

# **The Innovation Relay Centre Network: best practices for supporting international cooperation, business and innovation of Clusters and Competence Centres**

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## **1. Introduction**

In the last 10 years the European Union Framework Programs and many other national and regional programs set up many dynamic industrial and technology clusters and poles. These clusters in some cases act at regional levels and in other case at national and international levels, Some of them has been created around a scientific- technological area and others around industrial sectors. Few clusters initiatives are well integrated with the external environments and offer a real added value to the members clusters. Research and innovation therefore suffer from the same fragmentation as the internal market. To make them as attractive as possible to foreign investors, these innovation poles and clusters need to achieve critical mass, based on a strong industrial base and good and trustful relations between science and industry as well as to implement a very efficient marketing strategy and implementation plan.

Networking within clusters and across complementary clusters is a key factor for their successful development. Training and research centres, financial institutions, innovation and intellectual property consultants, local and regional development agencies and other support organisations are all key players in maximising firms' creative business potential. The ever increasing complexity of products and processes and the need to integrate services such as maintenance, logistics and marketing raise problems, even for the most successful clusters. Co-operation between clusters can help to address them in an international context.

The European Commission invested a lot of resources form one side to launch RTD programs, where industry and research organizations could provide benefits in learning collaboration and assessment of research results; from the other side many EU programs have been addressed in creation of network able to support exploitation of research results and technology transfer, linking private investors able to put in place resources to launch new products in the market. All the European Regions and Member States have been invited to launch “parallel programs” and local actions, managed by the Structural Funds, in order to support the European vision and actions of the business and innovation management policy, defined by the “Lisbon Strategy” as well as to support “clustering” and “competence centers” concepts.

Since more than 12 years specialized EU Networks dedicated to business and innovation have been created. These network are mainly addressed to SMEs with low, medium and high-tech levels of innovation, but also to research organizations, policy makers, public administrations and innovation agencies, acting as a “specialized bridge” to improve competitiveness of European Regions.

Furthermore, the Commission will streamline its business support and information networks. This will encourage and facilitate the uptake of new ideas and their transformation into marketable products and services, especially by SMEs. In particular it will help ensure that the Innovation Relay Centres (IRC) and Euro Info Centres (EIC) provide top class business services to SMEs. These 2 network are starting a common program 2008-2013 in order to unify resources and competences under a unique umbrella and offer a more efficient services at regional level for business and innovation, mainly addressed to SMEs.

Starting from 2008, the Commission will therefore create a common platform for these networks while maintaining the flexibility of multiple entry points for businesses. This means that one joint network will provide access to the same variety of services such as partner search, technology transfer, information on

renewable energy technology, start-up and development and funding opportunities to enterprises. When being approached by an enterprise, each network member will carefully analyse the needs of its client and will either provide the right service or signpost the client to the network member with the more appropriate profile. This ensures that the enterprise is accompanied until it finds the right response or solution to its problems. Having a clearly established profile, all members of the network will also actively promote it and raise awareness about EU policies and programs. Such an integrated network is in line with a more service oriented culture promoted by the Commission. It will aim to improve the business environment for European enterprises, foster entrepreneurship in the European Union and offer more efficient management.

## **2. IRC services for Clusters and Competence Centres (<http://irc.cordis.lu/>)**

The mission of the IRCs is to support innovation and transnational technological co-operation in Europe with a range of specialised business support services. IRC services are primarily targeted at technology-oriented small and medium-sized enterprises (SMEs), but are also available to large companies, research institutes, universities, technology centres and innovation agencies.

The first Innovation Relay Centres were established in 1995 with the support of the European Commission. The aim was to create a pan-European platform to stimulate transnational technology transfer and promote innovation services. Over the past five years the IRCs - working together in close co-operation - have been of assistance in over 12,500 technology transfer negotiations, and have helped more than 55,000 client companies to meet their technology needs and to exploit their research results. IRC staff (a total of nearly 1,000) are experienced specialists with backgrounds in business, industry and research. To date, they have facilitated more than 1000 transnational transfers of technology - signed agreements for the sale, licensing, distribution or joint development of new technologies.

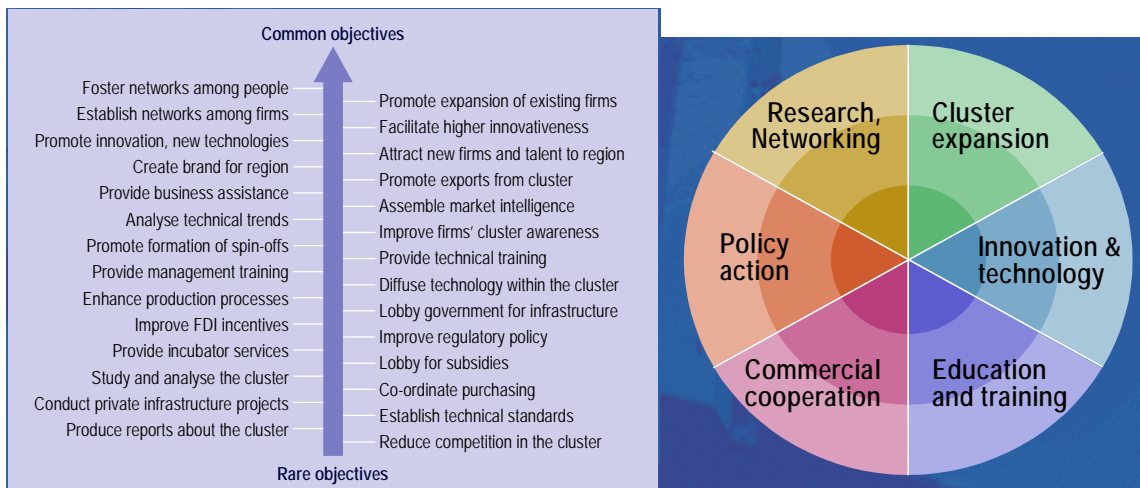
Today, 71 regional IRCs span 33 countries - 27 EU Member States, Iceland, Israel, Norway, Switzerland, Turkey and Chile. Most IRCs are operated by consortia of qualified regional organisations such as Chambers of Commerce, Regional Development Agencies and university Technology Centres. Altogether, almost 220 partner organisations are involved, ensuring wide geographic coverage.

The first priority is to help companies identify technology needs, identify suitable technologies to match these needs, to assist them in technology transfer negotiations and promote new technological development in the various regions through inward technology transfer. In addition, local industry is helped in the identification of suitable technologies eligible for transfer to other regions or industries thus building the basis for outward technology transfer. To do this, the IRCs encourage the circulation of European research results in each local industrial community and offer training and consulting services at the request of local companies.

Since their creation in 1995, the Innovation Relay Centres (IRC) have become a leading European network for both creation of technology partnerships among SMEs and research bodies.

In more than 12 years of activity the IRCs collected appreciated experiences in providing assistance in EU clusters of projects, in joining other EU networks for supporting technology transfer as well as in providing assistance to local authorities for setting up policies and programs to improve business and innovation. Today many IRCs established collaboration agreements with the regional clusters, often supported and funded by Regional Authorities and National Governments. In 2005 the IRC steering group set up a dedicated working group in order to investigate and identify types of services and methodologies of collaboration that the IRCs could provide to Clusters and Competence Centres.

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| Background : General objectives of cluster and main area of Cluster competences |
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Typically Clusters engage in six main objective areas with 66 % of Clusters covering five of these:

2\*The Irc supporting service schéma

The schéma in the next page describes the standard “working methodology” of an IRC . For successfully implementing this methodology the IRCs set up qualified and efficient instruments and tools to provide services and facilitate communication in the network as well as among the IRC clients. The typical instruments of the IRCs are:

- *BBS*: a specialized database where technology demand and offer as well as research results are included. Before storing these data each IRC must apply the quality evaluation procedure for both the innovativeness of data and the quality of contents. Every day each IRC received many technology demands and offers in different fields of applications as well as for different technological areas.
- *Help-desk*: IRC staff select and redirect information to IRC clients. Most of clients have been equipped with an “Automatic Matching Tool” in order to have direct access to relevant information.
- *Brokerage events*: in general after having managed preliminary contacts among IRCs clients of different European Regions, the IRCs assisted these clients up to conclusion of technology transfer agreements. In order to facilitate establishment of contacts and to assist negotiation phases, the IRCs organize brokerage events on specific technological areas or on specific industrial sectors, where the potential partners previously identified are invited to attend.
- *SMEs missions*: often IRCs organize missions of companies in the different European Regions in order to facilitate their knowledge on technology offer or demand. Groups of SMEs from clusters, Industrial Districts, Technological Poles are often included in the “SMEs mission” program.
- *Thematic Groups*: Bringing together IRCs with shared technical expertise between European regions which are active in common and/or complementary industrial or technological sectors. Cross border group of IRC further exploit their synergies by establishing closer relations, by jointly organising and promoting (cross-border) technology transfer events, and by organizing company missions. The regions selected are based on client companies' expressed preferences on doing business with other companies in the covered regions. IRCs collaborating other than merely in particular technological fields but in determined regions have likewise formed IRC clusters. Their in-depth understanding of the regions and their technological and intercultural interdependences helps to streamline transnational technology transfer. As a result the business communities in (historic) industrial areas will be strengthened by technology cooperations and partnerships.



- *Other Specific and personalized services for Clusters, Competences Centres, Technological Poles, Incubators:* Marketing (market analysis, elaboration of dissemination materials addressed to specific industrial fields, press articles and publications on national and international newspapers as well as on specialized magazines, Patents and IPRs, Innovation Financing (linking investors and supporting business planning), training on EU programs and projects, elaboration of EU project proposals and partner search.

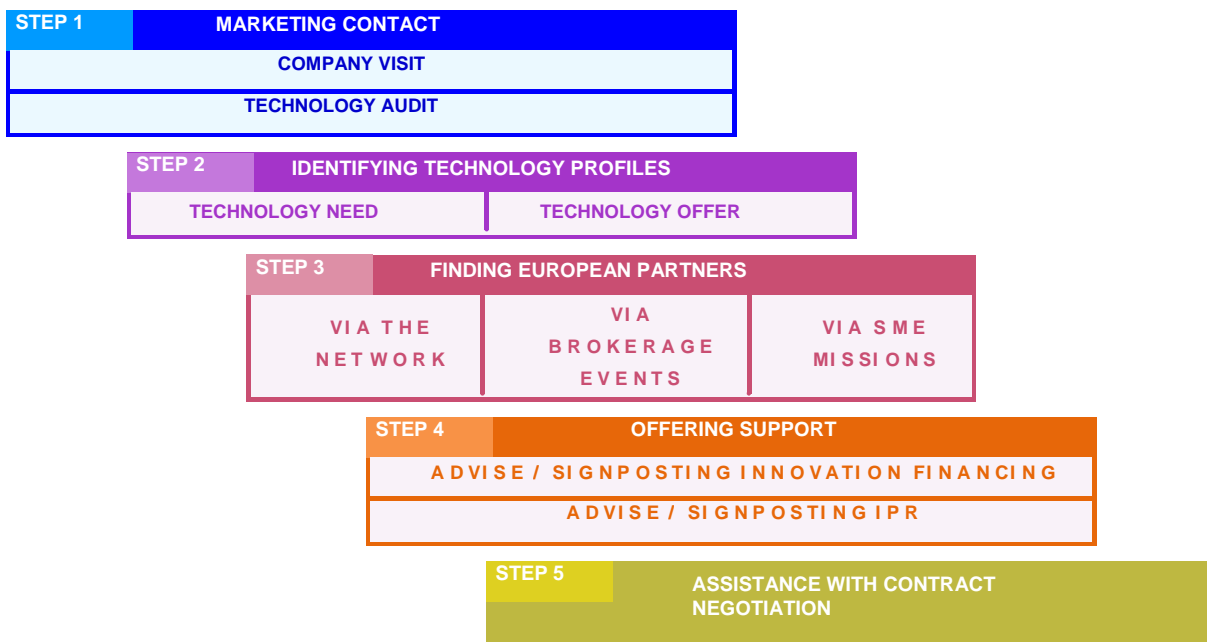


Schéma: A Standard “working methodology” of an IRC

### 3. The experience and successful schemes of the IRC RECITAL (Tuscany and Umbria Regions) in supporting clusters

The IRC are organized per geographical area and they cover all the Regions of the 33 countries involved in the Network. In Italy there are 7 Innovation Relay Centres:

IRC ALPS (Piemonte, Liguria, Valle D'Aosta): coordinator: Camera di Commercio di Torino - [http://www.to.camcom.it/alps\\_irc](http://www.to.camcom.it/alps_irc)

IRC LOMBARDIA (Lombardia): coordinator: Cestec Spa - <http://www.irclombardia.it/>

IRENE (Emilia Romagna, Marche, Friuli Venezia Giulia, Trentino Alto Adige, Veneto). Coordinator: ENEA Bologna - <http://www.irc-irene.org/>

IRC RECITAL (Toscana e Umbria): coordinator: Consorzio Pisa Ricerche - <http://www.recital.it/>

IRC CIRCE (Lazio, Sardegna e Abruzzo): coordinator: CNR – Roma - <http://www.irccirce.it/>

IRIDE (Puglia, Molise, Basilicata, Campania): coordinator: Tecnopolis Csata - <http://www.centroiride.it/>

IRC MEDIA (Calabria e Sicilia): coordinator: Consorzio Catania Ricerche - <http://www.mediainnovation.it/>

This configuration will change in January 2008, when the new consortia will start the mandate receive under the CIP (Competitiveness and Innovation framework Programme). The Innovation Relay Centre RECITAL actually is coordinated by Consorzio Pisa Ricerche (CPR) and covers Tuscany and Umbria Regions. Since January 2008 CPR will coordinate 5 Regions: Tuscany, Umbria, Marche, Lazio and Sardinia.

Consorzio Pisa Ricerche (CPR) was set up in 1987 to promote and co-ordinate the transfer of Innovative technology and expertise from the university and research environments to industry in many application areas. Consortium members are: Tuscany Region and other local public authorities, CNR (National Research Council), ENEA, INFN (National Institution of Nuclear Physics), University of Pisa, Scuola Superiore S. Anna, Scuola Normale Superiore and Italian companies, such as Finmeccanica, Sogei, Avio, Piaggio and Kayser-Italia. Current R&D activities encompass a wide range of research fields including: Aerospace, Energy and Environmental, Agriculture, Robotics, Telecommunications, Multimedia and e-commerce, Software Engineering, Microelectronics, Geographical Information Systems and Language Technology. CPR promotes and improves start-up and spin-off actions in the technological areas where relevant R&D results have been achieved. In the last 3 years CPR created 4 spin-off companies. CPR's experience in the management of RTD, technology transfer and training projects can be summarised in more than 250 projects acquired, of which more than 100 in the framework of EU programmes. CPR has a dedicated Division for technology transfer activity, where many EU projects have been activated in the last EC Framework Programs.

The Innovation Relay Centre RECITAL in the last 8 years provided support for business and innovation to many initiatives and some of them could be good examples of best practices on "how to promote clusters and of the success stories for the following initiatives:

- **TETRAMED:** this project has been launched in the framework of the European Commission IT Programme. The IRC RECITAL was "the mirror" in Europe for technology watch as well as to transfer the IRC methodology to other intermediaries organizations located in the 12 Mediterranean Countries, in order to support these "IT nodes" to acquire instruments and tools for business and innovation services. Countries involved: Italy, Greece and the 12 Mediterranean countries (Egypt, Morocco, Tunisia, Cyprus, Malta, Lebanon, Algeria, Palestinian Authorities, Israel, Syria, Jordan and Turkey)
- **IT-TTN network:** this network was launched in the framework of the accompanying measure of the European Commission IT Programme with the main aim to support exploitation and take up actions for an IT cluster of EU projects. In order to set up press campaigns, dissemination actions, market analysis and business planning, the network acquired the IRC instruments and tools. Country involved: Italy, France, Spain, Portugal, Greece, Germany, Denmark, Sweden, Austria, U.K. Ireland, Benelux and Finland then extended to Eastern Europe.
- **EUTIST-EXPANSIV cluster:** this project has been launched in the framework of the European Commission IT Programme. Lesson learnt from the previous experience in the IRC and TTN network was the base to start the assessment of the services activated for supporting dissemination and technology transfer of the Machine Vision cluster. Countries involved are the same of the IT-TTN network.

### **3.1 Services provide to the "Machine Vision" Cluster (EXPANSIV project)**

The EXPANSIV project was created as an Accompanying Measure for the "Machine Vision" cluster. It ran from December 1st 2001 until 30 November 2003. EXPANSIV's aim was to ensure the widespread promotion and early uptake of the project results of the Machine Vision cluster across European industries as well as implementation of targeted campaign to increase business of all the actors involve in the cluster.

The EXPANSIV partners come from the experience of TTN and IRC networks, that achieved many success stories in supporting business and innovation for both private and public organizations active in RTD activity as well as in high-tech sectors. The EXPANSIV partners set out to raise awareness among potential new end-users and exploiters of Machine Vision and to be a bridge between suppliers of technology and those who want to deploy it.

The EXPANSIV project produced impressive results and managed to exceed by far the goals from which it started out. With an expertly carried out dissemination campaign the partners reached out to Europe's key industry sectors with a wide selection of professional publication material. This created a good basis for more proactive efforts like company visits or the attendance at exhibitions. Thus the requested number of contacts with industry was surpassed considerably. Due to a skillfully orchestrated European press campaign a much greater and widely spread media coverage for the Machine Vision cluster's results was achieved in the key publications of the targeted trade and general press.

### 3. 2 Methodology behind EXPANSIV's activities

The reported methodology could provide some guidelines to answer to the question *“how to promote the openness of the centres and develop European networks of competence centers and their specialization and cooperation with other regions at the international level”*

The overall success of the project was built from several key strategies. At the very beginning of the project 3 relevant key actions have been carried out:

- A first global meeting with all the actors of the cluster in order to introduce all the implementation plan of the project, specifying the necessary involvement, motivation and commitment that all of them should provide to the project in order to receive benefits for their future business. Gaining consensus from the cluster for the services you intend to set up is fundamental for the success of your performances.
- It has been classified the status of the 93 project results included in the cluster as well as a complete analysis of all the organizations involved in terms of demand and offer of both services and RTD activities.
- An extensive market research was conducted in order to identify, segment and characterise the target audience. This was then followed by the production and distribution of effective dissemination material, which built a base for more proactive dissemination at exhibitions, trade fairs and workshops. For stimulating industrial use follow-up activities such as company visits and seminars were undertaken.
- Several clear and measurable objectives were defined at the beginning of the project:
  - Number of face-to-face contacts made with industry
  - Number of new contacts established after distribution of dissemination materials and press campaign
  - Number of contacts made with industry at events
  - Number of areas where the technology has been introduced
  - Number of publications obtained in technical and general press
  - Number and value of new technology transfer activities set-up as a results of contacts made
- A focussed strategic approach to raise Europe-wide awareness of machine vision and its new applications seemed paramount from the beginning. Therefore the EXPANSIV consortium members devised individual strategy plans for the countries they were to distribute.
- Furthermore, some major dissemination activities such as the company visits and the distribution of the Multimedia CD were underpinned with detailed strategy plans in order to have a clear focus on the desired outcome. All activities were monitored against the strategies throughout the course of the project

Relevant in this project was the preparation and elaboration of dissemination material, where experts from the partners of project was essential for high-quality production of brochures, flyers, web pages and press articles. In general, the online and paper-based publication material laid the groundwork for more proactive efforts like the attendance at international and regional events and the face-to-face visits with industry. There was also a good synergy between the paper based and the electronic and online information material, which complemented each other but also often had a mutual knock-on effect. An example is the significant increase of visits to the website after an EXPANSIV press release had been published.

The partners used a variety of methods to achieve at least 500 good quality contacts with industry, a goal defined in the EXPANSIV workplan. After suitable audiences were identified in EXPANSIV's market study the partners set out to build high quality contacts with industries in the countries of their responsibility. They did this by strategic distribution of professional high-quality dissemination material, by exhibiting at international events and with face-to-face meetings with a wide range of industries. All these efforts were underpinned by a wide-reaching press campaign that promoted the Machine Vision cluster and projects as well as the benefits for European businesses in the key publications of the general and trade press.

As a basis for all follow-on distribution efforts for the Machine Vision cluster, the EXPANSIV consortium carried out a market study in the first few months of the project in order to have a clear definition of targets. Interviews with end users and technology providers were conducted and key publications in the target sectors were identified. A lot of work was also put into identifying and prioritising suitable international fairs and exhibitions for presenting the Machine Vision cluster and its results.

The main target audiences for the efforts of EXPANSIV were foremost European industries that could potentially benefit from the results of Machine Vision, but also journalists, universities and research institutes and multiplier organisations like chambers of commerce or trade associations.

#### *Audiences targeted with EXPANSIV dissemination activities*

- Industry sectors (mainly Automotive, Glass & Ceramics, Wood, Paper, Manufacturing, Electronics, Textile, Fur & Leather, Food & Beverages, Water Industry, Security, Advertising)
- Journalists (trade and general press)
- Universities and research centres
- Multipliers (IRC network, chambers of commerce etc)

#### **4. Lesson learnt and recommendations**

- Before starting dissemination activity it is essential to have a professional market study carried out at the very beginning of the project. All the dissemination activities to be carried out are based on the market study and its results. This helped all partners to focus on the appropriate target sectors in their countries and made it much easier to identify important key publications for the press campaign. The choice must be made between qualitative and quantitative study and one must make sure that everyone understands the meaning of the methodology being chosen. The qualitative methodology is recommended when determining the targets and channels to be used in a dissemination campaign, because the object of the study is not to generalise its findings, but to give guidelines for future actions. There is a lot of market knowledge available inside the project; therefore the information available should be gathered from the partners involved. There are a number of ready market analyses available that can be exploited. Company visits in the beginning of the project could have contributed to the market study. At the same time that a problem would have been discussed, the project representative could have had a deep discussion with a potential end-user outside the project involving items important to the dissemination efforts. A clear schedule and determination of expected results must be set in the beginning of this activity; otherwise the market study can become a never-ending mission.
- A high quality and up-to-date website is an essential dissemination tool for any technology transfer initiative. Features like downloadable images, a free Multimedia CD, event news, press material and on-line newsletters help to attract new visitors. The project website should be made in a way that its layout and appearance are easy to modify. Trends in the web design change rapidly, therefore a website made at the beginning of a lengthy project, easily becomes old-fashioned towards the end of the project.
- Project flyers and in general dissemination material addressed and elaborated for specific audience and industrial sectors do not always achieve a high feedback rate, e.g. in mailings, but are important handout material at events etc. The attractiveness of flyers seems to increase if more than one project is covered or a whole sector is addressed with different solutions. The importance of having the dissemination material available in translated versions and not only in English should not be underestimated.
- A high-quality and professionally designed promotional CD ROM can be a very useful dissemination tool. In order to make it attractive to potential new users it was important to have attractive packaging and a lot of multimedia content. Some pictures of printable resolution should be included in the CD ROM for the use of journalists. Overall, it is strongly recommended to choose distribution channels for the CD carefully
- A periodic electronic newsletter containing news on events and brief summaries of the business cases from the Machine Vision cluster web page was distributed regularly. An electronic newsletter is a low-cost dissemination instrument and can be effective if sent to the right kind of contact. It is advisable not to distribute too widely in order to avoid spamming. The e-newsletter was used to promote events and to attract attention to other dissemination tools like the website.
- Another sizable contribution to the success of promoting the benefits of Machine Vision and the cluster's results was made by the European and national press campaigns. This was carried out by a UK PR agency in collaboration with the UK based EXPANSIV partner. The overall press coverage of EUTIST-IMV was greatly increased by this activity. Over the course of nine months over 100 online and paper-based articles were placed about the Machine Vision cluster. The PR agency provided eight press releases on projects preparation for exhibitions. These press releases were written in English and then translated by the partners into their local languages. The press campaign also clearly had an influence on the demand for other dissemination efforts. A good example is the

obvious connection between the publishing of a press release and subsequently increased visit numbers to the cluster website. Even though bringing in this external expertise was a considerable investment in terms of cost, the consortium feels it was well worth the effort if one looks at the results. In order to gain such widespread and extensive press coverage, it is paramount to have an excellent network of media contacts all over Europe.

- International trade fairs and exhibitions are an excellent opportunity for face-to-face meetings with the target audience in order to discuss their technology needs and potential machine vision solutions. At these events the printed and electronic distribution material set the ground for more active dissemination efforts. After an elaborate selection process, which took account of the end-users' preferences, seven international events were chosen for attendance. It is important to select these events carefully as the ones with the highest visitor or exhibitor numbers are not necessarily the ones where the project can have the biggest impact. All EXPANSIV events turned out to be good sources of contact for company visits and even for possible future collaborations. A reasonably sized stand as well as professional looking presentations and live demonstrators wherever possible proved to be essential. The EXPANSIV exhibition team was usually accompanied by technology experts from the appropriate Machine Vision cluster members. Generally, the technology-focused events resulted in a higher number of industry contacts than events focusing on one industry sector. Nevertheless it is important for successful technology transfer to attend these sector-based events as well in order to introduce new industries to innovative technical know-how. It is important to get a firm commitment from projects that they will attend an event. Stand space must often be reserved as much as one year before an exhibition takes place. Communications about attendance at exhibition should begin already some months before it takes place: contacts with journalists, mailing of invitations to industries, submitting product categories to the exhibition catalogue etc. It is worth pointing out that an exhibition outside one's home country requires a lot more effort.
- Company visits are an excellent opportunity for meeting the target audience and to discuss their technology needs and potential machine vision solutions. Company visits under EXPANSIV were meetings with key persons of SMEs and other companies in target industry sectors to create awareness for IMV and to generate new technology projects. The EXPANSIV partners developed individual and joint strategies to carry out the company as efficiently as possible and to identify potential users and multiplier partners. Key points of these strategies were:
  - Respond to urgent, promising, technical demands from the market
  - Respond to contacts gained at international and regional events
  - Reach out to territorial potential markets (analyse key sectors and companies)
  - Collaborate with local trade associations, chambers of commerce etc. to identify interesting users
  - Examine readiness of sectors to take-up technology / innovation capacity
  - Provide solutions of the clusters technology offer portfolio only if you judge that they can solve problems of the companies
  - Promote projects from similar application backgrounds

The visits were carried out by experienced technology transfer staff who were able to explain the business benefits as well as the underlying technological principles. Over the course of this activity the variety of the projects within the cluster proved to be very beneficial for establishing credibility with a wide range of industries

A final comment is to stress the importance to have simple concepts in mind to act as qualified member of a network for promoting international cooperation of clusters and/or competence centres: "We take P R I D E in all we do"

**P**rofessional

**R**esponsive

**I**nformative

**D**ependable

**E**ncouraging