



PRO INNO EUROPE

INNO LEARNING PLATFORM

Synergies between EU instruments supporting innovation

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1. Introduction

1.1 Scope and objectives of the mini-study

As part of the preparation for a European Commission Communication, a series of eight mini studies have been prepared under the overall theme of 'Towards a more efficient support of innovation in Europe'.

The objectives of the mini studies are to:

- better understand the scope and financial implications of existing support mechanisms in favour of innovation in Europe;
- better define the practical application of the subsidiarity principle as provided by the Lisbon Treaty to support mechanisms in favour of innovation, based on a better identification of market failures;
- explore how to better foster synergies and complementarities between regional, national and European level in support of innovation, taking into account the subsidiarity principle;
- identify future challenges for improving existing innovation support schemes or developing new instruments and approaches, by mutual learning and trans-national cooperation,
- explore needs and possibilities to further develop the European Enterprise Network, in response to well-identified market failures and in full respect of the subsidiarity principle.

This mini study sets out to examine the main instruments in support of innovation at European level. The analysis builds on a 2007 report by Technopolis Group to the European Parliament's ITER Committee (Industry, Technology, Energy and Research) on synergies between the Seventh Research Framework Programme, the Structural Funds and the Competitiveness and Innovation Programme. It seeks to develop new ideas on how to implement the recommendations of this report in a practical and operational manner.

In particular, it addresses the following two main questions:

- How can these Community instruments best complement each other in developing innovation support mechanisms and which bridges can be built to achieve optimal synergies between them?
- How to improve the efficiency of the European mechanisms in support of innovation?

Alasdair Reid, Technopolis Group (Belgium) drafted this mini study with contributions from:

- Paula Galvao, INNOVA Europe (Portugal)
- Eelco Denekamp, SenterNovem (the Netherlands)

1.2 Approach adopted by this mini study

Given the limited resources available this study does not seek to collect further additional evidence on how the European instruments operate or their potential synergies. Rather, the approach taken is to structure a set of operational proposals that could be taken up by European, national or regional authorities and stakeholders in order to improve synergies and complementarities.

This study is structured as follows:

Section 2: provides a succinct overview of the respective objectives, timetable and measures of the main EU instruments supporting innovation;

Section 3: examines the issue of complementarities between the main European initiatives and discusses how these complementarities can be achieved operationally, or how existing complementarities can be achieved more efficiently (avoiding overlap);

Section 4: makes a set of proposals to further enhance the European instruments in support of innovation; and in particular makes a set of recommendations that could be taken up by the partners and stakeholders involved in PRO-INNO Europe, Europe Innova or through the Enterprise Europe network activities.

2. Overview of the main European instruments supporting innovation

This section describes briefly the rationale and types of instruments for each of the main EU instruments. A recent Commission publication provides a more detailed guide to the three main instruments, but from a research driven perspective¹.

2.1 The competitiveness and innovation framework programme (CIP)

The CIP aims to foster the competitiveness of European enterprises and has a total budget of over EUR 3.6 billion for the period 2007-13. It is split into three main programmes²:

- The entrepreneurship and innovation programme (EIP) - EUR 2 170 million;
- Information communication technologies policy support programme (ICT-PSP) – EUR 730 million;
- Intelligent Energy Europe Programme (IEEP) - EUR 730 million

Although ICT-PSP and IEEP may have actions fostering innovation indirectly, these programmes do not directly target the promotion of more or better innovation performance in enterprises. The remainder of this section summarises briefly the instruments funded under the EIP in terms of type of support, target groups and funding available.

Figure 1: CIP - main instruments for innovation

Instrument	Type of support	Target Group	Finance 2008 EIP-WP
Pro-INNO Europe	Network of and support to policy makers	Policy makers	n.a.
Europe Innova	Networking of and support to service providers	Intermediaries	€3.4m (2008)
Enterprise Europe Network	Advisory services to SMEs	Intermediaries and indirectly enterprises	€74.2m (2008)
High Growth and Innovative SME Facility (GIF)	Innovation financing (equity based)	Venture funds and indirectly enterprises	€143m (2008) (€26m earmarked for eco-innovation) Same amounts for 2009
Eco-innovation	Grant based co-financing	Public and private organisations	€26m (2008) + €28m via DG ENV

Source: http://ec.europa.eu/cip/index_en.htm

¹ Practical Guide to EU funding opportunities for research, development and innovation (2008) Directorate General for Research, European Commission. http://cordis.europa.eu/eu-funding-guide/home_en.html

² The Executive Agency for Competitiveness and Innovation (EACI) currently implements the Intelligent Energy Europe programme. The Agency manages the projects and events funded under this programme and disseminates the resulting know-how and best practices. This gives the programme a sharper focus and greater visibility. As of 2008, the EACI also manages the Enterprise Europe network and eco-innovation initiatives.

PRO-Inno Europe and Europe Innova are two complementary initiatives at the policy making level and design level. They both involve a set of analytical and practically orientated technical assistance to respectively policy makers (national and regional levels) and service providers (technology transfer brokers, financial intermediaries, cluster managers, etc.).

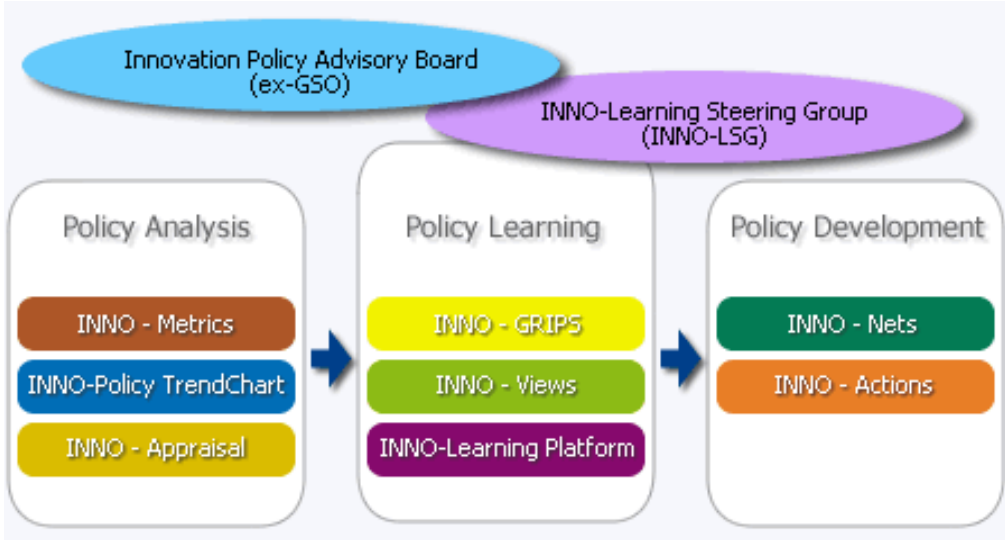
PRO INNO Europe and Europe INNOVA are **important cornerstones of the European innovation strategy**, aiming at mobilising innovation policy makers and intermediaries at all levels, with the view to improving existing innovation support mechanisms in Europe, notably for SMEs, and to fostering trans-national cooperation.

Whereas PRO INNO Europe focuses on 'better innovation policies' in Europe, Europe INNOVA addresses in a more practical manner specific market failures that still hinder innovators to commercialise their ideas faster and with greater success in Europe.

Both initiatives are inter-related. Practical solutions developed under Europe INNOVA may both improve the services provided by the European Business Support Networks as well as contribute to better policies in general. Nevertheless, **the two initiatives address different communities** that can not be easily merged. PRO INNO Europe addresses ministries, regional development agencies and innovation agencies that decide at strategic and programme level; Europe INNOVA addresses programme managers, cluster managers, consultants and investors that practically assist enterprises in their efforts to innovate.

PRO INNO Europe offers a platform for innovation policy analysis and policy learning in Europe, thus helping to build stronger innovation systems in Europe and making more efficient use of public support to innovation. This effort should be pursued and further developed, by further improving innovation policy analysis and benchmarking (European Innovation Scoreboard), and fostering trans-national policy cooperation through the so-called INNO-Nets and INNO-Actions. The ultimate **objective of PRO INNO Europe is to contribute to better innovation policies in Europe.**

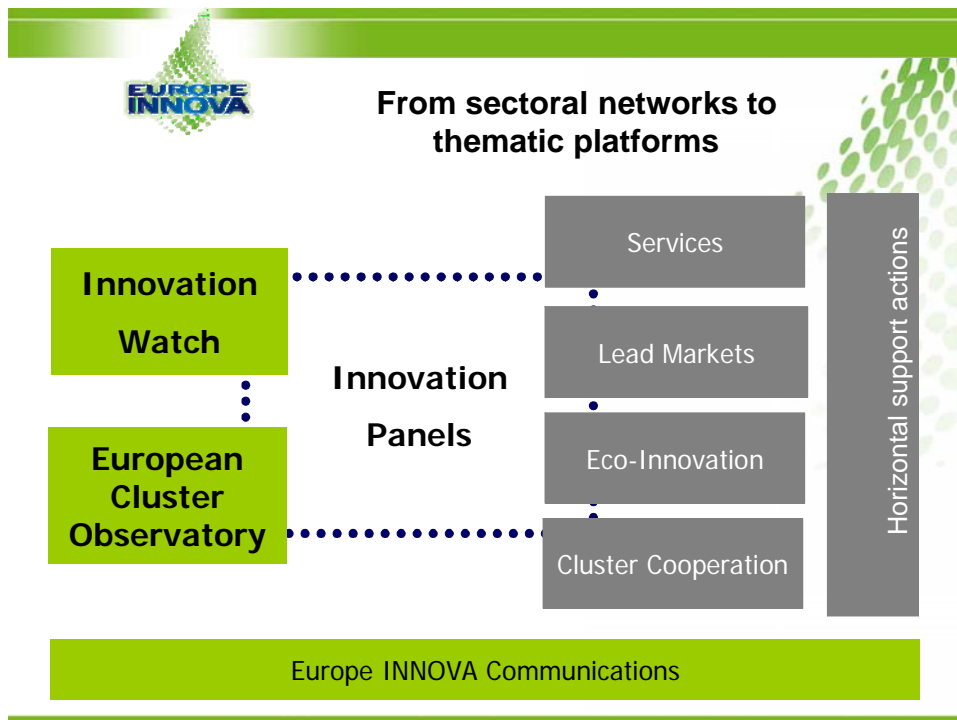
Figure 2: PRO-INNO Europe family of initiatives



Source: <http://www.proinno-europe.eu>

Europe INNOVA is to provide a more focussed response to new challenges and political priorities. Actions are geared towards promoting innovative market solutions and testing new innovation policy instruments through building strong **public-private partnerships**.

Figure 3: Europe Innova actions 2008 onwards



Source: <http://www.europe-innova.org>

These two instruments are clearly, on paper, key tools in promoting both an improved understanding of policy 'challenges' and emerging trends in policy measures in favour of innovation; as well as a means of encouraging policy development and design of more effective innovation policy measures. As such they could be expected to contribute to improving complementarities between EU level actions (e.g. direct funding for eco-innovation under the EIP and national or regional initiatives in favour of eco-innovation co-funded by the Structural Funds).

One observation here is that the wide range of issues addressed by both PRO INNO Europe and Europe Innova are not reflected in the direct grant funding provided by the EIP programme to develop pilot actions at national/regional level. Direct support or pilot actions are basically restricted to innovation financing and eco-innovation.

Launched in 2008 by the European Commission, the Enterprise Europe Network³ combines and builds on the former Innovation Relay Centres and Euro Info Centres (established in 1995 and 1987 respectively). The new integrated network offers a 'one-stop shop' to meet all the information needs of SMEs and companies in Europe. One prescribed aim of the new network is to improve the relationship between the European Commission and business. Network representatives will provide the Commission with regular feedback on EU policy, the difficulties SMEs face with operating in the EU and the effectiveness of the EU's programmes. In this sense, the mission of the regional partnerships clearly includes a remit to foster complementarities at their level between the EU instruments for the benefit of business.

Indeed, from the innovation policy perspective, it could be argued that the Enterprise Europe network is the foundation of a 'policy development and implementation' pyramid. At the next level up, Europe INNOVA brings together funding agencies and other financial organisations,

³ http://www.enterprise-europe-network.ec.europa.eu/index_en.htm

incubators, intermediaries and research institutes that are involved in policy development. These 'platforms' operating as public-private partnerships work in four themes: knowledge intensive services; lead markets; greening industries; cluster cooperation. All networks are expected to have a strong link to EU innovation policy development through the taking up of similar themes in the framework of PRO INNO Europe activities (explicitly aimed at supporting co-operation between policy makers in the Open Method of Coordination framework).

The High Growth and Innovative SME Facility (GIF)⁴ invests in specialised funds, which provide venture capital for SME financing. The GIF is funded by the CIP but managed by the European Investment Fund (EIF) on behalf of the Commission. The GIF's objective is to improve access to finance for the start-up and growth of SMEs, and investment in innovation activities, including eco-innovation. The GIF aims to achieve this objective by:

- contributing to the establishment and financing of SMEs and the reduction of the equity and risk capital market gap which prevents SMEs from exploiting their growth potential, with a view to improving the European venture capital market;
- supporting innovative SMEs with high growth potential, in particular those undertaking research, development and other innovation.

GIF comprises two business lines, or 'windows': GIF 1 covers early stage (seed and start-up) investments investing in specialised venture capital funds such as early stage fund, funds operating regionally, funds focussed on specific sectors, technologies or research, technologies or research and technical development and funds linked to incubators, which in turn provide capital to SMEs. Co-investment in funds and investment vehicles promoted by business angels is also permitted. GIF 2 covers expansion stage investments by investing in specialised risk capital funds, which in turn provide quasi-equity or equity for innovative SMEs with a high growth potential in their expansion phase avoiding buy-out or replacement capital for asset stripping.

In the framework of the EIP, the eco-innovation sub-programme is designed to overcome barriers to further market penetration of environmentally friendly products and turn these products and processes into Europe's future eco-innovation successes. Some EUR 28 million is available to co-finance projects for the promotion of innovative, environmental-friendly projects in the area of materials recycling, sustainable buildings, food and drink industrial processes, green business and smart purchasing to name a few. Successful applicants can expect to receive financial support covering up to 60% of the project eligible costs. Applications from SMEs are particularly encouraged. A first call was launched in 2008.

The two other programmes of the CIP obviously also indirectly influence innovation through a number of their actions. For instance, the ICT-PSP funds pilot projects aimed at ensuring the EU-wide interoperability of ICT-based solutions that are being launched or are already in operation in the Member States. They help ensure cross border access to these services and avoid market fragmentation of innovative services and products.

⁴ http://www.eif.org/venture/resources/european_commission/gif1_gif2/index.htm

2.2 The Structural Funds

EU cohesion policy for the period 2007-2013 addressed innovation through the legislative package governing cohesion policy as follows:

- A focussing of the scope of the European Regional Development Fund (ERDF) and of the European Social Fund (ESF) on investment directly relevant to innovation. In addition, the mainstreaming of innovative activities is called for by both funds.
- The Community strategic guidelines on cohesion policy (2007-2013) stress that to promote sustainable development and strengthen competitiveness it is essential to concentrate resources on research and innovation (RTDI), entrepreneurship, information society and training and adaptability of workers.

Figure 4: Structural Fund - main instruments supporting innovation

Instrument	Type of support	Target Group	Finance 2007-13
European Regional Development Fund	Broad range of financial support measures relevant for innovation	Regional authorities, agencies, intermediaries, enterprises	Share for research and innovation: €99bn estimated by DG REGIO
European Social Fund	Broad range of actions aimed at developing human capital but also networking of universities, enterprises, etc.	Training bodies, enterprises, universities, etc.	Share for research and innovation: €14.5bn estimated by DG EDUC
European Territorial co-operation objective (INTERREG IV)	Inter-regional co-operation projects	Regional authorities, agencies, intermediaries. Indirectly enterprises.	Share for research and innovation : €2bn estimated by DG REGIO
Joint European Resources for Micro to Medium Enterprises (Jeremie)	Technical assistance and studies on financial engineering in regions	Regional authorities and financial intermediaries	Per project (from ERDF technical assistance budget and EIB)
Regions for Economic Change	Inter-regional projects aimed at exchanging innovative ideas	Regional authorities, agencies, intermediaries.	Funding for 'fast-track' projects under INTERREG IVC

Source: http://ec.europa.eu/regional_policy/index_en.htm

From the list of spending categories included in the Commission Regulation covering the typical projects/activities that are financed through the Structural Funds, four include a specific innovation component, namely: 'RTDI - Research, Technological Development and Innovation', 'Entrepreneurship', 'Innovative ICT' and 'Human Capital'. Investment in the first group (RTDI) focuses on RTD infrastructure and centres of competence on technology transfer and improvement of cooperation of networks, on assistance to RTD and promotion of environmentally-friendly products and processes, assistance to SMEs for investment on research and innovation and on design and dissemination of innovative and productive ways of organising work, developing human potential in the field of research, etc.

Based on the data available to the Commission in November 2007⁵, the planned EU investment for innovation in 2007-2013 will be above EUR 85 billion which corresponds to 25% of the total new envelope for the 27 Member States. It is interesting to note that the value for EU-15 is more than EUR 48 billion corresponding to 30% of the total available while for EU-12 is EUR 35 billion or 20% of the total available.

The corresponding figure for 2000-2006 was EUR 26 billion which corresponds to 11% of the previous EU envelope. Thus the planned investments in innovation in 2007-2013 through cohesion policy are more than three times higher than in 2000-2006.

However, it has to be said that on past evidence these 'gross' numbers are likely to be a significant over-estimate of the amount actually devoted to innovation policy understood in a more narrow sense. Past evaluations, looking in more detail at country level, have highlighted that direct spending on innovation in 2000-2006 was less than half the official Commission estimates and that the effectiveness of the Structural Fund interventions in terms of synergies with national or regional policies was not always optimal⁶.

2.3 The Seventh Research Framework Programme

The total funding available to FP7 is considerable and is mainly disbursed (EUR 34 billion out of some EUR 50 billion) through collaborative research projects selected via competitive thematic calls under the co-operation programme⁷. Given that excellence is the criteria for selection, smaller firms and enterprises from 'less-advanced' regions have tended to be under-represented in past programmes⁸. The impact of the research framework programme on innovation is largely indirect since most actions concern research relatively far from the market⁹.

'Firms do not consider the FP primarily as a channel for developing outputs that could be immediately commercialisable. The dominant objectives for participation were reported to be: "access to complementary knowledge and skills"; "keeping up with state-of-the-art technological development"; "explore different technological opportunities"¹⁰ (Polt and Vonortas 2007).

However, a number of actions are tailored towards smaller firms or aim at developing a supporting environment in which research and innovation can flourish. The table below summarises essentially the actions promoted through the capacities programme aimed, to a greater or lesser extent, at improving the capacities of regions and smaller enterprises to participate in European level research and development actions.

⁵ Commission Staff Working Document, Regions Delivering Innovation Through Cohesion Policy, 14.11.2007, SEC(2007) 1547

⁶ Strategic Evaluation on innovation and the knowledge based economy in relation to the 2007-13 Structural Funds period. Technopolis Group for Directorate-General for Regional Policy (2006).

⁷ http://cordis.europa.eu/fp7/cooperation/home_en.html

⁸ See for instance EURAB report on SMEs and ERA, EURAB 04.028-final.

⁹ See for instance results of Innovation Impact and Implore projects.

¹⁰ See: <http://conference.imp-lore.org/statements/presentations/Polt-Vonortas.pdf>

Figure 5: Seventh Research Framework Programme - main instruments relevant for innovation

Instrument	Type of support	Target Group	Finance 2007-13
Risk Sharing Finance Facility (RSFF)	Loan financing from the European Investment Bank	Public and private organisations investing in research	€1bn from FP7 ¹¹
Research for SMEs	Research for SMEs Research for SME associations	Low to medium technology SMEs with limited research capability	€ 1 336m
Joint Technology Initiatives	Legal entities managing integrated groups of research projects	Industry, research institutes, etc.	n.a.
Research potential of Convergence Regions	Grant funding for equipment, training and technical assistance	Research institutes	€ 340m
Regions for knowledge	Support to policy design in field of regional research-driven clusters	Regional authorities, research institutes, enterprises (public-private partnership)	€ 126m
ERA-NET	Project funding for networking and exchange on research policies and programmes	Policy makers and programme managers	n.a.
ERAWATCH	Policy monitoring and studies on trends in research policy	Policy makers and programme managers	Studies and expert network
Key Figures of the ERA	Development of indicators on ERA and studies on trends in European research	Policy makers and analysts	Study budgets

Source: <http://cordis.europa.eu>

The actions can be divided into those aimed at improving access to funding for SMEs undertaking research (Research for SMEs and to some extent RSFF); actions aimed at building greater European coherence amongst research projects in specific technologies (the JTIs¹² building on the Technology Platforms, compare with Eureka clusters); actions aimed at improving research potential at regional level (Regions for Knowledge – soft measures; and Research Potential for infrastructure); and finally a set of actions aimed at improved policy design and implementation.

¹¹ In parallel, the EIB is contributing up to EUR 1bn from its own resources. Together, these funds will be used to back up financing operations with a higher risk profile than the average EIB lending portfolio. Given that each EUR of FP7 and EIB contribution to RSFF will, on average, translate into EUR 5 of RSFF loans and guarantees, RSFF will increase the overall capacity of the EIB to finance higher-risk, yet creditworthy, Research, Development and Innovation (RDI) projects by up to EUR 10bn.

¹² JTIs are independent legal entities that manage research projects in an integrated way, with industry joining forces with other stakeholders. JTIs have a dedicated budget and staff and provide a framework for the public and private players to work and take decisions together.

2.4 Other relevant initiatives

The table below summarises a number of other relevant initiatives, where potential complementarities exist with actions supported under the CIP in favour of innovation.

Figure 6: Other main European instruments for innovation

Instrument	Type of support	Target Group	Finance 2007-13
Green public procurement, standardisation, etc	Policy design and good practice materials	Policy makers and related stakeholders	Mainly studies and events.
LIFE+	Project grants financing	Public and private organisations	€2.143bn
EUREKA	'Eureka' label for market oriented R&D projects Eureka Clusters and 'Umbrellas' Eurostars programme	Projects involving at least 2 SMEs from 2 Eureka countries Strategic groupings of large firms, SMEs and research institutes Research intensive SMEs	National funding per project National funding per project €400m (€100m EU budget)
European Institute of Innovation & Technology	Knowledge Innovation Communities	Universities, research institutes and enterprises	€300m

In addition to the eco-innovation projects funded through the EIP, DG Environment of the Commission promotes a range of other technical assistance, studies, events, networks, etc. on 'greening of industry'. Much of this material is directly relevant to emerging future priorities for innovation policy, e.g. product life-cycle or integrated product policy¹³.

With a budget of €2.143 billion (for the period 2007-2013), LIFE+¹⁴ is a limited but focused funding instrument providing specific support for the development and implementation of Community environmental policy and legislation, in particular the objectives of the 6th EAP (Decision 1600/2002/EC) and resulting thematic strategies. It comprises three components: LIFE+ Nature & Biodiversity; LIFE+ Environment Policy & Governance; LIFE+ Information & Communication. At least 78% of LIFE+ will be for the co-financing of project action grants, of which at least 50% will be for nature and biodiversity projects.

A number of past and future LIFE projects have focussed on sustainable Consumption and Production (SCP); clean technologies and environmental management systems, all of which are closely linked to the developing focus on eco-innovation in the CIP. The example below illustrates that innovations promoted by LIFE can often be organisational as much as technological innovations.

¹³ <http://ec.europa.eu/environment/ipp/integratedpp.htm>. See also the forthcoming Europe Innova Innovation Watch report on eco-innovation (Technopolis Group, 2008)

¹⁴ <http://ec.europa.eu/environment/life/funding/lifeplus.htm>

Figure 7: RESPECT 'RE-use of Second-hand car ComPonEnts in Company car fleeTs'

Achmea SchadeService (a car insurance company in the Netherlands), pioneered the large-scale re-use of second hand components for vehicle repairs. With the aid of an intelligent logistics system that takes care of all the handling and availability of used car parts and quality assurance systems, and by establishing clear communication lines between all involved parties, Achmea was able to offer customers a 'green car insurance' policy. This guaranteed that clients would have their cars repaired with used parts. By early 2002, some 75 000 green policies had already been sold and 6 000 repairs carried out with used parts.

Source: <http://ec.europa.eu/environment/life/themes/industry/features2008/automotive.htm>

Created as an intergovernmental Initiative in 1985, EUREKA (<http://www.eureka.be>) aims to enhance European competitiveness through its support to businesses, research centres and universities who carry out pan-European projects to develop innovative products, processes and services. The internationally recognised EUREKA label adds value to a project and gives participants a competitive edge in their dealings with financial, technical and commercial partners. EUREKA 'Clusters' are long-term, strategically significant industrial initiatives. They usually have a large number of participants, and aim to develop generic technologies of key importance for European competitiveness, primarily in ICT and, more recently, in energy and biotechnology. Umbrellas are thematic networks within the EUREKA framework which focus on a specific technology area or business sector. The main goal of an umbrella is to facilitate the generation of EUREKA projects in its own target area. Umbrella activities are coordinated and implemented by a working group consisting of EUREKA representatives and industrial experts.

The newly launched EUREKA-Eurostars programme¹⁵ aims to ensure that 'research and development-performing SMEs receive transparent and non-bureaucratic support for their research activities'. Eurostars is a joint EUREKA-EU funding programme for R&D-driven SMEs to the tune of EUR 100m from Community funds; participating countries will jointly provide over EUR 300m. In some ways, this initiative can be regarded as an implicit recognition of the difficulties many SMEs face when sourcing funding from the Research Framework Programme.

The European Institute of Innovation and Technology (EIT)¹⁶ is a new initiative which aims to become a flagship for excellence in European innovation in order to face the challenges of globalisation. The EIT's activities will be coordinated by a Governing Board ensuring its strategic management. Activities will be based on competitively selected partnerships known as 'Knowledge and Innovation Communities' (KICs) – highly integrated public-private networks of universities, research organisations and businesses. Direct involvement of business stakeholders, including PMEs, in all strategic, operational and financial aspects of the Institute is the cornerstone of the initiative. Costs linked to the integration of KICs will be covered. These costs could arise from the ambitious, multi-annual, integrated nature of the KICs and entail support for: i) coordination of scientific and administrative tasks; ii) knowledge transfer; iii) development and implementation of interdisciplinary activities and innovation management; iv) mobility actions; v) equipment and material.

One issue that needs to be raised here is how all the 'platforms', transnational 'clusters', networks, umbrellas, etc. supported by the various EU DG's or Eureka are linked and articulated with one another. To what extent do JTIs overlap with Eureka clusters; how do Interreg IVC projects add value compared to ERANETs or Innonets, and so on.

¹⁵ <http://www.eurostars-eureka.eu/>

¹⁶ http://ec.europa.eu/eit/index_en.htm

3. Maximising synergies between European instruments

3.1 An overview of potential synergies and complementarities

The analysis in this section examines the potential for complementarities between the various EU initiatives from a thematic perspective structured around the main action lines of the EIP including:

- better access to finance for SMEs through venture capital investment and loan guarantee instruments;
- business and innovation support services delivered through a network of regional centres;
- promotion of entrepreneurship and innovation;
- support for eco-innovation;
- support for policy making that encourages entrepreneurship and innovation.

3.1.1 Financing innovative and fast-growing SMEs

The funding provided via the various EU instruments aimed at financing innovative and fast-growing SMEs has grown in the past five years and is now composed of a set of tools, which potentially cover a wider-range of SMEs.

Figure 8: Enterprise user view - finance

Types of SME	Potentially applicable initiatives
Technology pioneers	<ul style="list-style-type: none"> • FP7 Cooperation programmes and RSFF • EUREKA-Eurostars • Financial engineering instruments (co-funded by ERDF and/or CIP-GIF) • ERDF funding for collaborative research initiatives (e.g. competence centres)
Leading Technology users	<ul style="list-style-type: none"> • FP7 Research for SMEs • Financial engineering instruments (co-funded by ERDF and/or CIP-GIF) • ERDF funding for product development, prototyping, proof of concept, type measures etc.
Technology adopting SMEs	<ul style="list-style-type: none"> • FP7 Research for SME (associations) • SME guarantees (loans) (EIF) • ERDF co-financing of technology acquisition, etc.
Basic SMEs	<ul style="list-style-type: none"> • SME guarantees (loans) (EIF) • ERDF co-financing of business investment State Aid schemes

The difficulty is to go beyond a broad statement that most types of SMEs should have access to appropriate financing mechanisms, including through the support of the EU instruments.

Figure 9 Agencies user view - finance

Type of support	Source of support
Additional financial resources	<ul style="list-style-type: none"> • CIP GIF I and II (via EIF) • ERDF • RSFF (FP7)
Design of financial engineering measures	<ul style="list-style-type: none"> • Joint European Resources for Micro to Medium Enterprises (Jeremie) (EIB/ERDF); • Europe Innova financing networks • INTERREG IVC • Regions for knowledge

In terms of design of measures, regional and national stakeholders can access support from several sources as described in the table above. The most important instrument for direct design and development of new financial engineering mechanisms appears to be the JEREMIE initiative in Structural Fund eligible regions. Europe Innova financing networks provide more focused exchange between practitioners in specific fields or sectors (e.g. satellite technologies).

Examples of where previous DG Enterprise supported initiatives have led to complementarities with the Structural Funds do exist, such as the Latvian case below.

Figure 10: Boosting venture capital in Latvia

Thanks in part to participation in the DG Enterprise funded PAXIS scheme, Latvia was the first of the Baltic countries to initiate a public venture capital support scheme. It chose to model its approach on the Israeli Yozma initiative, often cited as good practice in this field. The feasibility phase of the project highlighted the absence of early-stage venture capital for small firms; as well as a lack of the necessary knowledge and skills amongst entrepreneurs on the role of venture financing and how to use it for implementing a business strategy.

The programme 'Risk Capital Financing for Small and Medium-Sized Enterprises' was initially developed as a pilot programme in 2004. It was subsequently re-branded as a national initiative, 'Venture capital financing', and included in the action plans of the National Programme on Innovation for 2005 and 2006. Since 2005, the programme has been co-financed by the European Regional Development Fund (ERDF).

Source:

http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/goodpractice/1knowledge/3ideas/lv_venture.pdf

3.1.2 Innovation support services

The main direct initiatives supporting improved effectiveness or extended service range at European level is clearly the Enterprise Europe Network. The EEN is the subject of a separate mini study, however the box below summarises the main roles and functions.

Figure 11: Enterprise Europe Network

The new EEN network is composed of three different strands, strand A covers the services delivered by the former Euro Info centres (47% of the total grant), strand B covers the activity delivered by the former Innovation Relay Centres (47 % of the total grant) and Strand C (6% of the total grant) will deliver a new set of services designed to facilitate the access of SMEs to FP7.

The regional EEN networks offer the following services:

- Providing information and practical advice on market opportunities, European legislation and policies relevant to a company or sector. Helping SMEs to find suitable business partners using its business and technology cooperation database, providing information on tender opportunities and international networking.
- Developing the research and innovation capacities of SMEs by helping to create synergies with other research actors, foster technological cooperation and holding brokerage events.
- Helping SMEs to share research results, participate in research programmes and apply for funding, particularly from the EU's FP7.
- Involving SMEs and business actors in the policy-making process, by transmitting feedback to the Commission and monitoring the implementation of EU policies in the field of competitiveness and innovation.

The role of EEN in terms of complementarities with other EU instruments could be seen from the point of view of an information dissemination or advisory function for bidding by enterprises for funding. A few points are worth raising here in terms of complementarities.

- While at first glance there might be some risk of duplicating the function of the national contact points (FP7), the Module C function of the EEN that relates to FP7 receives only 6% of the budget available and the activities eligible for co-financing are limited to those that NCPs rarely offer. For example, this includes groups to exchange experience among SMEs that have been successful in FP7. Support in proposal writing for FP7 is not eligible in the Enterprise Europe Network context since national support instruments – including those offered by the private sector - are available.
- A second risk would be to duplicate the information diffusion activities of national or regional ministries or agencies concerning programmes funded by the ERDF/ESF. However, services in Module A 'information and feedback' are limited to EU programmes for which the calls are published directly from Brussels. Since, ERDF/ESF measures are regionally managed, the Enterprise Europe Network partners should be aware of this and guide SMES directly to the local agency in charge of this.
- They may potentially lead to conflicts of interest, if the partners in the enterprise networks are using EU funding to promote and design projects in which they may have a joint interest with regional enterprises.

On the other hand, there may be more opportunities for adding on activities to the EEN in brokering and mentoring activities for SMEs in relationship to other EU funding instruments or to ensure 'joined-up' use of all funding sources available for different stages of projects. For example, LIFE+ project funding and its potential synergies with the eco-innovation projects and activities funded under the CIP.

Figure 12: Enterprise user view – innovation support services

Type of SME	Potentially applicable initiatives
Technology pioneers	<ul style="list-style-type: none"> • ERDF support for high-tech incubators and related facilities • TT/commercialisation services of universities and RTOs (often co-funded by the ERDF/ESF) • Technology centres, testing facilities, etc. (often co-funded by the ERDF/ESF)
Leading Technology users	<ul style="list-style-type: none"> • EEN (Module B) • NCPs (FP7) • TT/commercialisation services of universities and RTOs (often co-funded by the ERDF/ESF) • Technology centres, testing facilities, etc. (often co-funded by the ERDF/ESF)
Technology adopting SMEs	<ul style="list-style-type: none"> • EEN (Module B) • Technology transfer and innovation advisory services (often co-funded by the ERDF/ESF)... • Innovation advisory services (e.g. Syntens)
Basic SMEs	<ul style="list-style-type: none"> • EEN (Module A) • ERDF funding for business support services and business development grants • ESF life-long learning actions

Concerning the role of the EEN, Module A services are available to all companies but in terms of timing the market/EU rules/financing/business cooperation services offered are probably most relevant after the Module B (IRC) services when the technology is in a commercialisation/sales/internationalisation process.

However, it should not be forgotten that EEN funding is marginal compared to that of national or regional authorities and that the Structural Funds offer Member States and regional authorities much more scope and financial clout to invest in developing networks of intermediaries or developing advanced services to SMEs for innovation.

Figure 13: the Netherlands: Syntens - support services for innovation

Syntens is a network of 15 regional centres (400 employees), supported by the Dutch Ministry of Economic Affairs for over 20 years with the aim to strengthen innovativeness of SMEs by making technological and non-technological innovation oriented knowledge accessible and applicable for SMEs.

Syntens' role is to boost innovation in SMEs. This is done by; (1) tailor-made advice to SMEs, and (2) being a matchmaker: finding innovation partners for SMEs. Syntens' services are often the pre-step for bringing in (commercial) advisors or knowledge suppliers in innovation projects. Another task of Syntens is to monitor innovation trends and developments and inform policy makers about this.

Services from Syntens are very diverse, but the main ones are:

1. Collective Information services: meetings, mailings, workshops, presentations and publications. This makes entrepreneurs aware of the need to innovate.
2. Tailor made advice: start innovation in an SME by development of an Innovation Action Plan (IAP). Syntens is also available for short consults or can help with monitoring or evaluation of a project.
3. Information service desk: relatively simple questions can be asked by phone or internet (InnovatieNet).
4. Make SMEs enthusiastic to participate in regional, national and international programmes and networks.

Syntens is active in various networks with other players of the National Innovation System in the Netherlands and plays the role of a 'one stop shop' for SMEs: SMEs can contact Syntens with questions, and then Syntens will see which other organisation in the system can help the SME and make contact with this organisation.

The Syntens model has inspired a number of other national networks, such as the Flemish Innovation Co-operation network (VIS).

For more information: <http://www.syntens.nl>

Complementarities between the EU instruments do exist, for instance, the Structural Funds commonly support organisations which make up the EEN and help them to develop additional services or reinforce staff related to core regional missions. The example of the STIM network from Poland illustrates this case.

Figure 14: Developing capacities of Polish innovation brokers

STIM (Polish Network of Technology Transfer and Innovation Support for SMEs) is a network of technology transfer projects created to improve accessibility and quality of technology transfer services offered to Polish SMEs. The projects were co-funded by the ERDF Sectoral Operational Programme 'Growth of Enterprise Competitiveness' for the period 2004-2006. Although the projects were focused on developing and testing tools and know-how for technology transfer services, they have also achieved significant results in terms of actual service delivery. In concrete terms, the network's centres have advised 1 804 companies, undertaken 76 technology audits and prepared almost 200 opinions on innovativeness of technology required for obtaining technology credits. The network's activities have already led to 10 successful technology transfers.

The purpose of the initiative was to strengthen the potential of existing technology transfer centres through hiring and training new staff and through collaborative work on developing and testing new services. The network attempted to fill a gap in the supply of business advisory services in the field of technology transfer targeted at SMEs and research and development institutes looking for partners in Poland. The work of the STIM partners has benefited from the methods and experience of the European Union's Innovation Relay Centres (IRC) network, since the partners are also members of the IRC consortia. Nonetheless, the project's results went beyond the scope of the IRC service provision.

Source:

http://ec.europa.eu/regional_policy/cooperation/interregional/ecochange/goodpractice/1knowledge/2links/pl_stim.pdf

In the past, the FP7 Regions for Knowledge action has also supported development of technology and innovation intermediary services such as through the SUPER-SME project, which aimed to transfer experience¹⁷ on specific measures to improve the effectiveness of

¹⁷ http://www.e-innovation.org/supersme/files/WP5/BOOKPRINT_FINAL_COMPRESS.pdf

S&T intermediation services from more advanced regions to regions beginning to use Structural Fund support to develop such services.

3.1.3 Promotion of entrepreneurship and innovation

In terms of direct promotion of entrepreneurship and innovation, the Commission services essentially play a role as a catalyser of national or regional level initiatives. Direct actions mentioned in the 2008 EIP work-programme under this theme are more focused on small enterprise policy (European SME week, European Charter for Small Enterprises, etc.) than innovation per se. The plan to designate 2009 as the European year of creativity and innovation is an example of a Commission initiative which *'by combining action at Community, national, regional and local levels, can generate synergies and help to focus policy debate on specific issues'*¹⁸.

A number of actions undertaken by the Commission under the policy development strand of the EIP can also be seen as indirectly influencing national or regional debates on innovation. Reviews of policy developments in favour of innovation awareness or innovation prizes, workshops on innovation culture, European cluster conference, etc. (variously funded under PRO INNO Europe and Europe Innova) all help to promote new forms of support to innovation in enterprises, indirectly by informing and exchanging of practices amongst intermediaries and policy makers.

However, most action in this field is directly carried out by the Member States or regions, often with Structural Fund support in eligible regions. The following figure provides a number of examples from the TrendChart policy measure database.

Figure 15: Examples of innovation promotion and awareness initiatives

The **Estonian InnoAwareness** programme (2004-2007, co-financed by the ERDF) foresees a broad improvement of innovation awareness via various publications, seminars, and training programmes, innovation prizes and also aims at involving the media. The main goal is to raise awareness of the subject of innovation and its role in competitiveness of enterprises, and as a warrantee of economic growth and social welfare increase among different actors of the innovation system and wider public. The Innovation Awareness Programme aims to increase the awareness of innovation as an important factor of economic growth and to reinforce knowledge and know-how on innovation methods and tools. Enhanced innovation awareness is instrumental for Estonian businesses in increasing their productivity, the results of which would widen their opportunities in expanding markets, strengthen products and services as well as leading to successful company management.

The **Programme for Entrepreneurship and Innovation in Norway** (Programme for *entreprenørskap og nyskaping i Norge*), launched in 2001, develops methods, material and networks for the establishment of closer links between educational institutions and industry and the promotion of entrepreneurship in education on all levels. The programme's anchor is a nation-wide permanent institution that develops and implements models and methods for entrepreneurship in education and training in schools, colleges and universities.

The **Cypriot Innovation Prize for Tourism** aims at the promotion of business excellence and increasing awareness on the importance of innovation in the tourism sector. In this context two annual competitions were launched in 2006 on an annual basis aimed at tourism enterprises and food and beverage enterprises respectively. The competition will consist of different categories of winners, including hotels, travel agencies, traditional taverns, leisure parks etc. and for each category there will be three prize awards: gold, silver and bronze. The winners will be allowed to use the emblem of the competition in their advertising campaign for a period of five years. The results will be also integrated in the marketing campaign of the Cyprus Tourism Organisation. The measure has been introduced by the Regional Innovation Strategy for Cyprus action plan (a project co-financed by DG Enterprise).

Source: European Innovation TrendChart database

¹⁸ European Commission press release, 31 March 2008 (IP/08/482)

3.1.4 Eco-innovation

Eco-innovation is a key part of the CIP policy objectives and is increasingly seen as a means to promote a more 'sustainable competitiveness'. However, funding at European level through the CIP remains derisory given the level of the challenges faced. For the first call published in 2008, the CIP programme makes available only EUR 28m (co-financing) and expects to fund 40 projects. A drop in the ocean compared to the need to radically 'dematerialise' (reduce resource consumption of) the economy.

Moreover, the focus of attention adopted by the CIP programming documents remains on the classic 'eco-industries', while in reality most analysts argue that eco-innovation is a phenomenon that can occur in any business sector and, therefore should be encouraged and promoted in any business sector¹⁹. Innovation investment and performance remains disconnected from resource productivity and energy consumption in most if not all EU Member States²⁰. Hence, the need for a much more radical and significant initiative at European level to boost eco-innovation efforts by enterprises across all sectors is required.

Eco-innovation is also mentioned (briefly) in SF guidelines with a view to '*ensuring full exploitation of European strengths in the area of eco-innovations. Eco-innovations should be promoted, together with the improvement of SME practices through the introduction of environmental management systems. By investing in this area now, EU businesses will be in a strong position in the near future when other regions appreciate the necessity of such technologies. This is an area with a clear link to the Framework Programme for Competitiveness and Innovation*'.

Eco-innovation per se is not a matter addressed by FP7, however environmental technologies are targeted by the Environment theme under the co-operation programme²¹. Within the FP7 'Cooperation' Programme, the theme dealing with environment (including climate change) has a budget of EUR 1.9 billion. A wide range of research topics are addressed, grouped into four areas: climate change, pollution and risks; sustainable management of resources; environmental technologies; and earth observation and assessment tools for sustainable development. Clearly many of these projects will be upstream research that could lead to new eco-innovation at a later stage, with development and testing potentially supported under CIP or the Structural Funds.

Figure 16: Enterprise user view – eco-innovation

Types of SME	Potentially applicable initiatives
Technology pioneers	<ul style="list-style-type: none"> • FP7 Cooperation programme – environment theme • Potentially 'green' financial engineering schemes (with ERDF/EIF-CIP support) • EIP – Eco-innovation programme – grants for pilot projects
Leading Technology users	<ul style="list-style-type: none"> • LIFE+ grant funding • EIP – Eco-innovation programme – grants for pilot projects • ERDF funding for eco-clusters, thematic eco-innovation programmes, etc.

¹⁹ Technopolis Group (2008); Final Report on Eco-innovation; Sectoral Innovation Watch Project under Europe INNOVA.

²⁰ Technopolis Group (2008), op.cit.

²¹ http://cordis.europa.eu/fp7/environment/about-env_en.html#what

Types of SME	Potentially applicable initiatives
Technology adopting SMEs	<ul style="list-style-type: none"> • LIFE+ grant funding • ERDF funding for environmental technologies investments
Basic SMEs	<ul style="list-style-type: none"> • ERDF funding for environmental technologies; improved waste management/water, etc.

The public sector can use numerous instruments to work towards eco-innovation. The measures can be divided into six broad types:

- market-oriented schemes;
- public procurement;
- regulatory and normative frameworks;
- incentives for eco-innovation business process;
- awareness raising and demonstration measures;
- strategic planning and foresight.

Figure 17: National programmes supporting eco-innovation - an example

The 'Building of Tomorrow' is part of the Austrian Programme on Technologies for Sustainable Development developed by the Federal Ministry of Transport, Innovation and Technology. The programme aims at enhancing the competitiveness of Austrian industry and research while at the same time improving the quality of life and the environment.

The activities focus on three areas:

- Sub-programme 'Building of Tomorrow'
- Sub-programme 'Energy Systems of Tomorrow'
- Sub-programme 'Factory of Tomorrow'

Each sub-programme has defined concrete goals and a strategy of several years. Exemplary pilot and demonstration cases ('beacons of innovation') are being developed through chains of projects, each one building on the results of the previous. Basic research studies, cooperative research involving both companies and researchers and finally the development of components and technologies form the basis for these demonstration cases.

Source: European TrendChart on Innovation

Measures supporting eco-innovation are a mix of market-based and regulatory tools supported by voluntary agreements involving all relevant 'stakeholders'. These instruments can be applied within many government policies (e.g. fiscal policy, science policy, environmental policy, innovation policy). The longer-term impact of green public procurement, strongly promoted by DG Environment of the Commission, may indeed be more substantial than any direct support offered through the CIP for eco-innovation projects.

3.1.5 Support for innovation policy making

In many respects the actions promoted by the EIP described above in favour of policy making include the strongest likelihood of complementarities with other instruments, as well as the highest risk of overlap. The PRO INNO Europe and Europe Innova initiatives, described earlier, provide a range of options for policy makers and intermediary bodies. Under FP7, DG Research is funding a range of initiatives supporting policy making, ranging from ERAWATCH; key figures and regional key figures of the European Research Area; ERANETS; OMC-Nets; Regions for Knowledge; etc. The risk of overlap is well recognised since the dividing line between innovation and industrial R&D is hard to draw in a meaningful

way. Recognising this, the Commission services have taken a number of steps to improve complementarities. For instance, the Innovation TrendChart policy measure database and ERAWATCH inventory of research programmes were combined during 2007 into a single monitoring device using a common policy framework. At the same time, the two services retain the possibility to use the database for analysis of policy developments from the specific perspectives of innovation and science policies.

In terms of innovation and industrial research statistics and studies, the European Commission committed²² itself in October 2005 to establishing a European Industrial Research and Innovation Monitoring System (EIRIMS). An expert group reported²³ to DG Research and DG Enterprise in July 2007 on the establishment of EIRIMS proposing several options to reduce overlaps (e.g. between the European Innovation Scoreboard and Key Figures of ERA); or to prioritise the completion of gaps in specific areas of importance for industrial research and innovation policies.

Figure 18: Agency user view – innovation policy making (funding)

Types of agency	Potentially applicable initiatives
National or regional public authorities	<ul style="list-style-type: none"> • OMC-Nets • ERA-NETs • RFK (FP7) • Inno-nets • INTERREG IVC (Regions for Economic Change)
'Innovation' agencies	<ul style="list-style-type: none"> • Inno-actions • INTERREG IVC (Regions for Economic Change)
Specialised service providers (technology brokers, incubators, cluster managers, financial intermediaries, etc.)	<ul style="list-style-type: none"> • INTERREG IVC (Regions for Economic Change) • Europe Innova networks and 'platforms' • Regions for Knowledge (FP7)

The Structural Funds increasing focus on innovation is not entirely new, although the scale of investment has obviously increased. However, it is possible to look back over on over a decade of regional innovation policy since the launch of the first regional technology plans and subsequent regional innovation strategies (co-financed by the ERDF) back in 1994. In more recent years, innovation has become more mainstreamed but actions like regions for economic change and decisions by Member States to pursue funding for regional level innovation strategy type exercises underline that the scope for improvement remains. INTERREG has also in the past and will in the future continue to support regional clusters, intermediaries, technology centres, innovation centres, etc. to cooperate on common actions across frontiers or on an inter-regional basis.

The articulation of INTERREG type funding with Inno-nets and ERA-NETs is an area where the risk of overlap and duplication of effort remains high. The need for a wider ranging review

²² "More Research and Innovation - Investing for Growth and Employment - a common approach", COM (2005) 488 and "Implementing the Community Lisbon Programme. A policy framework to strengthen EU manufacturing - towards a more integrated approach for industrial policy", COM (2005) 474

²³ Report of the Expert Group investigating the Establishment of EIRIMS, June 2007

(e.g. using social network analysis to map networks of practitioner and identify nodes of co-operation and potential duplication of effort) should be further examined.

The table below summarises the above discussion by identifying the potential for complementarities, overlaps, etc. between the instruments:

Figure 19: potential complementarities between European Instruments

CIP EIP actions	Structural Funds	FP7	Other instruments
Access to finance	⇕⇕	⇕⇕	⇕
Innovation support services	⇕⇕	⇕	
Promotion of entrepreneurship and innovation	⇓⇓	⇕	
Support for eco-innovation	⇕	⇓	⇕⇓
Support for policy making	✕	✕✕	

Legend: ⇕ potential synergy, ✕ potential overlap, ⇕ CIP complementary to other instrument, ⇓ other instrument complementary to CIP. Number of symbols: low 1 – 3 high

3.2 Making synergies operational

This section provides a number of examples of efforts to increase complementarities between the instruments at the various levels of governance: European, national and regional.

3.2.1 Efforts to improve complementarities at European level

A number of recent studies and policy documents at European level have examined the issue of complementarities and synergies between the main instruments in favour of research and innovation. These include:

- CREST 1203/07 – CREST (EUROPEAN UNION SCIENTIFIC AND TECHNICAL RESEARCH COMMITTEE) 'Guidelines on Coordinating the Research Framework Programme and the Structural Funds to support research and development'.
- EURAB 07.010, EUROPEAN RESEARCH ADVISORY BOARD, FINAL REPORT: Energising Europe's Knowledge, Triangle of Research, Education and Innovation through the Structural Funds (April 2007).
- Study by Technopolis Group for the European Parliament's ITER Committee (Industry, Technology, Energy and Research) on synergies between the Seventh Research Framework Programme, the Structural Funds and the Competitiveness and Innovation Programme (May 2007).
- Communication from the Commission: Competitive European Regions through Research and Innovation: A contribution to more growth and more and better jobs (COM(2007) 474 final, 16.8.2007).
- Opinion of the Committee of the Regions on more efficient support for research and innovation in EU regions (February 2008).

The CREST report focused on only the research FP and the Structural Funds, noting that both instruments finance research and development activities; it argued that:

However, the underlying policy logic differs: the EU research policy focuses primarily on excellence with the perspective of global competitiveness, while the EU cohesion policy aims at ensuring that less developed regions and regions confronted with serious structural change can improve and contribute to European competitiveness. The two policies tend also to address different beneficiary groups: the applicants to FP are usually actors with the highest potential for excellence in research and belong to regions which usually make limited use of SF. Vice versa those regions receiving aid for convergence objectives participate less than the other regions in the FP.

CREST considered that a more coordinated use of Structural Funds and the FP could help to achieve the aims of the Lisbon Strategy. It proposed a number of recommendations including the development of regional RTDI strategies for optimising the governance. The EURAB study is essentially a set of recommendations drawing on studies of the past investments of the Structural Funds in favour of research and innovation²⁴ but again has a strong 'research bias'.

Based on analysis of the official documents, the Technopolis Group study identified the following key **expected complementarities** and synergies at a 'political level':

The three programmes share the broad Lisbon and Gothenburg objectives but differ in their primary focus on different actors and different phases of the innovation process.

- Structural Funds should be used by regions to build up research and innovation capacity, enabling them to take part in European level activities.
- The CIP should focus on the innovation and application phase whereas the FP7 focuses on the research and development phase. This should avoid financing gaps between research, development and application.
- Regions eligible under the Structural Funds should seek to take part in the networking activities and exchanges of good practices promoted by the CIP, so that their specific situations are taken into account in the identification of good practices adapted to their needs.
- The CIP should provide support to networks of intermediaries and national schemes for actions to encourage and notably facilitate the participation of SMEs in the FP7.
- Close cooperation between the European Commission and the European Investment Bank (EIB) and the European Investment Fund (EIF) should ensure an enhanced support for start-ups and micro-enterprises, through technical assistance, grants, loans, equity, venture capital and guarantees.

However, in reality, the Technopolis Group study found that such 'political declarations' were less evident at an operational level and that while 'synergies' are possible, overlaps and gaps also exist. The analysis suggested that the most important potential synergies can be expected between SF and FP7 and SF and CIP, and to a lesser extent between CIP and FP7. Indeed, the main opportunities for synergies are based on the strong thematic complementarities between the programmes with a stronger 'technology' or 'sectoral' focus. The potential for linking up lead-market initiatives of CIP with technology platforms under FP7 and regional technology road mapping and related RTDI initiatives under the Structural Funds is one example.

²⁴ Notably, Technopolis Group (2006) Strategic Evaluation on Innovation and the knowledge economy in relation to the Structural and Cohesion Funds, for the programming period 2007-2013; study for the Directorate-General for Regional Policy, European Commission

The authors argued that the development of synergies 'on the ground' will depend on the type, needs and capacities of the potential beneficiary as well as on the regional and local context in which innovation intermediaries and enterprises operate.

The major overlap appears to concern the support for research infrastructure under both Structural Funds and FP7. In this context, the challenges for the two instruments concern a more effective coordination and assuming a reasoned approach to R&D infrastructure investments, support to regional innovation strategies, etc. that balance the cohesion versus excellence issues should they aim at the adoption of a more sophisticated policy mix for research and innovation.

Furthermore, the study identified a risk of overlapping of actions in favour of inter-regional networking funded under all three programmes in the broad field of research and innovation policies and notably clusters. All of which tend to target both the same type of target group and the themes leading to a significant risk of duplication of effort. In this respect, the risk of 'overlap' with CIP initiatives such as Europe Innova and FP7 funding for ERANET and Regions for Knowledge initiatives is important.

The main gaps appear as regards issues related to support measures for those SMEs, which while not being the 'top technology pioneers' could benefit from greater integration in trans-regional co-operation on technology development. Neither FP7, which focuses on the technology pioneers, nor CIP, giving greater emphasis to supporting networks of intermediaries, seem to directly address this issue. While in principle the Structural Funds could support such actions, subsidy instruments tend to be rather inward looking and mono-regional.

The analysis of gaps versus overlaps for financing measures of innovation SMEs suggests that on one level, the Structural Fund programmes could technically provide support for all types of firms financing needs. The main issue arising appears to be the involvement of leading technology users and technology adopting SMEs in European level actions. One obvious type of action that has begun to be funded under the Structural Funds is the development of regional technology platforms enabling these types of regional firms to be informed of and eventually integrate actions of the European Technology Platforms (ETPs).

Actual synergies from the point of view of the direct beneficiary of funding will depend on their organisational capability and strategic need to combine support from different EU instruments. On a regional level, a long term planning is necessary in order to achieve synergies in case of e.g. using one instrument (e.g. FP7) as a preparatory activity to prepare a larger infrastructural investment (e.g. through the Structural Funds).

A main conclusion of the Technopolis Group report for the European Parliament was that potential synergies of funding from different EU instruments depend on a bottom-up process of selecting strategic objectives reflected in the policy mix of SF Operational Programmes at national and regional level. The realisation of a need to combine more than one funding source must be internalised into planning at an early stage. Four main recommendations were addressed to the European level authorities:

- Firstly, the Structural Funds regional operational programmes should allocate sufficient resources to sustaining and further developing 'regional research and innovation strategic frameworks'. A reserve funding pool could be included in regional operational programmes with a view to its release based on an updated strategic framework;
- Secondly, the study recommended a major cross-cutting evaluation of inter-regional network funding covering all such activities under three programmes. This should be done before continuing to fund, parallel, overlapping networks of regional policy makers and practitioners, with limited understanding of the value added or impact that they have on regional competitiveness.

- Thirdly, specific evaluation or impact assessment studies of the three instruments should include analysis of inter-relations with other instruments taking into account time lags and time inter-dependencies in achieving synergies.
- Finally, a more detailed assessment of spatial coverage of possible synergies is required, as an initial review suggests that only a limited number of regions have actual potential to benefit from synergies between the programmes. This requires strengthening regional level analysis of research and innovation potential.

Inspired by these different studies and opinions, the Commission services prepared a consultation document aimed at informing and advising project applicants about the three instruments. The most significant added value of this guide²⁵ is to bring together in one place information on the three programmes and to present it in a step-by-step way / frequently asked questions approach. Otherwise, it is unlikely to be of much help to potential participants to the programme(s) since:

- it is written - particularly the 'synergies' section - in a style that is still 'for Brussels consumption' with many vague or unintelligible sentences. For example, 'For the poorer regions the co-financing and the access to innovative experience facilitated by the governance system characteristic of cohesion policy is crucial'.
- it adopts a research driven approach (even the title 'idea to market' smacks of linear thinking), the rest of the text is even more flagrant;
- it provides no real-life examples and the examples given don't help in most cases and make lots of presumptions - e.g. transport research operational programmes financed under Structural Funds have been to date unheard of.

The checklist is marginally better but is often inconclusive, the word 'maybe' abounds everywhere; and in the end, the reader has to go and find out for themselves the information required on the usual EU websites or more likely from national or regional sources for ERDF/ESF co-financed programmes.

This said, the effort to produce such a guide and try and favour synergies should not be knocked. The reality will often be, however, that synergies are curtailed either from the top down by different funding cycles for programmes funded by different services (the temporal issue is important as noted elsewhere, if for instance LIFE+ projects may lead to ideas for potential eco-innovation projects under CIP then timing of calls needs to be considered beforehand), different eligibility of expenditure rules, different obligations in terms of reporting, auditing of projects, etc. Anyone who has either been the recipient of project funding or a contractor of several different Commission services will know that these are not 'marginal obstacles' and that each directorate-general, and it often seems each unit within each DG, applies its own set of rules or interpretation of financial regulations.

When, as in the case of the Structural Funds, the Member States then add their own additional interpretation of what the EU Regulations say, the hill to be climbed for project promoters seeking to make optimal use of the various instruments can appear rapidly as daunting as the Alps. In short, to maximise synergies of its instruments, the Commission needs to do some administrative simplification of its own in harmonising financial and administrative rules for project funding and kick the increasingly pernicious habit of thinking that excessive auditing and financial control is the only criteria for sound management of public funds. Sound financial management needs to be twinned, and often come second to the expertise of the officials technically responsible for projects if synergies are to be optimised. DG Enterprise has recently started promoting the concept of the innovation

²⁵ Now published in a final version, which remains substantially similar to the draft commented on in this mini-study: http://cordis.europa.eu/eu-funding-guide/home_en.html

voucher as a low cost (for public authorities and SMEs alike) way of supporting innovation, drawing lessons at EU level and thinking about how to create a '**European innovation voucher**'. Giving SMEs access to support under several complementary programmes may be one more radical approach.

3.2.2 Efforts to improve complementarities at national and regional levels

It is clearly in the interest of national authorities to ensure that funding received from the EU budget is used to maximum effect in promoting competitiveness and innovation, and socio-economic development more generally. A review of practices to foster complementarities at national level (carried out in support of this series of mini-studies by the InnoPolicy TrendChart network of experts)²⁶ to encourage complementarities suggests that:

- Co-ordination is mentioned as taking place at the highest, or strategic planning, level in several countries (Denmark, Finland, Ireland, Sweden) normally through a national development plan or national competitiveness council type structure.
- The 12 new Member States where Structural Funds dominate the funding mechanisms for innovation tend to underline that this instrument is fully integrated in national (and regional) policy supporting innovation. This is also mentioned as being the case in other 'older' Member States such as Germany,
- FP7 NCP (Austria, Czech Republic, Hungary, Lithuania, Luxembourg, Malta, Netherlands, Norway, Turkey, UK) and EIC/IRC (Belgium, Czech Republic, France, Lithuania, Netherlands, Norway, Portugal, Romania, Slovenia) networks were relatively often mentioned as an information channel on EU funding possibilities for research and innovation. Obviously, the country experts who listed these networks are simply reflecting a role for such networks that exists in principle in all EU Member States.
- A few countries highlighted difficulties in the timing or phasing of implementation of the EU funding instruments which complicates optimising complementarities (Estonia, Finland), others highlight that national action needs to be complemented by more regional initiatives (Netherlands, Slovakia) or point to the re-organisation of national bodies responsible for coordination (Greece) as an issue for maximising synergies.
- Several countries reported that financial support was being provided or planned to support enterprise involvement in EU programmes (e.g. France, Portugal) although impact is often quite limited and generally this concerns participation in FP7.

The example below from the Netherlands illustrates how the national authorities, in partnership with regional stakeholders, have taken steps to improve synergies at two key phases in the programming cycle.

²⁶ The experts were asked to address the question of "What mechanisms exist to integrate or optimise the linkage between these EU instruments and measures operated at the national and regional level within your country? This could include direct links with national/regional measures, dedicated national information sources about EU measures, etc." A second related set of questions asked "What is the approximate share of the main European instruments used for the support of innovation in your country (i.e. the balance between funds received under the Research Framework Programme, the Structural Funds and the Competitiveness and Innovation Framework Programme)? Is there any area of innovation support that may suffer from an overlap of action in your country? In your country, which area(s) of innovation support could benefit from better European level support? However the responses to both sets of questions were highly heterogeneous and offer only limited insight into these complex issues.

Figure 20: Enhancing synergies in the Netherlands

In the last few years, the national government and regional authorities have taken several steps to improve the synergy between the three programmes (SF, FP, CIP) and to enhance the quality of Dutch participation.

Preparatory phase.

In the National Strategic Reference Framework (NSRF) of the Netherlands it is determined that the operational programmes should include concrete steps to establish the relationship with FP and CIP. More specifically, the NSRF states that Dutch authorities which are responsible for the operational programmes must co-operate closely with the National Contact Point (NCP) for the FP. Vice versa, the annual working plan of EG-Liaison - the Dutch NCP, established in The Hague – contains a paragraph setting out concrete activities to accomplish the synergy between FP (for which the NCP is primarily responsible) and SF. The first step taken here was to educate the NCP staff (30 people) about the objectives and procedures of the SF. They were provided with a fact-sheet and were given briefings. In the same period – in the starting period of the three programmes – the regional management authorities were assembled, per region, and received presentations about FP7 and the CIP. This helped them to develop plans for co-operation and synergy, and was also useful to ensure a focus on innovation in the operational programmes.

Implementation phase.

The Dutch ministries of Economic Affairs and Education & Science organised in 2007 a large symposium about the CREST report on synergies between the FP and the SF. This meeting also served to increase the commitment for improved cooperation between the national and regional levels in the Netherlands. To provide additional support to the regions EG-Liaison will, starting in 2008, provide them annually with detailed reports about regional participation in FP7 projects. These reports will allow regional authorities to check the correlation between agreed regional priority themes and international cooperation at project level. The FP7 reports will also be used to develop further the regional thematic networks. To establish concrete synergy, since the end of 2007 an EG-Liaison advisor has been working one day a week in a regional office. He gives combined assistance and advice on both SF and FP to regional parties. He especially looks out for options to link regional projects to the FP. In addition, the Dutch government appointed regional representatives in the advisory board of the FP Regions of Knowledge programme.

Overall: the Dutch government aims at achieving synergy between the use of SF, FP and CIP, by:

- educating the people involved;
- ensuring that these people know each other and work together;
- maintaining a regular exchange of information.

Source: SenterNovem

4. Conclusions and policy options

Policy coherence is necessary

Eliminating overlaps between different measures, increasing complementarities both between various EU levels as well as between EU and national level initiatives are necessary steps towards policy coherence. Working towards coherence between major EU initiatives is a complex task requiring a coordinated approach involving various EU bodies as well as national and regional governments. Undoubtedly, a sound EU level programming governance is necessary for creating a good policy environment conducive to synergetic use of EU public measures. Yet, the issue of how to optimise the coordination of the different EU initiatives remains to be resolved. Coordination is difficult since each programme follows different comitology procedures, applies different rules, is based on different policy rationale, etc. This raises the crucial question of governance of EU funded innovation initiatives. There is currently a lack of strategic coordination in the design of EU programmes to allow for synergy effects. Indeed, there is currently no real incentive ('carrot or stick') to improve such coordination. Even if an 'inter-DG' co-ordination structure was established...

... it will not bring synergies automatically.

Since, even the best-planned and well-coordinated programmes are not sufficient for achieving actual synergies. Evidence suggests that the synergies appear often bottom-up thanks to the users of the programmes. Thus, policy complementarities are one of the important prerequisites, but not a guarantee of synergy. It is important to underline that policy-makers cannot impose policy synergies from above as it the on-the-ground use of policy, which creates policy value added and 'makes' synergies.

What does this imply for policy-making process?

Bottom-up learning for better programming

The policy makers responsible for programming at different levels should acknowledge that the behaviour of 'clients' of the initiatives is decisive for outcomes, notably for synergetic use of the policy measures. Therefore, there is a need to analyse practical experience of different group of users with respect to combining different (both EU and national) sources of funding. The analysis needs to take into account sufficiently long time horizons to capture developments, which may occur with a considerable delay.

The analysis should indicate the situations where combinations of public funds created demonstrable value added as well as the cases where a combined public funding leads to a public funding dependency. One should not forget that offering the possibility of combining funds is a double-edged sword and may be abused.

The relevant stakeholders and beneficiaries should be involved in policy design and implementation. The consultations on programmes and policy documents should include the issue of synergies. Further policy development needs to be based on more in-depth case studies of real examples.

Subsidiarity

If the behaviour of policy users is decisive for policy synergies, then the reflection on policy synergies should take place as close as possible to the users. In many cases, this implies a special role of the regional authorities in encouraging policy synergies on the ground. In practical terms, this means giving special attention to ensuring complementarities between

regional strategies and policies (most notably regional SF Operational Programmes) and EU level programmes (FP7 and CIP). On the other hand, the regional bodies (e.g. development agencies, intermediaries) are best placed to inform and build competencies of the policy measures users as regards 'synergetic' use of public support. Equally, they are best equipped to monitor and analyse the use of available 'policy mix' by regional actors. Needless to say, the experience of 'policy synergy' will differ between countries and regions. Hence, learning on the regional level can provide a valuable contextual knowledge that can contribute to EU level programming.

Recommendation 1: Streamline the instruments funding inter-regional co-operation in favour of innovation

The 2007 report for the European Parliament recommended a cross-service evaluation of the various funding streams being directed at 'innovation stakeholders' to encourage them to cooperate across national boundaries. So far, it appears that this recommendation has not been followed up. The greatest risk of overlap, duplication and waste of taxpayers resources lies here. The issue of how policy developers can learn and build upon the results of previous work to avoid repeating actions undertaken by another department and maximise spill-over effects needs more attention.

Paradoxically, the greatest potential for learning, exploiting Europe's diversity and improving the effectiveness of innovation policy design and delivery could also be argued to lie in these inter-regional 'innovation platforms'. Many regional authorities and agencies are struggling with the consequences of being told to spend a sizeable share of their Structural Fund support on innovation. Many do not have the tools, the know-how or the knowledge to do so effectively. The Regions for Economic Change initiative of DG REGIO is specifically aimed at supporting such learning about regional policy development (across a wider range of fields than innovation). PRO-INNO Europe and Europe INNOVA offer an additional and tailored set of instruments including policy benchmarking through the TrendChart, INNO-NETS, etc.

Failing to seek maximum synergies between these instruments would be a significant oversight by all the Commission services concerned. Yet at the same time, the risk that such inter-regional or trans-national actions become dominated by a group of usual suspects is significant. Too many of the current pan-European or inter-regional networking projects have been focused on identifying 'good practice' initiatives, producing 'guidebooks', etc. of limited value added; with often no strategy to valorise their results afterwards. There is a need to institutionalise policy learning to eliminate useless cost of overlaps between closely related projects (and thus avoid project tourism) and to define a strategy to valorise their results and create spill-over effects.

- Options for DG Enterprise in cooperation with other services:
 - Undertake an in-depth study of the 'inter-regional partnerships' operating thanks to European instruments in the field of innovation. A first step would be to undertake a 'data-mining' and mapping of the project partners information from FP6 (including RFK and the Innovation Programme), CIP, Interreg IIIC and potentially IVC projects. This could be done applying the techniques of 'social network analysis' to identify strengths of linkages and ties between specific partners and then examine in detail a selected sample of partners (rather than project) to understand the value added at regional or national level in terms of improved innovation policy or design.
 - Integrate the issue of examining the value added of inter-regional/trans-national projects into the future INNO NET Partnering Forum as a specific task; with the objective of providing a set of operational recommendations to the Commission services.

Recommendation 2: further strengthen complementarities and reduce overlaps between EU level innovation initiatives

This mini-study has underlined that compared to the previous programming periods, considerable effort has been made by the EU's institutions (inter-service consultations and communication of the Commission services, operational linkages with the EIB, etc.) to improve complementarities. However, the risk of overlap and under-exploited synergies remains high in the absence of a more integrated and coordinated effort by the Commission services. While potentially optimal, it seems unlikely that it would be possible to move to a single 'European Innovation Agency' structure (managing all EU funding initiatives supporting business innovation) in the short-term. However, based on the experience of the current CIP Agency, this could be foreseen post 2013.

- Options for DG Enterprise in cooperation with other services:
 - Review the potential for greater synergies between European level funded 'technology initiatives, umbrella and clusters' and industrial/innovation platforms; through creating specific obligations for such partnerships to seek out and develop operational complementarities. A baseline study could be undertaken to examine current linkages and overlaps between memberships of such structures.
 - Consider creating a 'European 'innovation voucher' giving SMEs access to support under several complementary programmes as a radical simplification of access to EU instruments. That is, an EU SME wishing to participate to several projects could apply to single agency structure and receive funding allowing it to participate to a number of pre-identified projects or networks.
 - In line with the principles of the Small Business Act, drastically simplify the rules governing access for SMEs to EU funding programmes. Apply full 'paperless' on-line submissions for all programmes, shift rapidly to e-procurement for services bought by the Commission, increase the ceiling for minimum grant funding before mandatory audit is required, standardise eligible costs and funding claim procedures across all European Commission DGs.

Recommendation 3: increase funding at European level for pilot initiatives in emerging fields of innovation.

From a purely innovation policy perspective, the mini-study suggests that direct funding of pilot initiatives in a wider range of areas relevant for future innovation policy could be considered. Indeed, a gap between rhetoric and investment appears to exist currently.

- Options for DG Enterprise:
 - Consider whether the meagre EIP resources allocated to pilot project funding for eco-innovation (particularly given the restricted focus on environmental goods and services) really represent the only area in which European instruments could serve as a 'laboratory of ideas' to be further developed at Member State or regional level after a trial phase. The mini study on future options for innovation policy may offer guidance here. Equally, the planned INNO NETS on eco-innovation and services may also be tasked with identifying future options for pilot action funding.
 - Examine, with other services of the Commission, how to channel more funds towards emerging operational concepts such as user-driven innovation, innovation in public sector, etc. (e.g. by channelling more Structural Fund support to such fields, or by launching joint actions with regional or national innovation agencies).

Recommendation 4: extend and deepen the analysis of how enterprises use EU instruments in their innovation projects

Innovation policy is concerned primarily with fostering and promoting the innovation activities of enterprises. From a public policy perspective, public support instruments direct funding to a self-contained project of an enterprise responding to the programme objectives. For an enterprise, however, the project is likely to be only one stage or one element of a broader strategic innovation process. Improved understanding of how 'publicly funded innovation projects' are part of a longer process of innovation in enterprises would almost certainly improve policy design and delivery.

- Options for DG Enterprise:
 - Extend the work done by studies such as Innovation Impact and Implore towards the impact of other EU instruments on innovation in enterprises. This should include the CIP as well as other instruments mentioned in this mini-study.
 - Integrate these issues into the future planned Inno-Net Partnering Forum with a specific task or working group examining how EU instruments concretely support innovation in enterprises; and dovetail with national or regional innovation policy measures.

On the other hand, networks of specialised intermediaries (such as EEN) ideally support an enterprise to develop its strategy, seek out sources of funding and know-how etc. As such, they should ideally work with the enterprise from a strategic perspective and develop an understanding of the 'project portfolio' of their client enterprises. Placed strategically at the base of the policy design and delivery 'pyramid', they should be doing more to feed such insight back up to programme managers and policy designers/makers.

- Options for DG Enterprise:
 - Require regional networks of EEN to produce a number of case studies per year illustrating the ways in which enterprises they support have used EU instruments in complementary ways in order to implement innovation activities:
 - Create an 'expert committee' of EEN representative to review annually such real-life examples and make proposals for adjustments to procedures, objectives, criteria, etc. of EU programmes.

Appendix A

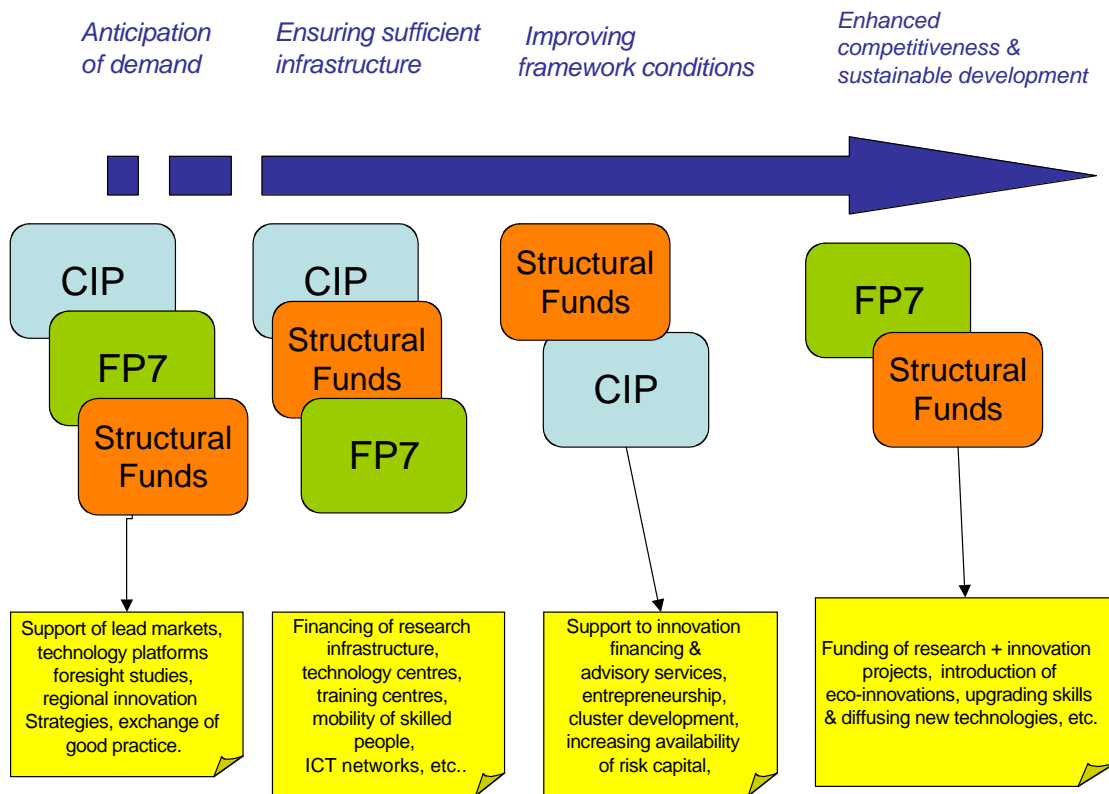
Extracted tables and diagrams from European Parliament Study

A.1. Overview table of SF, FP7 and CIP

Level of programming	SF	FP7	CIP
Strategic orientations at EU level	SF Regulations and Guidelines	Council & Parliament Decision adopting FP7 (18.12.06)	Council & Parliament Decision adopting CIP (24.10.06)
Thematic programmes/objectives at EU level	Three objectives:	Specific programmes:	Three (sub-) programmes:
-	<ul style="list-style-type: none"> Convergence 	<ul style="list-style-type: none"> People 	<ul style="list-style-type: none"> Entrepreneurship and innovation programme
-	<ul style="list-style-type: none"> Regional competitiveness and employment 	<ul style="list-style-type: none"> Ideas 	<ul style="list-style-type: none"> ICT policy support programme
-	<ul style="list-style-type: none"> European Territorial Co-operation 	<ul style="list-style-type: none"> Capacities 	<ul style="list-style-type: none"> Intelligent Energy Programme
Operational implementation at EU level	Not applicable but operational prioritisation at EU level implicit for instance in Regions for Economic Change	Work-programmes for specific sub-programmes / themes (updated annually).	Work-programme for each sub-programme (updated annually)
National level priorities	National Strategic Reference Frameworks	Not applicable	Not applicable
National/Regional level implementation frameworks	Operational Programmes	Not applicable	Not applicable
Measure or project level	Project funding of direct beneficiaries (public, not for profit and private organisations). Individuals as final beneficiaries	Project funding of direct beneficiaries (public, not for profit, private organisations and individuals)	Project funding of beneficiaries (public, not-for profit, private organisations).
Co-financing sources	Co-financing received via national/regional agencies or joint secretariats (inter-regional).	(Co-)financing received from European Commission	Co-)financing received from European Commission

Source: Technopolis Group Study for European Parliament

A.2. A demand driven intervention logic for SF, FP7 and CIP



Source: Technopolis Group study for European Parliament