



**SOLINSA**  
Support of Learning and Innovation  
Networks for Sustainable Agriculture

Agricultural Knowledge Systems In Transition:  
Towards a more effective and efficient support of Learning  
and Innovation Networks for Sustainable Agriculture

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# **REVIEW OF RELEVANT EU POLICY DOCUMENTS ON INNOVATION**

## **WP3 UNDERSTANDING THE CONTEXT**

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**DELIVERABLE N°3.1B**

Project Number: 266306  
FP7 – KBBE – 2010 –4



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<b>Project funded under the Seventh Research Framework Programme of the European Union</b>		
<b>Dissemination Level</b>		
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## EXECUTIVE SUMMARY

This report gives a general background in some relevant EU policy documents at the EU level, that form the context of the of the EU research project SOLINSA (No. 266306), which stands for Support of Learning Innovation Networks for Sustainable Agriculture. It contains a brief review of policy documents at the EU that influence the governance of innovation and learning in a diversifying agricultural sector.

The perception of a low innovative performance in Europe has led the European Union to adopt a wide range of innovation stimulating policies. The first part of this report reviews some of the general innovation and research agendas that have been developed as part of the Lisbon Agenda aiming to reverse the negative trend regarding European innovation performance. The report discusses how these aims are funded by reviewing several research programmes.

The second part of the report focuses further on the main area of interest in the SOLINSA project: learning and innovation networks in the agricultural sector. Specific attention has been paid to the effects of the Common Agricultural Policy on innovation and the introduction of the FAS across different European countries.

The report shows that the importance of both innovation and collaboration as a means to support innovation are well established within the EU. Whether it is the more general FP7 programme, or the LEADER programme within the CAP, collaboration and bottom-up knowledge development are actively encouraged.

However, whether and how LINSAs are actually supported by these measures - not only with regard to the type of collaboration that is supported, but also the kind of knowledge that is developed - has to be addressed in the remainder of the SOLINSA project.

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## **ABBREVIATIONS AND ACRONYMS**

AKIS – Agricultural Knowledge and Innovation System  
CAP – Common Agricultural Policy  
CIP - Competitiveness and Innovation framework programme  
EAFRD - European Agricultural Fund for Rural Development  
EAGF – European Agricultural Guarantee Fund  
EAR – European Research Area  
EIB - European Investment Bank  
EIP – European Innovation Partnership  
EIT – European Institute for Innovation and Technology  
ERDF – European Regional Development Fund  
ETP - European Technology Platform  
EU –European Union  
FABRE – Farm Animal Breeding and Reproduction  
FAS – Farming Advisory System  
FP7 – 7<sup>th</sup> Framework Programme  
GAEC – Good Agricultural Environmental Conditions  
GDP - Gross Domestic Product  
ICT – Innovation and Communication Technology  
JRC – Joint Research Centre  
KBBE – Knowledge based bio-economy  
KIC - Knowledge and Innovation Communities  
LEADER - Liaisons Entre de Development de l'Economie Rurale  
LINSIA - Learning Innovation Network for Sustainable Agriculture  
RSFF - Risk Sharing Facility  
SCAR – Standing Committee on Agricultural Research  
SME – Small and Medium sized enterprise  
SMR – Statutory Management Requirements  
SOLINSA – Support of Learning Innovation Networks for Sustainable Agriculture

# 1 INTRODUCTION

This report provides insight into the relevant innovation policy at the European level as it was formulated in Task 3.1 of the SOLINSA Description of Work:

*By means of a desk study research P5 (Wageningen UR) will provide a brief review of policy documents that influence governance of innovation and learning in a diversifying agriculture, and related support policies at national level with special regard to farm advisory services.*

Innovation has become one of the centre pillars of EU policy and often policies are designed to strengthen each other resulting in a complex web of policies and subsidy schemes. Table 1 provides an overview of just some of the EU policy measures that have been implemented for agriculture and rural development. The table shows that on the subject of agriculture and rural development alone, there is a wide variety of policy measures being implemented at the European level. However, it lies beyond the scope of the SOLINSA project to review all innovation policies of the EU in this short review. We therefore limit this review to the two most important aspects of SOLINSA: policies that deal with either the type of collaborative innovation networks that typify a LINSA (Learning and Innovation Network for Sustainable Agriculture) on the one hand, while focussing on the context of innovation in the agricultural sector on the other hand.

We start this review by sketching the general innovation and research agendas that have come to the fore as the European policy pillars on innovation ever since the introduction of the Lisbon agenda of 2000. We will review the Lisbon Agenda and the later Innovation Union that form the policy umbrella for much of the thinking about innovation at the European level. Subsequently we will review some of the funding mechanisms like the 7<sup>th</sup> Framework programme, the Competitiveness and Innovation Framework Programme (CIP) and the Structural Funds that contain much of the governance and financial framework supporting the innovation goals pursued by the Lisbon Agenda and the Innovation Union. Where appropriate we will give some examples of how these general programmes include references to specific agricultural innovation and research programmes. Subsequently we will focus further on our main area of interest: innovation and research in the agricultural sector. Here we will describe some of the history of the Common Agricultural Policy and how some of the recent changes in the CAP such as the implementation of the Farming Advisory System. We will end this review with some typical examples of collaborative networks promoted by various EU policies and their implication for the SOLINSA project.

**Table 1: Overview of some EU rural development measures relevant to innovation (non-exhaustive list)**

<b>Measure (with article no. from Council Regulation (EC) No 1698/2005)</b>	<b>Innovation-related application</b>
Measure 111 (article 21) Vocational training, information operations	Knowledge is essential to innovation
Measure 114 (article 24) Use of advisory services	Knowledge transfer
Measure 115 (article 25) Setting up of management, relief and advisory services	Knowledge transfer
Measure 121 (article 26) Modernisation of agricultural holdings	Investment in new technologies
Measure 123 (article 28) Adding value to agricultural and forestry products	Investment in new technologies
Measure 124 (article 29) Co-operation for the development of new products, processes and technologies in the agriculture, food & forestry sectors	Development of new products, processes, technologies
Measure 125 (article 30) Infrastructure related to the development & adaptation of agriculture & forestry	Innovative approaches to practical challenges e.g. water management
Measure 132 (article 32) Participation of farmers in food quality schemes	Production/marketing of products with new qualities
Measure 214 (article 39) Agri-environment payments	Use of innovative techniques to meet environmental challenges
Measure 311 (article 53) Farm diversification	Innovative non-agricultural projects
Measure 312 (article 54) Support for business creation and development	Businesses offering new products/services
Measure 313 (article 55) Encouragement of tourism activities	Tourism services involving new ideas
Measure 321 (article 56) Basic services for the economy and the rural population	Innovative approaches to providing services (e.g. broadband connections, other ICT services, mobile social advice units)
Measure 331 (article 58) Training and information	(Knowledge is essential to innovation)
Measure 41 (article 63) Implementing local development strategies (Leader)	Innovative forms of organisation, governance and decision-making

*Source: European Commission (2010) "Memorandum", in UK House of Lords, European Union Committee, "Innovation in EU Agriculture; Written Evidence", IEUA 29, 49-58.*

## 2 GENERAL INNOVATION POLICIES AT THE EU LEVEL

### 2.1 The Lisbon Agenda

The Lisbon Agenda, sometimes also referred to as the Lisbon Strategy, marked a turn towards more attention for innovation within the EU<sup>1</sup>. As it became clear that Europe was falling behind the United States and some other countries in Asia in terms of research and innovation, the need for more coordination at the European level became clear. The Lisbon Strategy was an attempt to reverse this trend. It was officially adopted in March 2000 and it was for Europe to become, by 2010, “*the most competitive and dynamic knowledge-based economy in the world, capable of sustainable growth with more and better jobs and greater social cohesion*” Since the year 2000 the Lisbon agenda was implemented in policy initiatives, but unsatisfied with its results<sup>2</sup>, the Commission proposed a new start for the Lisbon Strategy in 2005. The renewed Lisbon Strategy focuses on the year 2020. One of the most well-known goals of the Lisbon Agenda is to increase the spending on research and development, which should be increased to 3% of GDP in the European countries<sup>3</sup>.

The strategy has three priorities:

- 1) Making Europe a more attractive place to invest and work
- 2) Make knowledge and innovation the beating heart of European growth
- 3) Shape the policies allowing our businesses to create more and better jobs

Innovation is identified as having a key role in achieving sustainable economic growth and with the adoption of the Lisbon agenda, the view on knowledge and innovation has become broader focussing more on innovation as a socio-economic process rather than a technological process. However, according to some authors, the linear perspective of innovation (“Science finds, Industry applies and Man conforms”) is still dominant in much of the practical implementation of innovation policy within the EU<sup>4</sup>

### 2.2 The Innovation Union

The so called ‘Innovation Union’ is the latest initiative that targets innovation in the European Union<sup>5</sup>. It contains over thirty action points among which include the strategic use of public procurement budgets to finance innovation, a comprehensive innovation scoreboard based on 25 indicators<sup>6</sup>, and a European knowledge market for patents and licensing<sup>7</sup>. Furthermore, it includes measures to reinforce successful existing initiatives like the Risk Sharing Finance Facility

that was launched in cooperation with the European Investment Bank – the EIB, which supports investment in high-risk research, technological development and demonstration projects through loans and guarantees. The Risk Sharing Finance Facility is an attempt to boost the investments in innovations. The idea was that by reinforcing the financing capacity of EIB in the area of research, the efforts of a large number of European banks and financial institutions would be mobilised into research and innovation, thus increasing the amount of private investment and funding. One of the common complaints of entrepreneurs is the difficulty in crossing what has been called, the ‘Valley of Death’: bridging the time from the pilot phase of a new product to finding investments to actually take it into production and bring it to the market. In the early phases, there are subsidies available for feasibility studies and so forth, however there is no support of entrepreneurs who have developed a pilot model and want to commercialize this. As direct state support is forbidden, the RSFF is a way to make the valley a bit shallower by making it easier to attract capital. The RSFF has been considered to be quite successful as it has attracted stakeholder funding exceeding the combined Commission and EIB contribution of over a billion euro 15 times<sup>8</sup>.

Other central elements in the Innovation Union are the measures to revitalize and speed up efforts to build an European Research Area (ERA)<sup>9</sup>. The ERA is a system of scientific research programmes integrating the resources of the EU. The structure has been concentrated on multi-national co-operation in the fields of medical, environmental, industrial and socio-economic research. The initiatives taken to develop the ERA aim at facilitating exchanges across borders. A central objective of the ERA is therefore to establish the “fifth freedom”: the freedom of movement of knowledge as the equivalent for research and innovation of the common market. Increased mobility of researchers and knowledge workers and deepened multilateral co-operation among research institutions also belong to the central goals of the ERA<sup>10</sup>. As part of the ERA, the European Institute of Innovation and Technology (EIT) has been set up. This is an autonomous EU body bringing together the ‘knowledge triangle’: higher education, research and business sectors to stimulate innovation by connecting them through their Knowledge and Innovation Communities (KICs). The EIT’s flexibility aims at making it attractive to the business sector. A contribution of 309 million euro was provided to the EIT from the EU budget<sup>11</sup>.

For the agricultural sector, the Standing Committee on Agricultural Research currently has an important role within the ERA. The Standing Committee on Agricultural Research (SCAR) was established in 1974 specifically for the coordination of agricultural research. Although initially closely linked to the DG Agriculture, under the supervision of EU Commissioner Busquin SCAR was transferred from DG Agriculture to the DG Research and given a prominent role in the coordination of agricultural research activities for the ERA. The “new” SCAR is made up of the 27 EU Member States, with representatives from Candidate and Associated Countries as observers. The SCAR members currently

represent 37 countries<sup>12</sup>. Most delegates in the committee come either from the different Ministries responsible for agriculture and rural areas or from an (agricultural) university.

The SCAR Committee is taking coordination action on three fronts: the foresight process in which possible scenarios for European agriculture over the next 20 or so years are formulated. Secondly SCAR looks at the prioritisation of agriculture-related research in Europe in the medium to long term. Finally, SCAR has also been involved in the mapping of EU agricultural research capacity through the European Commission funded “EU-AGRI-MAPPING” project, which aims to analyse the status of agricultural and food research in Europe and identify trends and needs with respect to agricultural research and a number of Working Groups have formed on different topics, see Figure 1.

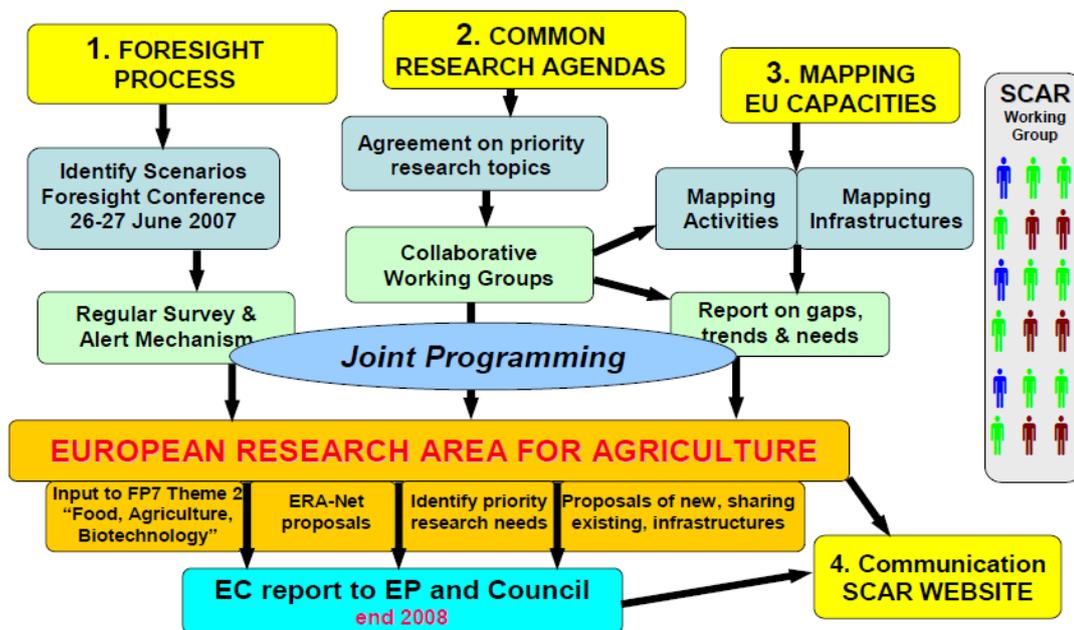


Figure 1: SCAR initiatives towards a European Research Area for Agriculture<sup>13</sup>

### **3 INNOVATION, GOVERNANCE AND FINANCIAL INCENTIVES**

There are several EU research and innovation funding mechanisms that are currently in place. We will shortly review the Seventh Framework Programme, the Competitiveness and Innovation Framework Programme (CIP) and the structural funds<sup>14</sup>. The fundamental difference between Cohesion Policy financed by the Structural Funds and FP7 and CIP is that its management and programming is decentralised, i.e. the implementation and allocation of funds to projects is not handled by the European Commission, but delegated to national/regional managing authorities.

#### **3.1 The Seventh Framework Programme**

The Seventh Framework Programme (FP7) runs in the period 2007-2013 and has a budget of 53.3 billion euro and supports research, technological development and demonstration activities across the EU. With this budget the FP7 programme is in fact the largest research programme in the world<sup>15</sup>. Its activities are implemented in four categories: 1) Cooperation, 2) Ideas, 3) People and 4) Capacities; it also supports research in two research institutes: Euratom for research on nuclear energy and the Joint Research Centre (JRC) that is divided into seven separate research institutes located in five different countries<sup>16</sup>. The Seventh Framework Programme is sometimes criticised for its bureaucratic and cumbersome protocols and monitoring schemes and there are calls to simplify regulations for future Framework Programmes<sup>17</sup>.

At the European level, agriculture's main link to the 7th Research Framework Programme is through the "Food, Agriculture and Biotechnology" theme. It covers farm management policies food safety and rural development with three main activities: sustainable production; farm-to-fork food; and life sciences, biotechnology and biochemistry for non-food products and processes.

#### **3.2 The Competitiveness and Innovation Framework Programme**

The Competitiveness and Innovation Framework Programme (CIP) has a budget of 3.6 billion euro and aims to encourage the competitiveness of European industry, with SMEs as its main target<sup>18</sup>. It promotes access to finance and supports the development of better innovation support services and policies. It funds trans-national business and innovation support services. It addresses clusters, public procurement and non-technological barriers to innovation. It helps with developing the information society by stimulating take-up and use of ICT and promotes the increased use of renewable energies and energy efficiency.

The CIP is composed of three specific programmes which have their own specific objectives:

- the Entrepreneurship and Innovation Programme (EIP)
- the ICT Policy Support Programme (ICT-PSP)
- the Intelligent Energy Europe Programme (IEE)

### 3.3 Structural Funds

The structural funds are part of European Cohesion policy that aims to reinforce economic and social cohesion in Europe by redressing some of the main regional imbalances through support for the development and structural adjustment of regional economies. One of its focal points is the need to strengthen competitiveness and innovation. The three main structural funds under which research and innovation activities can be supported are:

1. The European Regional Development Fund (ERDF) is for strengthening competitiveness through helping regions to anticipate and promote economic change through innovation and the promotion of the knowledge society, entrepreneurship, the protection of the environment, and the improvement of their accessibility. It also supports cross-border co-operation through joint local and regional initiatives, trans-national co-operation aiming at integrated territorial development, and interregional co-operation and exchange of experience.
2. The Cohesion Fund (CF) is for the least-developed member states and regions, i.e. member states whose GNI (Gross National Income) is lower than 90% of the EU average can benefit from the Cohesion Fund. Assistance from the Cohesion Fund is given to actions in the areas of trans-European transport networks and the environment within the priorities assigned to Community environmental protection policy (including energy, rail, sea transport and air traffic). Through the Cohesion Policy, about 86 billion euro (almost 25% of the total Structural Funds budget) is allocated to enhancing the capacity of regional economies to change and innovate. This investment focuses on four key elements: R&D and innovation, entrepreneurship, ICT and human capital development.
3. The European Social Fund (ESF) is for strengthening competitiveness and employment by helping member states and regions to adapt the workforce, their enterprises and entrepreneurs with a view to improving the anticipation and positive management of economic change, in particular by promoting lifelong learning and increased investment in human resources, the development of qualifications and competences, the dissemination of information and communication technologies, e-learning, eco-friendly technologies as well as the promotion of innovation and business start-ups.

## 4 THE COMMON AGRICULTURAL POLICY AND INNOVATION

Innovation and the knowledge infrastructure can't be discussed without looking at the Common Agricultural Policy, the CAP. For more than 40 years, the Common Agricultural Policy has been the European Union's most important common policy. A large part of the EU's budget is devoted to this agricultural policy, although the percentage has steadily declined over recent years from a level of over 50% of the total budget to around 30% now<sup>19</sup>.

Since 1997, the CAP consists of two pillars financed by two funds which form part of the EU's general budget: the European Agricultural Guarantee Fund (EAGF) finances direct payments to farmers and contains some measures to regulate agricultural markets such as intervention and export refunds. The European Agricultural Fund for Rural Development (EAFRD) finances the rural development programmes of the Member States. The last major restructuring of the CAP took place in 2003 with the so-called Fischler reforms<sup>20</sup>.

Traditional farmer support was decreased further and more money was invested in the second pillar of the CAP, the rural development fund. With the restructuring of the CAP several changes were made that were targeted at creating innovation. The perspective on innovation has shifted from innovation as a mere technological process to innovation as a socio-economic process. Direct payments were decoupled from the obligation to produce predetermined produce and this has led to diversification of farms, while at the same time such public goods as food security, climate change, biodiversity and water management were addressed. The direct payments are now directly coupled to the compliance with environmental and safety standards, requiring the improvement of production methods. Agricultural markets have been gradually liberalised, creating a more competitive environment that aims to motivate farmers to become more entrepreneurial and consumer oriented. At the same time, the CAP still aims to provide farmers with some guarantees for a stable income, taking away some of the insecurities that the global market also brings.

Support for knowledge transfer, training and innovation of various kinds is readily available through a wide range of measures in the EU's Rural Development Policy. The LEADER programme is a prominent example of this<sup>21</sup>. In the LEADER programme local development strategies are implemented through public-private partnerships called "local action groups". The strategies applied to clearly designated rural territories must achieve the objectives of at least one of the three goals ('axis') of the EAFRD: 1) improving the competitiveness of agriculture and forestry; 2) improving the environment and the countryside; and 3) improving the quality of life and the management of economic activity in rural areas.

Links between the CAP and other EU research policy and programmes are related mainly to the FP7 programme and its Food, Agriculture and Biotechnology priority. Important here are the KBBE Knowledge Based Bio-economy plan and the new Innovation Partnership “*building the bio-economy by 2020*”.

One of the main problems that plagues the European agricultural sector has been the general lack of formal training of farmers. In the CAP there is specific attention to support education and skills in the rural development policy.

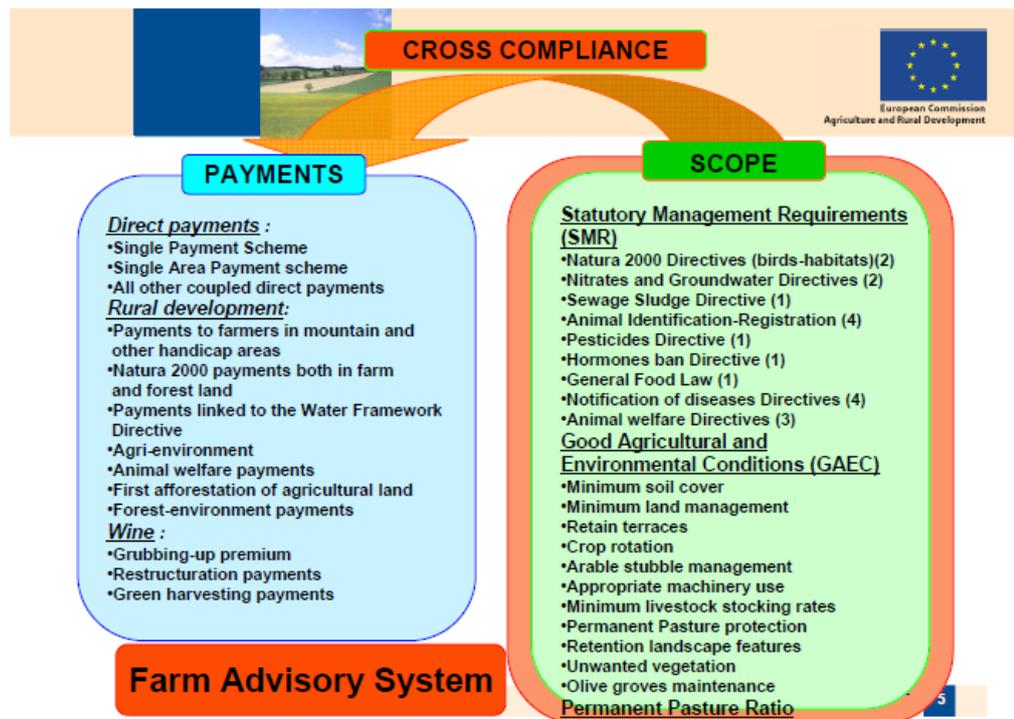
This support consist of 5 measures:

- Vocational training and information actions
- Advisory services (the FAS)
- Set-up of management, farm relief and advisor services
- Training and information related to general rural development outside farming and forestry
- Skill acquisition animation and implementation related to general rural development outside farming and forestry

We will specifically look into the Farm Advisory System.

#### 4.1 The Farm Advisory System

The Farm Advisory System (FAS) was a major component of the 2003 reform of the Common Agricultural Policy. This reform of the CAP made direct support of farmers dependent on compliance with requirements of public interest, the so called ‘cross compliance’ that dealt with issues related to the environmental quality, public and animal health, animal welfare included in the statutory management requirements (SMRs) and the maintenance of agricultural land in good agricultural and environmental condition (GEAC).



**Figure 2: cross compliance and the Farm Advisory System**

(source: DG Agriculture and Rural Development)

The direct payments to farmers now depend on their compliance with the standards of Statutory Management Requirements, but also the Good Agricultural Practices and Environmental Conditions. However, compliance with these standards is considered to be rather complex as the scope covers a wide range of different topics (see Figure 2). There was a threat that many farmers would experience a loss of income and the FAS was introduced to help farmers cope with the complexity of regulations. Under the FAS, the use of advice on cross compliance topics is promoted financially: 80% of the advisory costs with a maximum of 1500 euros can be subsidised.

Within the FAS three roles are identified: The first is that of the advisor that helps the farmers with advice. FAS advisors should function as ‘general practitioners’ able to direct farmers to a specialist when necessary. FAS coordinating bodies should play a role here in helping advisors to network and reach specialist advisors or research and their fields of expertise. The second role is that of the farmer, who is personally responsible for his or her own actions, and finally there is the role of controller who checks whether the obligations for direct payments have been met and can impose sanctions.

European member states could decide themselves on the organization of the FAS and whether they wanted to include also other advisory services in the FAS. In some member states, the establishment of the FAS represented a good

opportunity to rethink and improve their agricultural knowledge and innovation systems. However as a result the FAS is set-up differently in each member state, covering a wide range of public and private operators that deliver farm advisory services, assessing the specific situation a farmer is in. The farmers themselves could choose to participate. It was voluntary, and there are no rules for the frequency of advice, qualification of advisors and payments for advice. An evaluation of the implementation of the FAS concluded that:

*“overall, the FAS did help increase farmers’ awareness of material flows and on-farm processes relating to the environment, food safety and animal health/welfare[.] The FAS helped farmers to meet cross-compliance requirements, and this was the main motivation for farmers to make use of the system. FAS support also increased farmers’ financial management skills (accountancy) and improved their bookkeeping as regards cross-compliance obligations.”<sup>22</sup>.*

A problem with the implementation of the FAS in many countries has been that the FAS was seen as a control mechanism to force farmers into compliance. The effectiveness of the FAS was therefore still limited with only a few farmers seeking advice. The Commission has indicated that it wants to continue the FAS also in the future, and is taking measures to take away the distrust by placing more importance on the strict confidentiality of the advice to farmers. The commission intends to promote the FAS by 1) introducing flexibility in the content and 2) in the frequency and uptake of advisory services. The obligation to advice on all cross compliance fields is removed in order to make the advisory service more flexible and become more attractive for farmers as it can be used more targeted and more frequently.

## **5 INNOVATION PROGRAMMES IN SUPPORT OF COLLABORATION**

The linear perspective of innovation is slowly being replaced by innovation as a social process of collaboration. European innovation policy tries to stimulate various forms of collaboration and also between different types of organisations involving public-private collaboration. Learning Innovation Networks for Sustainable Agriculture (LINSA) are a form of this collaboration in to stimulate bottom-up, or grass roots innovation in the agricultural sector.

However, at this point in time, the precise definition of a LINSA is not exactly clear. Different forms of actor cooperation like clusters, multi-actor partnerships, territorial alliances and different forms of public-private partnerships can all be seen as a particular form of a LINSA. As we can conclude from this review EU policies strongly stimulate these kinds of collaborative networks. Many of the new EU policies have created platforms, institutes and governing bodies that promote a common understanding between various actors of research and innovation: large firms, SMEs, universities, public research centres, etc. Below

we will give some examples of the programmes that we have discussed and the type of collaborative network they support.

## 5.1 Joint Technology Initiatives

Joint Technology Initiatives are a new funding scheme under the Seventh Framework Programme and offer a new framework for realising research and technology agendas that require high public and private investment at European level<sup>23</sup>. They combine private and public funding and bring together a critical mass of researchers from companies and universities, to address complex technological challenges, whose scope and scale is such that existing funding schemes are not adequate to achieve the desired objectives. Bringing together stakeholders around commonly agreed, industry-driven research agendas, Joint Technology Initiatives are intended to accelerate the generation of new knowledge, enhance the uptake of the results of research into strategic technologies and foster the necessary specialisation in high technology sectors which determine the EU's future industrial competitiveness. Potential Joint Technology Initiatives have initially been identified in six areas that offer significant potential for boosting Europe's innovative capacity<sup>24</sup>:

- Fuel Cells and Hydrogen (FCH)
- Aeronautics and Air Transport (Clean Sky)
- Innovative Medicines (IMI)
- Nanoelectronics Technology 2020 (ENIAC)
- Embedded Computing Systems (ARTEMIS)
- Global Monitoring for Environment and Security (GMES).

## 5.2 European Innovation Partnerships

Similarly the European Innovation Partnerships, one of the latest initiatives under the Innovation Union, aims to bring together actors at EU, national and regional levels in a new way, combining supply and demand-side tools for innovation. The first European partnership that is currently set-up as a pilot, is the partnership on Health and Aging. It has an ambitious target of adding two years to the healthy life prospects of European citizens. At this point no agricultural EIP has been set up, although agriculture and food will have an EIP in the future.

## 5.3 European Technology Platforms

Finally the initiative on knowledge transfer and intellectual property, or the European Technology Platforms brings actors from all over Europe together in specific technology areas. These stakeholders, led by industry, are to define the medium to long-term research and development priorities that will contribute

to Europe's future growth. They focus on areas where progress depends on major technological and research advances. European Technology Platforms were designed to better align EU research priorities to industry's needs and to ensure the transformation of achieved results into innovative technologies and processes and hence into marketable products and services. For the agricultural sector, more specifically the animal domain, there are two official technology platforms—FABRE on breeding<sup>25</sup> and Global Animal Health on veterinary and pharmaceutical issues<sup>26</sup>. Two others are organising themselves now, one on aquaculture and one on feed production.

## 6 CONCLUSIONS

The perception of a low innovative performance in Europe has led the European Union to adopt a wide range of innovation stimulating policy at the European level. However, this common policy has for now not reversed the negative trend and one of the SCAR collaborative working groups concluded that the Agricultural Knowledge and Innovation System (AKIS) at the European level is still fragmented, unresponsive and overregulated<sup>27</sup>. Attempts are being made to centralise innovation and research at the European level, although this also has received some criticisms as there is a fear the joint programming will lead to more bureaucracy and that political consideration will start to dominate the distribution of research funds<sup>iv</sup>.

What is clear though is that the importance of both innovation and collaboration as a means to support innovation are well established within the EU. Whether it is the more general FP7 programme, or the LEADER programme within the CAP, collaboration and bottom-up knowledge development are actively encouraged. However, whether and how LINSAs are actually supported by these measures - not only with regard to the type of collaboration that is supported, but also the kind of knowledge that is developed - has to be addressed in the remainder of the SOLINSA project. These questions are especially relevant for those LINSAs that develop outside of the official AKS or in spite of existing policy.

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