

EU research – from funding to knowledge transfer (15 minutes speech)

Ms. Maive Rute, Director for Directorate E "Biotechnologies, Agriculture, Food" in DG Research of the European Commission;

- Zenit's role as leading regional innovation agency and its merits in terms of being a pioneer in promotion of SMEs (Mittelstand) through advice on innovation and technology transfer. Zenit's particular achievement is its successful transporting of the Commission SME and innovation policies right into the region
- **Zenit's unique experience in coping with the structural problems linked to the industrial decline in the Ruhr region coal industries in the 80ies, through innovation and technology promotion for restructuring towards a fabric of innovative SMES in the new technologies.**
- **Zenit became a member of the Europe Info Center Network founded in 1986.**
- ZENIT is a partner in the biotechnology sector group of the Enterprise Europe Network

1. Setting the scene

- The vision and aim of Directorate E is to contribute to the building of a **Knowledge Based Bio-economy (KBBE)** in Europe.
- Europe's Bio-Economy consists of a broad set of productive sectors around the exploitation of biological resources including Agriculture, Food and Fisheries. In terms of economic activity, the Bio economy sectors correspond to an estimated yearly turnover of Euros 1500 billion.

- One of the key issues for the future competitiveness of the bio economy is the ability to innovate through research that leads to new knowledge applied in new processes and products. And it has a special role in the economic crisis as it has the potential to create new green jobs and "green growth" in Europe.
- However public funding of excellence in scientific research is not enough: it is essential to translate that research into products and processes that enable the private sector to compete at world-wide level.

2. What has the European Commission done for improving knowledge transfer and innovation?

Let me concentrate on **3 key issues**:

- **knowledge transfer and successful examples**
- **financial incentives**
- **establishment of coherence in policies and programs**

(1). The EU is less strong than the US and Japan in converting scientific knowledge into socio-economic benefits. To increase the exploitation of publicly funded research, universities and public research organisations need to manage their **knowledge transfer and intellectual property** more effectively.

In the US, strong links between universities and businesses are widely recognised as making a key contribution to the innovation performance of the country. More productive interaction with the private sector would be essential for European universities, too.

The large differences in national policies and practices and the quality of management of intellectual property in the EU member states impede trans-national knowledge transfer across Europe.

In the past few years, over 3000 biotechnology firms in Europe have generated nearly a third of all the biotechnology patents filed worldwide. However further measures to further reduce the IPR and patent costs are essential at a European level. The EU has to be able to create an environment with an appropriate EU patent available.

Specific efforts are made in the KBBE sector by the Member States in collaboration with the Commission to stimulate more innovation from research and to promote best practice throughout Europe. Both the Network on the Knowledge Based Bio-economy (**KBBE-NET**) but also the Standing Committee on Agricultural Research (**SCAR**) – are considering **launching specific Collaborative Working Groups** of Member States to discuss burning issues in relation knowledge transfer. This group also could monitor the general framework conditions for the development of the KBBE and address public policy issues that might be an obstacle to progress such as availability of feed-stocks, lack of SME finance or the need of a strengthened skill base.

The stakeholders of the bio economy sector also consider knowledge transfer as a crucial element for the competitiveness of the sector. Knowledge transfer actions are foreseen in the **Strategic Research Agendas (SRAs) of all major KBBE ETPs**. Their efforts are also reinforced with a currently ongoing support action, the BECOTEPS project whose aim is to join the forces of the KBBE ETPs. It also enables discussions and formulating recommendations in fields of joint interest for them, thereby creating synergies among their efforts on issues related to knowledge transfer, SME promotion etc.

ETPs contribute to the efforts made at European level regarding knowledge transfer by participating in projects such as the **Aquainnova project** financed under call 3, where the European Aquaculture and Innovation Technology

Platform (EATIP) participates. In the framework of the project 7 areas of interest were created where the long-term sustainability of the European aquaculture is addressed. The actions foreseen in the project will aim to transfer knowledge to key stakeholders, also considering customising communication methods to the needs of the end users.

ETPs can also help in finding the appropriate balance between dissemination at local and at European level. The **Food for Life ETP** for example uses techno-scientific mediators in dialogue with SMEs, in order to build a bridge to the end users of the research results.

ETPs are strongly encouraged by the Commission in these efforts and the newly established **Joint Technology Initiatives (JTIs)** are also expected to bring further results in the field of technology transfer. However the results of the JTIs can only be measured at a later stage when their activities will be ongoing for a longer time.

The KBBE Theme of the "Cooperation" part of FP7 is designed to encourage their involvement in the research activities. In order to create a favourable environment for SMEs, simplified financial and administrative procedures have been introduced under FP7. The new SME rules allow funding of up to 75% of total costs for R&D, and for management and training activities SMEs might receive up to 100% financial support. A guarantee fund has been set up to cover the financial risks of defaulting project participants, and strong intellectual property rules provide effective protection with particular attention to the special needs of SMEs.

When it comes to the question of exploitation of results the SMEs face specific difficulties in access to loans and dept financing.

The Risk Sharing Finance Facility (RSFF) extends the ability of the European Investment Bank to provide loans and guarantees for companies deemed to be too risky under normal banking practice.

The **coherence in policies and programs** at a European level and the enhancement of coordination of national policies and programs helps to overcome the fragmentation that still exists currently in the European market.

To create coherence on the demand side: As regards the uptake of results more innovation friendly markets need to be created and here it is important to mention **the Lead Market Initiative (LMI)**, coordinated by DG ENTR. It was launched in 2008 as a pilot exercise in improving framework conditions for business investment in research and innovation (R&I). It focuses on demand-side measures and complements supply-side, technology-push initiatives.

Public authorities can promote the quick take-up of innovations by implementing a number of "instruments" or policy initiatives. For example, public organisations could put measures in place, within the existing legal framework, to procure more innovative goods and services.

The Commission also encourages Member States and all stakeholders to build on more synergies among the main EU innovation funding instruments (FP7, CIP, Cohesion Policy).

3. Future perspectives

- My Directorate is now working on a strategy and action plan for strengthening knowledge transfer in Food, Agriculture and Biotechnology Research.
- Let me briefly mention some of the actions we plan to implement in the coming years:

(1). Plans for creating a database to ensure a better follow-up of the results of the projects we fund and their industrial applications. It should link up with other initiatives such as the open data base for pilot projects and demonstration plants established by EuropaBio that allow more exchange of experience and speed up the innovation process.

(2). Creation of a list of multipliers and intermediaries which are the potential end users of our research results. We will establish strong links to these important stakeholders.

(3). A Communication on "an European vision and action plan for a sustainable Knowledge Based Bio-economy" is under preparation. It will build on the mid-term review of the Strategy on Life Sciences and Biotechnology, done in 2007. The Communication is planned to be adopted next year. It will bring the new developments in the area into a stronger policy focus and it will provide recommendations in fields that are needed to ensure EU leadership in the bio-economy sector at a world-wide level. Issues including innovation and technology transfer will also be included in the stakeholder discussion and preparation of the Communication.