Simone Strauf, Roland Scherer

Cross border cooperation in a knowledge economy: The example of the International Lake Constance University
International Lake Constance Region
A Border Region between 3 Metropolitan Areas
Facts and figures

• 10 states/cantons in 4 countries A-CH-D-FL
• Average population density 300-700 p/km²
• Drinking water reservoir for about 5 Mio. people
• About 3.9 Mio. inhabitants (+ 8.7% from 2000 – 2012)
• Strong population growth
• Growth of employees
• Strong manufacturing sector (26%)
• GDP 2011: 205 billion € (higher than the national GDP of Finland)
• Tourism destination for more than 10 mio. overnight stays p.a.
High potential of innovative firms

1. A long tradition of innovative entrepreneurs and companies
   - e.g. Zeppelin, Dornier, Maybach

2. A large number of world market leaders
   - e.g. Hilti, Doppelmayer, Leica, ZF, Airbus, EADS

3. Leading rankings in innovations performance measurements
Cross-border labour market

Cross-border commuter flows in the Lake Constance region (2012)

Source: www.statistik-bodensee.org
Large number of research institutions
Many cross-border institutions and actions

Quelle: Scherer 2011
Long tradition of cross-border cooperation

- **phase of formation**: mainly due to the consequences of industrialization and with a strong focus on the utilization of the common good ‘Lake Constance’;
- **post-war phase**: exchange over national borders and to improve international communication;
- **phase of environment**: about the 1960ies severe conflicts between economic growth and protection of the environment (especially of the potable water of the lake);
- **phase of regionalization**: 80ies and 90ies driven by the efforts of local and regional actors to counterbalance the strengthening of the national level, bringing along the foundation of the spatial planning conference and the formulation of common guide lines for the development of the cross-border region;
- **phase of Europeanization**: intensification of co-operative activities as well as the foundation of new cross-border institutions in parallel to European initiatives on cross-border integration;
- **INTERREG-phase**: with broad initiatives from all different sectors of society, and economy focusing on the financial support of the European Union (INTERREG programs).

Quelle: Scherer 2011
Different functions of borders in border regions

1. **Border-barrier effect**
   - Disadvantages because no exchange takes place across borders and the region is peripherally by the national centers

2. **Filter effect**
   - Border regions are characterized by different national political and economic systems. The border acts as a discriminatory mediator, which can lead to positive and negative effects

3. **Open border effect**
   - The border acts as a contact zone between the different national political and economic systems. Through sharing and co-working a positive benefit for regional development can be result.

*Quelle: Ratti 1993*
Regional Innovation Systems in cross-border regions

RIS A

RIS B
Cross-border regions as contactzones

NIS A

RIS A

RIS B

NIS B
A Cross-border region Innovation System

RIS A

people

knowledge

innovation

RIS B
Cross-border cooperation

Aims of cross-border cooperation

• Need of cross-border cooperation based on a common problem (functional aspects)
• Certain homogeneity of preferences and interests (mostly sectorally oriented)

Governance solutions for cross-border cooperation

• Territorial oriented organisations
• Functional oriented organisations

Source: Zumbusch, Scherer 2015
## Territorial versus functional orientation of cross-border organisations

<table>
<thead>
<tr>
<th></th>
<th>Territorial orientation</th>
<th>Functional orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structural pattern of interaction</strong></td>
<td>Vertical, hierarchical</td>
<td>Horizontal, network-based</td>
</tr>
<tr>
<td><strong>Type of actors/members</strong></td>
<td>Mainly public actors</td>
<td>Integration of private or societal actors</td>
</tr>
<tr>
<td><strong>Thematic scope</strong></td>
<td>Broad, many different tasks</td>
<td>Narrow, focus on a specific task</td>
</tr>
<tr>
<td><strong>Geographic scale</strong></td>
<td>Congruent and stable boundaries (identical to administrative entities)</td>
<td>Fuzzy and variable boundaries</td>
</tr>
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Source: Zumbusch, Scherer 2015
### Strong versus weak Institutionalisation

<table>
<thead>
<tr>
<th></th>
<th>Strong</th>
<th>Weak</th>
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</thead>
<tbody>
<tr>
<td><strong>Membership</strong></td>
<td>closed, defined representatives</td>
<td>open, flexible</td>
</tr>
<tr>
<td><strong>Legal form</strong></td>
<td>defined legal status (public law)</td>
<td>loose network arrangements (private law)</td>
</tr>
<tr>
<td><strong>Organizational structure</strong></td>
<td>Existence of several bodies, complex</td>
<td>Simple structure, modest complexity</td>
</tr>
<tr>
<td><strong>Decision-making</strong></td>
<td>majority voting</td>
<td>consensus, unanimous votes</td>
</tr>
<tr>
<td><strong>Character of decisions</strong></td>
<td>binding character, mandatory</td>
<td>non-binding, without obligation</td>
</tr>
<tr>
<td><strong>Political involvement</strong></td>
<td>political as well as sectoral expertise</td>
<td>various experts, administration</td>
</tr>
<tr>
<td><strong>Time perspective</strong></td>
<td>Long term perspective</td>
<td>Short or medium term perspective</td>
</tr>
</tbody>
</table>

Source: Zumbusch, Scherer 2015
The major cross-border organisations

Quelle: Scherer 2011
Prerequisites for successful cross-border cooperation

1. Sufficient stability
2. Incentives for new forms of collective action
3. Innovative approaches
4. Openness
5. Sufficient resources and capacities
6. Effectiveness
7. Sufficient autonomy and accountability

And:
8. Positive personal relations between the main actors involved
9. Shared values or shared knowledge

Source: Zumbusch, Scherer 2015
A hypothesis

Without the intensive exchange at the individual level, the development potential of a cross-border knowledge region can not be used. A cooperation only at the institutional level is not enough.

This exchange of knowledge must take place on three levels:
1. at the level of researchers and
2. at the level of the users of the scientific system, e.g. the regional business, institutions, etc.
International Lake Constance University
A network of 30 universities and colleges

30 Universities – 4 countries – 1 network
IBH Facts & Figures

The network:

• Since 2000
• 30 universities and colleges are members and have in total:
  • 100’000 students
  • Over 300 study paths
  • About 42’000 employees
  • About 16’000 graduates each year
• Overall Budget (2009-2014) for funding activities (research, networking, services, etc.): about 5 Mio. €
• 2009-2014: 58 transnational projects have been stimulated
Organisation

30 Colleges & Universities

30 Rectors: cooperation council

managing board

Department Knowledge and Technology Transfer
Department Communication
Department Interuniversitäre action
Department Mobility of student
Department Finances

Head office IBH
Speaker

Working group Knowledge and Technology Transfer
Working group Communication
Working group Gender & Diversity
Working group Career Services
Working group International Offices

Speaker

Speaker

Speaker

Speaker

Speaker

Accounting Task Force

professionals from member universities
IBH funding opportunities

Funding opportunities

Project funding
- Seed projects
- Research priority projects
- Projects with regional focus

Conferences with special focus on knowledge and technology transfer
- WTT-Workshop
- Small WTT-conference
- Large WTT-conference

Working groups
- Knowledge and technology transfer
- Communication
- Career service and mentoring
- Gender & Diversity
- International office
- Finances
Facts and figures (2009-2014)

58 funding activities

190 Workshops, Meetings, Conferences

13 Dissertation

150 Publications

440 persons involved in cross-border projects

23’000 participants

41% activities with different types of universities

5 Mio. € budget

360 presentations, posters, etc.

100% cross-border activities
Objectives for 2014 -2017

IBH as a network to enhance:

- Transnational mobility (students, researchers …)
- Joint projects across various school types (e.g. services)
- Projects with a high relevance for the regional development
- Knowledge and technology transfer amongst academia and between academia and the regional economy (SME)
- Research priority projects - focusing more on our two key topics
Added value for member universities

Regional Responsibility and Legitimation

Improvement of offers and attractiveness

Regional Anchoring

Initial and further education

IBH

Services

Research

Synergies and Know-How-Transfer

Access to consortia and funding
Added value for institutions of higher education

• Interdisciplinary and international research and teaching
• Improving quality in research and teaching
• Qualified graduates and employees
• Added value for students with innovative and international masters courses
• Exchange on cross-disciplinary topics
  • Involvement in international networks
  • Applied research
• Boosting the appeal of member institutions
  • for students
  • for (potential) employees
• Summer schools for foreign students
• Refectories and libraries at all IBH member universities open to all students
• Enabling structure
Added value for the region

Location attractiveness with supra-regional implications

Brain Gain for the region and the universities

Living environment

Education area

IBH

Economic area

Research area

Knowledge and innovation transfer by joined projects and applied R&D

Positioning as an attractiver Science area
Added value for the Lake Constance region

- Projects and activities geared to the needs of the region (relevance)
- Socially relevant issues tackled in applied research and development projects
- Improving education (further training and higher education)
- Strengthening the Lake Constance region through knowledge and technology transfer and promoting innovation
  - Transferring expertise and knowledge between universities and regional companies, institutes and institutions (e.g. knowledge transfer in the team)
  - Knowledge Spillover
Added value for the Lake Constance region (2)

• Improving the region’s image
• Raising profile of the region as a knowledge and education hub
• Brain gain instead of brain drain
• Universities as multipliers
• Fostering a sense of identity
  – within the member institutions of the IBH
  – within the Lake Constance region
• Cultural convergence
Knowledge and technology transfer
Objectives of Knowledge and technology transfer

- Stimulating collaboration between academia and the region
- IBH acts as intermediary between academia and the region
- Offer access to 30 member universities
- Promoting the potential of the member universities to industry
- To simplify access for industry to new knowledge and research
- Encouraging to share knowledge and expertise over all types of boundaries
www.team-wissenstransfer.com
Team Knowledge Transfer

Companies‘ Benefit:

• Direct enquiries from industry are send in parallel to 30 universities

• Enquiries can be send anonymously or through transfer “helpers”

• Quick answers from interested university partners
Team Knowledge Transfer

Advantages for industry:

• Experienced and knowledgeable team
• Efficiency: about 2,3 answers from universities per enquiries
• Support for financing, contracting and IPR
• „Partner search“ is for free and nonbinding
Summary

- The network of the IBH is more than the sum of each single University
- IBH lives through the engagement of each member university (cooperative structure) and through the motivation of each single employee or researcher
- Cross-border cooperation as an added value for the member universities and the region
- Responsibility and promotion of the development of the Lake Constance region as an attractive and competitive centre for education, knowledge and research.

The network has the potential to enhance knowledge and innovation in the Lake Constance region.