful selection and support targeting only those research and innovation activities that are driving performance and address key challenges such as the current economic crisis, and help transform the economic structure to face globalisation. Selected research and innovation fields need to demonstrate the highest potential for knowledge spill-overs, thus helping regional economies to diversify into higher added value markets, to modernise, or to exploit new economic activities or emerging technologies. Transport sector should be in the priority shortlist where local opportunities and capacities exist.

The concept is about *smart specialised diversification* based on regional strengths and potential, and it is a process where public authorities act as facilitators. Actors such as European Technology Platforms[^38] can act as binders to bring the different policies together on a national or regional level. National and regional authorities need to commit to a long-term strategic plan with clear, well-defined research and innovation priorities (based on a SWOT-analysis), specific objectives, performance indicators and measurable milestones and deliverables, including measures to stimulate private research and innovation investment, a framework outlining available budgetary resources and prioritisation of investments for research and innovation, and a monitoring and review system. After several years of parallel implementation of programmes, concrete visible results are expected in terms of increased support to research and innovation activities in the specific priority areas selected in the strategies. Critical mass is crucial to avoid duplication and fragmentation in the ERA.

At policy level, Horizon 2020 is expected to support the emerging Smart Specialisation strategic priorities by considering and reflecting them to a certain extent in the annual Work Programmes in topics with strong territorial impact where synergies with the Cohesion Policy can be exploited. Directorate General for Research and Innovation[^39] needs to translate research results for regional use and ensure seamless knowledge flows from one region to another.

Having a Smart Specialisation Strategy in place is an ex-ante conditionality in the future Cohesion Policy. Nevertheless, the Commission will not dictate priorities or measures to take at national or regional level, but will facilitate mutual learning through a Smart Specialisation Platform. The Platform supports Member States and regions in using Cohesion Policy funds as tools to develop their research capacity, including support to joint research programmes, in line with Cohesion Policy objectives.

The Platform for Smart Specialisation has been established in June 2011 under the auspices of the Joint Research Centre's Institute for Prospective Technological Studies[^40] in Seville with a purpose of providing assistance for countries and regions in their Smart Specialisation Strategy development. The Platform acts as a facilitator by bringing together the relevant policy support and EU funding programmes information. It offers hand-on support by providing methodological guidance, peer review, mutual learning, expert advice and best


practice, strategy and research agenda assessment, etc. Currently, around 130 regions from 18 Member States are registered to the Platform, plus eight countries at national level. The mapping of regions' and Member States intentions in terms of smart specialisation fields has already started. The Smart Specialisation platform is currently building the Eye@RIS3 online searchable database of priorities defines as 'activities, in which an investment of resources is likely to stimulate knowledge-driven growth. The Eye@RIS3 is intended as a tool to help strategy development'.

Additional information of utmost importance prior to the start of the Smart Specialisation Strategy process is provided by e.g. Regional Innovation Scoreboard, ERAWATCH, Regional Innovation Monitor, European Cluster Observatory, Digital Agenda Scoreboard, SME performance review, Joint Research Centre IPTS studies, etc. Good practices and further guidance are to be found for e.g. RegioStars, EIT European Entrepreneurship Awards, European Technological Platforms, Guides on incubation, Committee of the Regions, OECD, World Bank, JASPERS, and other organisations such as EURADA, ERRIN, EBN, EEN and the NCP networks, etc.

41 http://s3platform.jrc.ec.europa.eu/map
43 http://erawatch.jrc.ec.europa.eu/
44 http://ec.europa.eu/enterprise/policies/innovation/policy/regional-innovation/monitor/
45 http://www.clusterobservatory.eu/index.html
48 http://ipts.jrc.ec.europa.eu/
49 http://ec.europa.eu/regional_policy/cooperate/regions_for_economic_change/regiostars_en.cfm
50 http://www.eitawards.eu/index.aspx
51 http://cordis.europa.eu/technology-platforms/
53 http://cor.europa.eu/Pages/welcome.html
54 http://www.oecd.org/
55 http://ec.europa.eu/regional_policy/thefunds/instruments/jaspers_en.cfm#2
57 http://www.errin.eu/
58 http://www.ebn.be/
59 http://een.ec.europa.eu/
Developing a Smart Specialisation Strategy involves a six steps procedure covering the analysis of regional context, potential and governance, the selection of priorities and of the requested policy mix, and finally monitoring and evaluation of the impacts generated.

Within the scope of the present Report is the priorities definition - Smart Specialisation Strategy should prioritise transport activities where regions have a competitive advantage or the potential to generate knowledge-driven growth, and have the potential to bring the economic transformation needed to tackle the major societal and environmental challenges e.g. innovative infrastructure, ICT for active ageing or supporting intermodality, mobility solutions to reduce GHG gasses or traffic congestion such as dynamic traffic management, etc. The Smart Specialisation Strategy priority definition approach is mainly bottom-up, requiring active involvement of local stakeholders.
EDRF funded regional infrastructure - Experimental Flight Test Center for UAVs - used in an FP7 aeronautics project

**ATLAS** is an Experimental Flight Test Center located in Villacarrillo (Jaén, Spain) and promoted by FADA (Andalusian Foundation for Aerospace Development) which provides the international aeronautics community with an airfield with superior scientific and technological facilities and an segregated airspace, suitable for Unmanned Aircraft Systems (UAS) testing. Its main goal is to offer manufacturers, regulation authorities, Academia and technology centers, a unique scenario for research and technology development of UAS and air traffic control/management. ATLAS was partially funded under Cohesion Funds by the ERDF Operational Programme for Andalusia 2007-2013.

The main objective of the FP7 **PLANET** project is the design, development and validation of an integrated platform to enable the deployment, operation and maintenance of large-scale/complex systems of heterogeneous networked Cooperating Objects, including Wireless Sensor and Actuator Networks and mobile objects. The platform will support optimal and adaptive deployment and operation by means of mobile cooperating objects, i.e. vehicles, networked with static nodes. The platform will be validated in two complementary scenarios: the monitoring of the Doñana Biological Reserve with very high ecological value and very sensitive to the impact of pollution, and the highly automated airfield scenario, oriented to the Center for Experimental Flight ATLAS, in which security plays an important role and where wireless communication and cooperative techniques pose significant challenges.

This funding sequence supported the progress on the Technology Readiness Level in this field: while PLANET aims at TRL7 (System prototype demonstration in typical application scenario), ATLAS aims at TRL8 (Flight qualification through test and demonstration).

More info: [http://www.atlascenter.aero](http://www.atlascenter.aero)
[http://www.planet-ict.eu](http://www.planet-ict.eu)
3.4 Transport Research Areas Supporting Synergies

Yet recognising inherent difficulties to propose a unique set of transport priorities or domains of particular relevance for exploitation of synergies, an exercise was carried out to identify common areas and objectives contributing with a strong innovation content at European level and at the same time retaining a clear regional dimension.

The following table attempts to identify expected links of Cohesion Policy thematic objectives with transport innovation opportunities. Authorities and stakeholders are invited to tailor these synergy options tacking into account national and regional specificities.

<table>
<thead>
<tr>
<th>Cohesion policy Thematic Priorities</th>
<th>Opportunities for synergies with Horizon 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strengthening research, technological development and innovation</td>
<td>Regional projects (funded with Cohesion Policy funds) that help building research and innovation capacity.</td>
</tr>
<tr>
<td></td>
<td>Transport research and innovation infrastructure that facilitates participation in Horizon 2020 and crystallises economic growth, e.g. technology parks, incubators, firm cooperation, excellence centres, etc.</td>
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<tr>
<td>2. Enhancing access to, and use and quality of, information and communication technologies (ICT)</td>
<td>ICT tools for better mobility and transport schemes - deployment of EU funded research projects results into market applications at European, national and local levels</td>
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<tr>
<td></td>
<td>Use of ICT infrastructure for transport simulation</td>
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<tr>
<td>3. Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector and the fisheries and aquaculture sector</td>
<td>Support to SME in the area of transport</td>
</tr>
<tr>
<td>4. Supporting the shift towards a low-carbon economy in all sectors</td>
<td>Regional deployment of production centres for alternative fuels for transport</td>
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<td></td>
<td>Regional demonstration of low-carbon vehicles</td>
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<td></td>
<td>Regional deployment of recharging infrastructure for low-carbon vehicles</td>
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<td></td>
<td>Regional actions for the promotion of low-carbon mobility patterns - social marketing</td>
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<tr>
<td>5. Promoting climate change adaptation, risk prevention and management</td>
<td>Specific research activities exploring or deploying solutions for climate change adaptation and resilience of transport</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
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<td>6.</td>
<td>Protecting the environment and promoting resource efficiency</td>
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<td></td>
<td>Large scale regional testing of transport technologies that reduce resource consumption</td>
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<td></td>
<td>Transport products recyclability projects and activities</td>
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<td>7.</td>
<td>Promoting sustainable transport and removing bottlenecks in key network infrastructure</td>
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<tr>
<td></td>
<td>Solutions for multimodal and intermodal transportation of persons and freight, from one case project to European deployment</td>
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<tr>
<td></td>
<td>Transport infrastructure</td>
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<tr>
<td></td>
<td>Deployment, at regional level, of emerging transport technologies, for instance, advanced ITS</td>
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<tr>
<td>8.</td>
<td>Promoting employment and supporting labour mobility</td>
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<td></td>
<td>Activities for the promotion of transport-related jobs, including training</td>
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<tr>
<td>9.</td>
<td>Promoting social inclusion and combating poverty</td>
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<td></td>
<td>Regional projects increasing transport accessibility and affordability that are scalable at European level or that are continuation of previous Horizon 2020 actions</td>
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<tr>
<td>10.</td>
<td>Investing in education, skills and lifelong learning</td>
</tr>
<tr>
<td></td>
<td>Activities for the promotion of all types of education and training in the field of transport. In particular, training/educational programmes for sustainable mobility/behaviour</td>
</tr>
<tr>
<td>11.</td>
<td>Institutional capacity and efficient public administration</td>
</tr>
<tr>
<td></td>
<td>Support to regional transport administrations</td>
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</tbody>
</table>
4. BARRIERS AND DRIVERS TO SYNERGIES

This section identifies the most common barriers leading to underutilised opportunities of streamlining efforts of cohesion and research policies and programmes, and the most relevant drivers and benefits of synergetic exploitation of both funding opportunities, largely justifying the additional effort requested from both the Commission and the Member States to align policy objectives and coordinate programmes' implementation. Strategic use of funding from both programmes is expected to maximise both the impact of research and innovation on competitiveness, and the leverage effect of EU funds. An important element in this equation is the Smart Specialisation Strategy. Being essentially bottom-up, it streamlines Member States and regions research priorities and acts as a capacity building instrument. The learning mechanisms and skills created are expected to support Member States and regions capacity to participate in Horizon 2020.

4.1 Main Barriers to Synergies

Horizon 2020 and the Cohesion Policy, both provide support for research and innovation activities. During the past programming period, Cohesion Policy support to research and innovation often lacked strategic external perspective necessary in order to avoid duplication of efforts between regions.

Important structural differences between policies and programmes prevent exploitation of synergies. Barriers are generally represented by different policy aims and scope, lack of harmonisation of programmes implementation, including complex legal and financial rules and eligibility and evaluation criteria, insufficient coordination of responsible authorities at all levels, leading to deficits of global analysis and often resulting in duplication of efforts. Yet, excellence in research can become a Cohesion Policy tool for competitiveness and growth.

4.1.1 Different policy aims and scope

Cohesion Policy funds and the Research and Innovation framework programme have followed different approaches, allowing for limited programme interoperability.

Different rationale – excellence versus cohesion

- Research and Innovation Framework Programme focuses on promoting excellence in science and is mostly technology-driven, whereas Cohesion Policy stimulates regional socio-economic development, capacity building for innovation and growth through the promotion of innovation friendly business environments.

- Furthermore, research programme focus on excellence often resulted in concentration of funding in most performing Member States and regions in terms of research and innovation capacity, thus limiting synergies with less performing ones, main recipient of Cohesion Policy funds.

- Cohesion Policy lack of focus on aspects such as critical mass, demand stimulation, market access for new forms of innovation and emerging technologies and services constitutes an additional barrier to full exploitation of cohesion support to research and innovation deployment.

Different types of projects
The different scope is translated into different project architecture.

- FP7 supported projects with a trans-national perspective, requiring consortia of international partners, while the Cohesion Policy supported projects selected on the basis of their economic, social and territorial impact criteria, ensured larger allocation to less developed regions, and relied on regional management.

- Centralised management for Research and Innovation programme versus shared management with a national and regional scope and implementation of the Cohesion Policy funds

- Operational barriers also emerged from the application of State Aid rules – limiting both competition between, and participation of enterprises.

**Different evaluation procedures and implementing rules**

- Evaluation procedures, including eligibility criteria, employed by the two programmes are different - competitive selection based on excellence versus geographical non-competitive allocation, performed by different authorities, and requiring different criteria and proposal format.

- The programmes have different legal and administrative rules, instruments, mechanisms, and projects’ evaluation and selection procedures. In-depth knowledge is required for stakeholders to make use of both in an integrated manner, knowledge often lacking, especially in the case of SMEs.

**4.1.2 Insufficient coherence between different levels of governance**

The survey implemented for the purposes of this Report provided examples of limitations rising from aspects such as:

- Insufficient proactive coordination and interaction between policies at different governance levels, hampering a holistic approach between sectors and disciplines.

- Different governance structures and authorities involved - European Commission, Member States and regional authorities – with individual mandates, resulting in autonomous approaches towards research and innovation.

- Limited convergence of objectives resulting from national fragmentation – alternative focus of certain Member States either on the Framework Programme either on Cohesion Policy.

- Operational Programmes developed in parallel, often lacking external perspective leading to duplication of efforts.

- The number of Operational Programmes per Member State can be high, thus hindering their effective coordination.

- Ownership and operational responsibilities divided between different actors (ministries and agencies) - science/education versus economy/transport/finance/environment. These ministries have different priorities and scopes, with a potential of better coordination.

- Difficulty to identify coordination mechanisms and key actors involved in the process at Cohesion Policy thematic levels – responsible national or regional authorities for transport research and innovation priority.
4.1.3 Limited communication protocols/channels between responsible authorities

- Limited interaction of the different actors and networks involved in the agenda setting, programming, planning and selection of activities in the research and cohesion policies for both Member States and the Commission.

- Lack of established regular basis information-sharing processes and existing bureaucratic burdens prevent collective ability to effectively unify efforts of management and operational authorities within national/regional governments.

- Lack of overarching vision and awareness on the potential mutual reinforcements of the two programmes, amplified by the perceived high difficulty level of the respective programmes

- Scarcity of dedicated personnel.
4.2. Toolbox for Synergies Exploitation

During the previous programming period, synergies were to be found only exceptionally although the regional dimension of FP7 and CIP gained importance over the years. Nonetheless, Cohesion Policy funds investment in transport and research infrastructure led to increased Member States capacity, enhancing in certain cases their participation to the EU Research Framework Programme, as well as their integration to the European Research Area. The project examples mentioned in this Report outline cases where existing possibilities have been further exploited. For the next period 2014-2020 and beyond, solid preconditions exist for synergy implementation since both instruments share the same programming period and the same goals set out under the Europe 2020 Strategy for smart, sustainable and inclusive growth.

ERDF funded test systems used in FP6 aeronautical projects

Two 6th Research Framework Programme pioneering transport research projects LAPCAT (Long-term Advanced Propulsion Concepts and Technologies) and ATLLAS (Aerodynamic and Thermal Load Interactions with Lightweight Advanced Materials for High-Speed Flight) used the test system for long-endurance hypersonic technologies METHYLE, developed in France, at Bourges-Subdray plant, with support from the ERDF.

The purpose of the LAPCAT project is to evaluate the feasibility of a civil transport "aircraft" capable of flying using different types of combined cycle engines. ATLLAS focuses on the development of composite materials capable of withstanding extreme temperatures and intended for the structural parts and the combustion chambers of these future engines.


4.2.1 Strategic Policy Planning and Coordination

Joining specific goals of the Transport Research Programme and wider goals of the Cohesion Policy is expected to lead to better projects results and to support both policies’ objectives achievement. Common policy planning and priority alignment are major drivers for synergies, leading to greater policy coherence, and allowing better exploitation and leverage of EU funding. Coordination of priorities would encourage participation of stakeholders such as regions, universities, and innovative SMEs to both programmes, and would incentivise their cooperation.

Setting clear objectives for central policy elements such as innovation and competitiveness, and ensuring the same strategy is shared along the different levels – supranational, national and sub-national - represent important drivers leveraging synergies.

4.2.2 Common Programming

At programme level, coordinated implementation of both programmes strengthens the partnership in the programme delivery. Authorities involved in the design and delivery of the Cohesion Operational Programmes need to strategically cooperate with authorities and bodies involved in designing national research programmes and implementing EU research priorities, e.g. National Roadmaps for Research Infrastructure should be linked to the European Structural Funds for Research Infrastructure Roadmap; when added value is provided, complementarity of calls in terms of themes and timeframe could be ensured. Similarly, common planning and prioritisation should equally be ensured for long-term national and regional programmes.

Smart Specialisation priorities implementation through coherent strategic programmes, involving all relevant stakeholders and funding in a coordinated manner, contributes to the achievement of Europe 2020 objectives.

4.2.3 Smart Specialization Strategies

European Commission has included in its proposal for Cohesion Policy 2014-2020 the ex-ante condition for regions to develop Smart Specialisation Strategies aiming to strategically use EU Cohesion funding for research supporting regional entrepreneurial eco-systems. The Smart Specialisation Strategies are key elements for maximizing synergies between policy instruments, providing the rationale and the necessary coordination channel between different policy levels and managing authorities of ESIF and of Horizon 2020. Downstream, the Smart Specialisation Platform, supporting the strategies creation and implementation, acts as a broker linking regions and networks, and supporting new markets and proper environment creation for innovative ideas, knowledge, projects, etc.

It is in the best interest of all responsible transport research stakeholders at national and regional level to invest efforts into having transport included in the priority shortlist of the Smart Specialisation Strategies, where national and regional capacities and potential justify it.
4.2.4 Clusters and Connectivity

Collaboration between regions and clustering within the priority framework of Smart Specialisation Strategies represent important drivers for innovation and competitiveness. Developing knowledge-intensive innovative clusters and providing arenas for related cross-sectorial links, inside and outside the regions’ boundaries, will drive specialised technological diversification – matching regional competencies with outside world needs.

‘38% of all European employees work in industries that concentrate regionally – in clusters...The focus of cluster programmes needs to shift from capacity building...towards a clear orientation on excellence, focusing on clusters with the ability to upgrade in the face of global competition and ensuring the consistent provision of public knowledge infrastructure...’ European Cluster Policy Group – Final recommendations ‘A call for Policy Action 2010’

Multiple channels currently exists streamlining regional cooperation such as the Public Private Partnerships, ERA NETs, INTERREG, POLIS network, CIVITAS initiative, etc.; their added value needs to be maximised and their potential lock-in effect avoided. Networking support provided via the Regions of Knowledge lead to stronger European clusters, motor for growth in our regions.

Areas where collaboration could be maximised with great impact are sharing best practices and knowledge within regional clusters, mutual learning, investment in human resources, in common research infrastructure and facilities, but also implementing common marketing of innovation or creating markets for innovation via pre-commercial and innovation procurement activities.

62 http://www.polisnetwork.eu/
63 http://www.civitas-initiative.org/
64 http://ec.europa.eu/research/fp7/index_en.cfm?pg=know
Regions of Knowledge project defining actions to be implemented under Cohesion Policy

On-going FP7 Regions of Knowledge SAGE project represents a good example of best practice of cooperation, both at local and European level. The project represents a network of regional research driven clusters in Europe - Piemonte region in Italy, Vasta Gotaland in Sweden, the pole MOVEO in France, Regensburg region automotive cluster in Germany, and Warsaw University of Technology in Poland. The objective is the definition of joint innovation actions in the field of mobility to be carried out by regions, universities, and local enterprises. These actions will be implemented using Cohesion Policy funds.

http://www.sage-project.eu/home.html
4.2.5 Acknowledging the important role of SME Internationalization

In a globalised world, SMEs need to be able to confront increasing competition from developed and emerging economies and to plug into the new market opportunities these countries provide. There is a direct link between internationalization and increased SMEs performance. International activities reinforce growth, enhance competitiveness and support long term sustainability of companies. Yet European SMEs still depend largely on their domestic markets despite the opportunities brought by the enlarged EU single market and by globalisation at large. Access to activities funded at regional level seems to be easier for SMEs; therefore, the possibility to create further synergies with cross border research projects offers SMEs increased opportunities to access international collaboration and thus opens their innovation and market prospects.

**COSME**

The former Competitiveness and Innovation (CIP) follow-up programme for the next period is partly included in Horizon 2020, partly transformed into an instrument called Competitiveness of Enterprises and SMEs (COSME). With a budget of €2.5 billion for the period 2014-2020, the latter ensures continuity of activities with CIP.

Horizon 2020 and COSME are serving the same objective of enhancing the European growth and jobs’ creation; but their focus is different, COSME promoting the access to risk finance for SMEs and encouraging the entrepreneurial culture in Europe, whilst Horizon 2020 supports innovation driven growth. Nevertheless, the two programmes are closely coordinated and complement each other activities.

COSME includes both a debt and an equity facility aiming to improve SME access to finance; their guiding principles mainly refer to ensuring EU added value and maximizing the leverage effect of EU funds by effective targeting of policy goals, and by their catalytic effect on similar existing schemes in Member States, as well as on private investment.

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65 [http://ec.europa.eu/enterprise/policies/sme/market-access/internationalisation](http://ec.europa.eu/enterprise/policies/sme/market-access/internationalisation)

Sequence of FP7 & Cohesion Policy projects leading to a larger European-wide project in the area of electro-mobility supported Competitiveness and Innovation Programme (CIP) follow-up project

A sequence of projects previously developed and funded using FP7 and Cohesion Policy funds enabled the development of fundamental technology, as well as the creation of support infra-structure essential for the implementation of the MOBI.Europe initiative.

MOBI.Europe (Integrated and Interoperable ICT Applications for Electro-Mobility in Europe) is a project funded by the Competitiveness and Innovation Programme (CIP) with a total budget of 5,1M€ and an EC contribution of 2,4M€. A total of five countries participate in the consortium coordinated by INTELI – Inteligência em Inovação (Portugal).

MOBI.Europe will contribute to the definition of ICT interfaces allowing eMobility roaming across different networks in different countries in Europe. It is built upon the Portuguese, the Irish, the city of Amsterdam (The Netherlands), and the Galician (Spain) ongoing electro-mobility initiatives. Its main features are: i) make the user more comfortable to use EV beyond the limits of “range anxiety” by providing them with universal access to an interoperable charging infrastructure independent from its energy utility and region; ii) promote energy-efficient mobility services through a seamless integration with the transport system and with the EV ecosystem; iii) contribute to the standardization and openness of the EV ecosystem through a System of Systems (SoS) approach establishing open interfaces between the different systems and stakeholders; and iv) establish the management interface between the EV infrastructure and the electric grid, taking benefit of this information to create a more reliable and efficient end-to-end energy system.

More info: www.mobieurope.eu
**Horizon 2020 SME instrument**

A dedicated SME instrument, targeting all types of SMEs with an innovation potential, in a broad sense, will be implemented within Horizon 2020. The instrument will be centrally managed and shall be implemented primarily in a bottom-up manner via a continuously open call tailored to the needs of SMEs as set out under the specific objective "Innovation in SMEs" of Horizon 2020\(^67\).

Uniform promotion, implementation and monitoring of the SME instrument across Horizon 2020 will ensure easier access for SMEs. Relying on existing SME support networks, a mentoring scheme for SME beneficiaries is foreseen to accelerate impact of EU support provided. In addition, links will be explored with relevant national and/or regional intermediaries to ensure an efficient implementation of the mentoring scheme.

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4.2.6 Funding

EU Financial Instruments

The financial instruments are an effective and efficient way to support Europe 2020 objectives of smart, sustainable and inclusive growth. Greater use of financial instruments will help leverage private research and innovation investments, as a demand-driven approach is more flexible and market-oriented. EU Financial Instruments for Research and Innovation complement Horizon 2020 grant financing and can pool resources within Member States willing to contribute with part of their Cohesion Policy funds, thus supporting the introduction of new technologies into the market and transforming research results into innovative products. Cohesion Policy may contribute to EU financial instruments - the Operational Programmes contribution will be ring-fenced for investments in regions and actions covered, nevertheless, the rules framing the combination of financial instruments and other forms of support such as grants need to be further clarified.

EU Financial Instruments can take either the form of guarantees to financial intermediaries (banks) that provide lending to infrastructure projects, SMEs, etc. or of risk-sharing arrangements increasing the leverage capacity of the EU funds; either of equity capital, such as venture capital, to innovative, high-tech companies, or SMEs with high growth potential in early stage innovation activities.

Horizon 2020 financial instruments support the achievement of the programme’s objectives of tackling societal challenges (including transport), enhancing competitiveness, and fostering sustainable growth. The budget allocated to these financial instruments in Horizon 2020 - 3.7b Euros - is located in the Industrial Leadership pillar, under the ‘Access to risk finance’ component.

Sample of Transport projects supported by the Risk Sharing Financial Facility (RSFF)

Within EU Seventh Framework Programme for Research, the Risk-Sharing Finance Facility (RSFF) combined EU budgetary resources and European Investment Bank (EIB) funding to share the risks associated with investing in research and innovation projects (including infrastructure projects) with a strong European dimension. Sharing the risk between the Commission and the EIB allows the RSFF to produce additional loans for R&D projects.

RSFF loans were available to public and private sector promoters of any size and ownership from the Member States and the countries associated to the research programme.

The below project examples reflect the type of transport specific projects supported by this instrument, relevant for the objectives of the transport research programme. The approximate total amount of RSFF finance contracts signed between 2007-2013 ads up to 80 Billion Euros.

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EBERSPAECHER AUTOMOTIVE RDI


LEONI ELECTRIC CAR COMPONENTS
http://www.eib.org/projects/pipeline/2012/20120049.htm


RENAULT ELECTRIFICATION TECHNOLOGY

BETTER PLACE ELECTRIC VEHICLE SERVICE

## Financial Instruments included in the MFF 2014-2020

<table>
<thead>
<tr>
<th>Current prices</th>
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<th>Shared Management</th>
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<td>Horizon 2020 Equity and Risk Sharing Instruments EUR 4 bn (*)</td>
<td>Instruments under Structural and Cohesion Funds</td>
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<tr>
<td>Growth, jobs and Social Cohesion</td>
<td>Competitiveness &amp; SME (COSME) Equity &amp; Guarantees EUR 1.4 bn (*)</td>
<td>EU Level</td>
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<td>Creative Europe Guarantee Facility EUR 210 m</td>
<td>Off-the-shelf instruments</td>
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<td></td>
<td>Social Change &amp; Innovation Micro Finance EUR 12.2 m</td>
<td>Taylor made instruments</td>
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<td></td>
<td>ERASMUS for all Guarantee facility EUR 831 m</td>
<td>Significantly higher amounts then currently</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Connecting Europe Facility Risk Sharing (e.g. project bonds) and equity instruments</td>
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</tbody>
</table>

### Innovation Procurement

Europe 2020 Innovation Union flagship initiative proposes measures to strengthen public procurement as a driver for innovation in Europe. *Member States and regions should set aside dedicated budgets for pre-commercial procurement and public procurement of innovative products and services [with the aim to] achieve innovative procurement markets equivalent to those in the United States.* Innovation Union Commitment 17

Innovation procurement covers both pre-commercial procurement and public procurement of innovative solutions. Pre-commercial procurement is about public authorities procuring

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73 References to PPI and PCP - Horizon 2020 Rules for Participation, Article 49; and New EU Financial Regulations, article 35.2 on Public Procurement; Innovation Union Flagship Initiative, Commitment 17
research and development services in a phased process, exploring and comparing competing innovative solutions for a specific public sector needs, with a view to product or service development. Public procurement of innovative solutions promotes first application of innovative solutions with the procurer acting as a launch customer for products or services not yet available on a large-scale commercial basis.

Horizon 2020 foresees support to consortia of public procurers for preparing and co-financing innovation procurement. The added value of innovation procurement consists in creating opportunities for European companies to take international leadership in new markets, leading to growth and jobs. National or regional procurers (using Cohesion Policy funds) can compare competing solutions and obtain competitive prices for an innovative solution better fit-for-purpose and taking into account longer term public sector requirements. Suppliers can better anticipate demand for new solutions and shorten time-to-market. A public governmental contract might enhance credibility of small companies on financial markets, thus supporting further private funding leverage.

These procurements could be applied to top-up the innovation deployment in projects financed by the Cohesion Policy funds, thus fostering an innovative form of “parallel synergy”, merging the support of the two funding schemes into the same project with an increased leverage effect.

4.2.7 Other Drivers

- Knowledge and Innovation Communities[^74] - providing a platform for top European knowledge intensive clusters.

- Technological Platforms could further concentrate on disseminating information on EU strategies market up-take, creating enabling environment for companies to innovate and building the needed new capacities throughout the supply chain of the transport system, be it for vehicles, infrastructure, operations or services.

- Transport Connecting Europe Facility[^75] - special attention will be allocated to coordination of the Connecting Europe Facility implementation with Horizon 2020, supporting research and innovation is deployment into transport infrastructure, etc.

- Trans-European Networks[^76].


5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The next programming period 2014-2020 will facilitate synergies between Horizon 2020 and ESIF investments. Cohesion Policy funds to be invested in research and innovation will be of a magnitude comparable to Horizon 2020. Thus, for less performing regions, Cohesion Policy is a major source of funding for research and innovation activities. The purpose of this Report has been to discuss the importance of exploring these synergies for fuelling innovation, economic growth and cohesion in Europe. Cohesion Policy has a complementary role to play with regard to what Horizon 2020 will be able to achieve mainly in terms of capacity building and helping to smooth the path from innovation conception to market deployment.

A comprehensive approach involving all actors engaged in programming and carrying out research and innovation – public authorities, academia, industry, regional innovative clusters, SMEs, national and regional innovation agencies, etc - could optimise the use of cohesion and research funds and create significant impacts on public welfare.

Transport related measures are no doubt among the most important research and innovation priorities in many Members States and regions. As one of the key priorities of the Cohesion Policy, transport sector has the potential for triggering additional resources for funding research and innovation projects within Horizon 2020. In the light of the socio-economic and environmental medium and long term European goals, the planning of transport policies and their implementation calls for a harmonisation effort amongst EU countries, setting common objectives to be pursued, integrated at European level and instanced at national level. At policy level, mobility, competitiveness, land use, environment and societal issues should cooperate to converge to a more sustainable development.

A key element in the coming period 2014-2020 is the role of regional research and innovation Strategies for Smart Specialisation, catalysing synergies between Horizon 2020 and the ESIF. Under current economic restraints, Smart Specialisation represents an innovative policy tool that brings a fresh perspective on the debate on resource allocation in European regions. The Strategies streamline policy support and investments on key national and regional priorities, challenges and needs for knowledge-based development, and help regions and countries to climb the stairway to excellence and become more competitive.
5.2 Recommendations

In order to maximise the exploitation of synergies between policy instruments 2014-2020 in transport, the following recommendations are presented by the FP7 Transport Programme Committee experts working group:

1. Setting frameworks for strategic coordination and coherent prioritisation of policies

The opportunity to combine funds from the research and cohesion policies in the next programming period marks a major progress and must be implemented in a framework of coherent programing, common prioritisation and strategic coordination of policies in each Member State and at European level. The framework should involve innovation and cohesion policy making authorities, at European, national and regional level.

2. Alignment and coordination of research and cohesion programmes

Member States cooperation with EU in facing the societal challenges ahead in general, and those in relation to Transport more specifically, requires a more pro-active approach linking Horizon 2020 to national programmes and other sources of EU funding, such as the Cohesion Policy funds, to foster economic growth and regional cohesion. Strategic use of funding from multiple sources is expected to maximise the impact of research in innovation advances on competitiveness. In practical terms, National Partnership Agreements and Operational Programmes should align their priorities with Europe 2020, the Innovation Union strategy, and Horizon 2020.

3. Coordination of national and regional strategic planning and prioritisation

The coordination of national and regional strategic planning and prioritisation regarding the implementation of European programmes and funding is central for an integrated approach of research, development and innovation activities, requiring close involvement of national authorities and main transport research and development actors – industry, research institutions, public authorities, etc. Cohesion Policy represents a tool to modernise local research in terms of equipment, infrastructure, trainings, etc.

4. Common actors’ collaboration framework

Elaboration of recommendations at EU level concerning the cooperation between different European and national policy and managing bodies would streamline common strategic view of involved actors, allowing to incorporate in the policies and programmes the needs and aims of the different sectors (transport, environment, societal challenges, competitiveness, etc.) converging towards a common goal.

5. Monitoring synergies exploitation

It is critical for each country to monitor and report the exploitation of synergies. Central national governments should facilitate this task, but without imposing the reporting burden on the consortia implementing the research activities. Cooperation between national and regional authorities should be strengthened. At European level, the European Commission should promote the exchange of best practices in this domain.

6. Simplification of Cohesion Policy rules and procedures

Major simplification of access and participation rules to Cohesion Policy at national level could enhance the levels of participation by enlarging the number of successful beneficiaries.
Rationalising and reducing administrative burden related to access and financial reporting for ESIF is of utmost importance for synergies creation.

7. Synergies implementation and dissemination guidelines

The production and broad dissemination of dedicated guidelines for synergies implementation - new wider initiatives promoting and disseminating overarching principles of synergies and their limitation, on practical schemes for combining funds, on legal and financial framework - informing stakeholders directly participating in the value chain such as research organisations, national and regional policy making and management authorities, networks such as NCPs, industry and business, SMEs, etc. is strongly recommended.

8. Sustainable mobility training and education for all citizens

EU countries are still missing educational and awareness programmes making citizens alert to the consequences of their mobility habits and helping them to travel in a more sustainable way. EU countries are very diverse in terms of culture, heritage, climate, life styles, etc. and it is often difficult to successfully implement outcome of EU research, as well as EU policies at national and regional level. In parallel, technology alone is not sufficient to achieve major innovation implementation; thus, policy support and synergetic use of funds from both sources could target communication and educational strategies and programmes. Such programmes would tailor standards and norms at local level through an educational approach, training citizens of tomorrow to make our cities smarter.

9. Clearer research and innovation State Aid rules

European Commission, national and regional authorities, as well as final EU funds beneficiaries must share a common understanding of applicable financial rules, reducing administrative burden and error levels. With the aim to increase competitiveness, clear State Aid rules and governing principles for European research and innovation support (provided via Horizon 2020 and the ESIF) and for national and regional funding activities within the public and private sector, are necessary ‘to create critical mass on the demand-side and improve efficiency in the allocation of resources in full respect of competition and internal market rules’.

10. Stronger involvement of European Technological Platforms

Currently observed limited interaction between actors involved in policy making and implementation of research and cohesion policies could be overcome, inter alia, by extended focus of ETPs - in cooperation with national and regional technological platforms - on national and regional aspects, additionally to their main European dimension. Transport ETPs could include the use of Cohesion Policy funds in their Agendas’ implementation plans, and report to their European and national planning and programming fora.

11. Role of Support Networks

Networks such as the Enterprise Europe Network or the National Contact Points should provide expert advice on available EU funding from various sources, allowing a tailor made support for each project idea, thus facilitating dissemination of information on funding opportunities.

77 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions ’For an European Industrial Renaissance’ (not yet published)
12. Smart Specialisation in Global Value Chains

The Smart Specialisation is enabled by the participation in the Global Value Chains. Concentration of public investments in research and innovation on particular activities is crucial for regions/countries that are not leaders in any of the major science or technology domains. Concentration in the smart specialisation context should focus knowledge investments on specific activities, from the idea to the market, supporting integration in global value chains.
FP7 Transport Programme Committee Report on Synergies between the Transport component of Horizon 2020 and the Cohesion Policy 2014-2020
ANNEX I: LEGISLATIVE REFERENCES TO SYNERGIES

HORIZON 2020

Horizon 2020 Regulation - Article 17 'Complementarity with other Union programmes'

'Horizon 2020 shall contribute to the closing of the research and innovation divide within the Union by enabling synergies with the Structural Funds in support of research and innovation.'

Horizon 2020 Rules for Participation - Article 31 ‘Cumulative funding’

‘An action for which a grant from the Union budget has been awarded may also give rise to the award of a grant on the basis of Regulation (EU) No XX/XX [Horizon 2020] provided that the grants create added value for research and innovation and do not cover the same cost items. This applies especially to a grant from the Structural Funds.’

Annex I ‘Broad Lines of the Activities / Common Elements For The Indirect Actions'

Part II 'Industrial Leadership', point 2 'Access to Risk Finance'

'Horizon 2020 will set up two facilities the 'Equity facility' and the 'Debt facility. The Equity facility and the Debt facility may, where appropriate, allow pooling of financial resources with Member States or regions willing to contribute part of the Structural Funds allocated to them, in accordance with Article 33(1)(a) of the Structural Funds Council Regulation.'

COHESION POLICY

Research is among the eleven thematic objectives that the Cohesion Policy Regulation supports to contribute to Europe 2020. Article 9 'Thematic Objectives', Title III 'Strategic Approach', Chapter I. Annex I, article 4.3 ‘Horizon 2020 and other centrally managed EU programmes in the areas of research and innovation’ strengthens the obligation of ensuring further alignment and coordination of policies and priorities. Member States and the Commission are encouraged to foster complementarities by developing a research and innovation Smart Specialisation Strategies as ex-ante conditional for the use of Cohesion Policy funds.

Cohesion Policy Regulation, Chapter II ‘Eligibility of expenditure and durability

Article 55 (8) ‘Eligibility’

‘An operation may receive support from one of more Common Strategic Framework (CSF) Funds and from other Union instruments, provided that the expenditure item included in a request for payment for reimbursement by one of the CSF Funds does not receive support from another Fund or Union instrument, or support from the same Fund under a different programme.’

The provisions of the article 60(2) are useful for enabling combined support from ESIF and Horizon 2020 to partners in different countries.

Cohesion Policy Regulation, Chapter II ‘Eligibility of expenditure and durability

Article 60 (2) ‘Eligibility of operations depending on location’
The managing authority may accept that an operation is implemented outside the programme area but within the Union, provided that all the following conditions are satisfied:

(a) the operation is for the benefit of the programme area;

(b) the total amount allocated under the programme to operations located outside the programme area does not exceed 10% of the support from the ERDF, Cohesion Fund and EMFF at the level of the priority, or 3% of the support from the EAFRD at the level of the programme;

(c) the monitoring committee has given its agreement to the operation or types of operations concerned;

(d) the obligations of the authorities for the programme in relation to management, control and audit concerning the operation are fulfilled by the authorities responsible for the programme under which that operation is supported or they enter into agreements with authorities in the area in which the operation is implemented.

Art.4.3 of Annex 1:

[...]4.3 Horizon 2020 and other centrally managed EU programmes in the areas of research and innovation

1. Member States and the Commission shall pay attention to strengthening coordination and complementarities between the CSF Funds and Horizon 2020, the Programme for the Competitiveness of enterprises and small and medium-sized enterprises (COSME), and other relevant centrally managed Union funding programmes while also establishing a clear division of areas of intervention between them.

2. In particular, Member States shall develop national and/or regional research and innovation (R&I) strategies for ‘smart specialisation’ in line with the National Reform Programme. These strategies shall be developed through involving national or regional managing authorities and stakeholders such as universities and other higher education institutions, industry and social partners in an entrepreneurial discovery process. The authorities directly concerned by Horizon 2020 shall be closely associated to this process.

Under these strategies (inter alia):

(a) "Upstream actions" to prepare regional R&I players to participate in Horizon 2020 ("staircase to excellence") shall be developed through capacity building. Communication and cooperation between Horizon 2020 national contact points and managing authorities of the CSF Funds shall be strengthened.

(b) "Downstream actions" shall provide the means to exploit and diffuse R&I results, stemming from Horizon 2020 and preceding programmes, into the market with particular attention on creating an innovation-friendly business environment for SMEs and in line with the priorities identified for the territories in the relevant smart specialisation strategy.

3. Member States shall make full use of the provisions in this regulation allowing for combining the CSF Funds with those under Horizon 2020 in the relevant programmes used to implement parts of the strategies. Joint support shall be provided to national and regional authorities for the design and implementation of such strategies, to identify opportunities for joint financing of R&I infrastructures of European interest, the promotion of international
collaboration, methodological support through peer reviews, exchange of good practice, and training across regions.

4. Member States shall consider the following additional measures aimed at unlocking their potential for excellence in research and innovation, in a manner that is complementary to and creates synergies with Horizon 2020, in particular through joint funding:

(a) linking emerging centres of excellence and innovative regions in less developed Member States to leading counterparts elsewhere in Europe;

(b) building links with innovative clusters and recognising excellence in less developed regions;

(c) establishing "ERA Chairs" to attract outstanding academics, in particular to less developed regions;

(d) supporting access to international networks for researchers and innovators who are less involved in the ERA or from less developed regions;

(e) contributing as appropriate to the European Innovation Partnerships;

(f) preparing national institutions and/or clusters of excellence for participation in the Knowledge and Innovation Communities (KICs) of the European Institute of Innovation and Technology (EIT); and

(g) hosting high-quality international researcher mobility programmes with co-funding from the "Marie Skłodowska-Curie Actions".
ANNEX II: 'WHO'S WHO'

TRANSPORT RESEARCH and COHESION POLICY NATIONAL AUTHORITIES

Five categories

1. National authorities responsible for the policy/priority setting of Structural Funds
2. National authorities responsible for management/operation of SF, namely for drafting the operational programme for SF, related to transport and mobility
3. National authorities responsible for transport and mobility policy
4. National authorities responsible for research and innovation policy
5. National authorities responsible for transport research and innovation

Member States

Austria, Belgium, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom

Associated Counties

Serbia and Turkey
1. National authorities responsible for the policy/priority setting of Structural Funds

<table>
<thead>
<tr>
<th>Member States</th>
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<tr>
<td><strong>AUSTRIA</strong></td>
<td>Federal level</td>
<td>Nine Austrian Regional Governments (provinces or “Bundesländer”) - coordination and negotiation process structured by the “Austrian Conférence on Spatial Planning” (Österreichische Raumordnungskonferenz – ÖROK)</td>
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<td>National authority for partnership agreement coordination and control</td>
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<td><strong>DENMARK</strong></td>
<td>Ministry of Business and Growth, The Danish Business Authority</td>
<td>contact: Pernille Von Lillienskjold, <a href="mailto:pevoli@erst.dk">pevoli@erst.dk</a></td>
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<td>NETHERLANDS</td>
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<td>POLAND</td>
<td>Ministry of Regional Development Other ministries - Environment, Transport, Building and Maritime Policy</td>
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</tr>
<tr>
<td>PORTUGAL</td>
<td>Portuguese Prime Minister Council of Ministers</td>
<td></td>
</tr>
<tr>
<td>ROMANIA</td>
<td>National Plan for Development (NDP) 2007-2013 Ministry of Public Finance Ministry of Transport and Infrastructure - operational programs</td>
<td></td>
</tr>
<tr>
<td>SLOVAKIA</td>
<td>Ministry of Transport, Construction and Regional Development</td>
<td></td>
</tr>
<tr>
<td>SLOVENIA</td>
<td>Ministry of Economic Development and Technology</td>
<td></td>
</tr>
<tr>
<td>SPAIN</td>
<td>Seventeen Spanish Regional Governments (Comunidades Autónomas) Ceuta y Melilla Spanish Ministry of Finance and Public Administration</td>
<td></td>
</tr>
</tbody>
</table>
All the other Spanish Ministries and agents defined in the partnership principle - involved in the programming process

<table>
<thead>
<tr>
<th>Country</th>
<th>Ministry or Agent</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWEDEN</td>
<td>Ministry of Enterprise, Energy and Communications (Näringsdepartementet)</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>Department of Business, Innovation and Skills</td>
</tr>
<tr>
<td></td>
<td>Regional administration offices Scotland, Wales &amp; Northern Ireland – independent policy</td>
</tr>
<tr>
<td>Associated Countries</td>
<td></td>
</tr>
<tr>
<td>SERBIA</td>
<td>Ministry of Finance and Economy</td>
</tr>
<tr>
<td></td>
<td><a href="http://mfp.gov.rs">http://mfp.gov.rs</a></td>
</tr>
<tr>
<td></td>
<td>Office of Deputy Prime Minister for European Integration</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.srbija.gov.rs">www.srbija.gov.rs</a></td>
</tr>
<tr>
<td>TURKEY</td>
<td>Ministry of European Union</td>
</tr>
<tr>
<td></td>
<td>Programming process:</td>
</tr>
<tr>
<td></td>
<td>Ministry of Development, Ministry of Environment and Urban Planning</td>
</tr>
<tr>
<td></td>
<td>Ministry of Forestry and Waterworks</td>
</tr>
<tr>
<td></td>
<td>Ministry of Transport, Maritime Affairs and Communications</td>
</tr>
<tr>
<td></td>
<td>Ministry of Science, Industry and Technology</td>
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</tbody>
</table>

2. National authorities responsible for management/operation of SF, namely for drafting the operational programme for SF, related to transport and mobility

<table>
<thead>
<tr>
<th>Member States</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRIA</td>
<td>Regional level</td>
</tr>
<tr>
<td></td>
<td>Nine Austrian Regions (Bundesländer) - independent programmes; regional implementation</td>
</tr>
<tr>
<td></td>
<td>ERP Funds - Minor federal agencies involvement - Austrian Research Promotion Agency / Österreichische Forschungsförderungsgesellschaft FFG</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>Regions - own independent programmes, implemented at regional level.</td>
</tr>
<tr>
<td></td>
<td>Wallon region</td>
</tr>
<tr>
<td></td>
<td>Service Public de Wallonie, Département de la Coordination des fonds structurels, Place Joséphine Charlotte 2, 5100 Jambes</td>
</tr>
<tr>
<td></td>
<td>Flemish region</td>
</tr>
<tr>
<td></td>
<td>ERDF</td>
</tr>
<tr>
<td></td>
<td>Enterprise Flanders Agency</td>
</tr>
<tr>
<td></td>
<td>ESF</td>
</tr>
<tr>
<td></td>
<td>Agency Flanders for the implementation of the ESF</td>
</tr>
<tr>
<td></td>
<td>Brussels</td>
</tr>
<tr>
<td></td>
<td>Ministère de la Région de Bruxelles-Capitale ; Cellule Coordination et Gestion du FEDER 2007 – 2013, Rue du Progrès 80, 1035 Bruxelles</td>
</tr>
<tr>
<td>CROATIA</td>
<td>SF</td>
</tr>
<tr>
<td></td>
<td>Ministry of Regional Development and EU Funds</td>
</tr>
<tr>
<td></td>
<td>Ministry of Maritime Affairs, Transport and Infrastructure</td>
</tr>
<tr>
<td>Country</td>
<td>Agencies and Contact Information</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>CYPRUS</td>
<td>Planning Bureau of the Republic of Cyprus</td>
</tr>
</tbody>
</table>
| CZECH REPUBLIC      | Ministry of Transport  
Ministry of Industry and Trade  
Ministry for Regional Development  
Ministry of the Environment |
| DENMARK            | SF  
Ministry of Business and Growth, The Danish Business Authority, contact: Preben Gregersen, pregre@erst.dk  
Drafting the operation programme (the partnership agreement)  
Ministry of Business and Growth, The Danish Business Authority, contact: Preben Gregersen, pregre@erst.dk  
Ministry of Food, Agriculture and Fisheries, The Danish AgriFish Agency, contact: Morten Blom Andersen, morblo@naturerhverv.dk |
| FINLAND            | Finnish Regional Councils                                                                                                                                                                                                            |
| FRANCE             | DATAR – Délégation Interministérielle à l'Aménagement du Territoire et à l’Action Régionale (Service du Premier Ministre mis à disposition principalement du Ministère de l'Egalité des Territoires et du Logement)  
Préfets de Régions                                                                 |
| GERMANY            | ERDF  
Federal Ministry of Transport, Building and Urban Development  
Referat UI 23  
Invalidenstraße 44  
10115 Berlin  
E-Mail: EFRE-VB@bmvbs.bund.de  
Internet: www.bmvbs.de/efre  
The Federal Ministry of Economics and Technology – federal coordination |
| GREECE             | Ministry of Development, Infrastructure, Transports and Networks  
www.ypoian.gr                                                                                                                                                           |
| IRELAND            | Department of Transport, Tourism and Sport                                                                                                                                                                                          |
| ITALY              | Ministry for Infrastructure and Transports – D.G. for land development, planning and international projects  
Regional administration                                                                                                                                                  |
| LATVIA             | National authorities responsible for management/operation of SF  
Ministry of Finance ; Deputy State Secretary on EU Funds Issues  
-EU Funds Monitoring Department  
-EU Funds Management System Department  
-State Aid Control Department  
National authorities responsible for management/operation of SF projects, related to transport and mobility  
Ministry of Transport of Republic of Latvia, Investment Department                                                                                                           |
<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LITHUANIA</strong></td>
<td>Ministry of Transport and Communications</td>
</tr>
<tr>
<td><strong>MALTA</strong></td>
<td>Office of the Permanent Secretary (EU Funds) falling within the Office of the Prime Minister</td>
</tr>
<tr>
<td><strong>NETHERLANDS</strong></td>
<td>No specific transport and mobility OP NL - 80% SF funds must be spent for innovation, low carbon economy and SMEs Regions – SF spending includes logistics, smart mobility, high tech systems and materials (automotive, aeronautics, etc.)</td>
</tr>
<tr>
<td><strong>PORTUGAL</strong></td>
<td>SF - Secretary of State Assistant to the Minister and of European Affairs (Miguel Morais Leitão) - Secretary of State Assistant to the Minister and of Economy and Regional Development (Al-meida Henriques) - Secretary of State of Agriculture (José Diogo Albuquerque) Transport and Mobility Internal Committees of the transport and mobility areas: - Human Potential - Ministry of Science and Education – Secretary of State of Science - Factors of Competitiveness - Secretary of State of Entrepreneur-ship, Competitiveness and Innovation and the Secretary of State of Public Work, Transport and Communication from the Ministry of Economy and Employment (MEE) and Secretary of State of Science of Ministry of Science and Education - Territorial Enhancement - Secretary of Secretary of State of Public Work, Transport and Communication from the Ministry of Economy and Employment (MEE)</td>
</tr>
<tr>
<td><strong>ROMANIA</strong></td>
<td>Operational Programme Transport Infrastructure - Ministry of Transport and Infrastructure</td>
</tr>
<tr>
<td><strong>SLOVAKIA</strong></td>
<td>Operational Programme Transport - Ministry of Transport, Construction and Regional Development</td>
</tr>
<tr>
<td><strong>SLOVENIA</strong></td>
<td>Ministry of Economic Development and Technology Ministry of Infrastructure and Spatial Planning</td>
</tr>
<tr>
<td><strong>SPAIN</strong></td>
<td><strong>ERDF</strong> - Ministry of Finance and Public Administration - General Directorate of EU Funds</td>
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</tbody>
</table>
### 3. National authorities responsible for transport and mobility policy

<table>
<thead>
<tr>
<th>Member States</th>
<th>Federal Ministry for Transport, Innovation and Technology (Bundesministerium für Verkehr, Innovation und Technologie / bmvi) Austrian Regions</th>
</tr>
</thead>
</table>
| AUSTRIA       | Federal level  
Minister Paul Magnette, Ministre des Entreprises publiques, de la Politique scientifique et de la Coopération au développement, chargé des Grandes Villes ; Politique Scientifique Fédéral (BELSPO), Avenue Louise 231 à 1050 Bruxelles  
Regional level  
Walloon region  
Ministre André Antoine : Vice-Président et Ministre du Budget, des Finances, de l'Emploi, de la Formation, des Sports et de la politique aéroportuaire ; Service Public de Wallonie, Direction générale des Routes et des Bâtiments (DGO1)  
Ministre Philippe Henry : Ministre de l’Environnement, de |
<table>
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<tr>
<th>Country</th>
<th>Ministry/Department</th>
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</thead>
<tbody>
<tr>
<td>CROATIA</td>
<td>Ministry of Maritime Affairs, Transport and Infrastructure</td>
</tr>
<tr>
<td>CYPRUS</td>
<td>Ministry of Communications and Works of Cyprus</td>
</tr>
<tr>
<td>CZECH REPUBLIC</td>
<td>Ministry of Transport</td>
</tr>
</tbody>
</table>
| DENMARK      | Ministry of Transport  
contact: Erik Toft: et@trm.dk                                                       |
| FINLAND      | Ministry of Transport and Communications (www.lvm.fi/English)                         |
| FRANCE       | Ministry for Ecology, Sustainable Development and Energy (MEDDE /  
Ministère de l’Ecologie, du Développement Durable et de l’Energie)     |
| GERMANY      | Federal Ministry of Transport, Building and Urban Development (www.bmvbs.de)         |
| GREECE       | The ministry of Development, Infrastructure, Transports and Networks  
www.wypoian.gr                                                                 |
| IRELAND      | National Transport Authority on behalf of the Department of Transport,  
Tourism and Sport                                                                   |
| ITALY        | Ministry for Infrastructure and Transports                                           |
| LATVIA       | Ministry of Transport of Republic of Latvia                                           |
| LITHUANIA    | Ministry of Transport and Communications                                             |
| MALTA        | Ministry for Infrastructure, Transport and Communications                             |
| NETHERLANDS | Ministry of Infrastructure and Environment (Strategic Knowledge and  
Innovation Agenda for Transport and Mobility)                                      |
| POLAND       | Ministry of Transport, Building and Maritime Policy                                   |
| PORTUGAL     | Secretary of State of Public Work, Transport and Communication from the Ministry of  
Economy and Employment (MEE)                                                      |
| ROMANIA      | Ministry of Transport and Infrastructure (MTI)  
State Authority for transport and infrastructure                                      |
| SLOVAKIA     | Ministry of Transport, Construction and Regional Development                          |
| SLOVENIA     | Ministry of Infrastructure and Spatial Planning                                      |
| SPAIN        | Ministry for Public Works  
Ministry of Agriculture, Food and Environment – in charge of the  
Spanish Strategy for Sustainable Mobility  
Ministry of Industry and Energy – Spanish Institute for the  
Diversification of Energy (including energy consumption in Transport) |
| SWEDEN       | Ministry of Enterprise, Energy and Communications                                    |
### 4. National authorities responsible for research and innovation policy

<table>
<thead>
<tr>
<th>Member States</th>
<th>Federal Ministries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUSTRIA</strong></td>
<td>Federal Ministry for Transport, Innovation and Technology (Bundesministerium für Verkehr, Innovation und Technologie / bmvit)</td>
</tr>
<tr>
<td></td>
<td>Federal Ministry for Economy, Family and Youth (Bundesministerium für Wirtschaft, Familie und Jugend / BMWFJ)</td>
</tr>
<tr>
<td></td>
<td>Federal Ministry for Science and Research (Bundesministerium für Wissenschaft und Forschung/ bmwf-a), concerning universities and fundamental research</td>
</tr>
<tr>
<td><strong>BELGIUM</strong></td>
<td><strong>Federal level</strong> Minister Paul Magnette, Ministre des Entreprises publiques, de la Politique scientifique et de la Coopération au développement, chargé des Grandes Villes</td>
</tr>
</tbody>
</table>
|               | **Regional level**
<p>|               | <strong>Walloon region</strong> Minister Jean-Marc Nollet, Vice-Président et Ministre du Développement durable, de la Fonction publique, de l’Energie, du Logement et de la Recherche |
|               | Service Public de Wallonie, Direction générale de l’Economie, de l’Emploi et de la Recherche (DGO6) |
|               | <strong>Flemish region</strong> Minister Ingrid Lieten, Vice-Minister-President of the Government of Flanders, Flemish Minister for Innovation, Public Investment, Media and Poverty Reduction |
|               | <strong>Brussels Capital</strong> Minister Benoit Cerexhe, Innovation, Research, International Trade; Ministry of Research and Innovation of Brussels Capital Region (Rue Engelandstraat 555 – 1180 Bruxelles Brussel) |
| <strong>CROATIA</strong>   | Ministry of Science, Education and Sports |
|               | Croatian Academy of Sciences and Arts (HAZU) |
|               | Croatian Science Foundation |
| <strong>CYPRUS</strong>    | Planning Bureau |
|               | Research Promotion Foundation of Cyprus |</p>
<table>
<thead>
<tr>
<th>Country</th>
<th>Contact and Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CZECH REPUBLIC</td>
<td>Ministry of Education, Youth and Sport – central administrative body</td>
</tr>
<tr>
<td></td>
<td>Research and Development and Innovation Council, Office of the Government of the Czech</td>
</tr>
<tr>
<td></td>
<td>Republic</td>
</tr>
<tr>
<td></td>
<td>Ministry of Industry and Trade</td>
</tr>
<tr>
<td>DENMARK</td>
<td>Ministry of Science, Technology and Innovation contact: Thomas Midtgaard, <a href="mailto:thmi@fi.dk">thmi@fi.dk</a></td>
</tr>
<tr>
<td>FINLAND</td>
<td>Ministry of Education and Culture (<a href="http://www.minedu.fi/English">www.minedu.fi/English</a>)</td>
</tr>
<tr>
<td>FRANCE</td>
<td>Ministry of Higher Education and Research</td>
</tr>
<tr>
<td></td>
<td>Ministry for Economic Regeneration</td>
</tr>
<tr>
<td>GERMANY</td>
<td>Federal Ministry of Education and Research <a href="http://www.bmbf.de">www.bmbf.de</a></td>
</tr>
<tr>
<td></td>
<td>Federal Ministry of Economics and Technology <a href="http://www.bmwi.de">www.bmwi.de</a></td>
</tr>
<tr>
<td>GREECE</td>
<td>The General Secretariat for Research and Technology/GSRT/Ministry of Education</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.gsrt.gr">www.gsrt.gr</a></td>
</tr>
<tr>
<td></td>
<td>General Secretariat for Industry (Innovation Policy)</td>
</tr>
<tr>
<td>IRELAND</td>
<td>Office of Science, Technology and Innovation</td>
</tr>
<tr>
<td>ITALY</td>
<td>Ministry of Education, Universities and Research (MIUR)</td>
</tr>
<tr>
<td></td>
<td>Ministry for Economic Development (MISE) - innovation policy</td>
</tr>
<tr>
<td>LATVIA</td>
<td>Ministry of Education and Science of Republic of Latvia</td>
</tr>
<tr>
<td>LITHUANIA</td>
<td>Ministry of Science and Higher Education</td>
</tr>
<tr>
<td></td>
<td>Ministry of Economy</td>
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<tr>
<td>MALTA</td>
<td>Malta Council for Science and Technology under the Office of the Prime Minister</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>Ministry of Economic Affairs</td>
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<tr>
<td>POLAND</td>
<td>Ministry of Science and Higher Education</td>
</tr>
<tr>
<td></td>
<td>National Centre for Research and Development</td>
</tr>
<tr>
<td>PORTUGAL</td>
<td>Ministry of Economy and Employment (MEE) - Secretary of State of Entrepreneurship,</td>
</tr>
<tr>
<td></td>
<td>Competitiveness and Innovation</td>
</tr>
<tr>
<td></td>
<td>Carlos Oliveira</td>
</tr>
<tr>
<td></td>
<td>Ministry of Education and Science (MEC) - Secretary of State of Science</td>
</tr>
<tr>
<td></td>
<td>Leonor Parreira</td>
</tr>
<tr>
<td>ROMANIA</td>
<td>Authority for Scientific Research (NASR) (including innovation)</td>
</tr>
<tr>
<td>SLOVAKIA</td>
<td>Ministry of Education, Science, Research and Sportleco</td>
</tr>
<tr>
<td>SLOVENIA</td>
<td>Ministry of Education, Science, Culture and Sport</td>
</tr>
<tr>
<td>SPAIN</td>
<td>Ministry of Economy and Competitiveness (MEC)</td>
</tr>
<tr>
<td></td>
<td>Centre for the Development of Industrial Technology (CDTI) – MEC agency</td>
</tr>
<tr>
<td></td>
<td>Spanish Regions – independent R&amp;D&amp;I strategies</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>Ministry of Education and Research</td>
</tr>
<tr>
<td></td>
<td>Ministry of Enterprise, Energy and Communications – innovation</td>
</tr>
<tr>
<td>UNITED KINGDOM</td>
<td>Department of Business, Innovation and Skills</td>
</tr>
</tbody>
</table>
## Associated Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERBIA</td>
<td>Ministry of Education, Science and Technological Development (<a href="http://www.mpn.gov.rs">www.mpn.gov.rs</a>)</td>
</tr>
<tr>
<td>TURKEY</td>
<td>Supreme Council for Science and Technology (SCST) Scientific and Technological Research Council of Turkey (TUBITAK) - advisory agency to the Turkish Government on science and research + secretariat of the SCST Ministry of Science, Industry and Technology - research and innovation policies</td>
</tr>
</tbody>
</table>

## 5. National authorities responsible for transport research and innovation

<table>
<thead>
<tr>
<th>Member States</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRIA</td>
<td>The Austrian Federal Ministry for Transport, Innovation and Technology (Bundesministerium für Verkehr, Innovation und Technologie / bmvit)</td>
</tr>
</tbody>
</table>
| BELGIUM       | **Federal level**  
Minister Paul Magnette, Ministre des Entreprises publiques, de la Politique scientifique et de la Coopération au développement, chargé des Grandes Villes  
**Regional level**  
**Wallon region**  
Minister Jean-Marc Nollet, Vice-Président et Ministre du Développement durable, de la Fonction publique, de l’Énergie, du Logement et de la Recherche ; Service Public de Wallonie, Direction générale de l’Économie, de l’Emploi et de la Recherche (DGO6)  
**Flemish region**  
Minister Ingrid Lieten, Vice-Minister-President of the Government of Flanders, Flemish Minister for Innovation, Public Investment, Media and Poverty Reduction  
**Brussels Capital**  
Minister Benoît Cerexhe, Innovation, Research, International Trade; Ministry of Research and Innovation of Brussels Capital Region (Rue Engelandstraat 555 – 1180 Brussel) |
| CROATIA       | Ministry of Science, Education and Sports  
Croatian Academy of Sciences and Arts (HAZU)  
Croatian Science Foundation |
| CYPRUS        | Research Promotion Foundation of Cyprus |
| CZECH REPUBLIC| Ministry of Transport  
Technology Agency of the Czech Republic |
| DENMARK       | Ministry of Transport |
contact: Erik Toft: et@trm.dk  
Ministry of Science, Technology and Innovation  
contact: Thomas Midtgaard, thmi@fi.dk

**FINLAND**

- Ministry of Transport and Communication  
- Finnish Transport Agency (www.liikennevirasto.fi/en)  
- Finnish Transport Safety Agency TRAFI  
- Finnish Funding Agency for Technology and Innovation TEKES (www.tekes.fi/en)  
- Regional level  
- Centres for Economic Development, Transport and the Environment

**FRANCE**

- Ministry of Higher Education and Research  
- Ministry for Economic Regeneration  
- Ministry for Ecology, Sustainable Development and Energy (in charge of Transports, Sea and Fisheries)

**GERMANY**

- Federal ministries - national transport research programme  
- Mobility and Transportation Technologies  
- Federal Ministry of Economics and Technology (www.bmwi.de) - “Federal Aeronautical Research Programme” (LuFo IV)  
- Federal Ministry of Transport, Building and Urban Development (www.bmvbs.de)  
- Federal Ministry of Education and Research (www.bmbf.de)  
- Federal Environment Ministry (www.bmu.de)  
- Federal Ministry of Food, Agriculture and Consumer Protection (www.bmelv.de)

**GREECE**

- Ministry of Transport  
- Ministry of Development, Infrastructure, Transports and Networks (www.ypoian.gr)

**IRELAND**

- Department of Transport, Tourism and Sport  
- Agencies funding transport research  
- The National Roads Authority  
- The National Transport Authority  
- The Road Safety Authority  
- Enterprise Ireland

**ITALY**

- Ministry of Education, Universities and Research - PNR National Research Programme  
- Ministry for Infrastructure and Transports  
- Ministry for Environment  
- Ministry for Economic Development

**LATVIA**

- Ministry of Education and Science

**LITHUANIA**

- Ministry of Transport and Communications - National Communication Development Programme

**MALTA**

- Malta Council for Science and Technology within the Office of the Prime Minister  
- Transport Malta under the Ministry for Infrastructure, Transport and
<table>
<thead>
<tr>
<th>Associated Countries</th>
<th></th>
</tr>
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<tbody>
<tr>
<td><strong>SERBIA</strong></td>
<td>Ministry of Education, Science and Technological Development</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.mpn.gov.rs">www.mpn.gov.rs</a></td>
</tr>
<tr>
<td><strong>TURKEY</strong></td>
<td>TUBITAK</td>
</tr>
<tr>
<td></td>
<td>Ministry of Transport, Maritime Affairs and Communications</td>
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</tbody>
</table>
ANNEX III : QUESTIONNAIRE N°2

Structural Funds represent an important source of funding for Research and Innovation: 60% of the Cohesion budget for 2007-2013 has been committed to research and innovation projects, whilst 22% has been allocated to the transport sector.

The European Commission's proposal for a new framework for the Cohesion Policy 2014-2020 is currently under negotiation with the Council and the European Parliament. Out of its eleven Thematic Objectives to deliver Europe 2020, three are focussed on transport area: strengthening research, technological development and innovation (R&I Investment priorities for ERDF); supporting the shift towards a low-carbon economy in all sectors; and promoting sustainable transport and removing bottlenecks in key network infrastructure.

Horizon 2020, the new Research Framework Programme 2014-2020, provides specific reference to the synergies between the two programmes as it introduces higher levels of flexibility allowing for a multiannual approach and complementary funding, thereby facilitating coherent programming and prioritisation between the Framework Programme and the Structural Funds. The Framework Programme's key objective remains 'excellence', whereas the Structural Funds contribute to capacity building, deployment of results and downstream innovation activities.

The Questionnaire on EU Research Programme Synergies with the Structural Funds aims to identify drivers and barriers to synergies' exploitation, to explore suitable communication channels between responsible actors, and to understand the level of awareness and inclusion of transport research aspects in the Smart Specialisation Strategies in EU Member States.

Useful Links:

http://ec.europa.eu/research/horizon2020
http://ec.europa.eu/regional_policy
http://ec.europa.eu/regional_policy/country/prordn/index_en.cfm
http://s3platform.jrc.ec.europa.eu/home
1. To date, was there any exchange or cooperation between the Structural Funds managing bodies and the national authorities establishing policies and implementing transport research and innovation?

2. If such exchange or cooperation took place, what were the main aspects addressed?

3. If no exchange took place, what could be the reason for it?

4. What are the main barriers at political, strategic and at operational level preventing synergies between Transport Research Programme (FP7) and the Structural Funds?

5. What are the main drivers supporting common planning and implementation of the Transport Research Programme (FP7) and the Structural Funds?

6. What channels or networks were or could be used to exchange information between national authorities managing Structural Funds and Transport Research Programme (FP7) in your country?

7. Could you provide examples of transport activities - projects with regional dimension or impact and/or market up-take focus - where synergies between the Transport Research Programme (FP7) and the Structural Funds have been generated or exploited?

8. Could these examples be used to illustrate potential transport priority areas of Smart Specialisations National Strategies where concentration of both funding sources can maximize the impact of EU investment or act as leverage?

9. Is there/ will there be a Smart Specialisation Strategy that (could) include(s) transport and innovation aspects?

10. Please specify the context, type of activities, and foreseen timeframe for implementation of the Smart Specialisation Strategy.

11. Any other comments?
# ANNEX IV: FP7 TPC WORKING GROUP EXPERTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Institution</th>
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<tbody>
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<td>Manuel PEREIRA <em>Rapporteur</em></td>
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<td>CDTI, Madrid</td>
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<td>NL</td>
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<tr>
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<td>CZ</td>
<td>National Technology Platform for Road Transport, Brno</td>
</tr>
<tr>
<td>Cristina PRONELLO</td>
<td>IT</td>
<td>Politecnico di Torino</td>
</tr>
<tr>
<td>Frederick GETTON</td>
<td>FR</td>
<td>Ministère de l'Enseignement Supérieur et de la Recherche, Paris</td>
</tr>
<tr>
<td>Asa VAGLAND</td>
<td>SE</td>
<td>Ministry of Enterprise, Energy and Communication, Stockholm</td>
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<tr>
<td>Catalin NAE</td>
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<td>National Institute for Aerospace Research, (INCAS), Bucharest</td>
</tr>
<tr>
<td>Marina MARTINEZ</td>
<td>ES</td>
<td>SOST-CDTI, Brussels</td>
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<tr>
<td>Ana RAPOSO</td>
<td>PT</td>
<td>FCT, Ministry for Education and Science, Lisbon</td>
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<tr>
<td>Maria MUNOZ-MARTINEZ <em>invited-</em></td>
<td>ES</td>
<td>Ministry of the Treasury and Public Administrations, Madrid</td>
</tr>
</tbody>
</table>

**EC OFFICIALS**

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<thead>
<tr>
<th>NAME</th>
<th>DG</th>
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<tbody>
<tr>
<td>Andras SIEGLER</td>
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<td>Alessandro DAMIANI</td>
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<td>Roberta ZOBBI</td>
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<tr>
<td>Mihaela WILLIAMS</td>
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<tr>
<td>Cristina MAROLDA</td>
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</tbody>
</table>
The Report aims to inform national and regional transport research authorities and stakeholders about the possibility to combine funding offered by the research and cohesion programmes 2014-2020, to precise important notions such as the Smart Specialisation concept - allowing Member States and regions to concentrate investments on their comparative advantages and to boost the creation of cross-European value chains - as well as to recommend measures allowing to maximise the exploitation of synergies for transport research such as strategic coordination of policies and programmes and enhanced communication between actors, while indicating potential transport areas where synergies could bring added value.