



WP2

Deliverable 1

Methodology and Good Practice report

Responsibility of



MARTIN-LUTHER-UNIVERSITÄT
HALLE-WITTENBERG

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1. Introduction

This document describes the methodology applied by all project partners involved in WP2 “Needs analysis” of the SUPORT (Erasmus) project (Oct2010 – Mar2011). The objective of this work package is to identify the barriers that SME face when trying to access HEI research. It is also aiming to identify the barriers and training needs that HEI staff have in accessing and engaging in collaborations with SME. Based on the findings collected during WP2, learning material and a website will be created in order to help SME and HEI overcome those barriers. The proclaimed goal of WP2 is to develop and carry out a needs analysis survey and identify three good practices of different nature in each of the participating regions. WP2 is led by SUPORT partner Martin Luther University Halle-Wittenberg, Germany (MLU)

2. Methodology

2.1. A brief timeline for WP2:

- official start Oct 1st, 2010; effective start Nov 11th, 2010 (after project kickoff)
- Partners have to submit their good practice examples by Dec 10th, 2010
- Methodology and good practice report is due Dec 15th, 2010. It includes a needs analysis survey
- Survey participants have to be selected and appointments for interviews must be scheduled by Jan 15th, 2011
- Surveys have to be carried out and results be sent back to MLU by Feb 28th, 2011
- Needs analysis report must be finalized and submitted to LCEB by March 20th, 2011
- Final changes, presentation of findings and WP completion by March 30th, 2011

2.2 Structure of the good practice examples

WP2 starts Oct 1st, 2010 and ends March 10th for a total duration of six months. By Dec 10th all partners are supposed to have their good practice examples submitted to MLU so they can be incorporated into the report. The good practices are to be described by the partners according to following standards:

- 1) 1 successful example of actual SME/HEI interaction
 - involved partners and individuals (where applicable)

- topic/content of project, type of transfer activity (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; start-a-business; consulting; training)
 - duration and budget of project
 - outcomes (HEI/SME sides; follow-up projects)
- 2) 1 example for a working system of HEI outreach to regional SMEs
- involved HEIs and SMEs or SME networks
 - target topics/contents of the outreach system, types of transfer activities promoted (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; start-a-business; consulting; training)
 - leading organization, duration and budget of outreach system
 - outcomes
- 3) 1 successful public funding scheme for SME/HEI collaboration (e.g. research voucher)
- Funding organization and fundable entities (HEI/SME/regional/other criteria?)
 - Possible topics/contents of fundable projects, types of transfer activities funded (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; start-a-business; consulting; training)
 - duration and budget of the program as well as of individually funded projects
 - outcomes (number of SME and HEI involved, number of applications, projects funded and budget spent; evaluation information)

2.3. Creation of survey and interview structure

By Dec 15th, the “methodology and good practice report” at hand has to be submitted to the project coordinator (LCEB), including the prepared analysis interview guideline. The initial step is to create a set of questions that will unveil the different barriers SME and HEI face in order to cooperate. A total of three surveys have been created, one for each category (SME, HEI, and advisors). In the course of the localization process for each of the partner regions, interview contents may be subject to minor changes due to cultural factors and such. The adaptation as well as the translation of the survey is within the responsibility of the individual partners.

The methodology applied includes **ten face-to-face interviews and one focus group in each region**. As agreed by all partners during the project kick-off meeting in Valencia (Nov 8-9, 2010) and deviating from the official project description, no online surveys are being used. The goal is to view existing barriers from all perspectives in order to fully comprehend and then create solutions. Hence, the surveys will focus on three categories in correspondence to the project target groups: SME, HEI and advisors. By Jan 15th all partners will have to have scheduled appointments with the selected survey participants. Ten surveys will be administered to the participants in each region as follows:

- 7 SME
 - 5 SME with transfer experience with HEI
 - 2 life science or technology-based spin-out companies
 - 3 not high-technology / not scientific knowledge-based (e.g. crafts)
 - 2 SME without any transfer experience with HEI's
- 2 HEI representatives life sciences/technology researchers

- 1 with previous transfer projects
- 1 without transfer experience

1 SME-HEI Advisor (e.g. HEI tech transfer staff, chamber representatives, association rep.)

The set-up of the group is designed to provide is with a variety of knowledge in different categories. By incorporating participants with diverse backgrounds the partners will be able to examine what the preferred levels of transfer might be and if the applying barriers differ. The interview guidelines are created to follow a certain path of discussion. To start of we gather information about the participant. Through the **guided interviews** we intend to find out if the participant ever engaged in transfer activities before, whether or not it was a good experience and the reasons for that. Another area of interest is, which benefits the parties involved perceive or expect. We look to disclose the way SME and HEI see each other. Mental barriers are to be unveiled and emphasized by personal experience of the interview participants.

2.4. Structure of focus group and discussion key points

After the surveys have been held there will be a discussion within a **focus group** to be carried out in each partner region. It is to discuss the main findings of the surveys, thus representing a dialog between SME and HEI. The focus group is to consist of representatives of the following entities:

- 2 SME with transfer experience with HEI
 - 1 science-based business (e.g. spin-out company)
 - 1 non-science-based business (e.g. crafts)
- 1 SME without transfer experience with HEI
- 2 HEI representatives
 - 1 scientist with transfer experience
 - 1 scientist without transfer experience
- 1 SME-HEI Advisor

The discussion will revolve around the major findings of the previously completed individual interviews. Detailed focus group contents will be elaborated at the regional partner level with regard to the interview results from all regions in order to re-test the outcomes and fill the remaining gaps in understanding SME-HEI barriers. The main topics will focus on:

- personal experience of the participants with the different levels of transfer
- reciprocal perception of the parties in connection with transfer activity
- personal transfer experience of the participants in reflection to the other party
- Motivation/possible benefits of transfer for the parties involved
- Existing barriers that participants face when engaging in transfer activities
- Expectations of the participants about the transfer process and interaction

2.5 Evaluation of results and finalization of needs analysis report

By Feb 28th the surveys must be carried out and the results send to MLU. In reference to the submitted results MLU will submit the finalized needs analysis report to LCEB by March 20th, 2011. Report and results will be presented by MLU and discussed among all partners at the next partner meeting scheduled for end of March, 2011 in Ireland.

3. Good Practice Examples

3.1.Successful examples of actual SME/HEI interaction

3.1.1.France

3.1.2. Germany

NEPRO – project for new product development and implementation

- Involved partners
 - I. MLU, Conomic, IIE, Netzwerk für Ernährungswissenschaften
 - II. EDEKA and a number of regional SME
- Topic/content of project, type of transfer activity (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. Project is to improve the cooperation between the industry and businesses
 - II. Support of SMEs in their innovation process in order to minimize the rate of failing new products. Throughout the three phases of generating ideas, testing, market implementation, the SMEs benefit from the knowledge of HEIs. Students are used to develop product ideas and as well as creating a proper marketing and implementation strategy of the product. Products are tested on a smaller scale in a number of EDEKA stores over a span of twelve weeks. Successful products are then to be implemented in all EDEKA stores in the region.
- Duration and budget of project
 - I. NEPRO officially kicked off in April 2010 and is open-ended
 - II. The budget consists of 2/3 subsidies from the federal state and 1/3 deductibles from the SMEs
 - III. The budget for 4 years is a little over 250,000 Euros

3.1.3. Ireland

HAVOK – a games company that came from a leading University
(see www.havok.com)

- Involved partners and individuals (where applicable)
 - I. Trinity College Dublin , The Innovation Alliance and Dr Steve Collins
- Topic/content of project, type of transfer activity (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. campus company formed by computer science department to develop high end games technology. Used computing power along with students to develop content.
- Duration and budget of project
 - I. Company formed in 1998 as a campus based company and was eventually privatized in 2007

- Outcomes (HEI/SME sides; follow-up projects)
 - I. major outcome was the purchase by Intel of the company for \$110M in 2007. Company continues to grow. Major legacy is that Dublin has become a significant hub for the games development industry

3.1.4. Northern Ireland

3.1.5. Spain

- OO-Method and OlivaNOVA
 - I. OO-Method - Object-oriented method that allows the automatic generation of software applications from conceptual models.
 - II. OlivaNOVA - Commercial software suite that supports OO-Method
- Involved partners and individuals (where applicable)
 - I. PROS Research Center and CARE Technologies
- Topic/content of project, type of transfer activity (staff/student transfer; joint R&D; contract research; out-licencing/technology transfer; consulting; training)
 - I. Development of OlivaNOVA which supports OO-Method
 - II. OO-Method allows the automatic generation of software applications from conceptual models. These conceptual models cover aspects related to structure, behavior, and interaction of software applications.
 - III. OlivaNOVA edits the models and applies subsequent transformations until the final code of a fully functional application (persistence, logic, and presentation) is generated for different computing platforms: C# or ASP running on .NET or .NET 2.0; and EJB, JSP, or JavaServer Faces running on Java.
 - IV. This project is model-driven development (MDD) compliant since it aims to represent every feature of the software in a conceptual model, minimizing manual changes in the code.
 - V. students designed prototype that was implemented included in Oscar Pastor's research.
 - VI. Consoft grew interested in the tool. As a member of CHG group they provided funding.
 - VII. Later those students were hired by CARE which was created as a member of CHG to continue improving the tool
- Duration and budget of project
 - I. Project started in 1992
 - II. In 1998 CARE Technologies was created. They had 10 employees and a budget of 150. 000 Euros
- Outcomes (HEI/SME sides; follow-up projects)
 - I. OlivaNOVA^
 - II. CARE is responsible for maintaining and improving this tool with regard to market necessities
 - III. Support and training are offered for OlivaNOVA users and buyers

3.1.6. Poland

BioCentrum – Their mission is to create a platform for their clients and partners in order to help them translate innovative discoveries into preclinical candidates with improved chances to become marketed in as quickly as possible.

- Involved partners and individuals (where applicable)
 - I. BioCentrum
 - II. The faculty of Biochemistry, Biophysics, and Biotechnology of Jagiellonian University in Kraków
- Topic/content of project, type of transfer activity (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. They offer is a range of in vitro and in vivo assays that are created toward incorporating preclinical information into your pipeline.
 - II. They also offer comprehensive services on multiple key-steps of preclinical drug development for the pharmaceutical, biotechnological and chemical industries.
 - III. BioCentrum specialize in production of unique enzymes especially from human neutrophil granules as well as bacterial proteases.
 - IV. On the basis of an agreement with the Jagiellonian University, BioCentrum also have access to equipment in the Faculty of Biochemistry, Biophysics and Biotechnology in Jagiellonian University
- Duration and budget of project
 - I. BioCentrum and Jagiellonian University have been cooperating for 6 years now
 - II. The amount of share capital: 250.000 PLN.

3.2. Examples for a a working system of HEI outreach to regional SMEs

3.2.1. France

Cap Digital - non-profit organization and French business cluster for digital content and services in Paris and the Ile de France region.

- Involved HEIs and SMEs or SME networks
 - I. **530 SME / SOHO** (the SMEs incidentally employ 6,100 persons)
 - II. 20 large companies and major universities
 1. E.g. **Université Pierre et Marie Curie (Paris 6), Université de Vincennes à Saint-Denis (Paris 8), Université Paris-XIII** and the Telecom Institute.
 - III. 50 schools with 170 research laboratories
- Target topics/contents of the outreach system, types of transfer activities promoted (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. Image, Sound and Interactivity
 - II. Video Games
 - III. Knowledge Engineering
 - IV. Culture, Press, and Media
 - V. e-Learning and e-Training
 - VI. Collaborative Technology & Intelligence
 - VII. Mobile Lifestyle & Services
 - VIII. Robotics and Communicating Objects
 - IX. Digital Design
 - X. Cap Digital provides members with essential information, networks, and resources. These include ongoing competitive intelligence, training, partnerships, funding solutions, and project reviews. Partnerships with other

leading European clusters, at a structural and project level are an essential element of Cap Digital's strategic activities.

- Leadership, duration and budget of outreach system
 - I. Cap Digital is steered by both a Board of Directors and an Executive Board.
 - II. As the system operates based on calls the duration is program specific, but can average 3 months (including selection process).
 - III. Cap Digital is set up as a non-profit organization and receives dues from its members.

- Outcomes
 - I. Since its inception in 2006 Cap Digital has inspected nearly 1,100 projects of which 300 were approved and funded. Note that projects can be either “collaborative” or “mono-partner”.
 - II. In total, the projects approved by the cluster represent more than 600 million Euros of investment, including public funding of around 275 million Euros (grants and reimbursable advances).

3.2.2. Germany

KAT – Kompetenznetzwerk für Angewandte und Transferorientierte Forschung

- Involved HEIs and SMEs or SME networks
 - I. A joint initiative of the HEIs of the federal state of Saxony-Anhalt
- Target topics/contents of the outreach system, types of transfer activities promoted (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. KAT is designed to be the link between regional SMEs and HEIs of Saxony-Anhalt
 - II. Functions as an intermediary for regional SMEs and HEIs.
 - III. It gives SMEs an opportunity to access the resources of all of the HEIs in Saxony-Anhalt.
 - IV. The main objective is to help regional SMEs to engage in transfer activity with HEI's to solve their problems and become more competitive in their field.
 - V. Their main areas of focus are
 1. Initiation of R&D projects between regional SMEs and HEIs
 2. R&D
 3. Provisioning of laboratory resources to regional SMEs
 4. Coordination of internships, bachelor's or Master's Theses
 5. Placement of graduates in regional SMEs
 6. Provision of advanced training opportunities for SME employees
- Duration and budget of outreach system
 - I. Kat is a network without a restriction of period of time.
 - II. The latest records showed a total of 157 new projects for 2009 with a total project volume of around 8 mil Euros.
- Outcomes
 - I. Numerous examples of technology transfer in order to develop SMEs business skills and potential. The focus lies on the region's high-potential-clusters like custom machine and plant engineering, the food industry,

automotive industries, medical engineering, renewable energies, chemical industry, IT- and communication industry, tourism and engineering sciences.

3.2.3. Ireland

Enterprise Platform Programme (EPP)

- Involved HEIs and SMEs or SME networks
 - I. Institutes of Technology (local technical universities) and local SMEs
- Target topics/contents of the outreach system, types of transfer activities promoted (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. The Enterprise Platform Programme (NEPP) is a nine month programme of support for graduate entrepreneurs with an innovative business idea in the Knowledge Based, High Tech or IT sectors.
 - II. The main objective of the programme is to develop the commercial and job creation potential of the participant businesses. The programme delivers comprehensive training in business management to equip participants to successfully start up and manage a new business.
 - III. The programme assists participants in the achievement of personal and business development goals in relation to the project. It also assists participants in the completion of market or technical feasibility studies and/or the preparation of a business plan.
 - IV. The programme is delivered through the network of Institutes of Technology
 - V. Many ITs also offer a hot-desking facility as part of the program.
- Leadership, duration and budget of outreach system
 - I. Program runs for nine months. Cost to entrepreneurs is nil. All costs are borne by government funds. Program costs approx. €13,000 per participant. Typically 100 participants per year.
- Outcomes
 - I. Numerous examples of technologists developing their business skills and potential.

3.2.4. Northern Ireland

3.2.5. Spain

3.2.6. Poland

Academic Enterprise Incubator

- Involved HEIs and SMEs or SME networks
 - I. The West Pomeranian University of Technology in Szczecin
 - II. Local SME network consisting of about 30 businesses
- Target topics/contents of the outreach system, types of transfer activities promoted (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. The idea is to create good conditions at the university to support activities related to the widely understood enterprise.
 - II. The primary task is to create conditions and opportunities to create new, attractive jobs for graduates and students especially in last years of study as

well as to help young entrepreneurs in establishing and running their own business

III. Offers include

1. Free training for students and graduates who are interested in setting up their own business
 2. Access to investments grants (public funding), bridge support (for 12 months – “incubation period”)
 3. Rental of office space at very advantageous prices, use of technical facilities (internet access, phone / fax, multimedia projector...)
 4. Training and consultation for students and graduates who carry out business activities (management, accounting, analysis of the logistics, market research)
 5. Free promotion
- Duration and budget of outreach system
 - I. Program runs for nine months. Cost to entrepreneurs is nil. All costs are borne by government funds. Program costs approx. €13,000 per participant. Typically 100 participants per year.
 - Outcomes
 - I. There are 28 incubated businesses with a total of 38 employees

3.3. Examples for public funding schemes for SME/HEI collaboration

3.3.1. France

OSEO - created in 2005, by bringing together ANVAR (French innovation agency) and BDPME (SME development bank), around a mission of general interest supporting the regional and national policies. Its mission is to provide assistance and financial support to French SMEs and VSEs in the most decisive phases of their life cycle: start up, innovation, development, business transfer / buy out. By sharing the risk, it facilitates the access of SMEs to financing by banking partners and equity capital investors.

- I. Innovation support and funding: for **technology transfer** and innovative technology-based projects with real marketing prospects.
 - II. Guaranteeing funding granted by banks and equity capital investors.
 - III. Funding investments and operating cycle alongside the banks.
- Funding institutions and fundable entities (HEI/SME/regional/other criteria?).
 - I. Banks, financial institutions and equity capital investors ; research laboratories, universities, engineering schools, major companies ; chambers of commerce and industry, tradesmen's guilds ; business start-up assistance and support networks ; government agencies and private organisations working to promote the use of information technology by SMEs ; European structural funds and Community research programmes...
 - Possible topics/contents of fundable projects, types of transfer activities funded (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)

- I. OSEO covers all areas of France, through its **regional network**. It works with local communities and in particular with the French regions. It makes its skills and networks available to them, acts on their behalf and in accordance with their economic development priorities.
- Duration and budget of the program as well as of individual projects
 - I. In 2009 OSEO activity level was particularly intense and was strongly influenced by the exceptional mission, under the Recovery Plan, which was added to its traditional business
 - II. Overall this represents 560 million Euros in direct aid to innovation, or nearly 2 billion Euros of RDI investments in the companies that were helped.
- Outcomes (# of SME and HEI involved, # of applications and of projects funded and budget spent; evaluation information, if available)
 - I. 80,000 businesses (+28% compared to 2008) were aided in the 85,000 different projects that were supported.

3.3.2. Germany

- ZIM – Zentrales Innovationsprogramm Mittelstand
 - I. The objective of ZIM is the creation and sustainable support of the SME's innovative strength and competitive advantages. The focus lies on the growth of SMEs and the creation and protection of jobs.
 - II. ZIM is a nationwide funding program for SME's and their cooperating HEIs.
 - III. The types of projects funded are cooperation projects, network projects, and individual projects. However, we focus on cooperation projects between SMEs and HEIs
- Funding institutions and fundable entities (HEI/SME/regional/other criteria?).
 - I. All SMEs with up to 1000 employees
 - II. Subsidies of 25%-50% for SMEs
 - III. 100 % subsidies for HEIs
- Possible topics/contents of fundable projects, types of transfer activities funded (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. General R&D
 - 1. Innovation of products
 - 2. Innovation of processes
 - 3. Innovation of services
 - II. Funding of external services like technical support, management assistance, marketing assistance, etc...
- duration and budget of the program as well as of individual projects
 - I. Program started on July 1st, 2008 and runs until Dec 31st, 2013
 - II. Up until June 2010 the total amount of granted subsidies for 1.11 billion Euros out of which 830.8 mil Euros go to cooperation projects.
 - III. For 2011 itself the budget is set to be 393.3 mil Euros
 - IV. Individual project duration is typically six months

- outcomes (# of SME and HEI involved, # of applications and of projects funded and budget spent; evaluation information, if available)
 - I. Over 7000 projects have been supported
 - II. The average amount of subsidy for SMEs is 132,000 Euros per project
 - III. The average amount of subsidy for HEIs is 157,400 Euros per project

3.3.3. Ireland

- Innovation Voucher Scheme
 - I. The objective of the Innovation Voucher initiative is to build links between Ireland's HEIs and small businesses and create a cultural shift in the small business community's approach to innovation. It is designed to allow SMEs access the skills and knowledge available in HEIs to develop new products and services.
- Funding institutions and fundable entities (HEI/SME/regional/other criteria?).
 - I. All HEIs
- Possible topics/contents of fundable projects, types of transfer activities funded (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. new product / process development;
 - II. new business model development;
 - III. new service delivery and customer interface;
 - IV. new service development;
 - V. tailored training in innovation management;
 - VI. innovation / technology audit
- Duration and budget of the program as well as of individual projects
 - I. Program is open ended.
 - II. Individual project duration is typically six months
- Outcomes (# of SME and HEI involved, # of applications and of projects funded and budget spent; evaluation information, if available)
 - I. Over 600 individual projects have been completed
 - II. Each project cost is limited to €5000
 - III. For the purposes of this initiative, a knowledge transfer project is defined as one that transfers knowledge of a scientific, technological or innovative nature that it is new to the small enterprise. The small enterprise may then use the new knowledge to innovate a product, process or service.

3.3.4. Northern Ireland

3.3.5. Spain

“Innovation cheque”

- Funding institutions and fundable entities (HEI/SME/regional/other criteria?).
 - I. Comunidad Valenciana, Conselleria de Industria, Comercio e Innovación, through the IMPIVA office (www.impiva.es) (50% comes from FEDER funds)
 - II. SMEs in The Valencia Region

- Possible topics/contents of fundable projects, types of transfer activities funded (staff/student transfer; joint R&D; contract research; out-licensing/technology transfer; consulting; training)
 - I. new product / process development;
 - II. new service development;
 - III. external service funding
 1. However, it cannot be used for example to create a new webpage, or buy licenses for software, or obtain ISO certifications.
- Duration and budget of the program as well as of individual projects
 - I. Limited to one year in 2009. After being very successful it is considered a respectable funding scheme in all of Spain provinces in 2010
 - II. Overall budget of 5.200.000 Euros
 - III. Budget of 6000 Euros for individual projects
- Outcomes (# of SME and HEI involved, # of applications and of projects funded and budget spent; evaluation information, if available)
 - I. # of SME: 700
 - II. # of HEI involved: the cheque can be spend on a service from a technological institutes, in total there are 15. These are research oriented institutes, but do not do education.
 - III. # of applications: 2925
 - IV. # of projects funded: 866

3.3.6. Poland