

Training Session on Innovation Strategy – Summary of the Training Session in Brussels on 8th July 2008

1 Introduction to innovation strategy

Innovation is taken to mean the development and marketing of a new product (product innovation), development of new production procedures (process innovation) or introduction of new forms of business organisation in order to satisfy the customer needs better than previously.

Innovation is doubtlessly considered as the most important driving force for economic wealth; and it is not just related to high technology industries. It can pertain to any industry or economy sector. Likewise, innovation is more than simply the initial big idea or the end product or service. Innovation is more accurately defined as a process through which knowledge can be translated into new products, new services or an increase in productivity through new production methods. Innovation is a systemic rather than linear process, i.e. its processes are multidimensional, they involve many different players, and often take place over extended periods of time. [STRINNOP 2003]

The innovation process can be simplified as a chain in which interacting actions on intellectual capacity, technical or structural knowledge and capital can enable or promote the development of an idea. The ERIK Network used the following time line in order to aid understanding of innovation funding instruments throughout different stages of innovation. [ERIK Network 2007]



Figure: Basic time line for innovation finance

Explanation:

- The Idea stage is the starting point for innovation and mainly focuses on evaluation and securing the ownership of the innovation (Intellectual Property). The innovation has its origin in a research environment, a company or a private inventor. In the Idea stage there are often possibilities for the inventor to get initial funding from the public sector. If the innovation comes from a company it can be financially self supporting as there is need to secure the intellectual property and to hold the information within the company as long as possible. However, there may be a need for external experts and developers that to SMEs are quite expensive.
- The Prototype stage is essential to find the possibilities and design of the innovation, both physical products and services. Often the prototype stage is needed to find the right production environment or methods. In the Prototype stage the amount of financing varies, depends largely on how advanced the prototype is and the level of innovation. In general, however, there is a lack of funding in this stage as the public sector is limited by regulations and financial resources and it is too early for the private sector to see the possibilities of a return of investment.
- The Production stage focuses on developing the production environment, quite often with heavy investments in tools and “machinery”.
- The Market intro stage is strongly connected to the Production stage as an introduction to the market requires support from flexible production. The Market intro stage often sees large investments in marketing and PR and presents some risk as the innovation life cycle can differ.
- In the Production and Market intro stages there are often difficulties in accessing public funding with the restrictions mentioned above. Only the strongest innovations can find venture capital.
- The two final stages, Growth and Expansion are quite similar and combine marketing issues and the expansion of organisations and production facilities. These stages need heavy financing. In these stages there is a stronger interest from the private sector but there is a continued need for public involvement as many companies, especially SMEs, have little experience and need guidance. [ERIK Network 2007]

The content of regional innovation support strongly depends on the overall economic development of the respective region and the existence of a regional innovation strategy. More advanced regions often focus on high technology and firms with high R&D activities, whereas, due to underdeveloped entrepreneurial culture and limited R&D in the region, economically weaker or rural regions often concentrate on fostering innovation with a broader approach.

This fact correlates with different degrees of innovation, distinguishing between world novelties and firms’ novelties. In the latter case, while a similar product already exists on the market, for the enterprise it is an innovation which

improves customer satisfaction. More rural regions cannot ignore their current situation and have to avoid providing overly sophisticated innovation support which does not match the current needs of the regional firms. Instead the region can transfer existing innovation tools from other regions to their own region with adaptation according to the own regional particularities and needs. This results in new and (at least for the region) innovative innovation support services for the regional firms. Avoid reinventing the wheel is popular advice given in this context. [ERIK Network 2006]

Although it is more common to see the transfer of Good Practices services from an advanced region to a lagging behind/catching up region, the transfer is not only one-way. Transfer activities within ERIK ACTION demonstrates that there is also an added value for advanced regions provided by innovation support services from rural areas as it is the case of e.g. Alentejo and Flanders with respect to the support service Fame.¹

The long term management of a complex innovation process with all the required human, knowledge and financial resources requires a well aligned and executed innovation strategy. This strategy should not only deal with the overall vision and current innovation capacity (people, skills, culture), but also with the acquisition of additional innovation capacity and the involvement of external sources in order to become more innovative, and thus more competitive.

2 Conclusions of the training session

2.1 Key note presentations

The training session on innovation strategy consisted of two parts: a panel session with three key note presentations and the knowledge café with 4 parallel groups with focus on own experiences in supporting enterprises in innovation strategy development and implementing innovation activities.

The three key note speakers were:

- Mr. Walter Auwers (sirris Belgium, www.sirris.be): Taking technical innovation at a higher level
- Dr. Raimund Mitterbauer (TIP Technologie- und InnovationsPartner Lower Austria, www.tip-noe.at): TIP-Coaching, From projects to strategies
- Prof. Dr. Yiannis Bakouros (University of Western Macedonia, www.uowm.gr): Policies for fostering Innovating – Business Strategies to support firms competitiveness, the Region of West Macedonia

Sirris is the collective centre of the Belgian technological industry. They advise and guide companies during the introduction of technological innovations. Sirris experts visit companies on site, offer technological advice, launch innovation

¹ More information on all the ERIK Action good practices is available on the ERIK Action web site at <http://www.eriknetwork.net/erikaction/keydocs.html>

paths, and provide guidance until companies reach the implementation phase. Walter Auwers from sirris pointed out that innovation and technology strategies are indispensable to identifying, qualifying and quantifying the firm's opportunities and selecting the most promising one. Technology and innovation strategies should be closely linked with the business strategy in order to achieve a competitive advantage. Sirris recommends the following steps for a technology strategy:

- Situation analysis
 - Product-Market combinations
 - Competitors
 - Market expectations
- Technology analysis
 - Internal and external technologies
 - S-curve to categorise the innovation:
 - Start of a radical innovation
 - Take of: Innovation is mainly incremental based upon a dominant design
 - Maturity: Innovation aims mostly at processes and services
 - Own technology position
- Analysis of the strategic impact of technologies
 - Does the technology have real value (profitability)?
 - Does the technology provide a unique advantage?
 - How sustainable is the advantage?
- Technology options and scenario analyses
 - make or buy analysis:
 - Own development – Partnerships – Start new technologies/products
 - Mapping the potential risks / SWOT:
 - Technological risks, Market risks, Competition
 - Scenario analyses by selection of two main uncertainties
- Formulate strategic plan

In Lower Austria the Technology & Innovation Partners (TIP) visit regional firms on site in order to get an overview of the firms' situation through an analysis of technical/technological questions, financial issues, organisational aspects and strategic innovation relevant topics. Following the discussion, the TIP coach can advise the entrepreneur and refer him/her to potential collaboration partners, appropriate funding schemes, helpful services and events (public and private). The TIP Coach acts as a door opener for the firms to gain an access to the full

innovation service portfolio in Lower Austria and beyond the region. TIP coaching is selected as one of the Good Practices of ERIK ACTION.²

The TIPs play an important role in coaching regional firms on innovation strategies. The large success of the TIP services is based on several success factors, such as:

- Funding schemes for regional enterprises as door opener for TIPs

By offering innovation funding schemes, it becomes easier for the Technology and Innovation Partners to get new contacts with firms. Once the TIPs have demonstrated the added value of the broad service portfolio for their clients funding schemes no longer have a dominant importance for the firms.

- Pro-active coaching

In rural areas it is often difficult for innovation service providers to get into contact with the firms. Thus, the TIPs have set up sub-regional access points and visit the firms on site. This pro-active approach ensures a close relationship with companies and increases the range of coverage of the innovation support services.

- Complementary services and holistic strategy support

TIPs are continuously amending and enlarging the own service portfolio according to firms' needs and existing gaps in the regional innovation support system. These services deal with relevant innovation strategy issues (Technologies, Market access, Products) and also include easy to use tools for companies for self assessment of the own innovation profile and strategy, such as the "InnovationsPrüfstand" (Innovation-Testbed) or the "InnovationsProfil" (Innovation Profile).³

Fostering Innovating – Business Strategies to support firms' competitiveness has a very high priority for the Region of West Macedonia, as Yiannis Bakouros pointed out in his key note presentation. The first step, awakening the innovative spirit in SMEs, is achieved through innovation campaigns and cross-sector policy making events such as the Innovation Week and knowledge transfer events. The cluster initiative Development of Innovation in the Wood Sector, selected as Good Practice for ERIK ACTION⁴, demonstrates that it is possible to upgrade firms' innovation activities even in traditional sectors like the wood industry. The concept was tested with a limited number of firms which were accompanied by experts from science and wood technologies. A consequent monitoring of pilot activities, an analysis of parameters of new product development in the sector,

² As above, more information on all the ERIK Action good practices is available on the ERIK Action web site at <http://www.eriknetwork.net/erikaction/keydocs.html>

³ While these schemes are not included in the ERIK Action good practice portfolio, more information can be requested from the ERIK Action secretariat at: erikaction@eriknetwork.net

⁴ Available on the ERIK Action web site at <http://www.eriknetwork.net/erikaction/keydocs.html>

the transfer of know how from science towards pilot firms and the systematisation of knowledge are key results. The action led to an investment of more than €1million in product R&D.

2.2 Knowledge café

Support for companies in developing or improving their innovation strategy starts with raising awareness on strategic thinking and easy access to external innovation partners. SMEs don't always recognise the need for an innovation strategy. Thus, the regional government should help them change the way they think. The promotion of success stories in innovation is one way to create firms' awareness on the importance of innovation activities.

As target group for innovation support enterprises which are ready for innovation should be selected. This does not necessarily mean enterprises that are already innovative, but those which have a certain innovation capability such as size, staff skills, openness to collaboration and flexible management structures. Recent surveys in Lower Austria indicate that the aggregated impact of innovation support services on enterprises is similar for innovative, average and slightly below average innovative enterprises. However, in case of non innovative enterprises the impact is significantly lower due to a lack of absorption capacities and of positive attitude towards innovation. Selling an innovation strategy to not interested/less capable firms instead of supporting the development activities of the firm will lead to very limited benefit and sustainability is unsure.

To support innovation in firms the regional government should provide an set of clear, integrated services involving generalists, specialists, product managers and process managers. The toolkit should be tailor-made for different target groups (SMEs and large enterprises have different needs) and for different depth of support. Broad activities, such as information events, a publication of a Good Practice booklet or an on-line information system on regional innovation services, have no defined clients and no pre-selection of individual firms (1 service provider – undefined number of participating clients) and mainly provide entry services for awareness raising and a broad selection of relevant information for innovation activities and support. Training sessions or cluster initiatives, on the other hand, have a clearly defined number of clients (1 service provider – n enterprises). Individual innovation services, such as development of individual innovation strategies or running a technology transfer project have a 1:1 relationship (1 service provider – 1 company). A similar categorisation of services ranges from collective (knowledge development and research), to a mixture (innovation stimulation), to individual (like advise and guidance). Categorisation of innovation services increases the transparency for (potential) beneficiaries and helps service providers to structure their service portfolio.

The more individual the innovation service is, the more confidentiality is usually required. Trust is one of the success factors in innovation support, in particular with respect to innovation strategy development, but trust cannot be generated overnight. Only after several positive experiences with regional innovation services, will a company be open to external support in strategy development.

In Lower Austria the TIPs accompany regional firms over years with advice for innovation and business management. They recommend public and private support services to overcome weaknesses, develop new products, improve internal processes or enter new markets. Long and personal relationships create the required trust among entrepreneurs and TIPs, leading to more openness to external innovation support.

A public private partnership helps to overcome market failures (e.g. for awareness raising services and general information services the companies are usually not willing to pay for) and facilitates coordination of public and private innovation support services. This collaboration enables regional public authorities to avoid overlapping and competition, and to spend public money for innovation support more effectively and efficiently. The Swedish Triple Helix approach is based on public private partnerships finding a common language for business sector, academic sector and public sector together to push innovation activities. Public Private Partnership is also core factor for the Regional Pole of Innovation of Western Macedonia to improve technological and innovation performance and thus, to increase competitiveness of the regional firms and overall economy.

3 Highlights

- Regional Innovation Policy should always offer a set of tailor-made services with Public Private Partnership to fulfil the variety of firms' innovation oriented needs and to exploit regional innovation potentials efficiently;
- Trust plays an important role for external advice for firms' innovation strategies and activities;
- Awareness Raising on the importance of innovation for competitiveness is the first step towards effective and sustainable innovation strategies;
- Pilot actions in fostering firms' innovation activities and strategies can deliver innovation showcases in a short time.

4 References

[ERIK Network 2006], ERIK Network: Conclusions of the study visit in Alentejo, July 2006; <http://www.eriknetwork.net/startup.html>

[ERIK Network 2007], ERIK Network: Knowledge and Innovation for Regional Growth – Policy Recommendations based on European Good Practices, April 2007, <http://www.eriknetwork.net/documents.html>

[STRINNOP 2003], GUIDE BOOK STRINNOP: How to Strengthen the Regional Innovation Profile – A Pragmatic Approach, Written by the Thematic Network STRINNOP - 'Strengthening the Regional Innovation Profile', under the Programme 'Promotion of Innovation and Encouragement of SME Participation', IPS-2000-1029, October 2003, www.strinnop.net