
Networking ICT Clusters in Europe (NICE)

Christoph Beer

Telematic Cluster Berne (ICT-Cluster Berne), c/o innoBE AG,
Morgenstrasse 129, CH-3018 Berne, Switzerland
E-mail: christoph.beer@tcbe.ch

Abstract: The Telematic Cluster Berne, ICT-Cluster, was founded in 1996 and is embedded in regional cluster politics. The cluster has about 200 members in the field of ICT. One of the most important points for growing regions is export. The Swiss ICT-Sector overall has a need to increase exports. The ICT-Cluster supports its members in internationalisation. For example it organises economic excursions in different regions, builds links between companies and its members of the EU-funded project NICE (Networking ICT-Clusters in Europe). The overall objective of NICE (Networking ICT Clusters in Europe, a Coordination Action funded by the European Commission under the 6th Framework Program) is to strengthen the European ICT sector by networking clusters, having in mind that business clusters are the focal points for the creation of new jobs and a creative platform for innovative business ideas. The duration of the project is 30 months. The project team includes the five countries Finland, Germany, Turkey, Tscheck republic and Switzerland.

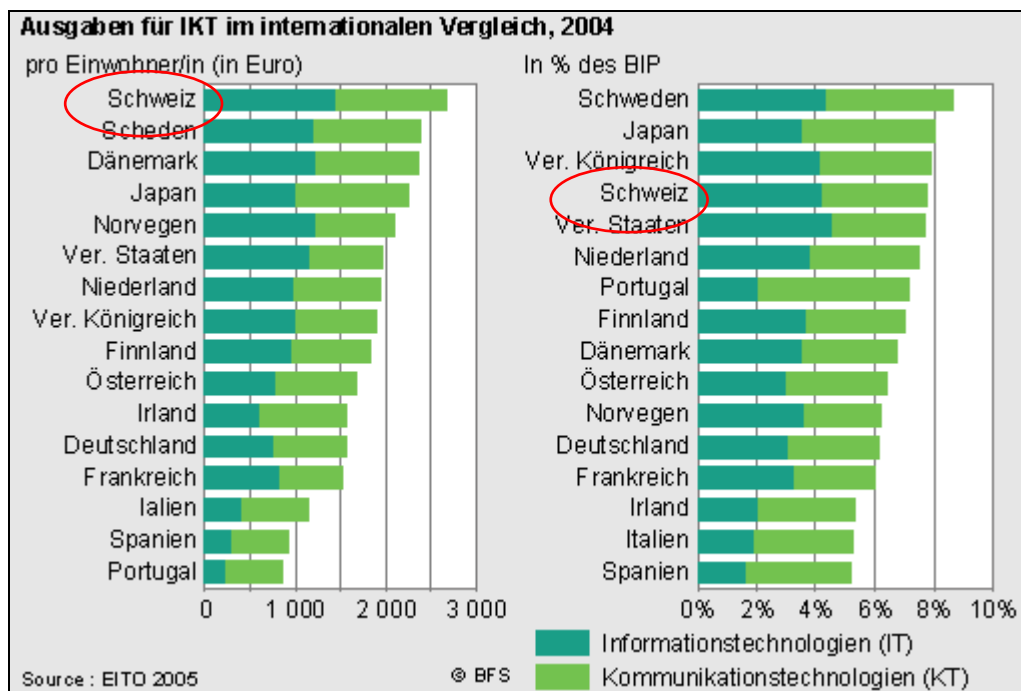
Keywords: clusters, network, ICT, Information and Communication Technology, internationalisation, cluster networking, growing region, innovation.

1 Introduction

The Telematic Cluster Bern (tcbe), ICT-Cluster Berne, was founded on 13th December 1996 and is embedded in regional cluster politics. The cluster is today well established and has extensive experience in cluster management. It enjoys the confidence of politics, local authorities, media, industry representatives, ICT providers and of ICT users. The tcbe is a non-commercial association (Article 60 of the Swiss Civil Code (ZGB)). It has about 200 members. The cluster is characterised by small companies, only 19 companies employing more than 100 employees. The tcbe works with a relatively small budget and few personal resources. Much of the work done is on a voluntary basis by the members, especially all the work on the board and in the working groups. Since the establishment of the Telematic cluster in Berne two trends are recognizable: The increasing professionalism of the cluster management and the change of priorities of the cluster management from promotion of the location to benefit and support for the cluster members.

The Swiss ICT infrastructure and services are excellent and the per capita spending on ICT is very high by international standards.

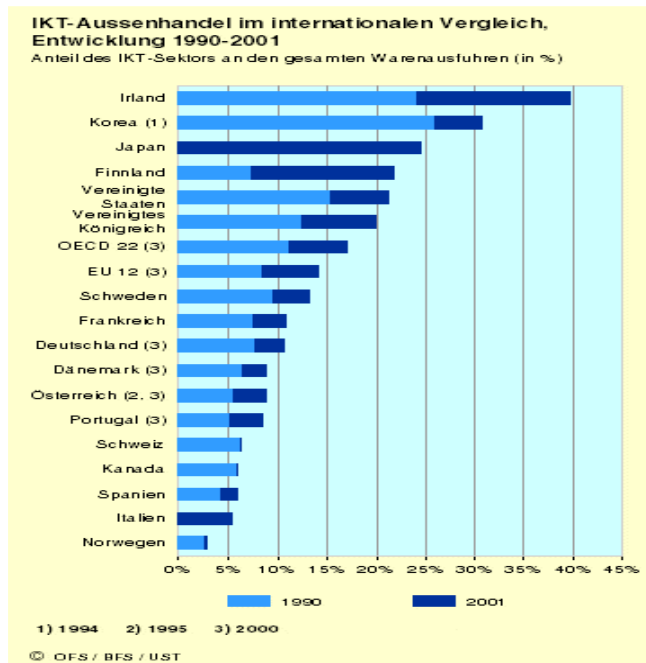
Spending on ICT in Switzerland in international comparison compared to GDP of the country



Source: BfS 2006 (www.bfs.admin.ch)

This excellent figure implicates a well positioned ICT-Sector in an international context. Switzerland is an intermediate country compared to leading ICT countries like Finland, Sweden, and Denmark and bigger export countries like the U.S. or Germany. Switzerland's growth drivers in the field of ICT are the software development and services sector, which is mainly characterised by many small companies, as well as the telecommunications service sector which is dominated by a few large players. Switzerland is still very dependent on international companies. Nonetheless, Switzerland has found a niche and has experienced several success stories in export, including hardware and software technologies, especially in the ICT segments of medical devices and other precision instruments, and watches, placing Switzerland among the leading countries. But all in all, the Swiss export in ICT is still very marginal compared to other countries:

Export rate in ICT compared to other countries



Source: BfS. www.bfs.admin.ch

This figure shows the need for SME's in the field of ICT in supporting their internationalisation.

2. Solution

The ICT-Cluster Berne is implementing an “internationalisation support” for its members. This support includes a first step the following four key-elements:

- Economic-excursions for know-how sharing and business initiation
- Internationalisation handbook
- Building an international network focussed on ICT
- Initiation of international joint projects

Economic excursions

In 2005 the ICT-Cluster Berne organised an excursion to Nordrhein-Westphalia. This excursion included a cluster-conference as well as four site visits to companies and institutions. In 2006 we organised an excursion to London and East England. 15 members joined this excursion.

Internationalisation handbook

The ICT-Cluster is creating a handbook with knowledge about internationalisation. This handbook includes information about the process as well as the contact information for generating new business.

International network, joint projects

The key-elements, international networking and joint projects are supported in a first phase through the EU-Project NICE, which is part of the Europe INNOVA initiative.

Europe INNOVA is an initiative for innovation professionals supported by the European Commission under the 6th Framework Programme. The fundamental objectives of this initiative fall in line with the policy direction set out within the FP6 priority of "Structuring the European Research Area". In acting as the focal point for innovation networking in Europe, Europe INNOVA aspires to inform, assist, mobilise and network the key stakeholders in the field of entrepreneurial innovation, including firm managers, policy makers, cluster managers, investors and relevant associations.

3. EU-Project NICE

The overall objective of NICE (Networking ICT Clusters in Europe, a Coordination Action funded by the European Commission under the 6th Framework Program) is to strengthen the European ICT sector by networking clusters, having in mind that business clusters are the focal point for the creation of new jobs and a creative platform for innovative business ideas.

The creation of an innovative-friendly environment throughout the EU, and the stimulation of technological innovation is important for the setting up of innovative technology businesses and thus, for the development of high quality, lasting employment and sustainable economic growth. Networking and exchange of experience support the process of innovation and the transfer of 'excellent' innovation management methodologies; tools and activities can be successfully fostered through co-operation at the European level. It becomes apparent that not the development of the single business itself is important, but also it's surrounding: sectors and the region come to the fore. Being embedded in an innovative-friendly environment, exchanging knowledge with suppliers as well as competitors and having strong connections with universities, research institutes and regional authorities is the perfect precondition for success. These 'nodes' within a sector, defined as clusters, are considered as the driving forces in the innovation processes.

A further aspect which has to be taken into account in this project is the Lisbon Strategy which aims at making the European Union "the most dynamic and competitive knowledge-based economy in the world" by 2010. Information and communication technologies (ICT) will be identified in playing a key role in achieving the main objectives of the strategy. Programmes and initiatives like eEurope have been launched and address the challenges of a European Information Society. Besides the permeation of ICT throughout society there is the need to step up investments and innovation in ICT itself.

Against this background NICE seeks to bridge the gap between regions with a highly innovative business environment due to ICT innovations and cluster building and those regions less advanced. Therefore, NICE aims at supporting networking, co-operation, transfer of knowledge and initiation of joint projects between advanced ICT clusters of European Economic Area and associated countries. The question that arises is, how an innovative environment can be built up and what are the key success factors for prosperous clusters? Are there idiosyncratic patterns according to different sectors? Does

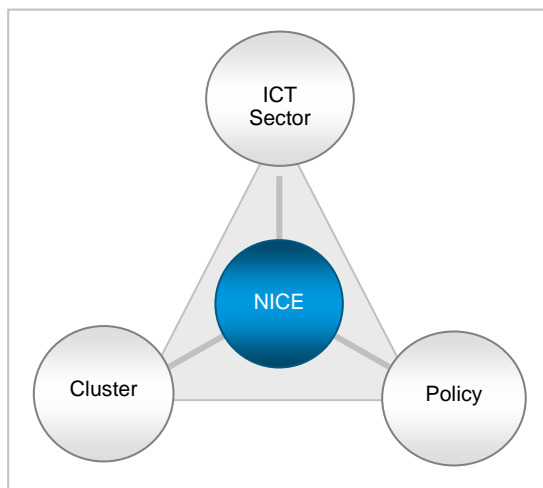
the ICT sector, and do ICT clusters, have special roles in the dual position as an innovations sector itself but also as a driving innovation force for other sectors?

To answer these questions NICE aims

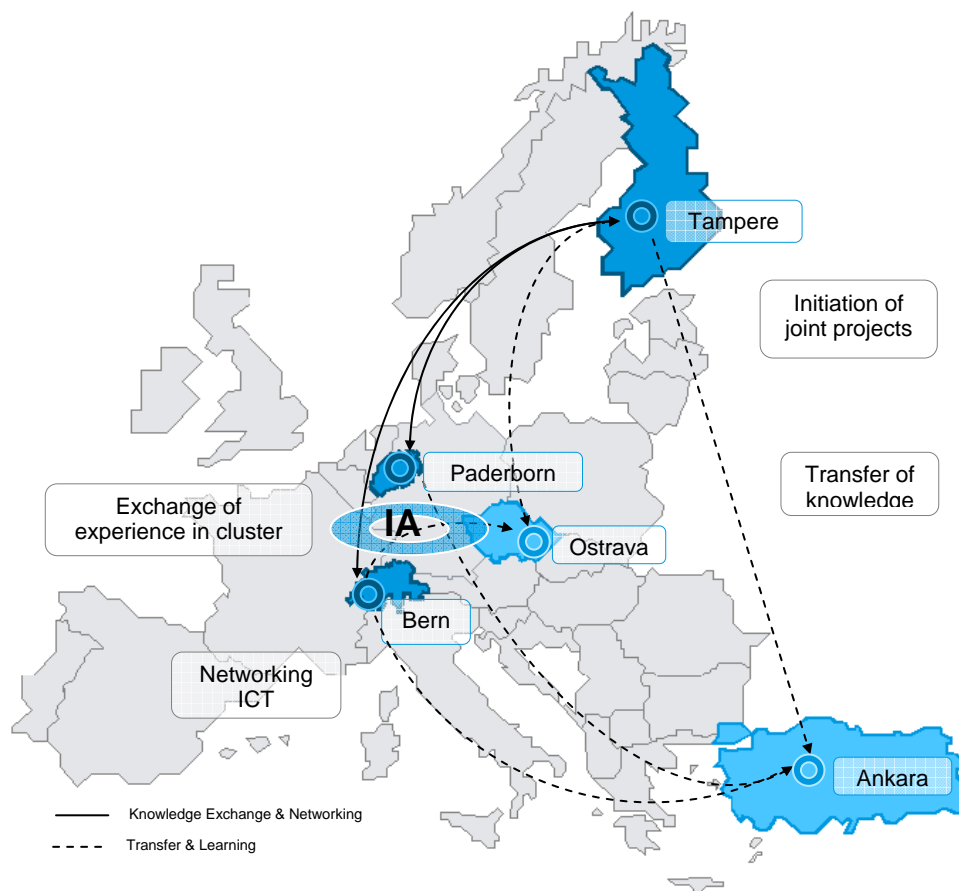
- to boost innovations in the ICT sector in Europe by bringing together actors from prosperous clusters to network, collaborate, exchange experience and expertise, learn from each other and exploit synergies;
- to obtain new knowledge on innovations in the ICT sector and their clusters, their success factors and barriers;
- to establish joint projects and business strategies among the participation clusters;
- to support the transfer of gained knowledge not only to the participation 'learning' regions but also to other less advanced regions and,
- to help building up a long standing network of ICT clusters in Europe.

Project Implementation

NICE addresses three different, closely related levels: First, cluster management second the sector and third cluster policies.



The activities to be carried out on these levels focus on different spatial levels which are the region, the country and the European Economic Area. The geographical area includes Finland, Germany, Turkey, Tcheck republic and Switzerland.



Source: NICE – a brief project description

The implementation plan with its methodology and its roadmap reflects the objectives of NICE: Firstly, it focuses on the support of co-operation between advanced ICT clusters in Europe to create synergies and innovations. And secondly, it centres on the exchange and transfer of good practice to associated countries and new member states. The plan is organised in four phases:

- Phase 1: Development of a common understanding of the ICT value chain and analyses of the participation clusters structure, management and regional conditions
- Phase 2: Exchange of experience and knowledge in order to learn from each other, to identify good practice in Cluster Management and to initiate an ICT cluster management network on a European level
- Phase 3: Entrepreneurial networking on specific topics to initiate task forces, joint projects or initiatives among ICT-related SMEs on a European level
- Phase 4: Transfer of cluster management models and good practices to the associated regions/ ICT clusters to support their further development

The initial phase of the project (12/2005 – 05/2006) aims at developing a mutual understanding of the ICT sector and its value chain. Analyses on the clusters, regions and ICT market conditions will be conducted based on a common analysis grid. A

comparative analysis on the results is to identify each clusters core competencies, position in the value chain and potential synergies among the clusters. Knowledge exchange, learning processes and the identification of good practice are centre stage in the second phase (06/2006 – 02/2007). The topics for the three Cluster Management workshops will be specified as the project proceeds. Phase 3 (04/2007 – 12/2007) focuses on entrepreneurial networking and is based on the assumption that besides the participating business partners other companies from the participation clusters are interested in and willing to collaborate. The objective is to initiate task forces, interest groups and joint projects among the companies which are the basis for future business collaboration. The collected information and knowledge regarding Cluster Management models, good practice and networking will be transferred to the participating region Ankara and Ostrava in order to support the further development of their clusters (01/2008 – 05/2008). Furthermore, the experience made and insights gained during the project term will lead to the formulation of policy recommendations on regional, national and European level.

Consortium

The project consortium is made up of 11 partners from five European regions:

- Institute for Work and Technology (IAT), D-Gelsenkirchen (co-ordinator, <http://www.iatge.de>)
- Wirtschaftsförderungsgesellschaft Paderborn mbH, D-Paderborn (<http://www.wfp.de>)
- code-x GmbH, D-Paderborn (<http://www.code-x.de>)
- Technology Centre Hermia, FI-Tampere (<http://www.hermia.fi>)
- Tampere University of Technology, FI-Tampere (<http://www.tut.fi>)
- Oy Tawasta OS Technologies Ltd., FI-Hämeenlinna (<http://www.tawasta.fi>)
- Telematic Cluster Berne, CH-Berne (<http://www.tcbe.ch>)
- Berne Economic Development Agency, CH-Berne (<http://www.berneinvest.com>)
- ISolution GmbH, CH-Berne (<http://www.isolution.ch>)
- ODTU Teknokent, TR-Ankara (<http://www.metutech.metu.edu.tr>)
- Regional Development Agency Ostrava, CZ-Ostrava (<http://www.rdaova.cz>)

4. Conclusion

The internationalisation is a very important process for the members of the ICT-Cluster Berne. They need a boost in export growth. The cluster is one factor, which can offer them possible elements for their success. The Europe INNOVA initiative is an important base, which supports Clusters and innovative regions in congruence with the targets of the European Union. The NICE-project is a facilitator for the ICT-Cluster Berne in the internationalisation programme.

References and Notes

1. Terstriepe Judith (2005), *NICE – a brief project description*