

Estonian Business School

**CROSS-BORDER COOPERATION
INSTITUTIONAL ORGANISATION AND
ITS ROLE IN REGIONAL DEVELOPMENT**

Thesis of the Degree of Doctor of Philosophy

by

Katri-Liis Lepik

Tallinn 2010

The Institute of Social Sciences, Estonian Business School, Estonia

Dissertation is accepted for the defense of the degree of Doctor of Philosophy in Management by the Research Council of Estonian Business School on April 12, 2010.

Supervisors: Professor Arno Almann, Ph. D.,
Head of the Department of Law and Public Administration
Estonian Business School, Estonia

Erik Terk, Ph. D., Director, Estonian Institute for Futures Studies,
Tallinn University, Estonia

Opponents: Professor Tõnu Oja, Ph. D.,
Chair of Geoinformatics and Cartography, Institute of Geography,
University of Tartu

Professor emeritus Jaak Leimann, Dr. Sc.,
Tallinn University of Technology, Tallinn
School of Economics and Business Administration,
Chair of Organisation and Management

Public Commencement on June 9, 2010, at Estonian Business School, Lauteri 3,
Tallinn.

Language editors: Ilvi Jõe-Cannon and Kairit Henno

Copyright: Katri-Liis Lepik, 2010

ISBN 978-9985-9824-6-4
EBS Print, Lauteri 3, Tallinn

ACKNOWLEDGEMENTS

I would like to express my gratitude to my supervisors Prof. Arno Almann and Prof. Erik Terk for their valuable criticism and comments.

The research would not have been possible without the people who have participated by answering the questionnaires and interviews.

I would like to express my gratitude to Mrs Merle Krigul, my co-author of some of the articles, for provoking discussions on the research topics.

I would like to thank the organisation Helsinki-Tallinn Euregio which has served as an object for the case study and enabled me to carry out a thorough investigation of an example of an institutionalised cross-border cooperation.

I would also like to thank my parents, my husband Mart, and my two daughters Rute and Ere, born during the dissertation writing period, for their patience and support.

The research for this dissertation was partly financed by ETF grant 7537.

CONTENTS

ACKNOWLEDGEMENTS	III
CONTENTS	V
ABSTRACT	VII
PART 1. INTRODUCTION.....	9
1.1. Relevance of the Topic	9
1.2. The Originality of the Research and Its Practical Merit	10
1.3. The Aim and Research Tasks	12
1.4. The Setup of the Research and Methods Used	13
PART 2. THE THEORETICAL BACKGROUND FOR ANALYSING CROSS-BORDER COOPERATION ORGANISATIONS	17
2.1. Multi-level governance and cross-border organisations	17
2.2. Learning regions and cross-border cooperation organisations	20
2.3. Collaborative regional innovation	23
PART 3. THE EMPIRICAL RESEARCH ON CROSS-BORDER COOPERATION ORGANISATION FRAMEWORKS AND MECHANISMS ..	25
3.1. The composition of research process	25
3.2. The results of the studies	27
3.2.1. International comparative research and its results	27
3.2.2. Study of Helsinki-Tallinn Euregio and its results	31
3.2.3. Studies on innovative cooperation forms and their results	34
PART 4. PUBLICATIONS.....	37
1. Euroregions as Mechanisms for Strengthening Cross-Border Cooperation in the Baltic Sea Region	39
2. Cross-Border Cooperation Institution in Building a Knowledge Cross-Border Region	63
3. Introducing Living Lab's Method as Knowledge Transfer from One Socio-Institutional Context to Another: Evidence from Helsinki- Tallinn Cross-Border Region	89
GENERAL CONCLUSIONS	105
REFERENCES	110
SUMMARY IN ESTONIAN	113
LITERATURE REVIEW	134
LIST OF AUTHOR'S PUBLICATIONS AND CONFERENCE PRESENTATIONS	143
CURRICULUM VITAE	145

ABSTRACT

The present dissertation focuses on elucidating the role of cross-border cooperation (CBC) organisations in strategic interventions and development processes within a cross-border regional setting. CBC organisations' role is analysed in the context of three interlinked theoretical concepts: multi-level governance, learning regions, and collaborative regional innovation. This approach makes it possible to analyse how institutionalised mechanisms like CBC organisations can enhance usage of complex tools and methods for the advancement of cross-border innovation. The research includes theoretical research, traditional empirical research including comparative international research of CBC organisations, and action research.

Firstly, the main characteristics, constraints, and development potentials occurring in the activities of CBC organisations or euroregions as institutional mechanisms enhancing regional development are identified. CBC organisations are distinguished depending on their level of maturity. Secondly, the institutional setup and functioning of a CBC organisation on a more concrete level is analysed to identify the goal setting, contradictions, and development process based on the case of Helsinki-Tallinn Euregio. Thirdly, it is analysed how to facilitate the creation of CBC forms with public and private sectors and academia (cross-border triple-helix cooperation) and additionally with active involvement of citizens in service design (cross-border Living Lab) for the creation of a regional innovative environment.

The dissertation shows that a CBC organisation is a facilitator and an appropriate framework for fostering innovative and complex CBC forms and tools. The dissertation proposes institutionalised CBC models as mechanisms of intervention in regional policy and cooperation between different bordering countries considering the legal, organisational, financial, and functional dimensions of cooperation. The dissertation results contribute to further research on institutionalised CBC and to the potential for such mechanisms to contribute to regional development processes, growth, and competitiveness by inclusion of various societal sectors in the cooperation forms.

Keywords: cross-border cooperation, cross-border cooperation organisation, multi-level governance, triple-helix cooperation, Living Lab cooperation, innovation-centred cooperation

PART 1. INTRODUCTION

1.1. Relevance of the Topic

Internationalization processes characterising the development of society today have led to a diversity of cooperation forms for countries and their regions. It presents new challenges for improvement of traditional administrative areas and administrative units considering the changed needs of the society.

Economic and technological changes and increased mobility of people have led to new needs in the organisation of regions; they have to cope with the pressures of the modernisation of regional economies and at the same time be competitive with other regions. Globalization makes borders more permeable and leads to a rearrangement of economic and political interactions. Ray Hudson refers to four strands of the new economy and the associated institutional and policy changes: inward foreign direct investment in manufacturing industry and a new role for the region in the international division of labour; enhancing the region's technological capacity; creating an enterprise culture: small and medium-sized enterprises, new forms of local economic development strategies, and the emergence of private sector services (Hudson 2000). Coping with the new restructuring processes in the developmental dynamics of EU integration requires new models for governance, institutions, and cooperation.

The topic of territorial cohesion as a way to decrease regional disparities has nowadays significant importance in the ongoing debates on the European Union (EU) level. Cross-border cooperation is one of the most recognized ways to develop border regions (Baldwin and Forslid 1999; Brodzicki 2002; Pitoska 2006) and thereby increase territorial cohesion in Europe. The term „region“ has two meanings in this dissertation: territorial units located within one country and cross-border territorial units composed of the territorial units of different countries sharing a border.

In the course of the studies which serve as the bases for the present dissertation, the author analysed forms of cross-border cooperation, especially focusing on cross-border governance, as the governance structures at the regional level are essential for a functioning cross-border cooperation organisation and influencing regional development. Cross-border governance has become in the last decade a key expression of regional development and of dynamics of change in territorial relations in Europe (OECD 2003). In theoretical literature this topic is usually addressed in the framework of multi-level governance.

Sub-national level is gradually gaining more power in terms of tasks and competences in comparison with nation states. Institutionalized cross-border cooperation supporting the development of sub-national level serves as one of the tools for implementing social, economic and territorial integration in Europe.

The studies which serve as the basis for the present dissertation address cross-border cooperation organisations, which are also called euroregions in the European Union as special forms for cross-border cooperation. These organisations are addressed by the author as general frameworks for cross-border cooperation. Together with the concrete organisational solutions implemented in the framework of such euroregions, such organisations serve as specific mechanisms for development of regional cooperation analysed in this dissertation.

The existence of a cross-border cooperation organisation in a region assists in the creation of other concrete level institutional mechanisms. The analysis of the creation of “triple-helix” and “Living Lab” type of cooperation is presented in the dissertation. The “triple-helix” cooperation denotes collaboration among public and private sectors and academia in a region, enhancing collaboration in research and development, and the implementation of scientific achievements. A “Living Lab” is an innovative and prospective method allowing usage of technological solutions and innovation and assist in linking them together for achievement of changes in various economic sectors and social spheres important for regional development. A “Living Lab” aims to provide structure and governance to the user participation in co-creation of new innovative services, products and societal infrastructure. The “Living Lab” is treated in this dissertation as a potential next phase from “triple-helix” cooperation. While planning the empirical studies, the author has synthesised several treatments of theoretical frameworks of multi-governance, learning regions and collaborative regional innovation. As compared to the earlier periods, the capacity of regions to support processes of learning and innovation has been identified as an increasingly significant source for regional development, increasing competitive advantage and growth in Europe in addition to decreasing regional disparities. As regional development and innovation are interlinked, the studies and their results point to the theoretical frameworks of learning region and collaborative regional innovation. It provides linkages between a cross-border cooperation organisation, the models of governance of institutionalised cooperation, and advancement of learning and innovation via novel methods.

1.2. The Originality of the Research and Its Practical Merit

The literature on cross-border regions, cooperation, and cross-border cooperation (CBC) organisations or euroregions can be found in a large variety of disciplines and these topics have been addressed from very different viewpoints (Anderson and O’Dowd 1999; Kramsch 2002; Anderson et al 2003; Perkmann 2003; Paasi 2003; Malchus 2004; Pikner 2008). The dominating topics include cultural-ethnic contacts, social, political problematics, and those related to geographical location. The European cross-border regions and organisations have been documented and analysed by Markus Perkmann (2003). His research covers only the practices of the organisations in the period of 1958–1999. Similar analysis on institutionalized cross-border cooperation in the academic literature beyond that date is not known to the author.

Traditionally the problems of cross-border cooperation organisations have proceeded from their peripheral location. The first euroregions were primarily the outcome of bottom-up social action aimed at addressing issues of peripheralization generated by nation-state borders and an attempt to develop economic situation caused by this location (Popescu 2008; Dürrschmidt 2006). Similarly, cross-border governance has been often treated in literature as a policy alternative aimed at the reduction of core-periphery disparities through the development of endogenous potential of peripheral regions (Gualini 2003; Kosonen and Loikkanen 2004). The studies which constitute this dissertation have a somewhat different focus. A region consisting of Helsinki-Tallinn capital regions has been treated from a more ambitious perspective – namely proceeding from the perspective of development of a new international growth centre. Cooperation in capital regions has in earlier literature been treated based on Vienna-Bratislava cooperation (OECD 2003). To date, empirical study of institutionalised cross-border cooperation and theoretical debate on the institutional mechanisms influencing regional development in the capital regions have not been explicitly linked.

According to the author the originality of the implemented studies is expressed in the following:

- a. In this dissertation cross-border cooperation has been studied not in the framework of its usual goal setting which is decreasing the drawbacks of border regions related to their peripheral location compared to core regions but such cooperation which aims at creation of joint internationally significant innovation-based growth pole. As in this case the cross-border cooperation involves not only border cities or regions but cities belonging to important growth centres of the participating countries, especially capital cities, the present dissertation is very relevant and topical and has been researched to a small extent.
- b. Cross-border cooperation and its institutional mechanism have been addressed in an original way integrating such modern theories as multi-level governance, learning regions and collaborative regional innovation.
- c. Development of cross-border cooperation institutional mechanism and its problems have been dealt with following the multi-stage principle moving from less developed forms and simpler tasks to more developed forms and ambitious tasks. The author has studied what kind of management problematics may arise moving from the initial stage to mature stage in development.
- d. The author has analysed the implementation of such important innovative cooperation forms in complex cross-border settings which experiences have so far been traditionally dealt with in the context of one country (“triple-helix” cooperation, “Living Labs”). The author has presented as a result of the research how an organisation established for enhancement of cross-border cooperation can assist in implementation of complex forms of cross-border cooperation between neighbouring countries.

- e. The author has analysed such novel topic as functioning problems and management of a special international mechanism created for arrangement of cross-border cooperation. Its management problematics has been analysed related to the board representing the institutions that have created the organisation and its other associated organisations.

As regions' economic growth and prosperity are determined to a large extent by the competitiveness and innovative capacity, the nature of regional cooperation depends on the actors driving and facilitating that cooperation. Cross-border cooperation can be a useful concept for local governments in a more globalized and modernized economy and an increasingly integrated Europe as it allows using the complementary growth from both sides of the borders.

The results of the studies presented in this dissertation add to the body of knowledge and enrich the understanding of CBC organisations as important intervention mechanisms in regional development processes and as facilitators of enhanced and more complex cross-border cooperation forms. The author treats various supporting systems for innovation in the cross-border cooperation context and opens the differences and interlinkages of those systems.

The case of Helsinki-Tallinn Euregio enables cross-border cooperation organisations to learn from the experiences of Helsinki-Tallinn Euregio in fostering wider cooperation with local governments, enterprises and research institutions ("triple-helix" cooperation). Furthermore, facilitation of the creation of a cross-border "Living Lab" based on an institutionalised CBC provides a novel approach for creation of an urban environment in an innovative way.

The presented systematised bases for models and dimensions of CBC organisations offer valuable information for their work to the decision-makers and managers of CBC organisations. The EU and Council of Europe's legal frameworks have been considered in compiling those systematized models.

1.3. The Aim and Research Tasks

The present dissertation's author attempts to clarify the role of CBC organisations in innovation and development processes within a cross-border regional setting. The CBC organisations and their functioning are analysed in the framework of an international comparative research, which serves as one of the studies in the empirical part. The more concrete level findings of the operation of a CBC organisation are derived from Helsinki-Tallinn Euregio, a cross-border cooperation organisation between Finland and Estonia.

Cross-border cooperation organisations can enhance relations between both sides of a border and hence support integrated regional development. The author does not

investigate regional integration itself but the operation of the institutional mechanisms created for increasing regional integration.

The first research task is to study the main characteristics, constraints of activities, and the development potential for cross-border cooperation organisations or euroregions as institutional mechanisms enhancing regional development. The challenges in organisational development processes confronting the managers involved in the activities of CBC organisations are also investigated. The CBC organisations are categorized according to their level of maturity as either “initial stage” or “mature” organisations. The international comparative research of various compositions, roles, forms of governance, legal and financial aspects serves as the background study for further research in this area.

The second research task is to analyse on a more concrete level the institutional setup and functioning of a CBC organisation based on the case of Helsinki-Tallinn Euregio to elucidate more specifically the aspects related to goal setting, contradictions, and development of such an organisation.

The third research task is to analyse how to facilitate the creation of cross-border cooperation forms with more specific focus like cross-border “triple-helix” cooperation and a cross-border “Living Lab” type of cooperation using the premises availed by a CBC organisation.

A generalized survey of institutionalised cross-border cooperation models as mechanisms of intervention in regional policy and cooperation between different bordering countries is presented. The models are constructed by considering the legal, organisational, financial, and functional dimensions of cooperation.

1.4. The Setup of the Research and Methods Used

The author has conducted various studies for addressing the research tasks; the processes have been described and the results and conclusions published in international scientific journals. The dissertation synthesises the results published in those three articles. This dissertation is based on the following original articles incorporated into the dissertation and referenced by their respective Roman numerals):

I Lepik, K-L. 2009. Euroregions as Mechanisms for Strengthening of Cross-border Cooperation in the Baltic Sea Region. *TRAMES*, 13 (3), 265–284.

II Lepik, K-L., Krigul, M. 2009. Cross-border cooperation institution in building a knowledge cross-border region. *Problems and Perspectives in Management*, 7 (4), 33-45.

III Lepik, K-L., Krigul, M. Terk, E. 2010. Introducing Living Lab's Method as Knowledge Transfer from One Socio-Institutional Context to another: Evidence from Helsinki-Tallinn Cross-Border Region. *Journal of Universal Computer Sciences*, 16 (accepted, will be published in autumn of 2010)

In order to prepare for the empirical studies, many sources addressing various theories encompassing the theoretical bases and problematics of multi-level governance, learning regions, and collaborative regional innovation had to be worked through. The institutional setup and functioning of CBC organisations was analysed in the framework of international comparative research and on a more concrete level based on the case of Helsinki-Tallinn Euregio.

The author used both traditional empirical research as well as action research methods. Due to author's employment in the organisation Helsinki-Tallinn Euregio, it was possible to implement so-called intervention activities (initiatives, conferences, fora, roundtables, seminars, action, and strategies) and their impact was more concretely analysed in this dissertation. In the framework of the second and third research tasks various questionnaires and interviews were conducted. They are treated in this dissertation not so much as separate empirical research, but in the context of action and supporting research.

The aim of international comparative research among thirty-five CBC organisations was to identify the differences and similarities between the CBC organisations and the greatest constraints and development potential for those organisations' activities. The distinction in their levels of maturity was made, namely either as "initial phase" or "mature" organisations. Legal, organisational, financial, and functional aspects of those organisations were investigated (Study I and II).

In the case of Helsinki-Tallinn Euregio, qualitative data (strategies and development plans) was used to analyse the characteristics and the legal, organizational, financial arrangements and functioning of a CBC organisation within a real-life context.

Questions regarding Helsinki-Tallinn Euregio stakeholders, its owners and partners included topics about Euregio's governance – the relationships between partners of various sectors, mechanisms of power, and its role in society. The fourteen in-depth interviews were carried out with experts (university, local government, entrepreneurs) on both sides of the Gulf of Finland to study the prospects for regional integration between the Helsinki and Tallinn capital regions as the main target area for the CBC organisation Helsinki-Tallinn Euregio. Prospects and development trends for Euregio as an institution were separately studied (Study II).

Diagnostic interviews were conducted with fourteen persons involved or potentially involved in adoption of the "Living Lab" method in Tallinn and Helsinki cross-border context. This part of the research serves as an investigation of a novel method for implementation of innovative cross-border co-operation tasks (Study III).

Part of the results of the study was obtained from in-depth research of one object, Helsinki-Tallinn Euregio. In interpreting the results, it is difficult to estimate the exact scale of the multiplication and generalisation of the results to other CBC organisations as their performance levels vary. It is logically possible to assume their wider applicability, but at the same time the differences in the development levels and qualitative differences between the CBC organisations can be limiting factors. For addressing regional development and enhancement of innovation in a specific international context, components of both organisation theory and public administration theory have been applied and mutually integrated.

PART 2. THE THEORETICAL BACKGROUND FOR ANALYSING CROSS-BORDER COOPERATION ORGANISATIONS

The aim of the dissertation is to elucidate the role of cross-border cooperation organisations in strategic interventions and regional development processes. CBC organisations' role is discussed in the context of three interlinked theoretical concepts: multi-level governance, learning regions and collaborative regional innovation. According to information available to the author, those theoretical concepts have not yet been dealt together in the framework of CBC organisations.

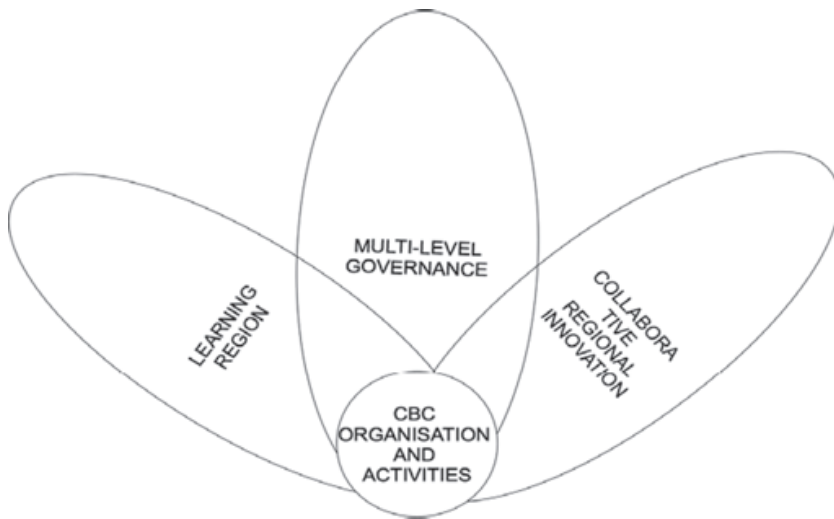


Figure 1. Theoretical concepts of a CBC organisation and its activities (*author's figure*)

2.1. Multi-level governance and cross-border cooperation organisations

Decentralisation processes in Europe have made local and regional governments more powerful and their capacity to formulate and deliver policy has been recognisably increased. Local and regional governments, concerned that their economies are increasingly exposed to global competition, expect to influence public policies so that they have a real and positive impact on improving competitiveness of the regional economy and the well-being of their populations. This shift of authority away from national governments to other levels is described as “multi-level” or “multi-layer” governance (Hooghe 2001). It means that the exercise of authority and the various dimensions of relations occur across levels of government.

Governance as a term has been widely perceived as a “policy network” or an “inter-organizational network” (Rhodes 1997), “public management” (Hood 1990),

“public-private partnership” (Pierre and Peters 1998), and “co-ordination of sectors of the economy” (Campbell et al. 1991) (quoted from Pierre and Peters 2000). Governance includes the organisational forms and processes through which economic activities in a specific field are co-ordinated and controlled. Hierarchy, markets, networks and culture are seen as the most important types of governance.

Various regionally based organizations and stakeholders participate in regional development and innovation activities, stimulating and co-ordinating their activities and forming cooperation networks. In addition to actors representing the public sector, enterprises and representatives of enterprises have an important role as their economic success does not depend only on their own organisational mechanisms, but also the regional governance structure and the institutions in that regional setting. The aspect of companies will be dealt with in the context of collaborative regional innovation.

EU policy-making has a multi-layered character. The theory referred to as multi-level governance argues that the sub-national tier of government is important next to national and European levels of governance. In the EU context, CBC organisations are included in the governance patterns as they have been established for implementation of joint regional development policy. Multilevel governance is a dynamic process with a horizontal and a vertical dimension, which does not in any way dilute political responsibility. On the European level, it has to do with the policy approach embedded in the implementation of the Structural Funds – the main tool of EU regional and territorial cohesion policy – and as an innovative field for experimentation with the principle of subsidiarity. Analyses of the European legal frameworks show that contrary to the Hooghe’s (2001) fear that state sovereignty is becoming diffused across various levels of government, sub-national authorities use various forms and channels to influence European policy while sub-national empowerment does not replace national states and state institutions retain significant control over CBC organisations.

In this dissertation the author addresses cross-border cooperation and governance as an element of multi-level governance. Multi-level governance has turned in the last decade into a key expression of regionalism and dynamics of change in territorial relations in Europe. The term “cross-border governance” can be defined as the establishment of, and adherence to, a set of incentives, norms, and organisations that are set up to co-ordinate policy making across political borders (OECD 2003). Further analyses of CBC organisations in the dissertation are directly related to multi-level governance theory. Cross-border governance is practiced in a cross-border setting. Perkmann (2003) distinguishes between two types of cross-border interaction: cross-border cooperation, defined as “a more or less institutionalized collaboration between contiguous sub-national authorities across national borders,” and cross-border region, which is “a bounded territorial unit composed of the territories of authorities participating in a CBC initiative” (Perkmann and Sum 2002). In Europe, cross-border regions tend to be territories governed by local and regional

authorities integrated into, or attached to, the multi-level policy implementation networks constituted by EU regional policy (Perkmann 2003; Anderson, O'Dowd and Wilson 2003). One wide-spread cross-border cooperation institutional structure is a euroregion. Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighbouring local or regional authorities of different countries located along shared state borders. In this dissertation a CBC organisation and a euroregion are treated as synonyms.

Perkmann (2003) argues that CBC organisations “represent a specific challenge within public governance due their atypical, non-nested territorial set-up: As their constituent parts – municipalities, districts and other sub-national jurisdictions – belong to different nation states, they do not operate in a conventional context of public administration defined by legal competencies and decision-making mechanisms rooted in public law.” Based on the analyses of the development of CBC organisations, it can be concluded that they have been operating on voluntary co-operation basis between partners. When cooperation has advanced, the organisations have been institutionalised. In cooperation networks the partners have acted within a context of pragmatically defined and mutually recognised set of rules and “even operated outside public law and resorted to civil law arrangements” (Malchus 2004).

The author analyses the legal frameworks imposed today by the EU and the Council of Europe that could assist in overcoming some of the legal obstacles faced in the work of CBC organisations. EU has additionally developed what has been defined as a strategy of multi-level institutionalisation (Scott 1999) which means vertical and horizontal interregional linkages. At the same time the nation-states maintain an important mediating and supervisory role in cross-border co-operation. Scott's criticism of cross-border cooperation includes the argumentation that CBC initiatives appear in many cases to consist of relatively loosely related policy measures, only partially capable of addressing EU's aim of territorial cohesion (Scott 1999). He is critical of public sector's dominance in CBC, its bureaucratic complexity, and the dependence of CBC on exogenous incentives (both material and political). The author's empirical research findings (Study I) support the criticism to some extent. In the dissertation (Study I) two frameworks provided on the European level – the European Groupings of Territorial Cooperation (EGTC), a regulation of the EU and Protocol No. 3 to the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities concerning Euroregional Co-operation Groupings (ECG) of the Council of Europe are analysed. Both frameworks allow provision of legal form to the cross-border cooperation involving an enlarged partnership with a variety of socioeconomic actors in addition to public sector representatives. The areas of application are varied, allowing a very broad scope of joint cross-border initiatives. The advantage of involving an enlarged partnership is that the competence of CBC organisations is increased.

Cross-border governance institutions have been analysed in political science from the viewpoints of thickness and territorial incorporation (Church and Reid 1999,

Amin and Thrift 1994). It can be concluded that cross-border governance institutions and their ability to reach political objectives can be evaluated along four lines:

“1) the nature and integrity of co-operation (social capital in the region); 2) the positioning strategies of the partners (costs and benefits of co-operation versus non-co-operation); 3) the contribution to organisational diversity (risk diminution and stability); and 4) the interaction between cross-border co-operation and other national, local and regional networks (transaction costs between institutions)” (OECD 2003).

In theoretical literature “governance” is said to focus on the dynamic side - the process and outcomes - rather than on the static side, the formal institutional arrangements referred to as “government”. Institutional systems remain important, according to the author. They determine roles and interactions among the different actors having impact in regional development. For the creation of governance it is necessary to establish institutional arrangements in which different actors work in a cooperative manner for common purposes. Hence, the case of Helsinki-Tallinn Euregio as an institutionalised cross-border cooperation organisation grown out of a network provides good ground for analysing the institutional setup, functions and interactions of actors at various levels of governance.

Changes in the structure of the economy and its modernisation needs call for improved cross-border governance models. The ability of regions to shift towards knowledge-economy has been identified as a significant driver of regional competitiveness. In that context develops the need to support learning processes and innovation; hence the creation of necessary networks and forms of activities for innovation and collaborative learning constitutes an important part in the activities of “mature” CBC organisations.

2.2. Learning regions and cross-border cooperation organisations

National economies have become global, reducing states’ control over flows of investment and exposing regions directly to the effects of international competition. This has focused attention on the need for regional-level intervention in policy processes during which regions could shape their own development prospects in a climate of rapid technological change and increased capital mobility (Amin and Thrift 1994). In view of the shift towards a “knowledge-driven economy” in the 1980s and 1990s, extra-economic relations and the capacity of regions to support processes of learning and innovation have been identified as significant sources of competitive advantage (Amin and Thrift 1994; Jessop 2000). Innovation is often a social exercise in which a range of different actors participates in a collective learning process. Public policy can help by exploring the sources of endogenous potential and strengthening the capacity of actors for self-development by creating a climate conducive to learning and removing obstacles to co-operation and interaction. Innovations are

not very exceptional phenomena; on the contrary, they can take place at any time in all areas of the economy. Therefore, they have to be conceptualised as ubiquitous phenomena (Lundvall 1992). At the same time innovation and development are two terms that refer to partially overlapping concepts. Whenever the author refers to innovation supporting regional development, the broadest definition of innovation is used. Using the concept this way, there is no need to associate innovations only with major changes, incremental changes are also included in the concept of innovation and it can occur in all economic areas, thus supporting knowledge-based economic development.

In the 1990s, a theory of learning regions (Florida 1995) emerged as a response to the shift from comparative advantage of the leading industrialized countries to knowledge-based economic activity. This emergence of learning regions reflects the growing importance of the social and institutional foundations of economic growth (Lawson et al 1998). In his “Competitive Advantage of Nations” (1990) Porter recognized that nations and regions could maximize their competitive advantage by developing specialized complexes of interrelated industries as the majority of economic activity takes place at the regional level. Some of his ideas are continuously applied to cities and regions. The shift from an economics of regions based on comparative advantage to concern with competitive advantage has institutional prerequisites and the need for new models of governance to cope with the new economic challenges (Brenner 1999, Scott 1998).

From the point of view of this dissertation, the author has tried to interlink theories dealing with the enhancement of innovation for the economic growth of the regions and governance forms treated in public administration theories. Amin and Thrift (1994) present the importance of locally specific social and institutional factors in shaping economic development, particularly in terms of supporting innovation and entrepreneurship through the development of collaboration and trust between firms and institutions. Thus moving towards an open innovation climate (Chesbrough 2003) is considered increasingly significant, and is dealt with in Study III.

Since the 1990s knowledge has been claimed as the most important resource in economy and learning the most important process (Lundvall 1994; Florida 1995). The increased importance of collaborative forms of innovation and learning within regional economies has led to a paradigm shift from individual to collective and organisational learning, emphasizing the knowledge created by individuals appropriating knowledge from outside or by creating new knowledge in interaction and collaboration with other organisations that support innovation and growth. The terms “learning region” and a “learning organisation” are ever increasingly used. “Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together” are defined as learning organisations by Senge (1990). As a learning organisation it is possible to treat the organisation in a narrow sense, but also in the

sense of a cooperation network created around the organisation. “As the learning processes require a degree of continuity and stability they are likely to be facilitated by spatial proximity” (MacKinnon 2002) which becomes important in case of CBC and CBC organisations. The author’s Study II addresses CBC organisations as learning organisations. Unlike Senge who suggests that all characteristics must be simultaneously developed, O’Keeffe (2002) suggests that the characteristics of a learning organization are gradually acquired factors. Most of the authors have mentioned information sharing, storage, and transformation. Environment scanning, experimentation and system problem solving are the most relevant characteristics of learning organizations. In addition, also empowerment, participation, strong culture, and team learning are mentioned by different authors. It is common to many theorists that a learning organization is created, when the results of learning are institutionalised (Alas 2006).

Having learning-related benefits of cross-border cooperation necessitates governance structures that facilitate cross-border co-operation. According to Perkmann cross-border regions cannot be governed in the traditional territorial and political sense. Instead, they are governed through various networks between multiple public and private actors and depend on the nature of socioeconomic relationships across the border (Perkmann and Sum 2002). Additionally, the competitive non-material advantages rendered in the close interaction of various sectors are claimed to be located at the regional level rather than on the national level. As it is argued that the learning region concept can be applied to less favoured regions as well as more advanced ones (Florida 1995), the theory can well be applied in the case of CBC organisations which possess various performance levels (Study I).

High interaction between the various societal sectors is referred to as “triple helix” cooperation (Etzkowitz 1998; Leydesdorff et al 2006; Johnson 2008) which is a term used to denote cooperation among three societal sectors: the public sector, the business community, and the educational establishment. The economic context in which these several sectors operate is analysed in terms of university-government-industry relations. Those sectors complement each other along the process of innovation.

“There are four dimensions to the development of the triple helix model: first, internal transformation within each of the helices; second, the influence of one helix upon another; third, creation of a new overlay of institutional structures from the interaction among the three helices; and fourth, a recursive effect of these entities, both on the spirals from which they emerge and on the larger society” (Etzkowitz 1998).

In terms of “triple helix” cooperation, CBC organisations practice various models of enhancement of “triple-helix” cooperation between public and private sectors, aiming at joint strategies and policies as well as greater involvement of all relevant stakeholders. More mature CBC organisations function as platforms of cooperation based on the “triple helix” model (Study I).

Enhancement of a learning region reinforces cross-border relations and networks which stimulate innovative activities and better use of skills and knowledge. Cross-border cooperation organisations have a vital role in the enhancement of regional knowledge exchange and creation of collaborative regional innovation, thereby making contribution to regional competitiveness.

2.3. Collaborative regional innovation

Since the 1990s research and development, and innovation policy are not just arenas for action by themselves, but are also instruments for achieving more wide-ranging policy objectives such as growth, competitiveness, and equity. The regional institutional context is an important factor in the creation of networks by embedding knowledge and enhancing interaction between the available physical and human resources (MacLeod 2000; Malmberg and Maskell 2006). Rather than the ability to produce low cost products, knowledge, innovation and creativity have become more important and European regions compete to attract and keep inhabitants, companies and visitors as sources of innovation and creativity. This trend is linked to the ever advancing process of European integration that has led to growing similarities in the “hardware” and “software” of places: nearly every urban area has invested over the years in the development of high-tech clusters, physical and knowledge infrastructural facilities, and non-work related amenities (e.g., culture and leisure) (Hospers 2006). The clustering (Porter 1990) policy on regional level is one of the policy tools for creating networks of companies and thereby facilitating the creation of innovative solutions. The earlier cluster policies focused on high-tech, knowledge-based industries in “strong” clusters, but recently a new innovation policy paradigm has emerged that is tailor-made for the specific context and applicable to regions depending on their needs and performance levels.

Although the world becomes more global with the support of information communication technologies (ICT) it is still to a large extent local as we live in localities. This means that services still require local tailoring. Many of the public services that can be useful are only valid locally, whether concerned with schools, healthcare, etc. (Eriksson et al 2005). In a world where increasing efforts are made to codify knowledge and render it ubiquitous or cosmopolitan, the places that become the repositories for tacit, specialized local knowledges can derive considerable advantages (MacKinnon 2002).

Innovation creation is directly interlinked with diffusion of knowledge, rapid creation, distribution and usage of new technologies. A CBC organisation has a role in the advancement of those processes as a promoter of a “Living Lab” concept in which real-life user-centric research and innovation is a normal co-creation technique for new products, services, and societal infrastructure. “Living Lab” offers services which enable users to take an active part in research and innovation (Samelin 2007). The “Living Lab” phenomenon can be viewed in many ways - as an environ-

ment, (Ballon et al 2005), a method or an approach (De Leon et al 2006; Eriksson et al 2005), or an innovation platform (Niitamo et al 2006). In the author's study (III), "Living Lab" is taken as a method. The theories of learning regions and "Living Labs" are interlinked in this dissertation, as the learning regions are associated with the importance of local knowledge as a source of competitive advantage by gathering local enterprises into clusters of industries in a region. Thus, the geographical proximity of the companies and public sector institutions utilising tacit knowledge in every day development processes is also important in cross-border cooperation models (Study III) and in the context of CBC organisations where knowledge is prevalingly tacit (Study II). Tacit knowledge refers to the experiences and skills employees acquire during the work processes and which are difficult to transfer. It often includes cultural peculiarities and habits belonging to the persons working in an organisation and which cannot be easily communicated to others outside the organisation.

According to the author, "Living Lab" can also be considered an institutionalised form of an innovation system where public sector, private sector, and third sector representatives cooperate. Thus, innovation can also be considered as a localized form of collaborative learning where representatives of various sectors participate in an open exchange of knowledge and ideas. There are strong incentives encouraging such participation, particularly for smaller firms which generally lack the knowledge and scale economies of larger firms. In particular, it is argued that innovation can be seen as a process of collective learning where complementary forms of knowledge are combined.

Nowadays "Living Labs" are "functional regions" where enabling actors have established PPP (Public-Private Partnership) of companies, public entities, universities, institutes and individuals. All these actors cooperate for the creation, prototyping, validation and testing of new services, products and systems in real-life environments. These environments may be towns, districts, villages or rural areas, as well as industrial zones. According to a study by Estonian Institute of Futures Studies (2008) PPP alone is too narrow; it suggests instead a public-business-citizen partnership or public-private-civic partnership - the end-users of innovative products and services or citizens are also included.

Cooperation across national borders in general is not only the technical inter-linkage of two or more different systems of governance. It also has to bring together different people and social systems with differing systems of values. There is a difference between the type of linkages that can be established between companies or a company and a research institution, a public institution and a company, or a public institution and a research organisation. The development processes become especially complex when the ideas offered as a result of the cooperation of various sectors become implemented with novel methods, and the services and products are to be created together with citizens/end-users. A leading role of a CBC organisation in those processes is both possible and necessary.

PART 3. THE EMPIRICAL RESEARCH ON CROSS-BORDER COOPERATION ORGANISATION FRAMEWORKS AND MECHANISMS

3.1. The Composition of Research Process

The author has been researching the topic of cross-border cooperation since 2003 when she began to work for the cross-border cooperation organisation Helsinki-Tallinn Euregio. Having worked for public sector organisations since 1999 and dealing with local governments and their international relations, the author developed an interest in cross-border cooperation related topics. The author conducted various studies addressing the research tasks, which have been described and the results and conclusions published in international scientific journals. The dissertation synthesises the results published in three articles. In order to prepare the empirical studies, many sources addressing various theories had to be worked through with the theoretical bases and problematics of multi-level governance, learning regions and collaborative regional innovation.

The first research task was to study the main characteristics, constraints, and development potential for cross-border cooperation organisations or euroregions as institutional mechanisms enhancing regional development. The international comparative research among thirty-five cross-border organisations in the Baltic Sea Region was carried out for that purpose in 2006 (Study I). The challenges in organisational development processes confronting the managers involved in the activities of CBC organisations were identified. Research of various compositions, roles, forms of governance, legal and financial aspects was carried out with a questionnaire, which served as background study for further research in this area (Study I and II). The respondents could also add their comments and ideas for addressing the problems. The results were structured, conclusions drawn, and recommendations worked out for different levels of governance (local, national, EU) to tackle the faced obstacles (Study I). As a result of the research, the CBC organisations were categorized according to their level of maturity as either “initial stage” or “mature” organisations.

The second research task was to analyse on a more concrete level the institutional setup and functioning of a CBC organisation using Helsinki-Tallinn Euregio as the base to elucidate more specifically the aspects related to goal setting, contradictions, and development of such an organisation. As an institutionalised cross-border cooperation organisation grown out of a network, it provided good ground for analysing the institutional setup, functions, and interactions of actors from diverse sectors.

Within the framework of the second and third research tasks various questionnaires and interviews were carried out and are treated in this dissertation not so much as separate empirical research, but in the context of action and supporting research. The action research was considered appropriate as the researcher could be involved in a

real organisational situation where there was not only expectation that contribution to knowledge should be made, but also to produce directly usable knowledge that could be applied and validated in action. Furthermore, the researcher could be actively involved in the situation or phenomenon being studied (Remenyi 1998).

Due to author's long-term employment in the organisation Helsinki-Tallinn Euregio, it was possible to implement so-called intervention activities (initiatives, conferences, fora, roundtables, seminars, action and strategies), and to analyse their impact more concretely in the dissertation. In the case of Helsinki-Tallinn Euregio, qualitative data (strategies and development plans) was used to analyse the characteristics, and the legal, organizational, financial arrangements, and functioning of a CBC organisation in a real-life context. The action research process also included questionnaires and interviews with the CBC organisation's key persons, hereinafter referred to as elite interviews.

The questions addressing Helsinki-Tallinn Euregio stakeholders, its owners and partners included topics about Euregio's governance – the relationships between partners of various sectors, mechanisms of power and its role in society. The questionnaire was sent out to fifty persons in October 2007, the stakeholders and partners of Euregio: members of the general meeting, members and substitute members of the board and secretariat members, entrepreneurs, artists, university lecturers, former speakers on Euregio fora, former project partners. Out of fifty questionnaires thirty-two answers were received. Respondents were asked to prioritize the statements. The priorities were scored by the author and all scores were summarized by priority lists given by each respondent.

The prospects and development trends for Euregio as an institution were separately studied (Study II). The fourteen in-depth interviews were carried out with experts (university, local government, entrepreneurs) on both sides of the Gulf of Finland to study the prospects for regional integration between Helsinki and Tallinn capital regions as the main target area for CBC organisation Helsinki-Tallinn Euregio. The interviews were referred to as elite interviews as defined by Odendahl and Shaw (2002) since they were carried out with the high-level decision-makers in Estonia and Finland. Elite interviews were used because they contribute to a fuller picture of multiple realities and as complex a picture as possible provided by the specialized knowledge that the interviewee possesses. Because the in-depth interview format stresses the interviewee's definition of a situation, the interviewee is encouraged to structure the account of the situation which enables him/her to introduce notions of what is most relevant instead of relying on the investigator's notions of relevance (Odendahl and Shaw 2002). The interviews were aimed to elicit subjective perceptions.

The third research task was to analyse how to facilitate creation of cross-border cooperation forms with more specific focus like cross-border "triple-helix" cooperation and a cross-border "Living Lab" type of cooperation using the premises

availed by a CBC organisation. Diagnostic interviews were conducted with fourteen persons involved or potentially involved in adopting the Living Lab method in Tallinn and Helsinki cross-border context. This part of the research served as an investigation of a novel method for implementation of innovative cross-border cooperation tasks (Study III).

In the course of the interviews the prerequisites of the method's transfer, potential areas of usage, and realisation options were investigated. The interview programme consisted of several blocks that contained main and additional sub-questions. The methodology made it possible to change the sequence of the questions. It was presumed that the researchers can later classify the answers given to the questions, e.g., to differentiate more perspective fields of use from less perspective, differentiate the existence of preconditions from lack of preconditions to using the method. At the same time, the aim of the interviews was not only to get answers to the questions, but also to stimulate the respondents so that they would develop their own ideas and suggestions on how to use the "Living Labs" method in Tallinn. The average length of the interview was sixty minutes.

Based on the various types of research, the dissertation's author presents a generalized survey of institutionalised cross-border cooperation models as mechanisms of intervention in regional policy and cooperation between different bordering countries. The construction of the models takes into consideration the legal, organisational, financial, and functional dimensions of cross-border cooperation. The "mature" CBC organisation serves as the basis for the development of more complex cross-border cooperation like the "triple-helix" and "Living Lab".

3.2. The results of the studies

3.2.1. Results of the international comparative research

The international comparative research facilitated the comparison of characteristics, constraints, and the development potential of cross-border cooperation organisations or euroregions as institutions enhancing regional development. Their setup, forms, financing and functions were studied. The results of the research allowed making a distinction between the development levels of CBC organisations by referring to them as either "initial phase" or "mature" organisations.

Legal status of cross-border cooperation organisations

Establishing cross-border governance means institutionalisation of one set of cooperation agreements on the basis of different legal systems. CBC is facilitated in cases where there are similar characteristics in the different legal systems of the countries. The respondents thought that the legal status of a CBC organisation af-

fects its eligibility for funding, because in order to be eligible for an EU grant, a euroregion must be a registered legal body. If it contains members lacking legal standing, the legally recognized members must apply on behalf of all the partners, creating potential inequity in their relationship. On the positive side, some respondents saw advantages in different kinds of legal status, which they believed helped achieve common initiatives through synergy. A commonly held view was that more discussion is needed at the local level about the legal status of a euroregion. If a euroregion is not an independent legal entity, financing can become more difficult. In addition, when the legal status of cooperating parties is incommensurate, the ideal balance characteristic of partnerships could be disturbed.

The theoretical research analysed the potential European legal frameworks for governance of cross-border cooperation. During the time of the international comparative research (Study I), EU regulation on the European Grouping of Territorial Co-operation (EGTC) had not yet been adopted and thus none of the CBC organisations had been able to implement it. The instrument was approved only in 2006. EGTC provides an opportunity to adopt a legal form governed by public law, but the final decision is left to EU member states to decide. EGTC can act on behalf of its members in matters such as governance, public service, and public facilities. In 2005, Council of Europe started its work on the 3rd protocol to the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities concerning Euroregional Co-operation Groupings (ECGs), also called the Madrid Convention, being influenced by the parallel negotiations taking place in the framework of the EU. This protocol's aim is to provide a legal framework for the establishment of the Euroregional Cooperation Grouping (ECG), similar to the EGTC but easier to set up and operate. At the end of 2009 the protocol was available for signing by the 47 member states of the Council of Europe. Similar to EGTC, the ECG can comprise only public entities established for general interest and those which are established, financed, or controlled by a public body. Industrial or commercial entities cannot become members. The wider application of the EGTC tool in Europe could assist in overcoming obstacles to institutionalised cooperation like legal personality and legal jurisdiction. However, the daily work of a CBC institution can be problematic since the EGTC must choose the legislation of one of the member countries in which it is registered, and as the public administration systems are different, it may lead to misunderstandings about the implementation of governance, although it might solve the formal obstacles to cross-border cooperation activities. The same applies for ECG as all legal rights must be transformed into the national legal systems. The problem of including the non-EU countries in cross-border activities with EU countries can be solved by the EGTC as it can also include among its members partners from non-EU member states where the legislation of the non-EU country or agreements between Member States and third countries so allow. In the case of ECG members outside EU partnering with those inside, they must use the traditional legal instruments offered by the Madrid Outline Convention together with framework state treaties.

Notwithstanding the legal form the CBC organisations eventually select, their functions and responsibilities will be in accordance with the law they select and not universally standardized on the European level since both EGTC and ECG leave the content of the activities open for the CBC institutions themselves to decide.

Organisation

It became evident from the study that the levels of institutionalisation of CBC organisations vary. Euroregions in the “initial stage” consist only of local and regional authorities; “mature” organisations include, for example, representatives of non-governmental organisations, universities, chambers of commerce, etc. In terms of “triple-helix” cooperation “mature” euroregions practice various models of cooperation within the public sector, within the private sector, and between the two sectors, aiming at joint strategies and policies as well as greater involvement of all relevant stakeholders. Research revealed that most, but not all, “mature” euroregions have adopted the “triple-helix” principle in governance. Some CBC organisations especially euroregions with non-EU member countries have not embraced the model to the same extent. The respondents of the questionnaire carried out in the study feared that admission of new partners like universities or chambers of commerce in an officially registered euroregion would complicate the efficient discharge of the main functions such as management, election of officers, collection of fees, and projects and activities. They feared that formalities might then supplant real cooperation activities.

Financing

Financial incentives have to be provided to enhance co-operation. Euroregions are funded from different sources: funds-generating programs or projects; the EU; national, regional, local entities, private individuals or agencies. Regarding EU-sponsored programmes, roles also varied. Although some “mature” euroregions engage in EU programme management, most participate as project applicants. Some national governments prefer to manage EU programmes themselves rather than assign responsibility to a euroregion, and some euroregions prefer not to manage programmes or micro-funds themselves. Based on the responses to the questionnaire, financing was one of the most crucial and important problems of every CBC organisation regardless of its legal status. Collectively the partners are responsible for seeking and sustaining financial support for running the office and supporting the executive body. Euroregions’ main source of support includes project-based EU programmes and funds, Interreg programme being the most prominent. The “mature” organisations which have legal bodies tend to have membership fees for financing their everyday maintenance costs whereas the organisations in the “initial stage” are mainly financed on project-basis. As grant funds often must be reimbursed afterwards, it makes the financing of a permanent staff and office difficult and in many cases impossible. Hence, the availability of external funds for the es-

establishment of a system of governance is also dependent on sufficient internal funds. The international comparative research made abundantly clear that the most crucial problem confronting euroregions in the “initial stage” is the absence of sustainable funding and the co-financing of projects. These factors influence their ability to conduct the everyday activities of cross-border cooperation.

Functions

The equality of partners in CBC organisations is important in terms of their functions and competencies. The questionnaires revealed that roles and functions varied depending on the specific needs and conditions of the cross-border region, the development stage of cross-border cooperation, and the national context. Differences of membership in euroregions influenced for better or worse the purposes and functionality of the CBC organisations.

According to the managers of CBC organisations, central governments still tend to regard cross-border cooperation as part of international relations and thus do act as “gate keepers”. In the case of CBC organisations bordering with non-EU countries, the national institutions seem to be afraid that euroregions are somehow implicating foreign policy and leading a foreign policy different from that of the nation states. On the Russian border the euroregions are still instruments of policy of governments which vest power in one to two leaders. In some cases, central governments’ international relations priorities are so general that they do not respond to the specific needs of the population of border regions.

Attempts among the “initial stage” CBC organisations in Europe and especially those bordering with the non-EU countries to make their voice heard are faced with insufficient support and trust from national institutions. The central governments do not tend to see the role of CBC organisations as mechanisms for influencing regional development. CBC organisations’ financial and personnel resources in the “initial stage” obviously set limits on the roles they can assume. In many instances euroregions recognize their limitations and elect to adopt roles accordingly. In the analysed CBC organisations, networking in the form of a “triple helix” model also proved difficult to implement due to problems associated with their role definition and articulation among the parties. Although CBC organisations could serve as instruments for tackling problems of national importance, especially at the regional level, their capabilities are not understood enough for them to have earned a distinctive niche within their national hierarchies. The majority of the respondents expressed concerns about recognition and leverage with international, transnational, as well as with EU institutions and national authorities.

3.2.2. Results based on the case of Helsinki-Tallinn Euregio

Helsinki-Tallinn Euregio (Euregio) is a cross-border cooperation organisation grown out of a cooperation network and registered as a non-profit organisation in 2003. The founding members are the City of Helsinki and Uusimaa Regional Council from Finland and the City of Tallinn, Harju County Government and Union of Harju County Municipalities from Estonia. The composition of Helsinki-Tallinn Euregio is different from other analysed CBC organisations as it includes national level representation from the Estonian side due to the Estonian administrative-territorial system. In Estonia and Finland three administrative-territorial levels have been determined by law. The countries' territory is divided into local and regional level. The local or first level units are municipalities and cities in Estonia and municipalities in Finland. The regional level units in Estonia are counties and in Finland regions (*maakunta*).

In Estonia, regions belong to artificial administrative units, i.e., they are established by the state. A region may also be treated as a regional association (union) that is competent as a legal entity in public law to complete the tasks imposed on it. It should also be noted that regions, as a general rule, are functional state administrative units or special administrative units. Unlike a region, a county can be treated as a general administrative unit in its main functions (Almann 2007). In this dissertation the term „region“ has two meanings: territorial units located within one country and cross-border territorial units composed of the territorial units of different countries sharing a border.

In order to have a counterpart for Uusimaa Regional Council by the corresponding competencies, it was necessary to include Harju County Government in addition to the Union of Harju County Municipalities in the membership of the organisation. If membership formation of the CBC organisation is considered in general, then in the case of Tallinn, no general legal obstacles are identified regarding possible cooperation with Helsinki (e.g., Local Government Organization Act). “The legal obstacles lie mainly in specific regulations adopted by the state (i.e., different standards, services regulated by the state, different methods for collecting and analysing data, etc.)” (Ruoppila 2007).

However, a solution whereby Harju County Government as national level representation in the region participates in solving problems which are in local governments' jurisdiction is to some extent problematic. There have been regular discussions with the Ministry of Internal Affairs on those matters. Such a difference in the administrative-territorial systems of Estonia and Finland is to some extent an obstacle to balanced cooperation within CBC organisation.

Helsinki-Tallinn Euregio is registered in Estonia and governed by Estonian laws, but any contradictions with the Finnish law regulating the corresponding area are also avoided. Euregio has a Tallinn office, established and financed by the members,

with staff from Estonia and a representative located in Helsinki. The organisation's overall general mission is defined as enhancement of cross-border integration between Helsinki-Uusimaa Region and Tallinn-Harju County. Specifications with references to promoting and assisting in inter-regional development and competitiveness and the regional knowledge-based economic development were added later. Euregio's daily activities are financed by the annual partnership fees of its members; additional funding is sought from international donors, mainly EU funded programmes, as well as national governments. To some extent the transfer to institutionalised cooperation (creation of a CBC organisation) was expedited by the financing opportunities EU availed at the end of the 1990s, which could be used only in case of a separate organisation. The process of institutionalization lasted over three years due to the need to harmonize the differences in Estonian and Finnish laws. The organisation's members are represented by politicians on the Board (including vice mayors and leaders of local government associations) and by civil servants in the Secretariat. Since the beginning, Euregio has created working groups where the representatives of universities and development organisations and later also representatives of enterprises have been included. The organisation's role as defined in the strategy of Euregio is to initiate cross-border contacts and networking, promote and inter-mediate cross-border cooperation. The activities have ranged from compiling project applications to introducing newest and most innovative trends in selected cooperation areas. A study of the Euregio key persons (Study II) showed that Euregio should focus on a very broad range of activities starting with knowledge exchange in regional planning to social services.

The strategic planning documents (strategies compiled for three years and action plan for one year) define the mission of Helsinki-Tallinn Euregio and its role, the characteristics of the operating environment as well as setting out priorities and activities. As such, the documents provide a check-list for goals and activities for joint cooperation initiatives with the members. Analysis of the Euregio planning documents and their structure reveals that these documents do not set out implementation mechanisms with clearly outlined roles and responsibilities of the involved parties. Moreover, the activities have evolved as a result of consensus building among the members of the organisation and driven by exogenous factors like Estonia's accession to the EU. Thus, the initial phase of the organisation in 2000-2002 was mostly devoted to the formation of a network, mapping of cooperation fields, and establishing of specific working groups for organising study tours for the exchange of experiences and generation of ideas. During 2003-2005 Euregio focused mainly on a broad range of cross-border cooperation aspects. The activities of Euregio were aimed at cooperation fostering cohesion of administrative procedures of local authorities and improving their capacity in regional development planning, education and science, drug prevention, rescue work, business support and raising public awareness about the twin region. The activities set out in Euregio Strategy 2005-2007 aimed at increased strengthening of the art and science twin-region, development of information services on education and science, encouraging coordinated spatial planning and joint public transport ticketing, facilitating political dialogue between part-

ner regions, enhancing elaboration of joint cross-border cooperation projects, and cooperating with CBC organisations in other countries. Euregio Strategy priorities for 2007-2009 centred on sustainable regional planning, the creation of a common business environment, and promotion of human resources. The Strategy Framework for 2009-2013 sets out three priorities: (1) increased interaction in spatial and regional planning; (2) creation of innovative and a barrier free region with common well-functioning markets and (3) a special priority devoted to the development of Twin-region of Arts and Science.

The broad range of activities shows that the intervention in the regional development processes is expected to be achieved on a large arena. Fulfilment of complex competencies requires also implementation of new cooperation methods. From the interviews with the organisation's stakeholders (Study II) it became evident that the stakeholders expected continued increase in the integration of Helsinki and Tallinn capital regions. Based on an analysis of the interviews, it can be concluded that an organization with varying tasks should be a learning and developing organization.

Based on a generalization of Helsinki-Tallinn development case, several conclusions can be drawn. Euregio was created by representatives of local governments in a situation where no broad strategy for integration of the two regions defining the target status and the stages for its achievement existed. It is possible to speak about a general will for more integration of Tallinn and Helsinki areas and to find corresponding references in various development documents, but of no concrete strategy in that direction. Strategic direction for Euregio's activities is given step-by-step as initiatives by its partners (founders, involved stakeholders, Euregio employees) as they reach integration aspirations. Based on present information such a situation can be considered quite typical also in case of other CBC organisations.

If initially Helsinki-Tallinn Euregio's main activities included exchange of experiences in traditional local government activity areas, then by now the central focus is on topics like innovation in all its forms. Heretofore, those had not been included in the traditional functions of local governments and local governments have only recently embraced them. This is especially applicable in case of Euregio's Estonian partners. Thus, it can be asserted that joint activities carried out in the framework of Euregio exert influence on local government activity patterns as holistic modernisation.

A large circle of stakeholders are included in Helsinki-Tallinn Euregio's activities which creates conditions whereby to a large extent regional development and innovation are influenced via their activities. At the same time, research revealed that Helsinki-Tallinn Euregio's role in the regional development is best expressed via its founding institutions, i.e. local government units and their associations, whom it also mostly represents.

The stakeholders and Euregio employees have been eager to offer various important activity areas and in many cases these have been launched. At the same time,

achieving a wider scale effect and guaranteeing sustainability of the activities, which is done via corresponding strategies and action programmes, requires their acceptance and financing by the Euregio Board consisting only of founding members.

In the case of an international organisation, strategic planning and the process of compiling development programs are a much more complicated and time-consuming process. It takes a lot of effort to balance and harmonise the interests of stakeholders. (For example, the question on the size of the share of Finnish partners in transferring a bit more developed practices to Estonia and how much the strategies and programmes must include other activities). If in the case of economic organisations it is usual that reaction to changes in the external environment are prevented by inertia on the structural level (A. Chandler's classical research), then in the case of Euregio's type of international organisation, the "bottle-neck" seems to work the initiatives through to be confirmed on the level of strategies and programmes.

Helsinki-Tallinn Euregio's seven years of experience shows that an organisation consisting only of public sector partners can operate with a relatively large spectrum of activities, changing the priorities periodically according to new requirements and demand, and rising to the level by implementing more important strategic projects. On one hand, this requires an abundance of experiences for operating in two quite different administrative cultures - to maintain an operative contact between the Board, the Secretariat, employees, members of the organisation, and linking active flexible activities in cooperation networks which allow flexible reaction to external opportunities. And on the other hand, it requires coping with harmonization and monitoring procedures demanding precision.

A complex future challenge is the question whether to enlarge the membership of the Board, possibly, with some associations of enterprises and representatives of universities. This could increase the capacity of the organisation to react to challenges and possibly also increase the necessary financial resources, but at the same time it would make the activities harmonisation process even more complex.

3.2.3 Results of the studies on innovative cooperation forms

The third research task was to analyse how to facilitate the creation of cross-border cooperation forms with more specific focus like cross-border "triple-helix" and "Living Lab" type of cooperation, using the opportunities available at a CBC organisation (Studies II and III).

It became evident from the diagnostic interviews that "Living Lab" method is quite known in Finland, but Tallinn representatives' interpretations of the method and how to define "Living Lab" as an object, differed greatly. Some respondents interpreted

it as physically limited new city space (under construction), a settlement under reconstruction, already existing city district that is distinguished by a concentration of certain type of citizen-groups, such as ecologically orientated, some functional subsystem in city space, like a transportation system with main transportation channels and cross-roads; concentration of technology creators (individuals and companies) or some other phenomenon, such as a high number of visitors or creative industries in a densely inhabited city district, or so-called virtual community of certain people. Shared understanding existed regarding several public areas where “Living Lab” method could be applicable in Estonia based on the Finnish example. “Living Lab” method could above all be implemented in areas like transport and logistics, media, tourism, and public security. Ideas were expressed about solutions for the improvement of life in cities. The most perspective technology for using “Living Labs” method was overwhelmingly ICT (in some cases IT, and in some cases info and telecommunication technologies were emphasized), and in some cases also electronics and precision mechanics (different measurement and identification systems and optics). Several technology companies, universities, and municipal leaders were interested in participating in the development of the “Living Lab’s” method. One of the major obstacles is the different understanding of the method itself and its realisation possibilities. As to the inclusion of citizens, traditions of citizen participation differ in Estonia and Finland. The somewhat weaker participatory democracy in Estonia could be an obstacle.

The launching process to introduce the method showed that realisation of the “Living Lab” method is institutionally a very challenging task. Not only technology, but ideology, knowledge, institutional cooperation traditions, and ways of thinking and acting need to change. It also requires much political support and expansion of social networks.

In the following table (Table 1) the author provides a generalization of the stages in the development of a cross-border Living Lab.

Table 1. Stages in the development of a cross-border Living Lab (LL) organisation.

	Stage 1 Initiation	Stage 2 Decisions on mechanisms	Stage 3 Implementation process
Acquisition of information on LL	Awareness raising events, fora, seminars, conferences, study trips etc. organised by the CBC organisation for potential partners in LL	Generating further interest in LL among interested partners, information on available operational tools	Evaluation of the information
Formation of a cross- border LL partnership based on the CBC organisation	Public sector highly interested; public sector institutions ask for information about the ways for service development in urban/regional setting	Finding suitable partners from public and private sectors at both sides of the border for creation of cross- border services	Negotiations with potential cross-border partners on appropriate legal forms, types of governance, partnership models, financing schemes, intellectual property rights
Institutionalisation of cross-border LL cooperation	Universities and SMEs providing potential solutions, selection of user groups for testing	Deciding on appropriate, institutional model based on the CBC organisation with enlarged partnership	Incorporating cross- border LL into the CBC organisation and the administrative-territorial settings of the countries involved
Operation of cross- border LL	Testing service solutions in a cross- border setting in cooperation with stakeholders (companies, universities, municipalities, citizens)	Confirmation of the selected operational models; Finally, creation of an international LL as a legal body	Final implementation of a cross-border LL; LL functioning; Replicating in other countries the technologies created by the technology companies; Potential for replicating the experience of organising a cross- border LL in other cross- border areas

PART 4. PUBLICATIONS

1. EUROREGIONS AS MECHANISMS FOR STRENGTHENING CROSS-BORDER COOPERATION IN THE BALTIC SEA REGION

Katri-Liis Lepik

Lepik, K-L. 2009. Euroregions as Mechanisms for Strengthening of Cross-border Cooperation in the Baltic Sea Region. *TRAMES*, 13 (3), 265–284.

ISSN: 1406-0922

Copyright: Estonian Academy Publishers, 2009

Reprinted with permissions from Estonian Academy Publishers, 2009

Abstract. Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighbouring local or regional authorities of different countries located along shared state borders. They are widely known tools of cooperation among the regions. Having integrated structures and their own financial resources, euroregions are able to address a variety of cross-border topics such as health, research and development, education and training, waste management, environmental protection, tourism and leisure, rescue and security, transport and communication infrastructure, mobility of people, and business cooperation. This paper explores the main characteristics and problems of euroregions as institutions in the Baltic Sea Region and especially in the regions bordering the Third countries. First, it describes euroregions; then it focuses on their compositions and roles and main issues confronting them with reference to the empirical research carried out among the thirty-five cross-border cooperating organisations.

The new legal instrument for euroregions deserves special attention since it provides a basis under public law for decentralised trans-European cooperation between regional and/or local authorities. The article concludes with a discussion of the needs and associated development opportunities available to euroregions within the Baltic Sea Region.

DOI: 10.3176/tr.2009.3.05

Keywords: euroregion, cross-border cooperation, Baltic Sea region, regional development

1. Introduction

Boundaries can connect as well as separate. Both characteristics should be taken into consideration when dealing with trans-frontier cooperation (Böttger 2006). According to Anderson, it is necessary “to analyse how borders function to understand the obstacles to cross-border cooperation, how networks of trust can be established, and how the democratic governance of cooperation might be achieved” (2002). “Territory is an essential element of modern states as it provides a tangible base for the exercise of its functions. Functions of boundaries are derived from functions of the state” (Knippenberg 1999). Besides the delimitation of state powers within the boundaries towards their citizens and organizations, “a boundary represents most typically a line (or a vertical level) of physical contact between states and ultimately affords opportunities for cooperation and discord” (Paasi 1996). During

the last two centuries, especially the last decades, as European nation-states assumed greater responsibilities and functions, boundaries have changed significantly, and they have grown in importance.

In Europe several key terms are used to describe various forms of cross-border cooperation. For instance, 'transfrontier cooperation' is a term mainly used in connection with the Council of Europe. According to the Practical Guide to Transfrontier Cooperation, it is "a form of cooperation within cross-border service and employment areas traversed by all kind of flows". The most distinctive feature of transfrontier cooperative initiatives is the establishment of collaborative undertakings at the local community level between adjacent local public bodies subject to different national legal systems. The so-called Madrid Convention defines transfrontier cooperation as "any concerted action designed to reinforce and foster neighbourly relations between territorial communities or authorities within the jurisdiction of two or more Contracting Parties". The preamble of Protocol No 2 to the Madrid Outline Convention on Interterritorial cooperation defines transfrontier cooperation as the cooperation with neighbouring authorities and interterritorial cooperation as cooperation with foreign non-neighbouring authorities. Transregional cooperation means "cooperation between member states and partner countries, addressing common challenges, intended for their common benefit, and taking place anywhere in the territory of the member states and of partner countries" (Regulation (EC) No 1638/2006). In this paper the term 'Euroregion' and 'cross-border cooperation (hereinafter CBC) structure/organisation' is used synonymously to denote an area of cooperation of local and regional authorities situated directly at the border or close to it and collaborating in different sectors (See Fig. 1).

Common identity, proximity, or mutual interests are common bases for cross-border cooperation (Boman and Berg, 2007). The idea for CBC organisations was first raised by the Council of Europe. However, the name 'euroregion' originated with the still-existing CBC region 'Euregio' (Germany – The Netherlands), and it gradually became a general term defining a form of CBC throughout Europe. In Europe various organisational structures have characteristics of a CBC. Many of their names derive from the terms 'region' or 'Euroregion': 'euregio' (Helsinki-Tallinn Euregio), 'euroregio' (Inn-Salzbach-Euroregio), 'euroregion' (Niemen Euroregion), 'regio' (Regio Egreensis), 'council' (Kvarken Council), 'conference' (Lake Constance Conference), 'working community' (Working Community of Western Alps), 'committee' (Öresund Committee) or similar terminology. The term 'regio' comes from the Latin *rege*, meaning to draw a line or border. In ancient Rome the 'regio' was used for demarcating an area rather than governing it. It did not correspond to any legislative or governmental institution (CoE, 2005). The term 'euroregion' refers mostly to institutionalized cross-border cooperation applied to a joint or twin-region of at least two different countries sharing a border. Yet, the existence of institutionalized cooperation does not imply the existence of a euroregion *per se*. Some regions which share a border have very close

cooperation on various matters similar to euroregions without possessing a special institution to promote cross-border relations and activities. Sometimes regions possess an institution for managing cross-border activities, yet little significant cross-border interaction occurs.

Generally speaking the cross-border structures are arrangements for cooperation between units of local or regional government across the border of two different countries in order to promote common interests and enhance the living standards of the border populations within the limits of the geographical scope of cooperation. Historically, the euroregions were instituted in order to overcome unnatural barriers between regions and ethnic groups which 'naturally' belonged together. They evolved from commonplace activities like everyday cross-border commuting among people who shared common economic, social or cultural characteristics. Inhabitants of border areas often want cooperation as a means of overcoming the problems they face and improving their living conditions. Hence the likelihood that euroregions can function at different levels of development relatively successfully. Their role has always been to integrate and harmonize regional relationships. Cooperation usually starts with people to people exchanges and with the help of cultural programmes. Having organizational structures and their own financial resources, euroregions are able to address a larger variety of cross-border topics like health, research and development, education and training, waste management, environmental protection, tourism and leisure, rescue and security, transport and communication infrastructure, mobility of people, and business cooperation (see Fig. 1).

This article studies the main characteristics and problems of euroregions as institutions in the Baltic Sea region and especially in the regions bordering the Third countries. It aims to explore the challenges confronting the leaders involved in the activities of euroregions. First, it conceptualizes euroregions while focusing on the various compositions, roles, forms, legal and financial issues. Second, the article discusses the new legal instrument for euroregions which can partly solve the problems that euroregions encounter. The empirical part of this article focuses on thirty-five cross-border cooperation organisations. A questionnaire was used to help to identify the most crucial issues and problems facing euroregions. Additional evidence was gathered from secondary materials as well as policy documents of European Union institutions, the Council of Europe and cross-border organisations. Documentation included legal documents, regulations, agreements, strategy papers, and reviews produced by different national and international institutions; official statistics; conference and workshop materials; articles in the local and international press; government programmes, and Internet data. Based on research findings, the article concludes by presenting the development opportunities for the Baltic area's euroregions.

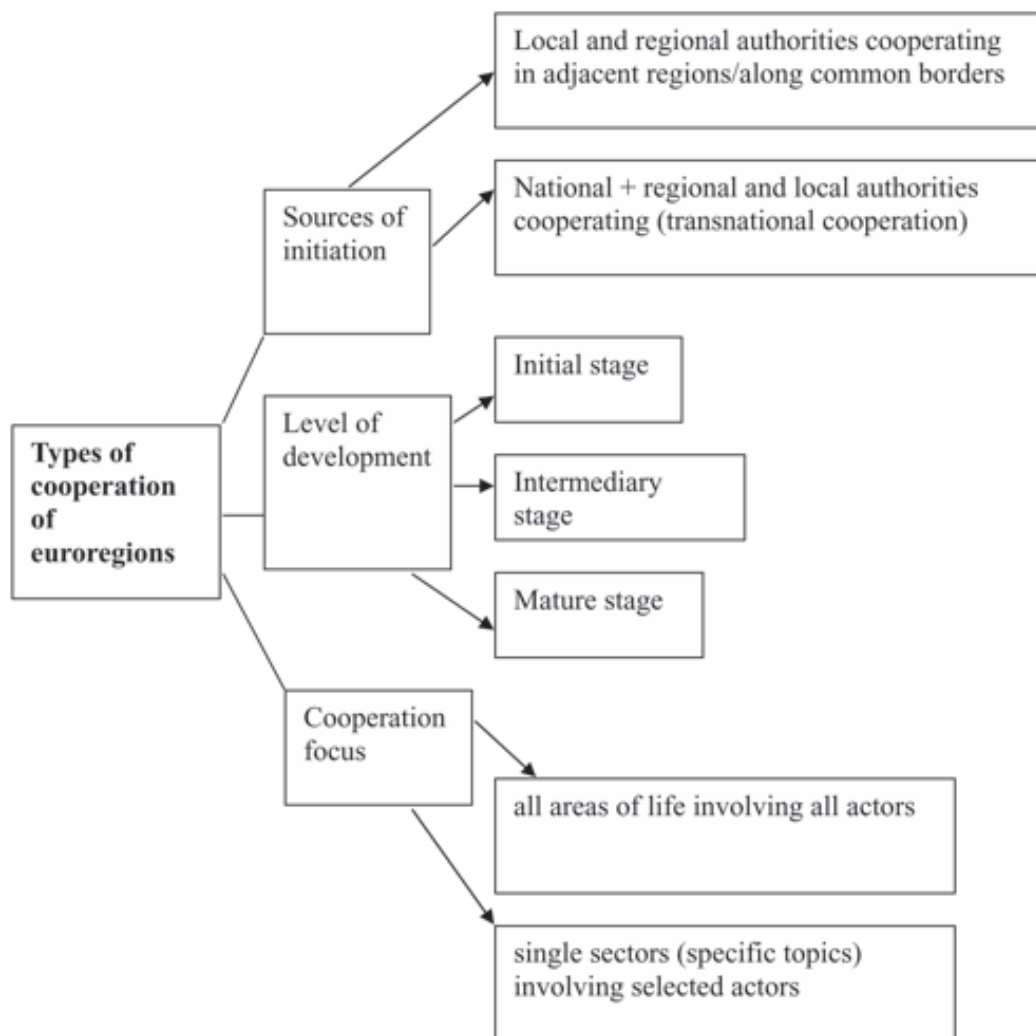


Figure 1. Types of cooperation of euroregions

2. Legal framework of euroregions

In his study of 2003, Markus Perkmann wrote that “in more than seventy cases, municipalities and regional authorities cooperate with their counterparts across the border in more or less formalized organisational arrangements” (Perkmann, 2003). Currently there are thirty-eight border regions as defined by NUTS 2 (European Commission). However, the Association of European Border Regions (hereinafter AEBR) has a list of one hundred and sixty-eight euroregions and similar structures. Anderson observes that the EU could be viewed as causal factor, notably through the diminishing importance of borders and growing regional representation at the supranational level and in the Interreg programme (Anderson, 1997). However, various scholars disagree whether the European Union should be considered a driving force behind the emergence and spread of euroregions across Europe. According to European Parliament’s report, the EU’s impact is often overestimated because it tends to obscure the fact that cross-border cooperation is driven from the bottom up. The regions have a long history of signing cooperation agreements. The first euroregion was created in 1958 around the Dutch area of Enschede and the German area of Gronau. “Other bilateral and multilateral interstate agreements such as the German-Dutch Treaty signed on 23 May 1991 and the agreement of Karlsruhe on transfrontier cooperation between territorial authorities and local public bodies signed on 23 January 1996 have created frameworks for more sophisticated forms of transfrontier cooperation, notably on the basis of public law” (CoE, 2005). Between 1975 and 1985, a number of working communities were set up between regions in different states. The Karlsruhe Agreement was signed between the Government of the French Republic, the Government of the Federal Republic of Germany, the Government of the Grand Duchy of Luxembourg, and the Swiss Federal Council acting on behalf of the cantons of Solothurn, Basel-town, Basel-county, Aargau and Jura with limited scope to act.

In terms of legal status, the euroregions vary. They may involve a community of interest without legal personality, a European Economic Interest Grouping, a non-profit-making association, or a working community without a legal personality or a public body. Euroregions and other structures for cross-border cooperation do not create a new type of government at the cross-border level. They do not have political powers, and their work is limited to the competencies of the local and regional authorities that constitute them. Different CBC structures will have to adopt their needs and strategic goals to existing legal possibilities provided by EU legislation, the legal framework of the Council of Europe, bilateral agreements, and national legislation.

AEBR’s White Book on European Border regions points out that cross-border cooperation is a policy framework task for the European Union which must be implemented at the regional/local level in partnership with the national bodies: “There is a need to make progress towards elaborating a more uniform and comprehensive typology of European border and cross-border regions that integrates – in a bal-

anced way – the various dimensions characterising the actual cross-border cooperation reality”. Both the Council of Europe and EU institutions have been working on recommendations and legal documentation concerning the legal status of euroregions for years. The European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities (ETS No. 106) was opened for signature by the member States of the Council of Europe, held in Madrid, on 21 May 1980. It became effective on 22 December 1981. Thirty-three states ratified it and another three signed it. The so-called Madrid Convention was the first step towards cross-border cooperation structures based on public law. “The Outline Convention includes twelve articles. To allow for variations in the legal and constitutional systems in the Council of Europe’s member States, the Convention sets out a range of model agreements to enable both local and regional authorities as well as states to place transfrontier cooperation in the context best suited to their needs” (CoE 2006). It provides a legal framework for completing bi- and multinational agreements for cross-border cooperation among regions. The decisions put forward are binding only on the public authorities within the cross-border area concerned. The countries ratifying the Outline Convention agree to foster and facilitate transfrontier cooperation by removing obstacles, and they „grant to authorities engaging in international cooperation the facilities they would enjoy in a purely national context“ (CoE, 2005).

Article 10 of the European Charter of Local Self-Government envisions the right of local governments to “belong to an international association” (paragraph 2) and “under such conditions as may be provided for by the law, to co-operate with their counterparts in other States (paragraph 3)”. The Additional Protocol to the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities (ETS No. 159) was opened for signature by states which signed the Outline Convention in Strasbourg on 9 November 1995 and entered into force on 1 December 1998. It has been ratified by fifteen states and signed by a further seven. The Second Protocol to the European Outline Convention on Transfrontier Cooperation between Territorial Communities or Authorities concerning interterritorial cooperation (ETS No. 169) was opened for signature on 5 May 1998. Twelve states ratified it, and seven more signed it. It entered into force on 1 December 2001. According to the Second Protocol, the territorial communities or authorities have the right to engage in interterritorial (territorial communities or authorities of two or more contracting parties) activities and to conclude interterritorial agreements in accordance with the procedures laid down in their statutes, in conformity with national law and insofar as such agreements are in keeping with the contracting parties’ international commitments.

The main barriers to joint cross-border cooperation are the different administrative and territorial structures and legal systems, which influence the level of activities and the management of projects and programmes. These influences also affect the management of joint EU programmes. The Council of Europe has drafted a legal instrument in the form of a third protocol to the European Outline Convention on

Transfrontier Cooperation between Territorial Communities or Authorities on the establishment of European cooperation groupings. The present version of the legal statute under proposal has been drawn up so as to apply to every draft euroregion constitution of II Council of Europe member states. It was drafted to serve as a model for a possible European Union regulation to introduce a framework for transfrontier, transnational or inter-territorial cooperation between local and regional authorities (CoE 2004). The idea behind the third protocol is that it would obviate the need for countries to adopt their own national legislations or amendments.

3. Problematising the Baltic Euroregional Network

In 2006, a study was conducted among thirty-five cross-border organisations in the Baltic Sea Region. The selection of the organisations was based on the membership of the Baltic Euroregional Network (BEN), which was formed in 2005 at the Baltic Sea Region Interreg IIIB. The project had a steering group made up of representatives from all the partners, which approved at its steering group meeting the mandate of six persons to work on the Baltic euroregional strategy.

The aim was that the composition of the strategy group had to reflect representatives of all the stakeholder groups represented in the BEN project in order to be able to encompass the experience and interests of all the stakeholders in the region. The following stakeholder-groups were represented:

- Lead partner;
- Secretariat of a euroregion from the Nordic, Baltic countries or Russia/Belarus;
- Local or regional authority from the Nordic, Baltic countries or Russia/Belarus;
- NGO from the Nordic, Baltic countries or Russia/Belarus.

Additionally, the composition of the group had to reflect the geographical scope of the BEN partnership so that at least one representative from the Nordic countries, one from the Baltic countries and one from Russia/Belarus had to be in the group. The composition also had to reflect gender balance as much as possible. Hence, in consequence the working group was comprised of representatives of the following organisations: the Zemgale Development Agency, the Öresund Committee, the Vyborg municipality, the Association of Municipalities of the Republic of Karelia, the Nordic Council of Ministers Office in Lithuania, and the Helsinki-Tallinn Euregio. The working group consisted of four men and two women.

The group's initial task was to develop a strategy for cross-border cooperation in the Baltic Sea region and to develop an agenda of topics and activities to be part of the BEN project. The document had to give direction to the BEN partners and its stakeholders on how to proceed with future cooperation. However, as the project commenced, obstacles surfaced due to differences among the regions and cooper-

ating parties. So the group had to find a common ground first. This part of the work constitutes the core of the present article. In order to carry out the preliminary study, the group developed a questionnaire. The aim was to find a catalogue of the main characteristics of euroregions, to identify main impediments to cross-border cooperation, and to receive ideas for addressing problems. The author of this article was the chair of the working group, compiling background information; participating in the development of the questionnaire, and drawing provisional conclusions. Based on the group's meetings and discussions, a list was completed which described the main challenges for CBC structures. The list was distributed to the representatives/managers of the participating institutions.

It included the following statements:

1. Euroregions have various roles.
2. Membership and partnership in euroregions varies.
3. Euroregions represent platforms for all three elements of triple helix cooperation.
4. There is no single solution for the legal status of euroregions.
5. Financing of euroregions varies.
6. The role of euroregions regarding EU CBC programs varies.
7. Euroregions are important supplements to international relations.
8. Euroregions have an important role in the spatial development of the Baltic Sea Region.
9. There is a constant need for a dialogue between euroregions and national governments.
10. There is a need for consultations between euroregions and international organizations.

The respondents received these statements in written form and were asked to respond and freely comment on them. The answers were analysed, generalisations made and conclusions drawn. The next sections of the article analyse the respondents' views.

3.1. Characteristics of euroregions

A number of roles for euroregions were suggested including acting as facilitators, catalysts, network builders, process initiators, platforms, framers of common agendas and strategies; and acting as venues for holding people to people meetings and events. Questionnaires revealed that roles and functions varied depending on the specific needs and conditions of the cross-border region, the development stage of cross-border cooperation, and the national context. Some euroregions consist only of local and regional authorities; others include, for example, NGOs, universities, and chambers of commerce. Differences of membership in euroregions influenced for better or worse the purposes and functionality of the CBC structures.

‘Triple helix cooperation’ is a term used to denote cooperation among three societal sectors: the public sector, the business community, and the educational establishment at the regional, national and multinational levels. The economic context in which these several sectors operate is now analysed in terms of university-government-industry relations. “There are four dimensions to the development of the triple helix model: first, internal transformation within each of the helices; second, the influence of one helix upon another; third, creation of a new overlay of institutional structures from the interaction among the three helices; and fourth, a recursive effect of these entities, both on the spirals from which they emerge and on the larger society” (Etzkowitz, 1998). In terms of ‘triple helix cooperation’, euroregions as territorial units practice various models of cooperation within the public sector, within the private sector and between these two sectors, aiming at joint strategies and policies as well as greater involvement of all relevant stakeholders. More advanced euroregions can function as platforms of cooperation based on the ‘triple helix’ model. Research revealed that most but not all euroregions have adopted the ‘triple helix’ principle. Some CBC’s especially in euroregions with non-EU member countries have not embraced the model to the same extent.

The legal status among euroregions varies depending on geography, politics, and ambition. Although a few respondents preferred a legal determination of the role of local authorities within euroregions, support for a ‘common concept’ was limited, reflecting the multiplicity of juridical and financing structures among existing euroregions. Euroregions are funded from different sources: funds-generating programs or projects; the EU; national, regional, or local entities, and private individuals or agencies. Regarding EU-sponsored programs, roles also varied. Although some euroregions engage in program management, most participate as project applicants. Some national governments prefer to manage EU programs themselves rather than assign responsibility to a euroregion, and some euroregions prefer not to manage programs or micro-funds themselves. CBCs’ financial and personnel resources often set limits on the roles they can assume. In many instances euroregions recognize their limitations and elect to adopt roles within them.

Significantly, none of the euroregions on the Russian border agrees with the statement that “euroregions constitute an important supplement to foreign policies at people to people level”. On the Russian border the euroregions are still instruments of policy of governments which vest power in one to two leaders. In some cases official international relations priorities are so general that they do not respond to the specific needs of the population of border regions. National institutions might be afraid that euroregions are somehow implicating foreign policy. But a euroregion cannot have a different foreign policy from the home countries of its members.

3.2. Problems of euroregions

According to the respondents, the main obstacles to the success of euroregions are the following: insufficient support and trust from national institutions; inability to recruit and retain qualified staff; limited organizational capacity; lack of authority, insufficient funding, and not enough international cooperation. The ‘triple helix’ model also proved difficult to implement due to problems associated with role definition and articulation among the parties. In several cases universities and businesses did not exhibit a high degree of interest in the activities of their euroregions. Some euroregions feared that admission of new partners like universities or chambers of commerce in an officially registered euroregion would complicate the efficient discharge of the main functions such as management, election of officers, collection of fees, and projects and activities. They feared that formalities might then supplant action at the grass roots level.

Various opinions on legal standing were expressed. A commonly held view was that more discussion is needed at the local level about the legal status of a euroregion. If a euroregion is not an independent legal person, financing can become more difficult. In addition, when the legal status of cooperating parties is incommensurate, the ideal balance characteristic of partnerships can be disturbed. For example, to be eligible for an EU grant, a euroregion must be a registered legal body. If it contains members lacking legal standing, the legally recognized members must apply on behalf of all the partners, creating a potential inequity in their relationship. On the positive side, some respondents saw advantages to different kinds of legal status, which they believed helped achieve common initiatives through synergy.

Based on the responses, financing was one of the most crucial and important problems of every CBC structure regardless of legal status. Collectively the partners are responsible for seeking and sustaining financial support for running the office and supporting the executive body. Euroregions’ main source of support is project-based EU programmes and funds. Often grant funds must be reimbursed afterwards, however, making the financing of a permanent staff and office difficult and in many cases impossible. The absence of stable funding limits the ability to make commitments on a long-term basis, which in turn diminishes the likelihood for receiving a grant or loan. Euroregions, especially NGOs, need stable funding in order to cover operational costs. As a consequence, too few euroregions participate actively in multinational projects, focusing instead on the management of EU programmes.

The question concerning the role of euroregions in improving cross-border mobility and accessibility in the Baltic Sea Region was subject to interpretation. Some respondents understood it as a long-term regional development made in consultation with national governments. Others interpreted the question more narrowly, taking it to refer to cooperation across a border region. The dominant problem for the regions bordering Russia was securing visas, which are either too expensive or not

permissive. Solving the problem often required national governments to intervene because they control public services across borders.

Presently the CBCs are trapped within a recursive and self-perpetuating cycle leading from low credibility to low status among major decision-makers and then back again to low credibility. Although euroregions have significant accomplishments to their credit, their story has not been well publicized so that their importance in addressing national needs is insufficiently known or understood. In consequence, they participate in their national governments from a position of weakness. Although they can be effective instruments for tackling problems of national importance, especially at the regional level, their capabilities are not understood enough for them to have earned a distinctive niche within their national hierarchies. The majority of the respondents expressed concerns about recognition and leverage with international, transnational, and Pan-Baltic organizations as well as with EU institutions and national authorities. Discussion with these organizations should centre on issues that the CBCs have an ability to manage effectively.

3.3. Possible solutions to the problems of euroregions

The following solutions were suggested: establishment of functions and responsibilities enshrined in law; allocation of state funds to support cross-border cooperation; adoption of strategies for the general promotion of euroregions; clarification of the 'triple helix' concept; developing a marketing plan for publicizing the value-added of regional cooperation; and inviting businesses, chambers of commerce, and university representatives to euroregion events in order to raise interest. Suggestions regarding financing included lobbying governments for earmarked funding through state budgets, through international cooperation organizations, and through regional/local governing bodies. In order to provide a sustainable and working mechanism, all partners need to make their financial contributions on a regular and planned basis. In order to receive funding to the local/regional budgets, activities of euroregions should be highlighted and visualised, so that lobbying for recognisable conceptual projects in national bodies becomes much easier.

The legal status of a CBC affects its eligibility for funding. Potential for conflicts of interest needs to be minimized. Euroregions also need to determine priorities and identify their specific roles as programme managers or as project partners. The issues of cross-border mobility and accessibility also need to be resolved. The respondents felt that the position of the euroregions needs to be strengthened within their national countries. CBCs need to stay in constant and systematic dialogue with national governments and direct discussions towards concrete policy implementation measures that improve living standards in border territories. People to people contact happens anyway through projects and seminars. However, when relations between neighbouring countries become strained, local and regional level can increase in value. Cooperation on the grassroot level can be a force in sustaining long-term relations.

The majority of the respondents thought that the international, transnational, and Pan-Baltic organizations, as well as the EU, in cooperation with national authorities, should consult with euroregions on issues relevant for CBCs. The solutions proposed by euroregions included taking self-initiative in various fields and not only consulting with various levels of governance but forming a working network of organisations for the purpose of information exchange on various policies.

4. A new legal instrument for euroregions

Although respondents believed that the differences in the legal status of the euroregions impeded cooperative projects and application for EU funds, they did not take a single legal solution for all euroregions as the only possibility. At the time when the questionnaire was distributed, the EU regulation on the European Grouping of Territorial Cooperation (EGTC) had not been adopted. The instrument was approved in 2006 on the basis of an initial proposal by the European Commission in 2004. The regulation sprang from the difficulties that regional and local authorities experienced as they endeavoured to implement territorial cooperation within the framework of differing national laws and procedures. The main purpose of the Commission's proposal was "to reduce the obstacles and difficulties encountered in managing actions of cross-border, transnational or interregional cooperation within the framework of differing national laws and procedures" (EP 2006). This initiative was followed up and strengthened by the European Parliament and the Committee of the Regions.

Viktor von Malchus, a researcher of AEBR, has noted that "numerous conventions, treaties, agreements and protocols at bilateral and trilateral level, which include national and/or regional or local authorities, often contain declarations of goodwill on friendly neighbourly cooperation, partnerships and more. They also allow for recommendations to be made, but do not confer decision-making powers on cross-border structures. The strategic, long-term cross-border cooperation at regional and/or local level has largely been rooted in private law". He also argues that „cooperation under public law is easier to achieve at project level/.../". "There are no forms of cooperation based on public law in the domain of interregional and transnational cooperation". Olivier Kramsch (2002) has advanced similar arguments in his article on one of the oldest institutionalised euroregions, the Euregio Maas-Rhein, which acquired the juridical status of a foundation in 1991 under the terms of Dutch private law as Stichting Euregio Maas-Rhein. He argues that the weakness of the euroregion is that "fiscal and social security issues remain a matter for policy making at the member state level." "The Stichting is legally proscribed from intervening in matters related to spatial planning and the regulation of local labour markets." He concludes that the transformation from a private to a public entity resulted in "greater decision-making flexibility within the Stichting and improved its democratic accountability with the cross-border community at large" (Kramsch 2002). The new legal instrument provides a basis in public law for decentralised trans-European cooperation

between regional and/or local authorities on the basis of public (EU) law for all forms of cooperation (cross-border, interregional and transnational) whether strategic or operational and regardless of topic or form.

The territory of the EU has been subject to EGTC regulation since August 1, 2007. So far only thirteen member states have adopted the EGTC's national legislation. Only three EGTCs have been established to date: the first one between France and Belgium involving the cities of Lille, Tournai and Kortrijk; the second between Hungary and Slovakia in the region of Ister-Granum; and the third between Spain and Portugal on the border of Galicia and Norte. After establishing a general basis for cooperation, the regulation allows the EGTC members the flexibility to reach agreement on particulars in accordance with domestic law. In effect, the EGTC supplements rather than replaces the existing instruments. Designed to have legal personality, it has the capacity to act for and on behalf of its members, and it can place contracts, employ personnel and acquire movable and immovable property. As a legal entity governed by public law, it can act on behalf of its members in matters such as governance, public service, and public facilities. The EGTCs' regulations provide for the controlling law to be the statutes of the member state where the EGTC has its registered office. In addition, the EGTC seeks to comply with the national law of its members. The purposes of the EGTCs are to promote cross-border and transnational and interregional cooperation and to make the euroregions' management of cooperative projects easier.

An EGTC can also include among its members partners' non-EU member states. In this case "at least two members from two EU member states must participate in the EGTC. The registered office of the EGTC, which determines the applicable legal system under which the EGTC will operate, must be located in one of the EU member states by whose law at least one of the members of the EGTC is governed" (MOT 2008). Nevertheless, the EGTC remains under the control of national governments since the establishment of an EGTC depends on authorisation by each member state concerned.

The wider application of the EGTC tool in Europe would address several obstacles to institutionalised cooperation of euroregions (heterogeneity, legal personality and legal jurisdiction). However, it could also create new problems or resurface old ones in a new form. Due to imbalances among partnering communities, issues regarding implementation might arise; vagueness regarding supervision due to different public administration systems in the countries might result in ineffectiveness, and ambiguities about legal authority and jurisdiction might persist since the EGTC must choose the legislation of one of the member countries in which it is registered. Despite these issues, EGTCs could favourably influence the overall legal landscape of euroregions in the future.

5. Discussion on development opportunities for euroregions

Euroregions are challenged by the constant changes and reforms they have to undertake in order to become stronger in terms of structures, membership, and financing. They are part of a developing system at both the micro or macro levels. To maximize the benefits of improvements as they occur, they need to be informed and adaptable. An information network among euroregions, national institutions and the European Commission would be beneficial. Presently, without such a support system, many euroregions lack the experience, resources, and status to take full advantage of new developments.

The research data made abundantly clear that the most crucial problem confronting euroregions is the absence of funding and the co-financing of projects. Financial instability prevents the formation of joint structures. Without common resources including permanent staff, the euroregions are forced to focus their energy on strategies for long-term cooperation and on individual projects which can be implemented using volunteers or temporary staff. Yet with absent adequate staffing, they are often incapable of managing programmes, including European programmes. Technical, administrative, financial and decision-making instruments are vital for lasting cross-border cooperation activities. Euroregions should actively work on fundraising using all possible financial sources available at the moment. At the same time, long-term financial schemes (loans, preferably at low interest rates) as well as advanced payment schemes should be worked out on the national level with financing institutions, banks, and the private sector. The degree of involvement of the ministries in the work and funding of euroregions also needs to be more clearly defined. To avert excessive influence on the part of member nations, euroregions should not rely on national funding as their basic revenue source. Instead national resources should be allocated to support particular projects. The best solution is assessing euroregion membership fees for funding for increasing organizational capacity and management. Micro-funds could be created within the framework of cross-border cooperation programs, and they should be monitored or analyzed through SWOT within the context of programs managed by euroregions.

Euroregions can to a large extent help to overcome the legal, administrative and financial barriers and disparities that hamper the progress of the border regions. They can prepare joint studies and improve mutual understanding. They can also facilitate more open labour markets, enhancing economic development and job creation. Euroregions should inform the national government of their successes and point out the benefits of the CBCs' operations on their service regions or countries. Stronger contacts with academic and research institutions would help euroregions perform their functions when their own institutional capacity is insufficient. Regarding membership, an overview and assessment of the main types of membership/partnership structures might prove helpful. The involvement of 'triple helix' partners from both sides of the border is important for achieving common goals.

Euroregions could also play a more prominent role in the overall development of the Baltic Sea Region if they took part in analyzing the needs and in writing and implementing international projects. As multinational institutions, euroregions possess unique knowledge about cross-border cooperation on the local and regional level. Today the euroregions are not only interacting within the circle of their immediate membership but they are also active vis-à-vis central governments and EU institutions. They are well informed about the local needs and problems of border territories, especially those with a cross-border character, and they are bearers of a longstanding tradition of cross-border cooperation on the grass roots level. Although this knowledge and experience is invaluable, it has been insufficiently used as a resource for responding to issues within the Baltic Sea Region.

By implementing ‘triple helix’ projects and fostering networks, wider audiences can be addressed. If euroregions could secure greater involvement from the university and business sectors, the public would acquire a better understanding of the meaning and activities of cross-border organizations. But the business sector in particular will not be motivated to involvement in the practical work of euroregions unless it first believes that euroregions can serve their interests. Euroregions need to make a conscious effort to develop programmes that promote business success, making their value-added evident. Then the needed support of the business community can be expected to follow.

Euroregions can serve as platforms for strategic cooperation regarding issues of spatial planning. As part of the ‘triple helix’, universities should investigate joint development strategies for bordering territories and regions within the framework of legislation that guarantees complementarity among participating nations and regions. National governments should include a CBC in their regional development plans, and they should involve euroregions in the development of cross-border infrastructure and in spatial planning commissions. They should then try to foster competency at the regional/municipal level, and after issues of local infrastructure are solved, entrust the euroregions to find solutions responsive to local and regional needs.

Friendly visa policies need to be adopted to permit non-EU members of a euroregion to travel across borders with minimal inconvenience and cost. Experiences with Nordic CBC partners in issues concerning the model of mobility and accessibility to services across the borders could be exchanged. The national institutions should inform the euroregions on the new legislation that is being prepared concerning CBCs and include the representatives of euroregions in the decision-making bodies of the national institutions. Having a national coordinator in national institutions would be an advantage. Regarding the legal status of euroregions, on the EU level the new model of EGTCs needs to be promoted among the stakeholders at different levels of governance.

6. Conclusions

Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighbouring local or regional authorities of different countries located along shared state borders (either land or maritime borderlines). They are widely known mechanisms of cooperation between regions. The empirical study discussed in this report examined euroregions in the Baltic Sea Region and especially in those bordering non-EU member states. It examined characteristics of euroregions and various problems they face. Euroregions differ with regard to organizational setups, legal forms, membership, roles and financing. These factors influence their ability to conduct everyday activities of cross-border cooperation. The most severe problems pertain to the lack and stability of financial resources, which leads to understaffing, insufficient capacity and the inability to participate effectively in cooperative problem solving. Lack of dialogue with the national institutions as well as EU-level institutions also militated against effectiveness. Euroregions are often excluded from decision-making bodies within the central government, and they are not always kept informed through regular systems of communication, limiting their ability to contribute fully to national success.

The respondents agreed with seven out of ten statements presented to them. As to the statements concerning the wider international arena, respondents believed that those areas are already too far from the everyday activities of a euroregion. Because respondents interpreted the statement on spatial development differently, they cited a wider range of opportunities for regional intervention than anticipated. Regarding suggestions for solving the main problems, respondents thought that a mix of political representatives (local, regional, national and European) was crucial for successful cross-border cooperation. Various initiatives were suggested including coordinated cooperation among different institutions, demonstration of the benefit of euroregions, and establishment of direct contacts with universities and the business sector. A need for various financing schemes mainly from the national sources was recommended.

As to the new legal instrument of the European Grouping of Territorial Cooperation (EGTC), respondents thought it would simplify the management of cross-border cooperation projects among countries with differing legal systems and laws. They also believed that the possibility for an EGTC to enter into agreements with private sector entities would improve cooperation among the public and private sector and academia.

In conclusion, regions should be seen as continuous spheres of common interest despite borders and national allegiance. For the model of territorial cooperation to succeed, discussions in diverse forums throughout Europe are recommended with the future development of euroregions as the main topic. Future research directions could include investigating whether the existence of a CBC institution in the region results in a higher degree of integration in a region and among local or regional

authorities representing the member countries. Another main research topic could be documenting whether euroregions are cost effective organizations for contributing to the achievement of local and regional goals and aspirations and whether euroregions could also be effective instruments of beneficial effects through national and international cooperation.

Address:
Katri-Liis Lepik
Estonian Business School
Lauteri 3
10114 Tallinn, Estonia
E-mail: kats@retked.ee
Tel.: +372 665 1325

References

Anderson, M. (1997) "Transfrontier co-operation – history and theory". In *Grenzüberschreitende Zusammenarbeit in Europa: Theorie – Empirie – Praxis*, 78–97. G. Brunnand and P. Schmitt-Egner, eds. Baden-Baden: Nomos.

Anderson, James et al. (2002) "Why study borders now?" *Regional and Federal Studies* 12, 1–12. Association of European Border Regions (2004) *European charter for cross-border regions*. Gronau: AEHR.

Association of European Border Regions (2004) *Synthesis report: towards a new community legal instrument facilitating public law based transeuropean co-operation among territorial authorities in the European Union*. Gronau: AEHR.

Association of European Border Regions (2006) *White paper on European border regions final version*. Gronau: AEHR.

Boman, Julia and Eiki Berg (2007) "Identity and institutions shaping cross-border cooperation at the margins of the European Union". *Regional and Federal Studies* 17, 2, 195–215.

Böttger, Katrin. (2006) "Grenzüberschreitende Zusammenarbeit in Europa, Erfolge und Misserfolge der Kooperation am Beispiel der EUREGIO (Rhein-Ems-Ijssel), der Euregio Maas-Rhein und der Euregion Neisse-Nisa-Nysa". (Occasional Papers, 32) Stuttgart: Europäisches Zentrum für Föderalismus-Forschung.

Conference of Local and Regional Authorities of Europe (2002) *Recommendation 117 of congress of local and regional authorities of Europe*. Strasbourg: CLRAE.

Conference of Local and Regional Authorities of Europe (1991) *Resolution 227 of standing conference of local and regional authorities of Europe*. Strasbourg: CLRAE.

Council of Europe (1995) *Additional protocol to the European outline convention on transfrontier co-operation between territorial communities or authorities*. (ETS, 159.) Strasbourg: CoE.

Council of Europe (2005) *Fourth annual report to the Committee of Ministers covering the year 2004*". DG1 (2005) 4. *Committee of Advisers for the Development of Transfrontier Cooperation in Central and Eastern Europe*. Strasbourg: CoE.

Council of Europe (1985) *European charter of local self-government*. (ETS, 122.) Strasbourg: CoE.

Council of Europe (1980) *European outline convention on transfrontier co-operation between territorial communities or authorities*. (ETS,106.) Madrid: CoE.

Council of Europe (2006) *Similarities and differences of Instruments and policies of the Council of Europe and the European Union in the field of transfrontier cooperation*. Strasbourg: CoE.

Council of Europe (2006) *Practical guide to transfrontier cooperation*. Strasbourg: CoE.

Council of Europe (2002) *Promoting transfrontier co-operation: an important factor of democratic stability in Europe*. Report by Hans-Martin Tschudi. Strasbourg: CLRAE.

Council of Europe (1998) *Protocol No. 2 to the European outline convention on transfrontier cooperation between territorial communities or authorities concerning interterritorial cooperation*. (ETS, 169.) Strasbourg: CoE.

Council of Europe (2004) *Proposal for a protocol (no 3) to the European outline convention on transfrontier co-operation between territorial communities or authorities concerning the establishment of euroregional co-operation groupings (ECG)*. Memorandum of the Secretariat prepared by the Directorate of Co-operation for Local and Regional Democracy Directorate General I – Legal Affairs. LR-CT (2004)15. Strasbourg: CoE.

Council of Europe (2005) *Recommendation on good practices in and reducing obstacles to transfrontier and interterritorial cooperation between territorial communities or authorities*. Rec (2005)2. Strasbourg: CoE.

Council of Europe (2006) *Report on The Current State of the Administrative and Legal Framework of Transfrontier co-operation in Europe*. Strasbourg: CoE.

Cross-Border Cooperation – Cross-Thematic Study of INTERREG and ESPON activities (2007) Denmark: INTERACT Point Qualification and Transfer.

Etzkowitz, Henry and Loet Leydesdorff (1998) “The endless transition: a ‘triple helix’ of university-industry-government relations”. *A Review of Science, Learning & Policy* 36, 3, 203–208.

European Parliament (2005) “Report on the role of “Euroregions” in the development of regional policy. Committee on Regional Development. Rapporteur: Kyriacos Triantaphyllides (2004/2257(INI)) A6-0311/2005”.

European Parliament (2005) *Report on the proposal for a regulation of the European Parliament and of the Council on establishing a European grouping of cross-border cooperation (EGCC) (COM(2004)0496 – C6-0091/2004 – 2004/0168(COD)) Committee on Regional Development*. Rapporteur: Jan Olbrycht.

European Parliament (2006) “Regulation (EC) No 1638/2006 of the European Parliament and of the Council of 24 October 2006 laying down general provisions establishing a European Neighbourhood and Partnership Instrument”. *Official Journal* L 310, 09/11/2006 P. 0001–0014.

European Parliament (2006) “Regulation (EC) No 1080/2006 of the European Parliament and of the Council of 5 July 2006 on the European Regional Development Fund and repealing Regulation (EC) No 1783/1999”. *Official Journal* L 210, 31/07/2006 P. 0001–0011.

Knippenberg, Hans and Jan Markusse (1999) “19th and 20th century borders and border regions in Europe”. In *Nationalising and denationalising European border regions, 1800–2000: views from geography and history*, 1–19. Hans Knippenberg and Jan Markusse, eds. Dordrecht: Kluwer.

Kosonen, R. and Heliste, P. Loikkanen (2004) *Kaksoiskaupunkija vai kaupunkipareja? Tapaustutkimukset Helsinki–Tallinna, Tornio–Haaparanta, Imatra–Svetogorsk*. [Twin cities or paired border cities? Case studies of Helsinki–Tallinn, Tornio–Haaparanta, Imatra–Svetogorsk] Helsinki: Helsinki School of Economics, B-57, HeSE.

Kramsch, Olivier. (2002) “Navigating the spaces of Kantian reason: notes on cosmopolitical governance within the cross-border *Euregios* of the European Union”. *Geopolitics* 6, 2, 27–50.

Malchus, Viktor (2004) “A new legal instrument for transeuropean cooperation among territorial authorities in Europe”. Manuscript.

Paasi, Anssi (2001) “Europe as a process and discourse: considerations of place, boundaries and identity”. *European Urban and Regional Studies* 8, 1, 7–28.

Paasi, Anssi (1996) *Territories, boundaries and consciousness: the changing geographies of the Finnish-Russian border*. Chichester: John Wiley.

Perkmann, Markus (2003) “Cross-border regions in Europe: significance and drivers of regional cross-border co-operation”. *European Urban and Regional Studies* 10, 153–171.

Piliutyte, Jolita and Sarunas Radvilavicius (2004) “Comparative analysis of Euroregions on the territory of Lithuania”. Strasbourg: CoE.

Radvilavicius, Sarunas (2007) “Baltic Euroregional network: spatial development in the Baltic sea region. Baltic sea region INTERREG III B neighbourhood program”. Presentation at the 2nd annual conference of the NEEBOR network. NEEBOR regions towards better European integration 6–7 September 2007, Olsztyn, Poland.

Schneider-François, Francoise and Salambo Ludivine (2008) *The European grouping of territorial cooperation guides*. Paris: Mission Opérationnelle Transfrontalière (MOT).

Annex 1. Partners of the BEN project

1. Nordic Council of Ministers Office in Lithuania;
2. Council of the Baltic Sea States (CBSS) Secretariat, represents 11 BSR countries, office in Sweden;
3. Nordic Council of Ministers' Office in Estonia (EE);
4. Nordic Council of Ministers Office in Latvia (LV);
5. Hiiumaa County Government, representing B7 (EE/DE /DK/FIN/SE), office in Estonia;
6. Peipsi Center for Transboundary Cooperation (EE);
7. Helsinki-Tallinn Euregio (EE/FIN), office in Estonia;
8. Euregio Pskov, Livonia (LV/EE/RUS), office in Latvia;
9. Association of Polish Communes Euroregion Baltic (PL/SE/DK/LT/RUS), office in Poland;
10. Euroregion Country of Lakes office of Directorate in Latvia (LV);
11. Euroregion Country of Lakes Lithuanian Directorate (LT);
12. Valga County Government (EE);
13. Zemgale Planning Region Administration, representing Euroregion Saule (LT/LV/RUS), Office in Latvia;
14. Tauragė County Government, representing Euroregion Saule (LT/LV/RUS), office in Lithuania;
15. Public institution "Klaipėda Region Development Agency", representing Euroregion Saule (LT/LV/RUS), office in Lithuania;
16. Nemunas Euroregion Marijampole Bureau (LT);
17. Lappeenranta municipality (FIN);
18. Charity and Support Fund "Euregio Klaipėda Office (LT);
19. Öresund Committee (DK/SE), Office in Denmark;
20. CBC Gränskommittén (NO/SE), office in Sweden;
21. The Ministry of the Interior of the Republic of Lithuania (Regional policy department) (LT);
22. North Calotte Council (FIN/NO/SE), office in Finland;
23. The Association of Polish Municipalities in the Pomerania Euroregion (PL);
24. The Kvarken Council (FIN/SE), office in Finland;
25. ARKO (NO/SE), office in Sweden;
26. The Nordic Council of Ministers Information Office in Saint-Petersburg (RUS);
27. NGO Tchudskoj project (RUS);
28. Municipality "Vyborg region of Leningrad oblast" (RUS);
29. Euroregion Country of Lakes Office of Belarusian Directorate (BY);
30. Association on cross-border cooperation "Euroregion Pskov – Livonia, Pskov Section" (RUS);
31. Association of Municipalities of the Republic of Karelia (RUS);
32. Sovietsk municipality, representing Euroregion Saule (LT/LV/RUS), office in Russia;
33. Russian secretariat of Euroregion Sesupe, Krasnoznamensk (RUS);
34. Kaliningrad Regional Duma (DK/LT/PL/RUS/SE), office in Russia;
35. NGO Nadruva, representing Euroregion Neman (BY/LT/PL/RUS), office in Russia

Annex 2. Map of the partners of the BEN project



Source: Nordic Council of Ministers Office in Lithuania

2. CROSS-BORDER COOPERATION INSTITUTION IN BUILDING A KNOWLEDGE-CROSS BORDER REGION

Katri-Liis Lepik and Merle Krigul

Lepik, K-L., Krigul, M. 2009. Cross-border cooperation institution in building a knowledge cross-border region. *Problems and Perspectives in Management*, 7 (4), 33-45.

ISSN: 1727-7051

Copyright: Publishing company “Business Perspectives”, 2009

Reprinted with permissions from publishing company “Business Perspectives”, 2010

ABSTRACT

Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighbouring local or regional authorities of different countries located along the shared state borders. They are widely known cooperation mechanisms between the regions.

This paper explores development of integration processes in cross-border region based on the cross-border cooperation organisation. Firstly, it conceptualizes euroregions and cross-border cooperation regions from the viewpoint of knowledge management processes. Secondly, the article analyses management of CBC organisations and knowledge management in general. Thirdly, the article analyses management in creation of knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the example of Helsinki-Tallinn Euregio. The article concludes by presenting how a learning organisation can be a tool for cross-border regional integration and how it could contribute to the development of a common knowledge cross-border region.

Keywords:

cross-border co-operation organisation, euroregion, knowledge management process, knowledge cross-border metropolitan region, triple helix, Helsinki-Tallinn Euregio

JEL: O32

Introduction

The EU enlargement has created challenging opportunities to countries for the support of economic and regional development. Peripherality is a well-known problem of border regions and there is a wide discussion in the regional development literature about the possibilities to reduce regional disparities.

The cross-border cooperation is one of the most recognised ways to develop border regions (Baldwin and Forslid, 1999; Brodzicki, 2002; Pitoska, 2006). Still, the twenty first century new global economy seems to give metropolitan (city-) regions a new central role. In Jane Jacobs's words (1985) regions make the wealth of nations, and yet, often, their governmental structures and functions do not mirror those important urban social, political, and economic and spatial facts. In a British study which describes the challenges and opportunities for knowledge based city-regions under the

term “Ideopolis”, a city-region is defined as “the enlarged territories from which core urban areas draw people for work and services such as shopping, education, health, leisure and entertainment. (Brenner 2003)

Cross-border cooperation in general refers to “a more or less institutionalised collaboration between contiguous sub-national authorities across national borders” (Perkmann, 2003). One possible and wide-spread cross-border co-operation institutional structure is a euroregion. Euroregions are administrative-territorial structures intended to promote cross-border cooperation between neighbouring local or regional authorities of different countries located along shared state borders (either land or maritime borderlines).

The authors of the article will use the term *euroregion* and *cross-border cooperation (CBC) organisation* synonymously hereafter to denote an area of co-operation of local and regional authorities situated directly at the border, or close to it and collaborating in different sectors.

The authors of the article work for the Non-Profit Association Helsinki-Tallinn Euregio (further: Euregio) whose mission has been stated as “to enhance cross-border integration between Helsinki-Uusimaa region and Tallinn-Harju county” and the role is “to promote and assist co-operation inside the twin-region, Euregio supports and promotes inter-regional development and competitiveness, aiming to strengthen the regional knowledge based economic development”. Founded as a network in 1999 and re-organised as a non-profit organisation in 2003. As euroregions have been often created for finding solutions to concrete problems and not for dealing with the development of the competitiveness of the region, Euregio stands out as a different case. Euregio will be dealt with as a learning organization. From the point of view of the target and mission of Euregio, the aim is to develop a cross-border metropolitan knowledge region.

The organisation’s development has raised several theoretical questions that have proved to be academically insufficiently covered. The problem regarding activities of the organisation lies in disparities in the development of innovation environment between Finland and Estonia. Thus, investigation process is two-fold: organizational learning about the actors that help overcome this disparity and influencing actions via regional decision-makers to help overcome these disparities.

The goal of the article is to analyse knowledge management in creation of a knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the example of Helsinki-Tallinn Euregio.

Our hypotheses are that a euroregion that aims at developing a cross-border region of knowledge, arts and science should be a developing learning organisation itself and according to the stakeholders there takes place development towards a metropolitan knowledge cross-border region.

The empirical part of the paper consists of the Euregio's case as its novelty lies in the fact that CBC takes place between capitals/metropolitan regions, not peripheral regions. Still, disparities between two regions exist and they both, Estonia and Finland, are located far from the European growth centers.

This paper explores development of integration processes in cross-border region based on the cross-border cooperation organisation. Firstly, it conceptualizes euroregions and cross-border cooperation regions from the viewpoint of knowledge management processes. Secondly, the article analyses management of CBC organisations and knowledge management in general. Thirdly, the article analyses management in creation of knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the example of Helsinki-Tallinn Euregio. The article concludes by presenting how a learning organisation can be a tool for cross-border regional integration and how it could contribute to the development of a common knowledge cross-border region. The present research is part of an ongoing longer research.

Theoretical Framework

Cross-Border Cooperation Organisations

Historically, the euroregions have come into existence due to the fact that unnatural barriers have been created between regions and ethnic groups which actually belong together. They are widely known cooperation mechanisms between the regions. Until today the concepts and characteristics of CBC organisations have been worked out by the Council of Europe and dealt with mainly by EU institutions and by associations uniting border regions.

However, the characteristics, management and problems of euroregions have not been thoroughly investigated in the Baltic Sea Region. Moreover, there are very few examples of clear institutional and functional frameworks presiding over large cross-border urban regions (Brunet-Jailly 2002). The management of the cross-border cooperation varies. There can be a joint executive committee created for a cross-border structure or region, permanent working groups and/or a cross-border secretariat with members from both sides of the border (AEBR). With the EU regulation on the European grouping of territorial cooperation (EGTC) adopted in 2006 the initiative was made to reduce the obstacles and difficulties encountered in managing actions of cross-border, transnational or interregional cooperation within the framework of differing national laws and procedures (MOT 2008).

Since 1958 when the first euroregion was created, more than 100 cross-border cooperation structures have been established at regional/local level along the EU's internal and external borders. Very often, there are big differences regarding size, population, competences and financing. Regarding the euroregions in the Baltic Sea

Region, an analyses of the characteristics and most crucial problems for cross-border co-operation institutions and ideas for addressing the problems has been made by Lepik (2009) based on the research carried out among the leaders of the 35 CBC organizations.

Today the cross-border cooperation organisations in Europe differ with regard to organisational set-ups, legal forms, membership, roles and financing that characterise everyday activity of the cross-border co-operation. Knowledge management importance has risen as today's effective and successful regional and interregional organisations have been built on triple-helix model. Triple helix cooperation is a term used to denote cooperation between three sectors in the society: the public sector, businesses and high schools/universities at the regional, national and multinational level. (Etzkowitz 1998). This system is complicated and demands from counterparts knowledge sharing, as well as knowledge creation, sharing storing and transfer systems.

Knowledge Management and Cross-Border Learning Organisation

The concept of knowledge has long fascinated scholars in many disciplines. Different perspectives have given rise to different methodologies by which knowledge can be studied and different ways for analysing, interpreting and managing knowledge. (Troilo 2006, Firestone 2001) Over the last decade the concepts of knowledge and knowledge management in business and management sciences have been up and down the sinuous curves of the hype cycle. Now it is recognised that knowledge as a management theme is a fundamental part of our present and future. (Dawson 2005)

The important distinction for the CBC institutions is between tacit and explicit knowledge, introduced by Polanyi (1996): we can know more than we can tell or explain to others. Explicit knowledge is what we can express to others, while tacit knowledge comprises the rest of our knowledge—that which we cannot communicate in words or symbols. Much of our knowledge is tacit. Explicit knowledge, conversely, can be put in a form that can be communicated to others through language, visuals, models, diagrams or other representations. When knowledge is made explicit by putting it into words or other representations, it can then be digitized, copied, stored, and communicated electronically. It has become information. What is commonly termed explicit knowledge is information, while tacit knowledge is simply knowledge. One way we can share our tacit knowledge with others is socialization, where we converse directly, share experiences, and together work toward enhancing another person's or organization's knowledge. (Dawson 2005)

An organization's competitiveness is based on its capabilities that impact its performance. Those capabilities are based on a fusion of effective goal-oriented business and management processes and skills, both of which are forms of knowledge.

Firestone (2001) defines Knowledge management as human activity that is part of knowledge management process (KMP) of an agent or collective. And the KMP, in turn, is an ongoing, persistent, purposeful network of interactions among human-based agents through which the participating agents aim at managing (handling, directing, governing, controlling, coordinating, planning, organizing) other agents, components, and activities participating in the basic knowledge processes (knowledge production and knowledge integration) in order to produce a planned, directed, unified whole, producing, maintaining, enhancing, acquiring, and transmitting the organisation's knowledge base.

There is no consensus on the nature of knowledge (Firestone, 2001). Definitions vary from "Justified true belief" (Nonaka and Takeuchi, 1995), "Knowledge, while made up of data and information, can be thought of as much greater understanding of a situation, relationships, causal phenomena, and the theories and rules (both explicit and implicit) that underlie a given domain or problem." (Bennet and Bennet, 1996) to "Knowledge is the capacity for effective action" (Sveiby, 1996). This definition is the one favoured by the organisational learning community. Similarly, Tom Davenport and Larry Prusak contend that "knowledge can and should be evaluated by the decisions or actions to which it leads", while Donald Schön notes of professionals that "our knowledge is in our action." Firestone (2001) distinguishes three types of "knowledge":

World 1 "knowledge" - encoded structures in physical systems (such as genetic encoding in DNA) that allow those objects to adapt to an environment;

World 2 "knowledge" - validated beliefs (in minds) about the world, the beautiful, and the right;

World 3 "knowledge" - validated linguistic formulations about the world, the beautiful and the right.

In many organizations, there is little concern with world 1 knowledge and with the beautiful, and only slightly greater concern with the right, so world 2 and 3 knowledge of reality is in the outcomes of knowledge processes that are of primary concern to knowledge management.

Malhotra (2001) looks at knowledge management as "a synthesis of IT and human innovation: knowledge management caters to critical issues of organisational adaption, survival and competence, in face of increasingly discontinuous environmental change. Essentially, it embodies organisational process that seek synergistic combination of data and information processing capacity of information technologies, and the creative and innovative capacity of human beings" (2001).

The authors of this article consider Malhotra's (2001) and Karl Wiig's (2000) understanding of knowledge management relevant for cross-border cooperation organisations that have chosen their development towards a learning organization.

“Knowledge management in organisations must be considered from three perspectives with different horizons and purposes:

Business Perspective - focusing on why, where, and to what extent the organisation must invest in or exploit knowledge. Strategies, products and services, alliances, acquisitions, or investments should be considered from knowledge-related points of view.

Management Perspective - focusing on determining, organising, directing, facilitating, and monitoring knowledge-related practices and activities required to achieve the desired business strategies and objectives.

Hands-On Operational Perspective - focusing on applying the expertise to conduct explicit knowledge-related work and tasks.”

Authors consider Senge’s (1990) definition of the learning organisation most suitable in the CBC organisations context. Senge defines Learning Organizations as “Organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to learn together.” A Learning Organization has five main features; systems thinking, personal mastery, mental models, shared vision and team learning. In Euregio’s context the authors propose that unlike Senge who suggests that all characteristics must be simultaneously developed, O’Keeffe (2002) suggests the characteristics of a Learning Organization are factors that are gradually acquired.

There has been an extraordinary burgeoning of literature in recent years on the relationship between innovation, learning, and regional economic development. This includes literature exploring the concept of a ‘learning region’ (Florida, 1995; Morgan, 1997; Simmie, 1997) and knowledge region. As the Helsinki-Tallinn Euregio’s strategy indicates the concept of a knowledge region, the authors remain with the term “knowledge region”.

The authors consider most relevant approach to the definition of knowledge cross-border region as presented by the team of the Crossworks (2008) project: As the analysis shows, leading knowledge region models compel:

- The development of high-tech services;
- The development of education: knowledge workers, universities, life-long learning;
- The development of wide cooperation and collaboration in R&D among and between triple helix actors;
- International cooperation in R&D.

Further moves to extend cooperation should be based on longer-term strategic considerations linked to the science policies of both countries and innovation policies of the countries and cities.

Methodology

In terms of methodology, the article adopts a mix of primary research and secondary evidence provided by the literature. Evidence was collected by participatory method via in-depth interviews, elite interviews and questionnaires. The qualitative approach was selected as euroregions are not widely known among not-involved citizens.

The empirical research evidence consists of the 3 investigations and a case:

- (a) the investigation carried out among the thirty-five cross-border cooperation organisations in the Baltic Sea Region to identify the most crucial issues and problems for euroregions (Lepik, 2009);
- (b) investigation among Helsinki-Tallinn Euregio owners and partners
- (c) elite interviews
- (d) Helsinki-Tallinn Euregio case

Research methods

(a) The leaders of the 35 CBC organisations from the Baltic Sea Region commented on the 10 statements concerning euroregions to find out the characteristics and most crucial problems for cross-border cooperation institutions and receive ideas for addressing the problems. The study was carried out in 2006 and other aspects apart from knowledge have been addressed in the article “Euroregions as Mechanisms for Strengthening of Cross-border Cooperation in the Baltic Sea Region” (Trames 2009).

(b) The Questionnaire

The questions involved Euregio’s expected areas of expertise, influence mechanisms, supporters and co-partners. The questionnaire was sent out to 50 persons in October 2007, the stakeholders’ and partners’ of Euregio: members of the general meeting, members and substitute members of the board and secretariat members, entrepreneurs, artists, university lecturers, former speakers on Euregio fora, former project partners. Out of 50 questionnaires 32 answers were received. Respondents were asked to prioritise the statements. There was “other, please specify” option. The given priorities’ numbers were counted and the number of points calculated.

The statements were:

1. Euregio should influence decision-making of city governments and state governments in the following policy areas:

- innovation
- general and spatial planning
- Environment protection
- physical infrastructure
- Social services
- Energy economy
- Education
- Regional development
- Other, please specify

2. Helsinki-Tallinn Euregio should influence changes in society through:

- Top-leaders (mayors, vice-mayors, municipality heads, MPs, CEOs, etc.)
- Middle-level leaders (heads of departments, etc.)
- Officials
- University representatives
- Artists and media people
- Entrepreneurs

3. Helsinki-Tallinn Euregio is a representation and cooperation organisation for:

- Politicians
- Common citizens
- University professors and students
- Artists
- Entrepreneurs
- Others:

4. Please describe what indicates Euregio's success?

(c) Elite in-depth interviews on regional integration

The research question was on the perspective of regional integration between Helsinki and Tallinn metropolitan regions as the main target area for Euregio. The perspectives of development of Euregio as an institution were additionally studied.

Elite interviews on regional development perspectives were carried out with 14 experts (university, local government, entrepreneurs) from both sides of the Gulf.

Elite interview questions:

1. Which scenario do you predict to happen?

- Integration between two regions will deepen;

- Joint integration will not happen at all;

- A new entity Helsinki-Tallinn twin-region will emerge

- regional integration will happen in a form of knowledge region/science and arts region/technology region/functional region/virtual region

2. Which scenario do you predict to happen to Euregio?
3. How to brand the twin-region and Euregio?

The questions were asked in the course of discussions in order to allow the respondents to comment and offer ideas connected to the research area. Every interview lasted about an hour, the interview period was February to July, 2008 and interviews were conducted by two persons and they were recorded. Respondents were promised anonymity, their names are recorded by researchers.

(d) Helsinki-Tallinn Euregio Case

Helsinki-Tallinn Euregio's mission, role, institutional structure and management, strategy, priorities and activities for implementing of the given tasks were studied. The investigations named above have been included in the analyses of the case. Additional evidence was gathered from secondary material as well as policy documents of European Union institutions, Council of Europe and cross-border organisations, Helsinki, Tallinn, Uusimaa and Harjumaa different strategy documents, Euregio fora, conference and workshop materials; articles in the local and international press, government programmes affecting cross-border co-operation and related issues as well as Internet data were reviewed.

Helsinki-Tallinn Euregio Case

Authors investigate Helsinki-Tallinn Euregio case as an empirical inquiry that analyses a phenomenon of the organisational development and goals within its real-life context. Case study research includes qualitative evidence – the questionnaires, elite interviews and strategy documents of Euregio and its partners.

Euregio has a well-developed institutional organisation with characteristics of a classical management system: General meeting, Board meetings, Secretariat meetings as strategic management bodies, manager, project managers as implementing bodies; permanent funding by partners, additional funding from European projects; priorities and action plans are worked out yearly, information producing and preserving mechanisms established. Since 2001 the target area is innovation, science and arts co-operation, competitiveness of the region. Additionally the organisation has a specified target area of activities – Harjumaa/Tallinn and Uusimaa/Helsinki metropolitan regions.

From both, an understanding-oriented and an action-oriented perspective, it is more important to clarify the deeper causes behind a problem of further developments of the Euregio and the region.

Helsinki-Tallinn Euregio – organisation, mission, priorities

Helsinki-Tallinn Euregio started as a cross-border co-operation network in 1999. The non-profit association (NPA) for providing services to the partners of the network was established in 2003. Helsinki-Tallinn Euregio's role is to promote co-operation inside the region and enhance regional integration by:

- being a cross-border, triple helix driven tool;
- aiming to strengthen the cross-border regional knowledge based economic and political development;
- aiming to develop of a united multi-cluster innovation region of high competitiveness.

The financing of Euregio is provided from annual membership fees paid by the partners. Additional sums for joint projects are applied for from various national and international funds.

Key events of the cooperation process are Euregio fora, which take place every 1,5 years. The second most important event is the Knowledge Arena, which takes place every second year.

Effective work in the period between the key events is carried out in seminars, conferences, round table meetings, minor and major cooperation networks, project groups, forming, maintaining and mediating of contacts between local governments, academic circles and entrepreneurs.

Helsinki-Tallinn Euregio members are: Helsinki, Tallinn, Uusimaa Region, Republic of Estonia represented by Harju county government and Union of Harju county municipalities. The list of co-operation partners includes Culminatum Ltd. (Uusimaa research and development centre), the Tuglas Association, the Finnish Institute in Estonia and the Estonian Institute in Finland, embassies, EAS (Enterprise Estonia), universities, science parks, chambers of commerce and trade and ministries.

The mission of Euregio is to increase balanced cross-border integration and to contribute to the emergence of the Harjumaa-Uusimaa a cross-border metropolitan knowledge region by boosting the entire area's competitiveness and sustainability. The development of an integrated cross-border region is based on the principle that both sides should benefit from closer ties and co-operation and that balanced mutual economic co-operation makes the two metropolitan regions stronger and more visible together than they could be apart. The basis for this process is provided by an innovative and creative environment, knowledge-based economy, mutual support and operation according to the "triple helix" principle – co-operation of universities, business and local governments to either side of the Gulf of Finland.

Euregio priorities are set by two-year periods. The 1999-2000 was for the Estonian and Finnish sides primarily a period of learning to co-operate and adjusting to the other party's operating culture. The first formal action plan was drafted for the

years 2003-2005. Keywords of that period were connected to the European Union – how it works and how to operate within the union, dialogue and information exchange, learning how to select possible projects in accordance with the needs of Tallinn and Harjumaa, how to solve own problems. The rectors and pro-rectors of universities of Tallinn, representatives of the Tallinn City Chancellery and higher officials of the Ministry of Education and Research convened in the Euregio offices in January 2004 in order to agree on common interests and spheres of cooperation. The Science twin cities project was completed in 2005; it comprised six reports and studies, including two specifically dedicated to Helsinki-Tallinn universities cooperation “Helsinki-Tallinn - Science Twin City: University Cooperation Development” (Merle Krigul) and “Cooperation in High-tech Business Development” (Raivo Tamkivi).

Keywords of the period 2005-2006 were competence and knowledge: development of the science region concept, branding activities for the science and arts twin region – the idea of a science twin region was complemented by art and the designation no longer concerned twin cities, but twin region. Priorities for 2007 – 2009 included sustainable regional planning, creating a common business environment, developing human resources. The keywords were recreation services and ways for improving welfare of seniors; relations between urban space and “new media artists”, use of new technologies in humanising the urban space (m-services, VJ-bus, wiki-technologies) and new type of festivals; branding and marketing; cooperation between euroregions of the Baltic Sea area. Priorities for 2009-2013 are increased interaction in spatial and regional planning, creation of innovative and a barrier free region with common well-functioning markets and development of Twin-region of Arts and Sciences. In order to implement the above-mentioned priorities the activities include a fixed link/transportation systems’ development study, Helsinki-Tallinn Twin-TV based services’ development, implementation of the Living Laboratories’ method in Tallinn metropolitan region and common festivals in the framework of Tallinn Culture Capital 2011.

Results

Investigation of euroregions

Based on the study (Lepik, 2009), cross-border cooperation organisations in Europe depending on type and role differ in management categories and implementation of management. Euregios are part of knowledge management process, being collective agents of managing cross-border knowledge production, preservation, integration and transfer.

In the case, where the strategy, vision and mission of a cross-border cooperation organisation is focused on basic knowledge processes, then knowledge management should be applied. Euroregions’ competitiveness and sustainability is based on

a fusion of effective goal-oriented business and management processes and skills, and both of them are forms of knowledge.

Knowledge management is an inherent part of the work of developed cross-border cooperation organisations as it demands organisational capabilities. As cross-border organisations act in a very practical world, Firestone's World 3 "knowledge" accompanied by Wiig's business, management and hands-on perspectives form theoretical basis to analysis of management of cross-border organisation. Explicit and tacit knowledge are important part of everyday life of these organisations.

According to Lepik (2009) newer euroregions are in lack of funds and human resources that raises a dual situation – on the one hand, there is lack of finances for using them in developing knowledge formation, storing and management, and lack of time to develop special knowledge systems; on the other hand, as in majority of euroregions in the Baltic Sea region there are one to four employees, a manager is expected to be competent in all areas of activities and processes on different sides of borders. She or he becomes a real knowledge bank – if the manager leaves, organisation is at risk of not being sustainable, as explicit knowledge consists basically of minutes of meetings, project descriptions and annual reports; good or bad working relations, unofficial networks, contexts and inside information are not described in the written form.

In knowledge management of euroregions predominant is tacit knowledge, both, in older and newer organisations: this is the information, competencies, and experience possessed by employees, including professional contacts and cultural and interpersonal dimensions – openness, lessons to be gained from successes of failures, anecdotal fables, and information sharing (Hellriegel 2002). Tacit knowledge is inexpressible, so, in many instances, it is impossible to share even through non-verbal communication. Thus, if we accept the idea of personal, tacit knowledge, we must also accept that knowledge is not always experience we can share. Possibilities to add to knowledge sharing is socialization and this is inherent part of activities of euroregions.

In newer cross-border cooperation organisations actors of knowledge management are covered or partly covered: use of new technologies (tele-conferences, Skype, etc.), knowledge producing and preserving procedures are well established (systems of minutes, information sharing etc.), still, the problem of one-person-connected knowledge and knowledge management makes cross-border cooperation organisations vulnerable.

Importance of knowledge management has increased as today's effective and successful regional and interregional organisations have been built on triple-helix model and forms a complicated system. This system is many-sided and demands knowledge storing systems, as well as knowledge transfer and competencies to use the positive effects knowledge management process in different aspects offers.

Cross-border cooperation organisations are well informed about the local needs and problems of border territories and they are bearers of longstanding tradition of cross-

border co-operation on the grass-root level. This knowledge and experience of the cross-border cooperation organisations are valuable for discussions concerning crucial issues of the region. Effective knowledge management in a cross-border organisation would contribute to developing regions' competitiveness. This means that knowledge creation, storage, and transfer are essential factors of raising regional competitiveness.

According to the development documents of both, Estonia and Finland, and strategic plans of Tallinn, Helsinki, Uusimaa and Harjumaa (Tallinn Development Strategy 2025, Harju County Development Strategy 2025, Trends and bases for activities of the Union of Harju County Municipalities 2007-2013, Uusimaa Development plan 2030/Vision and Strategy, Helsinki Strategy Programme 2009-2012), all counterparts state that knowledge economy is the future of development of the region. This sets frames to Euregio – Euregio should be a learning organisation, and the management type is knowledge management.

Results of the stakeholders' questionnaire

The areas where positive changes are expected:

Respondents favoured innovation (28 points), education (27), regional development (25) and social services (24), environment protection (1), physical infrastructure and energy economy (0 points).

Power of influence of stakeholders:

Euregio is influential via top leaders (18 points), entrepreneurs (14 points), artists and media people (13 points), university representatives (10 points), middle-level leaders (heads of departments, etc.) (0 points), officials (0 points).

Strong connection to the respondents' profession or position was noted: university and art representatives did not mention official top-leaders; official top-leaders did not mention middle-level leaders and artists. It may indicate that for official city leaders' new developments in city entrepreneurship bases is not familiar and ideas of city economic bases are traditional. The under-estimation of the middle-level leaders surprised the authors as the majority of every-day practice is going on between the middle-level leaders.

Euregio partners in the strategy process

Euregio was considered as a representation and co-operation body for city authorities (others – 6 points), artists and media people (5 points), entrepreneurs (3 points); politicians and common citizens were not mentioned. It may indicate the fact that mayors and vice-mayors are not considered to be politicians, and the link to common citizen is understood directly.

Euregio's success factors

Euregio's success factors were connected with fora, seminars, projects, implementing new ideas.

There was a strong connection with respondents' profession. University-connected respondents tended to consider Euregio as a developer of a science and arts region through people connected to universities and artists and they under-estimated local government and politicians' roles. The trend was stronger among Estonian experts. This trend needs further study. Respondents being the city or regional officials under-estimated university co-operation and pointed out co-operation between local authorities. Only one respondent indicated that success factors can be characterised by the development of co-operation between the regions, namely, the number and scope of joint projects, the number of joint events, marketing and representation of the region in fairs, seminars, etc., the number of joint publications, etc. For the Euregio staff the study indicated the necessity to repeat the questionnaire and organise interviews with key persons. It is also necessary to achieve common understanding between main stake-holders about the expectations towards Helsinki-Tallinn Euregio organisation and towards the twin- region as the main goal. Proceeding from these results Euregio brand can be developed.

On the bases of the research it may be stated that Helsinki-Tallinn Euregio is expected to focus on innovation and education, meaning knowledge dissemination, its visibility increased through top-leaders. The main clientele being from the demand side founding members (board, top-politicians and top-officials, secretariat) and supply side being universities, innovative businesses, new media representatives, new media artists.

Results of the in-depth elite interviews

Future trends for regional integration

- Integration between the two regions will deepen – television and e- and m-services, integration of university and science institutions; joint city and regional planning activities; job mobility; joint festivals; joint marketing, joint television programmes. Still there is no twin-region self-identification. (8 experts)
- Joint integration will not happen at all. The cities and the regions will follow different paths and the present interaction and networking will be stopped either by internal (common will, laws, economic situation etc.) or by external (national security situation, natural disasters, etc.) forces. (2 experts)
- A new entity Helsinki-Tallinn twin-region will emerge. A twin-entity may correspond to many features. It may include for example joint universities between the cities, joint city councils, joint city departments, joint services in the region (social services, health care, procurement, etc.), joint resources, joint transport networks (tunnel), joint spatial planning (general and regional planning), etc. A new dialect (like stadia) might emerge. (4 experts)

Future trends for Euregio development

- Euregio as a strong networking and matchmaking organisation between Estonia and Finland. (8 experts)

- Euregio will continue working as it has so far and no significant changes happen. The awareness of the activities and results of Euregio remains low among the stakeholders as well as the target group. (3 experts)
- Euregio will be transformed into something else like Öresund Committee or, Euregio might finish its existence. (3 experts)

Euregio branding

Euregio's brand is connected to fora, seminars, innovative festivals, innovation-promoting activities. Extended and visible projects, like tunnel/fixed link study, serve as branding actions.

The investigation showed that regional integration will deepen between the two regions, still the self-identification of the region as a twin-region is not foreseen. Euregio development is seen by interviewees as continuing and strengthening but not transforming into any other type of organization. The number of respondents who believe in positive qualitative developments indicates that Euregio activities and goals correspond to interviewed partners' expectations.

Case study results

Euregio's organisation and interplay with founding members and interested parties can be described as follows:

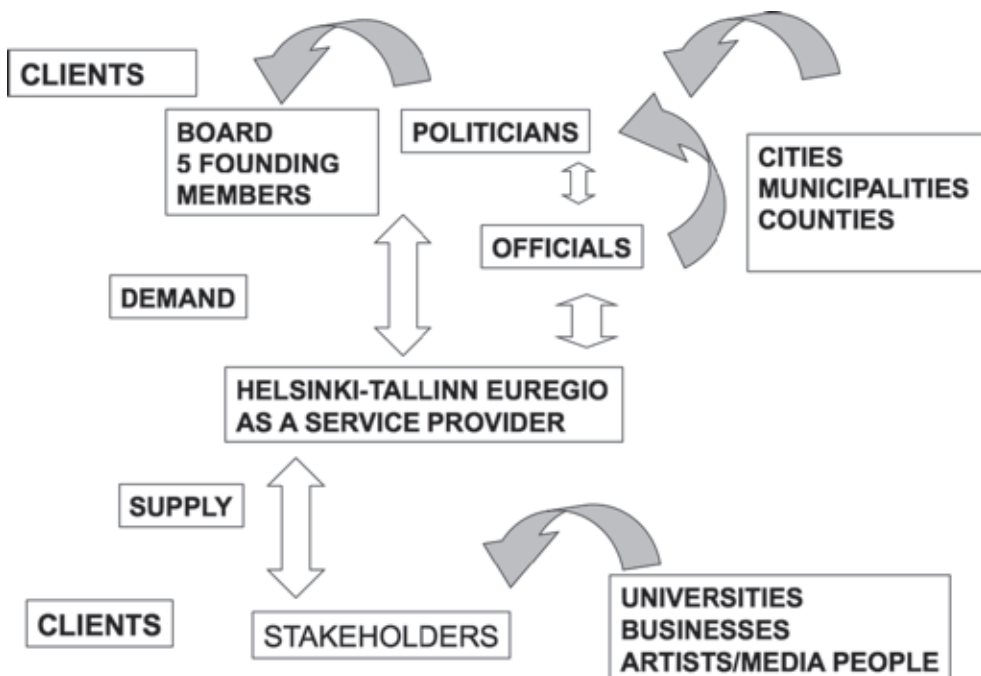


Figure 1: Euregio's supply and demand chart

Euregio is the only regional level tool between Estonia and Finland which deals with contact making between universities, enterprises and local governments. This task is not given to any other institution in Estonia by law and not by general practice either. Helsinki-Tallinn Euregio is also the only institution between Finland and Estonia whose primary task is enhancing regional integration towards a joint region, in Euregio documents also referred to as a twin-city and twin-region.

Based on the analyses of the interviews we may conclude that the organization with the tasks to enhance regional integration would be a learning organisation as the tasks continuously vary and develop. Such organization should be developing itself – its systems thinking, personal mastery, mental models, shared vision and team learning. This is proved by the change in priorities from 1999-2001 when learning how to cooperate was stressed until 2009 when extended infrastructure projects are planned. The stakeholders foresee the development towards a metropolitan knowledge cross-border region. As it is a complex task, knowledge management should be applied.

The twin-region of arts and science (knowledge region) has been stressed but the creation of no other joint institutional structures apart from Euregio are foreseen, e.g. joint city councils. Based on the elite interviews integration between the two regions will deepen – television and e- and m-services, integration of university and science institutions; joint city and regional planning activities; job mobility; joint festivals; joint marketing, joint television programmes.

The target status of Euregio could be as follows:

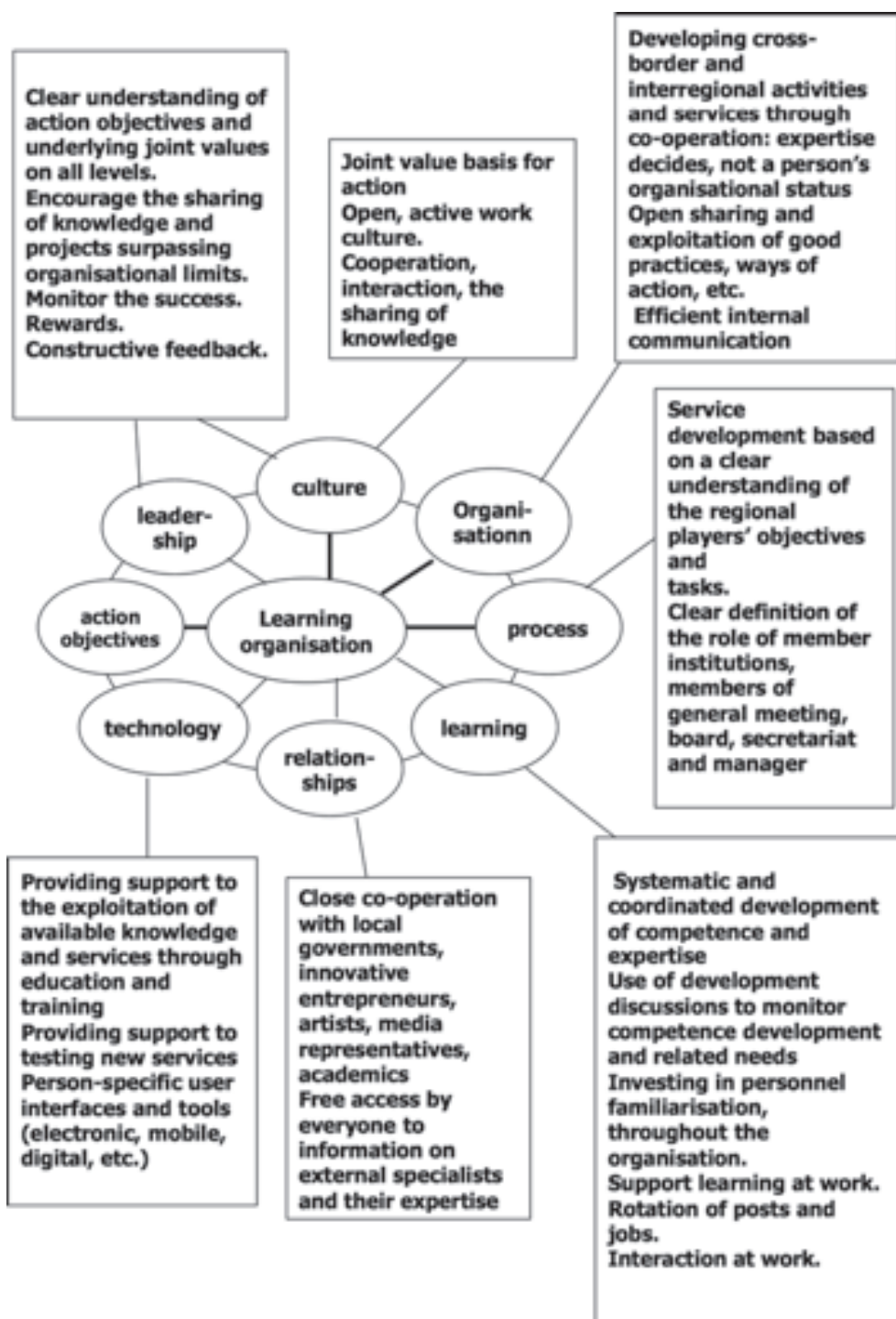


Figure 2: Euregio's target as a learning organization

In order to be a learning organisation, the authors forecast that with new and visible tasks Euregio should grow, both, in capacities and numbers of working force and should remain as one of the leading forces in promoting cross-border regional integration. Further regional development via joint projects developing joint services, common television, joint festivals and marketing is the most possible development for Euregio in the near future. Branding of a region is usually a task for national governments, but as cities play growing role in regional economic development, still a joint marketing system for the region should be established. Branding the region and the organisation is inter-connected. Euregio's brand is connected to fora, seminars, innovative festivals, innovation-promoting activities. Extended and visible projects, like tunnel/fixed link study, serve as branding actions.

Based on the investigations, the authors claim that regional integration should develop towards metropolitan knowledge cross-border region, meaning integration of higher education, high-tech entrepreneurship, services and new media and arts. They will serve as Euregio priorities in the near future.

Further research

Euregio's role as a change agent in knowledge transfer and open innovation requires further research.

Mutual understanding and acceptance of counterparts of triple helix – local authorities, academic circles and innovative entrepreneurs needs further study. There is a need for clarifying the triple helix concept and the added-value of developing such co-operation as well as developing common long term strategies for how to achieve it. For the Euregio staff the study of stakeholders indicated the necessity to repeat the questionnaire and organise interviews with key persons to find out more on Euregio's success factors and brand Euregio better. Institutional cooperation and coherence of strategy documents between Estonia and Finland for knowledge cross-border regional integration is needed.

Conclusion

The cross-border cooperation is one of the most recognised ways to develop border regions (Baldwin and Forslid, 1999; Brodzicki, 2002; Pitoska, 2006). The twenty first century new global economy seems to give metropolitan regions a new central role.

Cross-border cooperation in general refers to “a more or less institutionalised collaboration between contiguous sub-national authorities across national borders” (Perkmann, 2003). One possible and wide-spread cross-border co-operation institutional structure is a euroregion. Euroregions are administrative-territorial structures

intended to promote cross-border cooperation between neighbouring local or regional authorities of different countries located along shared state borders (either land or maritime borderlines).

The authors of the article used the term *euoregion* and *cross-border cooperation (CBC) organisation* synonymously hereafter to denote an area of co-operation of local and regional authorities situated directly at the border, or close to it and collaborating in different sectors. The goal of the article was to analyse knowledge management in creation of knowledge cross-border region, and how cross-border cooperation is enabled via cross-border cooperation institution using the example of Helsinki-Tallinn Euregio.

Our hypotheses were that an institution that aims at developing a cross-border region of knowledge, arts and science should be a developing learning organisation itself and according to the stakeholders there takes place development towards a metropolitan knowledge cross-border region.

Authors used Helsinki-Tallinn Euregio case for an empirical inquiry that analysed a phenomenon of the organisational development and goals within its real-life context. Case study research included qualitative evidence –two questionnaires, elite interviews and strategy documents of Euregio and its partners.

Euregio is the only regional level tool between Estonia and Finland which deals with contact making between universities, enterprises and local governments and whose mission is “to enhance cross-border integration between Helsinki-Uusimaa region and Tallinn-Harju county” and the role is “to promote and assist co-operation inside the twin-region, Euregio supports and promotes inter-regional development and competitiveness, aiming to strengthen the regional knowledge based economic development”.

Euregio strategy documents set frames for Euregio as a learning organisation, using knowledge management. On the bases of the research it may be stated that Helsinki-Tallinn Euregio is expected to focus on innovation and education and new high-tech services, meaning knowledge dissemination and knowledge transfer, its influence provided through top-leaders. The main clientele being from the demand side founding members (board, top-politicians and top-officials, secretariat) and supply side being universities, innovative businesses, new media representatives, artists.

Strong connection to the respondents’ profession or position was noted: university and art representatives did not mention official top-leaders; official top-leaders did not mention middle-level leaders and artists. It may indicate that for official city leaders’ new developments in city entrepreneurship bases is not familiar and ideas of city economic bases are traditional. The under-estimation of the middle-level leaders surprised the authors as the majority of every-day practice is going on between the middle-level leaders.

Euregio was considered as a representation and co-operation body for city authorities, artists and media people, entrepreneurs; politicians and common citizens were not mentioned. It may indicate the fact that mayors and vice-mayors are not considered to be politicians, and the link to common citizen is understood directly.

University-connected respondents tended to consider Euregio as a developer of a science and arts region through people connected to universities and artists and they under-estimated local government and politicians' roles. Respondents being the city or regional officials under-estimated university co-operation and pointed out co-operation between local authorities.

Euregio's success factors were connected with fora, seminars, projects, implementing new ideas. The investigation via in-depth elite interviews showed that regional integration is expected to deepen between the two regions, still the self-identification of the region as a twin-region is not foreseen in the near future. Euregio development is seen by interviewees as continuing and strengthening but not transforming into any other type of organization. The number of respondents who believe in positive qualitative developments indicates that Euregio activities and goals correspond to interviewed partners' expectations. Euregio's brand is connected to fora, seminars, innovative festivals, innovation-promoting activities. Extended and visible projects, like tunnel/fixed link study, serve as branding actions.

Based on the analyses of the interviews we may conclude that the organization with the tasks to enhance regional integration would be a learning organisation as the priorities continuously vary and develop. Such organization should be developing itself. This is proved by the change in priorities from 1999-2001 when learning how to cooperate was stressed until program period 2009 - 2013 when extended infrastructure projects are planned.

The stakeholders foresee the development towards a metropolitan knowledge cross-border region. As it is a complex task, knowledge management should be applied. The twin-region of arts and science (knowledge region) has been stressed but the creation of no other joint institutional structures apart from Euregio are foreseen, eg. joint city councils. Based on the elite interviews integration between the two regions will deepen – television and e- and m-services, integration of university and science institutions; joint city and regional planning activities; job mobility; joint festivals; joint marketing, joint television programmes.

Based on the investigations, the authors claim that regional integration should develop towards metropolitan knowledge cross-border region, meaning integration of higher education, high-tech entrepreneurship, services and new media and arts. They will serve as Euregio priorities in the near future.

Euregio's task in the near future is influencing actions via regional decision-makers to help overcome regional disparities.

References

Association of European Border Regions (2006). *White Paper on European Border Regions final version*. AEBR: Gronau.

Bennet, A., Bennet, D. (2000). Characterizing the Next Generation Knowledge Organization. Knowledge and Innovation. Journal of the KMCI, 1, No 1, pp 8-42

Bomann, J. (2005). *Identity and Institutions Shaping Cross-border Cooperation*. M.A. Thesis, University of Tartu; Estonia.

Brenner, C. (2003). Learning communities in a learning region: the soft infrastructure of cross-firm learning networks in Silicon Valley. Environment and Planning A 2003, volume 35, pp 1809 - 1830

Brunet-Jailly, E. (2002). "Economic Integration and the Governance of Cross-Border Regions: Forms and Functions of Cross-Border Urban Regions - North American Functional Regions, European Territorial Regions". *Paper presented at the annual meeting of the American Political Science Association, Boston Marriott Copley Place, Sheraton Boston & Hynes Convention Center, Boston, Massachusetts, Aug 28, 2002*. <http://www.allacademic.com/>

Crossworks. (2008). R&D Investment. R&D Capacity. R&D Cooperation.

Davenport Thomas H., Prusak. L. (2000). Working Knowledge: How Organizations Manage What they Know

Firestone, J.M. (2001). Key issues in Knowledge Management. Knowledge and Innovation. Journal of the KMCI, 1, No 3. April 15, 2001

Florida, R. (1995). Toward the learning region. Futures 27, pp 527- 536

Grover, V. (2001). General Perspectives on Knowledge Management: Fostering a Research Agenda. *Journal of Management Information Systems*, Summer 2001, 5-21.

Hellriegel, D., Jackson, S.E., Slocum J.W. (2002). *Management: A Competency-Based Approach*. Cincinnati: South-Western

Jacobs, J. (1985). Cities and the Wealth of Nations. Vintage.

Kosonen, R., Loikkanen, K. and Heliste, P. (2004). Kaksoiskaupunkija vai kaupunkipareja? Tapaustutkimukset Helsinki–Tallinna, Tornio–Haaparanta, Imatra–Svetogorsk. Helsinki School of Economics, B-57, HeSE.

Krigul, M. (2004). University Cooperation Development. <http://www.euregio-heltal.org/index.php?pg=sisu&id=106&keel=eng>

Lepik, K-L. (2009). Euroregions as Mechanisms for Strengthening of Cross-border Cooperation in the Baltic Sea Region. Tartu: Trames vol 13, issue 3 pp. 265-284

Malhotra, Y. (2001). *Knowledge Management and Business Model Innovation*. Hershey PA, Idea Group Publishing

Morgan, K. (1997). The learning region: institutions, innovation and regional renewal” *Regional Studies* 31, pp 491- 503

Nonaka, I., Takeuchi, H. (1995). *The Knowledge Creating Company*. New York, Oxford University Press.

Näkymätön näkyväksi – tieto, osaaminen ja Knowledge Management. 1997. (In Finnish) [Making the Invisible Visible Knowledge, Competence and Knowledge Management.] *INFO* 8. Helsinki University of Technology.

O’Keefee, T. (2002). Organizational Learning: a new perspective. *Journal of European Industrial Training*. 26 (2), pp. 130-141.

Paasi, A. (2001). Europe as a process and discourse: Considerations of Place, Boundaries and Identity. *European Urban and Regional Studies*, 8 (1), 7-28.

Paasi, A. (1996). *Territories, Boundaries and Consciousness. The Changing Geographies of the Finnish-Russian Border*. Chichester.

Perkmann, M. (2003). Cross-Border Regions in Europe: Significance and Drivers of Regional Cross-Border Co-operation. *European Urban and Regional Studies* 10: 153-171.

Polanyi, M. (1966). *The Tacit Dimension*. London, UK: Routledge and Jegan Paul.

Prusak, L. and Matson, E. (2006). *Knowledge Management and Organizational Learning: A Reader*, Oxford Management Readers

Schneider-Français, F. and Salambo, L. (2008). *The European Grouping of Territorial Cooperation Guides*. Mission Opérationnelle Transfrontalière (MOT): Paris.

Senge, P.M. (1990). *The Fifth Discipline*. London: Century Business.

Simmie, J. (ed) (1997). *Innovation, Networks and Learning Regions?* (Regional Studies Association, London) <http://www.emeraldinsight.com/Insight/>

ViewContentServlet?Filename=/published/emeraldfulltextarticle/pdf/2300110508,
accessed July 29, 2009

Sveiby, K.-E. (1996). *The Learning organisation*. <http://www.sveiby.com/portals/0/articles/KOS1.html>

Wiig, K (2000). *Knowledge Management in Innovation and R&D.*” AspenWorld 2000 Proceedings, Cambridge, MA: Aspen Technologies.

3. INTRODUCING LIVING LAB'S METHOD AS KNOWLEDGE TRANSFER FROM ONE SOCIO- INSITUTIONAL CONTEXT TO ANOTHER: EVIDENCE FROM HELSINKI-TALLINN CROSS-BORDER REGION

Katri-Liis Lepik, Merle Krigul and Erik Terk

Lepik, K-L., Krigul, M. Terk, E. 2010. Introducing Living Lab's Method as Knowledge Transfer from One Socio-Institutional Context to another: Evidence from Helsinki-Tallinn Cross-Border Region. *Journal of Universal Computer Science*, 16 (accepted, will be published in autumn of 2010)

Copyright: Journal of Universal Computer Science, 2010

Printed with permissions from Journal of Universal Computer Science, 2010

Abstract: The present article aims to describe the Living Lab's method as a method innovation in institutional activities and problems of taking this innovation into use. Possibilities to transfer the Living Lab's method from one country, Finland, to other, Estonia, potential implementation fields and obstacles are studied. Considerations on the process of utilising the Living Lab's method in Tallinn are given. Living Lab's is a human-centric research and development approach in which new technologies are co-created, tested, and evaluated in the users' own private context. This method is coming into use in several countries among which Finland is in the forefront but is not yet in use in Tallinn, Estonia. The empirical part of the research is based on the analyses of fourteen interviews conducted among Tallinn and Helsinki city officials, representatives of technology enterprises, experts of the fields that are internationally most wide-spread Living Labs' testing grounds, using structured interviews and discussions. The article concludes by discussing possibilities to use the Living Lab's method in enhancing Helsinki-Tallinn cross-border co-operation and thus metropolitan regional intergration.

Keywords: cross-border co-operation, Living Lab, Living Lab's method, open innovation, Helsinki-Tallinn Euregio, knowledge transfer, method innovation

Category: M

1. Introduction

Living Labs is a human-centric research and development approach in which new technologies are co-created, tested, and evaluated in the users' own private context.

In practice the Living Lab phenomena can be viewed in different ways, as a special environment for innovations, as a quite general approach and as a method. The process of taking it into use is a complex process with many stakeholders. In this paper, the perspective taken is Living Lab as a method with concrete characteristics. The method of Living Labs started to emerge around Europe in 2000 only. Presently it is only in the process of formulation and hence listing of its main features and demands proceeding from this requires additional separate work. The authors study how to transfer this complicated and developing method including different counterparts from one cultural environment to another and where obstacles occur. As the phenomenon of transfer of innovations from one user (early adaptor) to another is vastly covered by literature since Rogers' classical surveys [Rogers

2003], transfer of innovations from one state or cultural environment to another is less studied, but still studies are available [Koren 2006, Chesbrough 2003]. The object of these studies being usually spontaneous spread of innovation. In this article authors study the method's innovation in the conditions where a special institution created to enhance cross-border transfer of knowledge – Helsinki-Tallinn Euregio - is in existence and is part of the process of assisting in creation of such environment. Rogers proposes that innovation phases include awareness raising, interest, evaluation, trial, and adoption. Helsinki-Tallinn Euregio aims at shortening innovation phases described by Rogers. The article concludes by presenting strategies and tools this institution could use to enhance the faster spread of Living Labs' method in Tallinn, Estonia.

Helsinki-Tallinn Euregio, a cross-border cooperation institution, has some experience in using the "triple-helix principle" in its cross-border activities, but the Living Labs' method has been inaccessible for the organization so far, as the method is well-used in Finland - only in Helsinki there is registered 7 Living Labs in 2009 [Helsinki LL 2009] and not known in Estonia. Relying on the Finnish experience and studying the reasons for economic success of Finland it is visible that there has been consensus in Finland on goal-oriented innovation's environment development for about 10 years: well developed institutions, systematic development of innovation environment and attention to R&D [Hautamäki 2008] The authors presume that transfer of Living Labs' method to Estonia might open up innovation processes, facilitating user involvement and also facilitating citizens' democratic involvement in developing their living and working environment and services.

As the authors have long-time experiences in facilitating co-operation in Helsinki-Tallinn metropolitan region suggestions for the utilisation of the Living Labs method in parts 5 and 6 of this article are based on the special research based on the interviews, but also on authors' experiences and results from numerous other discussions with stakeholders.

2. Living Lab Phenomenon – Some Theoretical Considerations

By Ståhlbröst [Ståhlbröst 2008] the concept of Living Labs started to develop in the late 1990s and one of the first to mention it was the Georgia Institute of Technology, where the technology was developed for capturing a live experience from an educational situation and then provide it to users for later access and review [Abowd 1999]. By Veli-Pekka Niitamo [Nokia 2009] the term of the Living Labs was first used by Professor Bill Mitchell, MIT, Boston, around 1995. Other areas where Living Labs have been used as a concept have been in tests of new technologies in home-like constructed environments [Markopoulos 2000]. Since then, the concept has grown and, today, one precondition in Living Lab activities is that they are situated in real-world contexts, not constructed laboratory settings.

In Living Labs the activities go around the clock, since the user involvement process is situated in users' real-life everyday context [Eriksson 2005]. With such an approach, it follows that users are involved actively in development processes in their own context; hence, the users are facilitated to communicate their needs and requirements on the basis of their everyday experiences. It is assumed that the development and innovation process should be open for all relevant and interested stakeholders. This is influenced by the open innovation approach posed by Chesbrough [Chesbrough 2003], and by the emerging Web 2.0 approach, aiming to facilitate creativity, information sharing, and, collaboration among users [Dearstyne 2007; Leibs 2008; Walters 2007].

Another important aspect of a Living Labs environment is the "living" aspect - people involved in any development project live with the process and constantly check how the process proceeds. Eriksson and others [Eriksson 2005] define Living Labs as a research and development methodology whereby innovations, such as services, products, and application enhancements, are created and validated in collaborative, multi-contextual empirical real-world settings. This definition implies that humans are considered as the collaborative sources of innovation, not merely involved for testing and validating products and services. Inherent in this definition is the assumption that the involvement processes should be carried out in real-world settings and in close connection to research. In this definition, the perspective of Living Labs is that it is a methodology.

Living Labs are considered as a new character in a chain of open innovation. Open innovation needs different mindset and company culture than traditional or closed innovation. In Nokia presentation [Nokia 2005] the end users are considered as co-creators, and user-driven innovation is understood as human-centric innovation. According to Salmelin [Salmelin 2007] the object of Living Labs is societal innovation with technological innovation what indicates that the content is not testing any technological solution in any social environment, but to initiate change in social environment using technological means.

Nowadays Living Labs are "functional regions" where enabling actors have settled down PPP (Public-Private Partnership) of companies, public entities, universities, institutes and individuals. All these actors cooperate for the creation, prototyping, validation and testing of new services, products and systems in real-life environments. These environments may be towns, districts, villages or rural areas, as well as industrial zones. According to the study by Estonian Institute of Futures Studies [EIFS 2008] just a PPP is too narrow, the suggested expression is *public-business-citizen partnership* or *public-private-civic partnership*. A Living Lab is a system for building future economy in which real-life user-centric research and innovation will be a normal co-creation technique for new products, services and societal infrastructure. A Living Lab offers services which enables the users to take active part in research and innovation.

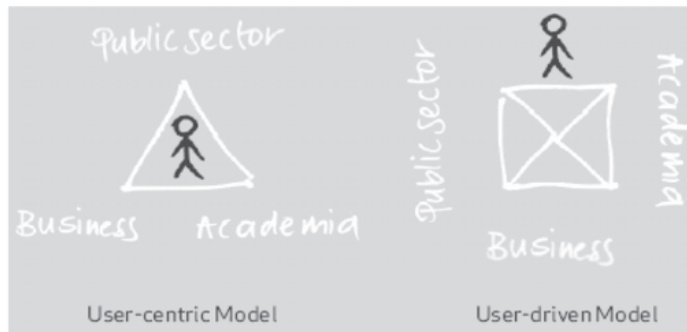


Figure 1: From user-centric to user-driven model (Helsinki LL 2009)

Living Lab is often related to creation of technological systems for usage in urban environment and redesign of urban environments and the role of the public sector, namely the city government is very important here. The typical list of actors in the implementation of the method includes: communities as end-users of innovation processes, companies interested in innovations, especially technology enterprises, universities, research institutions and city government as the main goal setting partner in the process and an organiser. The Finnish experience shows that those technology enterprises that are interested in participation of working out new solutions in order to gain from multiplying them at a later stage are ready to contribute with their own financing in case the environment and partners are motivating. Due to that development costs are not too big for the city and the cooperation is useful to both sides. The city government and city departments have the strategic position in the implementation of the method in public services. If the city government is in the position of an initiator, they need to suggest the idea and provide financing for the process. A focused task and a well planned goal are the key success factors here and the technology enterprises (TEs) should not start working on random ideas.

3. Living Laboratories as Special Kind of Innovation

Living Labs are created in order to work out some innovations but at the same time living labs constitute an innovation in working methods and in the system of cooperation of various stakeholders compared to the earlier methods in the field. Thus, it is possible to presume that obstacles that must be overcome when implementing the method are close to other innovations that are tackled in the framework of innovation theory.

Rogers [Rogers 2003] proposes that adopters of any new innovation or idea can be categorized as innovators, early adopters, early majority, late majority and laggards, based on the mathematically-based Bell curve. The introduction of an innovation goes through the following phases: awareness, interest, evaluation, trial, and adoption. Using of these categories provide a common language for innovation research-

ers. In our case of Living Lab in Tallinn we can position ourselves between the awareness raising stage and the interest. The Living Lab method's innovation is more complex than a product, technology or any other type of innovation as in Living Labs the technology and life-style are interwoven. Special institution like Helsinki-Tallinn Euregio serves in this case as a supporting institution for innovation cross-border transfer and speeding the process of moving from one innovation phase to the next one. The broader positive context includes the general Estonian-Finnish (Tallinn-Helsinki) knowledge transfer and exchange of experiences, which has given positive results in several fields and is generally valued well.

The method is still in development and this status of progress becomes especially important in case of transfer. Not only technology, but ideology, knowledge, institutional cooperation experiences, and ways of thinking and acting need to be transferred. It requires also political support and enhancement of social networks.

4. Study of Living Lab's Method's Transferability and Implementation Peculiarities

After the study visits and seminars of leading city officials, politicians and ICT specialists aiming to introduce Helsinki and Finnish experiences of using the Living labs' method, the necessity for a study of the prerequisites and implementation potential in Tallinn occurred. In the first half of 2008 a special diagnostic methodology was worked out that concentrated on the following main questions:

What could be the general presumptions in Tallinn to become a ground for implementation of the Living Labs method?

Which are the public service sectors in Tallinn where the living lab method could be adopted?

Which areas are considered as potential Living Lab environments?

Is there any potential and motivation of domestic technology enterprises and universities, technology parks and research institutions start to participate actively in potential Living Labs?

Do we find representatives of the local authorities in Tallinn ready to initiate and support the creation of Living Labs?

Can we count on the readiness of Tallinn citizens for active participation as the essence of the method presumes?

The study method was a semi-structured interview. (Annex 1) The interview program consisted of several blocks that contained main and additional sub-questions. The methodology enabled to change the sequence of the questions. It was presumed that the researchers later can classify the answers given to the questions, e.g. to differentiate more perspective fields of use from less perspective, differentiate the existence of preconditions from lack of preconditions to using the method. At the same time the aim of interviews was not only to get answers to the questions

but to stimulate the respondents to develop their own ideas and suggestions how to use the Living Labs method in Tallinn.

14 persons were interviewed, from them 5 were representatives of high-level municipal officials, 9 were well-known experts of the ICT sector, most of them had had earlier co-operation with public sector, included municipal sector. The interviewees were in addition to the authors of the current article Ms Kyllike Tafel and Anna Murulauk from the Estonian Institute of Futures Studies. Interviews were recorded. An average length of the interview was 60 minutes.

As follows, we present the generalised answers to the before mentioned six questions and we also bring out these questions that generated more problems and interpretation options. We presume that bringing out communication difficulties, difficult questions, consciousness of researchers helps to understand the thinking schemes and clichés of the stake-holders and can be beneficial for researchers in the future.

The interviewees were generally optimistic considering Tallinn's suitability to use the Living Labs' method. As positive preconditions it was considered that in several communal fields it is possible to take the next step from existing "yesterday's and the-day-before solutions" to new "tomorrow and after-tomorrow" solutions, just omitting today's solutions. An exception here are ICT companies as Tallinn has acquired in this field quite a leading position. This might be a promising possibility for technology companies who could gain experience in scaling new solutions in several municipalities. It was brought out that city districts in Tallinn are very different what enables to test different systems.

Interviewees were of different opinion on the general innovativeness of the citizens as the precondition for using the Living Labs method. Those who were positive about the innovativeness of the citizens, pointed out that the Tallinn citizens are generally very positive about ICT-based solutions, also, the citizens have gone through big changes in employment and life-style, thus their level of innovativeness and trust towards "new things" cannot be low. Those who were negative pointed out that citizen from Central and Eastern Europe are less active in social interference than in for example Northern Europe and a significant part of younger, more active and successful citizens have due to urban sprawl moved out of the borders of Tallinn. Thus, perspectives for creating new systems lay in the hinterland new settlements rather than in traditional city districts.

Concerning the potential of different fields of Tallinn city life to use the Living Labs method, the viewpoints of interviewees was quite similar. Clearly more potential were considered two fields: first, transportation and logistics, and second, media. A bit less was represented tourism management and providing security. All other fields were mentioned just once or twice. In transportation and logistics possibilities like creation of intelligent cross-roads, but also regulating movement on the main roads were favoured. In media (multimedia as means of communication, but also the

traditional media and interactive new media) television and television based services were favoured by interviewees. New solutions suggested were massive mobile TV, Tallinn tagging, interdisciplinary solutions like new media festivals, new arts, new participatory methods in film producing, audiovisual performances to enlighten specific social/environmental problems and solutions.

Analysing the arguments of respondents preferences about the aforementioned fields we may conclude that they were based on the potential of achieving breakthrough using the Living Labs method rather than indicating that this field is problematic in comparison with other fields in Tallinn. This indicates that prioritising the fields was seen through the prism of perspective and usable technologies, i.e. what high-tech companies exist in Tallinn/Estonia and how active they are. The most perspective technology for using the Living Labs method was overwhelmingly ICT (in some cases IT, in some cases info and telecommunication technologies were stressed). In some cases also electronics and precision mechanics (different measurement and identification systems and optics).

Technology experts tended to consider as the LL environment as a technology city or technopark type of environment: the Ülemiste Technology City where it is attempted to concentrate high-technology companies and connected service-companies was mentioned in the first place; or the Tallinn University of Technology Technology park, not fully understanding that solutions created in specific conditions of a technology cities may not be multiplied in other districts. City officials tended to consider as the LL environment either functional systems like traffic magistrales or certain types of city districts or certain places where people gather in great numbers like business streets or centers.

Analysis of the protocols of the interviews indicates that there exists 8-9 different interpretations of LL environments: physically limited new city space (under construction) or settlement under reconstruction, already existing city district that is distinguished by concentration of certain type of citizens like ecologically orientated, older or younger than the average etc., some functional sub-system from the city space like the transportation system with main transportation channels and cross-roads; concentration of technology creators (individuals and companies), for example in a technology cities, or some other criteria, like high number of visitors or by creative industries densely inhabited city district, or so-called virtual community of certain people.

Concerning before mentioned questions, we may state that the respondents had clear-cut and coinciding opinions, definitely it is not the case concerning the next question about potential concrete living labs' environments: what physical space might be "turned into" a living lab. Firstly, problematic was the concept of an environment, it was possible to interpret it in different way, secondly, occurred that the understanding of the environment differed greatly as understood by municipal officials or representatives of technology companies.

Concerning municipal departments it is possible to state that in some departments interest exists. Several respondents pointed out that the possibility to solve their problems using the LL method exists, still, strong motivation was not visible. During the interviews several actors that diminish interest, were mentioned. First, very strict rules of the public procurement process, it is difficult to organise LL type of flexible cooperation as underbidding mechanisms are not applicable here. Second, the leaders and leading specialists are overloaded with current work, implementing the LL method demands great dedication. It is not clear where to find additional working time. Third, limitations due to current budgetary situation. In the interviews with departments' leaders it was noted that they were informed about Finnish LL experience, but it was difficult for them to understand their own part in a cooperation mechanisms of LL type. As the practical experience was lacking, attempts were made to find analogues with used financial schemes like public-private partnership. This kind of analogues may not work in all cases. Interviews were followed by group works: roundtables and seminars.

In conclusion we should mention that as the topic of the LL was quite new to most of the interviewees. It was possible to think in terms of a field or technology, but not in terms of concrete environment that should be created for the LL. Formation of this type of concrete ideas presumes quite deep understanding of functioning mechanisms. Concerning the potential of domestic high-tech companies, general opinion was that the potential is big in ICT companies, but not enough high with other firms. Their number is too limited. A bigger problem than the number of high-tech companies is their size: majority of Estonian high-tech companies are very small and financially weak. This is a problem: if in more richer countries like Finland the companies are able to invest into development of an idea that may not bring money back immediately and this is extremely important considering the Living Labs. Companies invest money in the future scaling perspective. For Estonian high-tech companies this kind of investment is usually not available. Concluding, there may be interest and potential, but it is difficult to agree on financing mechanisms with the municipality.

5. Design of the Method Transfer and Perspectives of a Cross-Border Living Labs

After getting findings of the study, generalising and discussions on next steps for process design were taken: several roundtables and seminars were organised. In group discussions it was concluded that the logic of implementing the LL method should be as follows:

First, there must be a clear statement from Tallinn high-level leaders, preferably the mayor's level that Tallinn has decided to begin to use the LL concept. Second, as there are several areas where using the LL concept is possible, the next step is to figure out departments and areas where implementing the method might be per-

spective. As the Helsinki's example shows the content of the LL can vary on a very large scale from online photo project in a kindergarten to a whole neighbourhood for elderly citizens. Third, a decision must be made on high level what problems should be solved via LL, and start with not only one, but rather with two to three LLs. The process of creating LLs should be the joint activities of city departments with possible stakeholders. The high-level decision should also state the financing schemes. Thereafter, it may occur relevant to create a umbrella organization that brings along (high)technology companies. It occurred that immediate implementation was difficult.

The findings indicated that basic preconditions for implementation of the method in Tallinn were existing, still the study indicated several weak elements in the implementation potential. There was a danger of a deadlock: to go on with the process presumed from the City Government and especially from the Heads of those City Boards where the LL method was perspective, great effort to work out exact tasks to start the project and involve the citizens. This instead of general comprehension formed realistic ideas that were necessary for city development and attractive to domestic technology companies. This presumed guarantees that the process is serious and companies and people just do not waste time. At the same time there was lack of certainty of the the amount of technology companies who were motivated and financially able to invest in city development processes. It was also difficult to estimate how big is the workload for key officials to initiate and supervise this type of projects, and it was also unclear what cooperation model between the city government and technology companies, and city government and involved people was. In other words, to continue the innovation process, it was necessary to move from the awareness raising phase to trial phase (by Rogers). There was a too big amount of unanswered questions, even with the Finnish experience available.

Under these conditions the idea of creating a LL not just in Tallinn and with Estonian counterparts, but attempt to create cross-border, Estonian-Finnish LL is very ambitious: there is a need to transfer not only method, but the people having the experience using the method. Differently from several other forms of open innovation LL is considered as strongly connected to the region. It presumes strong contacts between the involved citizens as co-authors of the service and understanding of the certain city districts' possibilities by technology companies. Generally this is an obstacle to operate other country's LL. Different lifestyles and culture are also obstacles.

In Tallinn-Helsinki case cross-border LL seems promising:

- geographical proximity, everyday contacts possible, if necessary;
- culturally close countries, with intensive contacts over last 20 years;
- several Finnish high-level technology companies have LL experience.

Differently from Estonian companies they have financial coverage for participating in technological innovations and ability to multiple the solutions worked out in the

LL. Several Finnish companies have daughter companies in Tallinn what made participation in the LLs even less complicated.

In the diagnostic study Estonian experts were pessimistic about foreign companies motivation to participate in Estonian networks of innovation, included LL. It was stated that the foreign companies motivation to participate in local initiatives is low and they are supposed to act in accordance with mother company's strategy. This criticism is relevant only until we speak about contacts with daughter companies, our aim is, vice versa, to involve mother companies in Finland and get them interested to involve local daughter companies in Estonian LL.

The reputation of Finland as a technology country and Finnish technology companies is high in Estonia. Finnish participation in Tallinn LLs not only increases the capacity of the LLs, but also guarantees stakeholders and all citizens positive attitude. For Finnish companies Tallinn were a good testground: East-European cities are specific markets for new technologies and new ways of organising citizens life. Developing new solutions, different from Finnish and involving citizens of Tallinn and multiplying them later in Central- or Eastern Europe or in other places, is a promising business idea, being useful to Tallinn at the same time.

Creation of a cross-border LL is institutionally a complicated task that presumes assistance and intermediating. Helsinki-Tallinn Euregio's mission is to enhance (Lepik, Trames) knowledge transfer between two metropolitan regions and has longstanding experience in the area. First negotiations between Helsinki and Tallinn, initiated by Euregio, have proved interest from both sides towards the idea. The usage of a LL to work out solutions for TwinTV, Caring TV, TV-based services, intelligent traffic cross-roads, innovative services for elderly are under discussion. Institutional forms of these LLs are under discussion, one option might be joint stock company with stakeholders from Tallinn and Helsinki.

6. Discussion and perspectives for future research

Empirical evidence presented in the article is based on the experience in Helsinki and Tallinn metropolitan regions, but as creating of the LL in Tallinn is still in process, it is impossible to conclude if the method is transferable within this region or not. Still, as the authors are of the opinion that findings and conceptions of this research may be of wider interest, we suggest two possible research directions that might develop our research.

First, the results of our diagnostic research on obstacles and favouring actors of creating LLs and on transferability of the LL method from one socio-cultural environment to another may indicate a more general character and may be valid in wider context than Tallinn/Estonia. This means that it may be expedient to study if these actors are valid in other East-European cities. Still, it is not clear, if our re-

search methodology is repeatable in this type of study. In our case it was presumed that the interviewee is at least to some extent informed about the essence and functioning of the LLs. This was the case in Tallinn, as several events for introducing the method had taken place, but this presumption may not be in force with many cities. One solution may be to improve the interview methodology more operational towards greater formalisation, so that it was possible to ascertain with an interview or questionnaire the findings of an implementation potential elements (for example availability of a high-tech company, cooperation experience between the authorities and the companies, innovativeness potential of citizens, potential activity in seeking solutions to environmental problems etc.) even in the case when the respondent does not have information on LL method or implementation potentials. In this case an important element is missing: interest of potential users. Interest occurs with knowledge on the method's potentials.

We set a hypothesis that part of actors found in the study may be even more general and valid than in cities with post-soviet history, but transfer takes place from a region with higher technological or institutional level to lower. In literature the creation of LLs is interpreted as a process that is going on within the borders of the same country. It is presumed that information spreads from one country to another, but the LL operates in cooperation of one and the same city government and technology company from the same country. Our article states that combining conditions other opportunities open. If this presumption finds proof in practice, it will open up new perspectives of developing cross-border clusters of technology companies. Due to this, an additional hypothesis should be set to define which combinations of basic actors might occur relevant in creating the LLs. In case of Helsinki and Tallinn cultural and geographical proximity are fostering actors, but it is possible to build combinations on other basic actors.

Acknowledgement

The authors of would like to thank Mrs Külliki Taffel Viia's and Anna Murulauk's assistance in carrying out the interviews. The research was supported by ETF grant 7537

References

Abowd, G. 1999. Classroom 2000: An Experiment with the Instrumentation of a Living Educational Environment. *IBM Systems Journal* 38 (4), 508-530.

Chesbrough, H. 2003a. The Era of Open Innovation. *MIT Sloan Management Review*, 44 (3) 35-42.

Chesbrough, H. 2003b. Open Innovation. The new Imperative for Creating and Profiting from Technology. Boston: Harvard Business School Press.

Dearstyne, B. W. 2007. Blogs, Mashups, & Wikis Oh, My! *Information Management Journal*, 41 (4), 24-33.

Estonian Institute for Futures Studies. 2008. Possibilities to Use the Concept of Living Laboratories in Tallinn. Report. Tallinn: Estonian Institute for Futures Studies.

Estonian Institute for Futures Studies. 2008. Theoretical background of the Living Laboratories. Concept and overview of the Literature. Report. Tallinn: Estonian Institute for Futures Studies.

Eriksson, M., Niitamo, V. P., and Kulkki, S. 2005. State-of-the-Art in Utilizing Living Labs Approach to User-centric ICT innovation - a European approach. http://www.vinnova.se/upload/dokument/Verksamhet/TITA/Stateoftheart_LivingLabs_Eriksson2005.pdf (22.07.2009)

Hautamäki, A. 2008. Innovaatiopolitiikka usien haasteiden edessä. (New Challenges in Innovation Policies) Sitra report, Helsinki, Electronic publication (22.07.2009)

Helsinki Living Lab. (homepage). www.helsinkilivinglab.fi (20.05.2009)

Koren, A. 2006. Knowledge transfer and innovations in a global world: reflections on head-teachers training project. *International Journal of Innovation and Learning*, 3 (2), 186-197.

Leibs, S. 2008. Web 2.0, Confusion 1.5. *CFO* 24 (3), 33-34.

Markopoulos, P., and Rauterberg, G. W. M 2000. LivingLab: A White Paper, 35, I. A. P. R.

Niitamo, V.-P. 2009. Presentation on a Living Labs' seminar, organised by the Estonian Development Foundation. www.arengufond.ee (accessed 09.12.2009).

Lisbon Strategy Post 2010: Regional strategies for innovation. A network event of the Lisbon Regions and ERRIN, 18th June 2009, Brussels.

Nokia presentation 2005. Open Service Innovation in Living labs. www.Nokia.fi (accessed 09.12.2009)

Rogers, E. 2003. Diffusion of innovations. New York: Free Press.

Salmelin, B. 2007. Open Innovation and eServices - Living Labs as facilitating environment. Co-Creative Research and Innovation to Connect the Lisbon Strategy to People. European Network of Living Labs Event, Guimarães, Portugal, 21-22 May.

Ståhlbröst, A. 2008. Forming Future IT - The Living Lab Way of User Involvement. Doctoral Thesis, Luleå University of Technology.

Walters, B. 2007. What is web 2.0 and what does it mean to you? *New Mexico Business Journal*, 31 (10) 24-24.

Annex 1

Guide for Conducting Interviews to Investigate the Usage of Potential of Living Lab Method in Tallinn

We address you with this interview as we consider you to be a person who has previous knowledge about Living Lab method and its usage in Finland and/or other countries. As Living Lab method is quite complicated and its implementation cases vary then we would like to start with specifying if we understand similarly the term of the Living Lab method. [In case the respondent claims that he/she needs additional clarifications, then additional short instruction by the interviewer follows according to the prepared explanatory materials.

For the beginning one should ask generally if Tallinn has needs and prerequisites for using the LL method in the near future. If so, then the respondents should explain why he/she thinks this way.

In which urban areas would it be reasonable to use this method in Tallinn and what are the justifications?

[Questions 1-2 about the most potential implementation areas.] How do you envision the implementation of this method in the particular urban area? What kind of new solutions would be reasonable to try to create with this method? How do you envision the so called lab environment in this particular case?

Is there critical mass of local technology enterprises that could participate in such activities? Can you name concrete companies that could be interested? What could prevent those companies from participating? Could universities and technology park be interested in participating? In what way?

Reputedly one of the features of the Living Lab method is the participation of clients (in this case citizens, people working in the city or visiting it) in creation of new products, systems or environment. Can we presume that Tallinn's citizens could be active participants in future Living Labs? In which cases? Why do you think so? What could be the motives for participation?

[A question to the respondent from a city department.] Do you think that top city officials are motivated and ready to take up the leading role in the from the city's side in the future Living Labs? Are there problems in addition to the lack of information about the method that could prevent it? Which problems could occur?

GENERAL CONCLUSIONS

The theoretical bases, overview of the methods used, and studies carried out are presented in Section 1.4 and Chapter 2 and 3 of the dissertation. The concrete results of the author's studies are also covered in Chapter 3.

A number of general conclusions are noted here about the various institutional forms of cross-border cooperation, their potential dynamics and interconnectedness.

- Cross-border cooperation of border regions between neighbouring countries is important for regional development. Application of such cooperation with the assistance of EU is an increasing trend among European countries.
- During the implementation period of the research in the Baltic Sea Region, the networks created by local and regional authorities for enhancement of cross-border cooperation were more numerous than the special CBC cooperation bodies. The networks' activities were initially planned for short periods and financed mainly on project-basis by EU grants. Financing was not based on a sustainable model. It was not evident from the financing perspective which institutional form would function best. Networks' activities were often driven by external factors (EU financing) and were quite noncommittal. Movement toward the mature stage in cross-border cooperation is attributable mostly to strengthening of the internal mechanisms of the cooperating networks, and, secondly, to the creation of special institutionalized arrangements for development of cooperation.
- The Helsinki-Tallinn Euregio experience shows that for institutionalised form of cooperation it is necessary to reach agreement on the resolution of the differences in the institutions and legal systems of the two countries. CBC organization tends to be established and goals set in situations where various types of cooperation exist between regions with no experience in developing and coordinating systemic cooperation. Partners' visions for integration and its coordination are often divergent and preliminary.
- Key issues addressed in arranging a CBC organisation's activities are the harmonizing of vertical (public sector institutions) and horizontal (stakeholders) cooperation, and the different organisational cultures of the countries. During the launching phase of a CBC organisation, focus is on inclusion of the various stakeholders in the cooperation and the organisation's planning and management. A concern is the existence/non-existence of representation of other stakeholders (in addition to the local and regional authorities and/or their associations that established the organisation) on the Board of the CBC organization.
- Transition to the knowledge-based economy is topical in cities and regions of EU. Question becomes: in what way can institutionalised form of CBC facilitate the transition? From the Helsinki-Tallinn Euregio study it is possible to conclude that focusing on the enhancement of innovation-centred economy is possible, but rather complicated due to a variety of reasons. For example, "triple-helix" type of cooperation (representatives of public and private sectors, and research institutions participate) works well when the goal is to transfer experi-

ences from one country to another. Cooperation becomes more problematic, however, when geographic proximity of partners is not essential, as in the case of university cooperation. It is prospective to enhance such cross-border cooperation forms where technology companies have a key role in development processes. Such forms of cooperation may include collaboration in technology parks or “Living Labs” in various urban environment fields. In the “triple-helix” model, citizens are not included in the development processes. “Living Lab” has the potential for being the next phase from “triple-helix” and it can encompass citizens in the creation of urban environment.

As a result of the research, the author submits a generalization of the forms of cross-border cooperation proceeding from various development stages of a network – from an initial stage to a mature organisation.

The upper part of the table below provides an overview of the organisation of CBC, and the characteristics of CBC institutional mechanisms on its two development stages. Subsequent sections in the table present the two mechanisms that can be developed in the framework of a CBC organisation if a more complex CBC is in focus. The models are based on the author’s experience gained in a real-life working environment.

Research showed that it is possible to create an institutional framework for cooperation. Models are submitted on how a “mature” CBC organisation provides suitable conditions for building broader cross-border cooperation in the form of cross-border “triple-helix” and “Living Lab” types of cooperation, and how a cross-border “Living Lab” can be developed into a free-standing legal entity.

Currently, it is possible to generalise only about launching innovation-centred cooperation in the cross-border context, and not yet about analysis of the effectiveness of such cooperation activities. In future research, the focal point could move from the initiation stage in innovation processes to the role of a CBC organisation as facilitator of on-going development and innovation processes, and the effectiveness of such activities.

Table 2. Institutionalised Cross-Border Cooperation Models (*constructed by the author*)

Models	Characteristics	Focus	Merits and drawbacks
CBC organisation /euroregion (initial stage) <i>Study 1</i>	<u>Legal status</u>: organisation usually governed by mutual agreements; no formal joint governing body, no formal joint management body. <u>Organisations</u>: a network of public sector institutions (regional and local authorities) with minimal staff in servicing functions in adjacent regions/along common borders; <u>Staff</u> from both countries not involved. Other societal groups/stakeholders not involved in governance. <u>Financing</u>: activities are project based, dependent on grant programmes. <u>Functions</u>: mainly ad hoc project based activities, political-cultural contact- making	Selected activities in cooperation framework: cross-border people-to-people contacts; information exchange and mutual visits of representatives of the CBC organisation's members	<u>Merits</u>: Flexible form for starting cooperation presuming that the interest of participants is strong <u>Drawbacks</u>: Difficult to reach consensus on organisational and financial mechanisms if no joint legal form Weak platform for societal changes due to absence of members from other sectors Financing insufficient and not sustainable Scope of activities too narrow to have impact on regional development
CBC organisation /euroregion (mature stage) <i>Study 1</i>	<u>Legal status</u>: a special joint body governed by agreements or a legal body governed by public law following national legislation of one of the member countries or in the form of European Grouping of Territorial Cooperation or European Cross-Border Grouping (in the future) working on the basis of a working plan compiled by members; usually joint management body, staff; involvement of other stakeholders in the society on project basis <u>Organization</u>: membership of public sector institutions (regional and local authorities or national + regional and local authorities) in adjacent regions/along common borders; in some mature forms membership can also	General development of a region in its broadest sense; possibility to select various focal areas for a certain development period e.g. tourism development, innovation	<u>Merits</u>: Joint legal form providing scope for joint actions Access to more sustainable public funding via membership fees Broader range of activities and stronger sense of partnership and identity as a joint region than in the initial stage <u>Drawbacks</u>: Involvement of representatives of other sectors only on <i>ad hoc</i> and project bases

	include universities, development foundations/associations, think tanks, etc. <u>Financing:</u> membership fees, national and EU grant programmes <u>Functions:</u> activities ranging from practical activities for improvement of living conditions in the cross-border area to strategic and spatial planning, region's economic and infrastructure development		
Cross-border triple-helix cooperation <i>Study I and II</i>	<u>Legal status:</u> set of multi-lateral agreements supplemented by informal cooperation, the organisation based on a mature CBC organisation <u>Organization:</u> partnership of public and private sector institutions (regional and local authorities, companies, and/or their associations, main actors being universities and research institutions) in adjacent regions/along common borders; active involvement of private sector representatives and academic institutions <u>Financing:</u> membership fees, national and EU grant programmes, earmarked funding from national governments, research grants <u>Functions:</u> broad spectrum of activities	Development of broad cooperation between public sector, private sector and research institutions, and application of scientific achievements for the region's growth and competitiveness; universities are central players	<u>Merits:</u> An established CBC organisation facilitating triple-helix cooperation; in principle, a good form of cooperation for creation of synergy effects; a good form for realisation and application of ideas generated in universities; potentially strong impact on regional R&D <u>Drawbacks:</u> Complicated management mechanism due to a broad partnership from various sectors; more diverse financing mechanisms needed to guarantee balanced cooperation

Models	Characteristics	Focus	Merits and Drawbacks
Cross-border Living Lab <i>Study III</i>	Legal status: during initial phase, cooperation is regulated by a set of multilateral contracts or informal agreements, based on the mature CBC organisation; in the mature stage, a formal legal joint body of interested parties is possible Organization: during the initial stage project based cooperation of participating partners, in the mature phase partnership of public and private sector institutions and academic institutions; permanent staff, a company with multiple cooperation directions serving the cooperation cluster Financing: main financing provided by participating technology companies, during the initial phase also based on mature CBC organisation's financing; additional financing from public sector Functions: forum for selected projects for joint cross-border service development	Selected projects for creation of a living environment in an innovative way, technology companies and local inhabitants as central actors	Merits: The need for improving the living environment in society and innovative technological solutions are found for the implementation Direct continuous involvement of citizens/users in the cross-border activities and service development; Combination of public and private funding (including venture capital, etc.) Technology companies might request rather little financing from the public sector as they are mainly interested in replicating the innovations worked out Drawbacks: Complicated to launch and implement due to multiple interests and partners Consensus-building complicated due to involvement of partners from diverse sectors Complex intellectual property rights

REFERENCES

- Ache P., Andersen H.T., Maioutas T., Raco M., Ta'an-Kok T. eds. 2008. *Cities between competitiveness and cohesion: discourses, realities and implementation*. Springer Science + Business Media B.V.
- Alas R. 2006. Changes and Learning in Estonian Organizations. *Problems and Perspectives in Management*, 1, 86-97.
- Almann, A. 2007. The Area of Responsibility of a Local Government at County Level and Possibilities for the Legal Organisation Thereof. *Juridica*, Tartu. 125-130.
- Amin, A. and Thrift, N. 1994. Living in the global. *Globalisation, institutions and regional development in Europe*. Edited by A. Amin and N. Thrift. Oxford: Oxford University Press, 1-22.
- Anderson, J. and O'Dowd, L. 1999. State Borders and Border Regions, *special issue, Regional Studies*, 33 (7).
- Anderson, J., O'Dowd, L. and Wilson, T.M. eds. 2003. *New Borders for a Changing Europe: Cross-border Cooperation and Governance*. London: Frank Cass.
- Baldwin, R., Braconier, H., Forslid, R. 1999. Multinationals, Endogenous Growth and Technological Spillovers: Theory and Evidence. *CEPR Discussion Papers* 2155. C.E.P.R. Discussion Papers.
- Ballon, P., Pierson, J., Delaere, S. 2005. Test and experimentation platforms for broadband innovation: Examining European practice. The 16th European Regional Conference by the International Telecommunications Society, Porto, Portugal, 4-6 September.
- Brodzicki T. 2002. Is The Membership In The EU Going To Induce Regional Convergence? Paper provided by Economics of European Integration Department, Faculty of Economics, University of Gdansk, Poland, Working Papers no 0203, <http://gnu.univ.gda.pl/~keie/ao3.doc>, (10.02.2009).
- Castells, M. 1996. *The rise of network society. The Informational Age: Economy, Society and Culture*. Blackwell: Oxford.
- Chandler, A. 1998. *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. Cambridge, MA: MIT Press.
- Chesbrough, H. 2003. *Open Innovation. The New Imperative for Creating and Profiting from Technology*. Boston, Massachusetts: Harvard Business School Press.

Church A. and Reid P. 1999. Cross-border Co-operation, Institutionalization and Political Space Across the English Channel. *Regional Studies*, 33 (7), 643- 655.

Council of Europe. 2009. Protocol No. 3 to the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities concerning Euroregional Co-operation Groupings (ECGs) CETS No.: 206.

Dürschmidt J. 2006. So near yet so far: blocked networks, global links and multiple exclusion in the German–Polish borderlands. *Global Networks* 6 (3), 245–263.

Eriksson, M., Niitamo, V-P., Kulkki S. 2005. State-of-the-art in utilizing Living Labs approach to user- centric ICT innovation - a European approach. http://www.vinnova.se/upload/dokument/Verksamhet/TITA/Stateofheart_LivingLabs_Eriksson2005.pdf (17.09.2009)

Florida, R. 1995. Towards the learning region. *Futures* 27, 527–36.

Grabher G. and Stark D. 1997. Organising diversity: evolutionary theory, network analysis and postsocialism. *Regional Studies* 31, 533- 544.

Green paper on Territorial Cohesion, COM (2008) 616, 3 October 2008.

Gualini, E. 2003. Cross-border Governance: Inventing Regions in a Trans-national Multi-level Polity. *DISP* 152, 43-53.

Hooghe L, Marks G. 2001. *Multi-level governance and European integration*. New York: Rowman & Littlefield Publishers, Inc.

Hospers, G.J. 2006. Borders, Bridges and Branding: The Transformation of the Oresund Region into an Imagined Space. *European Planning Studies*, 14 (8).

Jessop, B. 2000. The state and the contradictions of the knowledge-driven economy. *Knowledge, space, economy*. Edited by J.R. Bryson, P.W. Daniels, N.D. Henry, and J.S Pollard. London: Routledge, 63–78.

Johnson H.A.W. 2008. Roles, resources and benefits of intermediate organizations supporting triple helix collaborative R&D: The case of Precarn. *Technovation*, 28 (8), 495-505.

Kosonen, R. and Loikkanen, Heliste, P. 2004. *Kaksoiskaupunkija vai kaupunkipareja? Tapaustutkimukset Helsinki–Tallinna, Tornio–Haaparanta, Imatra–Svetogorsk*. (In Finnish). Helsinki School of Economics, B-57, HeSE.

Kramsch, O. 2002. Navigating the spaces of Kantian reason: notes on cosmopolitical governance within the cross-border Euregios of the European Union. *Geopolitics*,

6 (2), 27–50.

Lawson, C., Moore, B., Keeble, D., Lawton, Smith, H. and Wilkinson, F. 1998. Inter-firm links between regionally clustered hightechnology SMEs: a comparison of Cambridge and Oxford innovation networks. In *New technology based firms in the 1990s*. Edited by W. During and R. Oakley. London: Paul Chapman, 181–196.

Leydesdorff, L., Dolfsma W., Van der Panne G. 2006. Measuring the knowledge base of an economy in terms of triple-helix relations among ‘technology, organization, and territory’. *Research Policy*, 35 (2), 81-199.

Lundvall, B. ed. 1992. *National Systems of Innovation; Towards a Theory of Innovation and Interactive Learning*. London: Pinter.

Perkmann, M. 2003. Cross-border regions in Europe: significance and drivers of regional cross-border co-operation. *European Urban and Regional Studies*, 10, 153–171.

Perkmann, M. 2007. Construction of new territorial scales: a framework and case study of the Euregio cross-border region. *Regional Studies*, 41 (2) 253-266.

Pierre, J. and Peters, B.G. 2000. *Governance, Politics, and State*. New York: St. Martin Press.

Pitoska, E. 2006. Euro-Balkan Cooperation: Reasonable Doubts Regarding the Developing Contribution of European Initiatives in the Weaker Borderland Regions, Paper presented at 46th Congress of the European Regional Science Association, Volos, 28-26 August.

Popescu G. 2008. *The conflicting logics of cross-border reterritorialization: Geopolitics of Political Geography*, 27.

Porter E.M. 1990. *Competitive Advantage of Nations*. New York: Free Press.

Ruoppila S. 2000. *Possibilities of Joint Public Services Provision between the Cities of Helsinki and Tallinn*, Net Effect Ltd and Tallinn University of Technology Report.

Wills J., Parker M., Wills G. 2009. *Social and Community Informatics and Social Theories of Networks*. United Kingdom: University of Southampton, Wealthy Mind Publishers.

SUMMARY IN ESTONIAN

PIIRIÜLESE KOOSTÖÖ INSTITUTSIONAALNE KORRALDUS JA SELLE ROLL REGIONAALARENGUS

Töö aktuaalsus ja uudsus

Tänapäeva ühiskonna arengut iseloomustav rahvusvahelistumine on kaasa toonud riikide ja nende eri piirkondade koostöövormide mitmekesisuse ning esitab uusi väljakutseid ka traditsiooniliste halduspiirkondade ja haldusüksuste koostöö täiustamisele, arvestades ühiskonna muutunud vajadusi.

Majanduslikud ja tehnoloogilised muutused ning inimeste suurenenud liikumine tekitavad vajaduse ka regioonide parema toimimise järele: nad peavad suutma toime tulla majanduse nüüdisajastamise survega ning olema konkurentsivõimelised teiste regioonidega. Riigipiirid pole enam läbitamatuteks takistusteks ning see omakorda on muutnud majanduslikku ja poliitilist vastastikust suhtlust. Käivitunud restruktureerimise protsessid ning Euroopa Liidu integratsiooni arengudünaamika tekitavad vajaduse uute institutsionaalsete lahendite, korraldus- ja koostöömodelite järele.

Territoriaalse ühtekuuluvuse (*territorial cohesion*) teema ja selle suurendamise meetodid on praegusel ajal tähelepanu keskmes ka Euroopa Liidus (EL) peetavates debattides. Üheks enam tunnustatud viisiks arendada piiriäärseid regioone ning suurendada territoriaalset ühtekuuluvust Euroopas loetakse piiriülest koostööd (Baldwin ja Forslid 1999; Brodzicki 2002; Pitoska 2006).

Doktoritöö aluseks olnud uurimuste käigus analüüsis autor piiriülese koostöö vorme ning selle korraldusmudeleid, mis kogumis loovad aluse piiriülese koostöö toimivale organisatsioonile ning mõjutavad oluliselt regionaalset arengut. Piiriülese koostöö korraldusmudelid on viimasel kümnendil saanud põhitermineid Euroopa territoriaalsete suhete muutuste dünaamikat ning regionaalarengut puudutavates arutlustes (OECD 2003).

Teoreetilises kirjanduses käsitletakse seda teemat tavaliselt mitmetasandilise valitsemise (*multi-level governance*) teema raames. Riikide halduskorralduses saab regionaalne tasand üha enam mõjujõudu nii ülesannete kui ka õiguspädevuse aspektist. Selle tasandi arengut toetava institutsionaliseeritud piiriülese koostöö kaudu on võimalik saavutada Euroopas sotsiaalse, majandusliku ja territoriaalse integratsiooni eesmäärke. Mõistet „regioon“ kasutatakse antud töös kahes tähenduses: riigisisestest piirkonnadest ja erinevate riikide riigisisestest piirkondadest moodustunud piiriülestest piirkonnadest.

Doktoritöö aluseks olnud uurimuses võeti täpsema vaatluse alla piiriülese koostöö jaoks Euroopa Liidus loodud spetsiaalsed organisatsioonilised vormid (inglise keeles

euroregion/euregio). Neid organisatsioone käsitleb autor piiriülese koostöö üldise raamistikuna. Koos euregiote raames rakendatavate konkreetsete organisatsiooniliste lahenditega moodustavad sellised organisatsioonid spetsiifilise mehhanismi regionaalse koostöö arendamiseks, mida selles doktoritöös uuriti.

Piirülestest regioonide, piiriülese koostöö (PÜK) ja piiriülese koostöö organisatsioonide kohta leidub käsitlusi väga mitmetes distsipliinides ning neid teemasid on kajastatud väga erinevatest vaatenurkadest lähtuvalt (Anderson ja O'Dowd 1999; Kramsch 2002; Anderson *et al.* 2003; Perkmann 2003; Paasi 2003; Malchus 2004; Pikner 2008). Kõige enam käsitletavateks teemadeks on majandussuhted ja areng, kultuurilised-etnilised kontaktid, sotsiaalne, poliitiline ja geograafilisest asendist tulenev problemaatika. Euroopa PÜK-organisatsioonide on küllalt põhjalikult dokumenteeritud ja analüüsitud Markus Perkmann (2003). Paraku hõlmab tema uurimus vaid aastatel 1958-1999 tegutsenud organisatsioonide praktikat. Hilisema perioodi kohta autorile teadaolevalt taolist analüüsi pole erialases kirjanduses avaldatud.

Traditsiooniliselt on piiriülestest regioonide probleemide tekkepõhjuseid tuletatud nende perifeersest asendist (Gualini 2003; Kosonen ja Loikkanen 2004; Popescu 2008; Cappellin 1993; Dürrschmidt 2006). Piiriülest korraldusmudelit on sel juhul käsitletud kui võimalust vähendada tõmbekeskuse ja ääremaa erinevusi (Popescu 2008, Dürrschmidt 2006). Doktoritöö aluseks olnud uurimustele seati mõnevõrra erinev fookus. Helsingi ja Tallinna pealinnaregioonidest koosnevat piirkonda käsitletakse ambitsioonikamast perspektiivist: nimelt uue rahvusvahelise kasvukeskuse väljaarendamise perspektiivist. Varem on pealinna hõlmavat piiriülest regiooni käsitletud Viini ja Bratislava näitel (OECD 2003).

Empiiriliste uuringute kavandamise käigus on autor sünteesinud mitmes erinevas teoreetilises käsitluses (mitmetasandiline korraldusmudel, õppiv regioon, koostööpõhine regionaalne innovatsioon) olevaid skeeme.

Kuna varasema perioodiga võrreldes hakkavad regioonide arendamisel ja nende konkurentsivõime tõstmisel enam tähtsust omandama õppimise ja innovatsiooniprotsesside toetamise küsimused, siis lähtuti doktoritöö uurimustes ja esitatud järeldustes sellistest teoreetilistest käsitlustest nagu õppiv regioon ja koostööpõhine regionaalne innovatsioon.

Doktoritöö raames tehtud uurimuste uudsus põhineb alljärgneval:

a. Vaatluse alla ei ole võetud piiriülese koostöö tegemine mitte tema seni tavapärase eesmärgipüstituse raames, milleks on lihtsalt piiriülestest regioonide perifeersest asendist tulenevate miinuste vähendamine võrreldes tuumikregioonidega (*core region*), vaid selline koostöö, mis on suunatud ühise rahvusvahelise tähtsusega innovatsioonipõhise kasvupooluse loomisele. Juhul kui piiriülestesse koostöösse ei ole kaasatud mitte lihtsalt piiriäärseid linnasid või regioonid, vaid osalevate riikide oluliste arengukeskuste hulka

kuuluvad linnad, eriti pealinnad, on taoline eesmärgipüstitus äärmiselt asjakohane ja aktuaalne, samas aga väga vähe uuritud.

b. Piiriülese koostöö ja selle institutsionaalset korraldust on käsitletud uudsel viisil, integreerides selliseid nüüdisaegseid teoreetilisi käsitlusi nagu mitmetasandiline valitsemine (*multi-level governance*), õppivad regioonid (*learning regions*) ja koostööpõhine regionaalne innovatsioon (*collaborative regional innovation*).

c. Piiriülese koostöö institutsionaalse mehhanismi arengut ja probleeme on käsitletud stadiaalsel põhimõttel liikumisena vähemarenenud vormidelt ja lihtsamatelt ülesannetelt enamarenenud vormidele ja ambitsioonikamatele ülesannetele. Autor on näidanud, mis laadi juhtimisproblemaatika võib esile kerkida, liikudes algtasemelt “küpsematele” staadiumidele.

d. Autor on analüüsinud selliste oluliste innovaatilise koostöö vormide rakendamist keerukates piiriülese koostöö tingimustes, mille kogemust on seni käsitletud traditsiooniliselt ühe riigi raames (*triple-helix cooperation, Living Labs*). Autor on uurinud, kuidas piiriülese koostöö edendamiseks loodud organisatsioon saab kaasa aidata taoliste keerukate koostöövormide rakendamisele piiririooselt naaberriikide vahel.

e. Autor on analüüsinud sellist uut teemat nagu piiriülese koostöö korraldamiseks loodud spetsiaalse rahvusvahelise organisatsiooni funktsioneerimist, probleeme ja juhtimist, s.h. juhtimisprobleeme seoses organisatsiooni loonud institutsioone esindava juhatuse ja selle sidusorganisatsioonidega.

Piiriülese koostöö organisatsiooni olemasolu regioonis aitab luua teisi konkreetsema tasandi institutsionaalseid mehhanisme. Siinses töös on vaatluse alla võetud nn “kolmikspiraali” tüüpi koostöö ja “eluslaborite” loomine. “Kolmikspiraali” tüüpi koostöö tähendab koostööd avaliku sektori, erasektori ning teadusasutuste vahel regioonis, mis edendab koostööd uurimis- ja arendustegevuses ning teadussaavutuste ja nende rakendamisega seotud arengutes. “Eluslabor” on uudseks ja perspektiivikaks meetodiks, mis võimaldab kasutada tehnoloogilisi lahendeid ja innovatsiooni ning aitab need siduda regionaalarengu jaoks oluliste muutuste saavutamise eri majandussektorites ja sotsiaalelu sfäärides. “Eluslabori” eesmärgiks on olla struktuuriks ning korraldusmudeliks, mis aitab lõpptarbijatel/kasutajatel osaleda uute innovatsiooniteenuste ja -toodete ning ühiskondliku infrastruktuuri loomisel. “Eluslaborit” käsitletakse töös kui järgmist võimalikku etappi peale “kolmikspiraali” tüüpi koostööd.

Doktoritöös esitatud uuringute tulemused rikastavad arusaama PÜK-organisatsioonidest kui olulistest regionaalarengu protsesside sekkumismehhanismidest ning uute arenenumate ja keerukamate piiriülese koostöö vormide edendajatest. Autor käsitleb mitmesuguseid innovatsiooni tugisüsteeme piiriülese koostöö kontekstis ning avatakse nende süsteemide erinevused ja omavahelised seosed.

Töö eesmärk ja uurimisülesanded

Doktoritöös püütakse selgitada piiriülese koostöö (PÜK) organisatsioonide rolli regionaalarengu ja innovatsiooni protsessides. Töö aluseks olnud empiirilises osas uuritakse PÜK-organisatsioone ja nende toimimist rahvusvahelise võrdlusuuringu raames, detailsemal kujul Helsinki-Tallinn Euregio näitel. Viimane on Eesti ja Soome vahel loodud PÜK-organisatsioon.

PÜK-organisatsioonid võivad edendada suhteid mõlemal pool riigipiiri ning seega toetada regiooni lõimumist. Töös ei uurita regionaalset integratsiooni ennast, vaid nimelt integratsiooni süvendamiseks loodud institutsionaalsete mehhanismide toimimist. Uuritakse nii PÜK-organisatsiooni tunnusjooni kui ka tema tegevust innovatsiooni edendamisel.

Esimeseks uurimisülesandeks on kirjeldada PÜK-organisatsioonide ehk euroregionide tunnusjooni, nende tegevust takistavaid tegureid ja potentsiaali regionaalset arengut soodustavate institutsionaalsete mehhanismidena. Uuritakse ka PÜK-organisatsioonide juhtide väljakutseid organisatsiooni arenguprotsessides. PÜK-organisatsioonid jaotatakse “algastmel” ja “küpseteks” organisatsioonideks. Rahvusvaheline võrdlusuuring eri PÜK-organisatsioonide liikmelisuse, rollide, valitsemisvormide, juriidiliste ja finantsaspektide kohta on taustauuringuks edasisele selles valdkonnas tehtavale uurimistööle.

Teiseks uurimisülesandeks on analüüsida konkreetsemalt ühe PÜK-organisatsiooni institutsionaalset ülesehitust ja toimimist Helsinki-Tallinn Euregio näitel, et selgitada lähemalt taolise organisatsiooni eesmärgistamise, vastuolude ja väljaarendamisega seotud küsimusi.

Kolmandaks uurimisülesandeks on analüüsida, kuidas edendada konkreetsema sihitusega PÜK-vormide loomist, nagu piiriülene “kolmikspiraali” tüüpi koostöö ja piiriülene “eluslabor”, kasutades selleks PÜK-organisatsiooni loodud eeldusi.

Doktoritöös on esitatud üldistatud ülevaade institutsionaliseeritud PÜK-mudelitest kui regionaalpoliitika sekkumismehhanismidest koostöökä ühiste piiridega riikide vahel. Ülevaate koostamisel on lähtutud koostöö õiguslikest, organisatsioonilistest, finantsilistest ja funktsionaalsetest aspektidest.

Esitatud PÜK-organisatsioonide korraldusmodelite ja dimensioonide süstematiseeritud alused annavad PÜK-organisatsioonidega seotud otsustajatele ning juhtimisega seotud inimestele nende tööks vajalikku informatsiooni. Selle süstemaatika koostamisel on arvestatud ka EL-i ja Euroopa Nõukogu õigusraamistikuga.

Uurimistöö ülesehitus ja meetodid

Töös esitatud uurimusküsimuste lahendamiseks on autor teinud uurimusi, mida on kirjeldatud ning tulemused ja järeldused avaldatud rahvusvahelistes teadusajakirjades. Doktoritöö võtab kokku kolmes artiklis avaldatud tulemused. Nendeks uuringuteks (doktoritöös tähistatud rooma numbritega I-III) on:

Lepik, K.-L. 2009. Euroregions as Mechanisms for Strengthening of Cross-border Cooperation in the Baltic Sea Region. (Euroregioonid kui piiriülese koostöö tugevdamise mehhanismid Läänemere regioonis). *TRAMES*, 13 (3), 265–284.

Lepik, K.-L., Krigul, M. 2009. Cross-border cooperation institution in building a knowledge cross-border region. (Piiriülese koostöö institutsioon piiriülese teadmusregiooni kujundajana). *Problems and Perspectives in Management*, 7 (4), 33-45.

Lepik, K.-L., Krigul, M. Terk, E. 2010. Introducing Living Lab's Method as Knowledge Transfer from One Socio-Institutional Context to another: Evidence from Helsinki-Tallinn Cross-Border Region. (Eluslabori kui ühest sotsiaal-institutsionaalsest kontekstist teise teadmusülekande meetodi tutvustamine Helsinki-Tallinn piiriülese regiooni näitel). *Journal of Universal Computer Sciences* 16. (aktsepteeritud, avaldatakse 2010. a sügisel).

Empiiriliste uuringute tarvis tuli doktoritöös läbi töötada eri teooriavaldkondi käsitlevaid allikaid, milles puudutati mitmetasandilise korraldusmudeli, õppiva regiooni ja koostööpõhise regionaalse innovatsiooni teoreetilisi aluseid ja probleeme. PÜK-organisatsioonide ülesehitust ja toimimist on töös analüüsitud nii rahvusvahelise võrdlusuuringu raames kui süvendatud kujul organisatsiooni Helsinki-Tallinn Euregio näitel.

Töös on kasutatud nii traditsioonilise empiirilise uuringu kui ka tegevusuuringu (*action research*) meetodit. Tänu autori pikaajalisele tööle organisatsioonis Helsinki-Tallinn Euregio on olnud võimalik teha nn sekkuvaid aktsioone (algatused, konverentsid, foorumid, ümarlauad, seminarid, tegevuskavad, strateegiad), mille mõjusid on töös lähemalt uuritud.

Teise ja kolmanda uurimisülesande raames korraldati ka hulk küsitlusi ja intervjuusid, mida töös ei ole käsitletud mitte niivõrd eraldiseisvate empiiriliste uuringutena, kui võrd tegevusuuringu ja toetava uuringu kontekstis.

Kolmekümne viie rahvusvahelise PÜK-organisatsiooni võrdlusuuringu eesmärgiks oli selgitada välja erisused ja sarnasused PÜK-organisatsioonide vahel ning nende töös esinevad suuremad takistused ja organisatsioonide potentsiaal. Töös kirjeldatakse PÜK-organisatsioonide erinevusi sõltuvalt nende “küpsuse” astmest ehk siis kirjeldatakse “algtaasel” olevaid ning “küpsaid” organisatsioone. Samuti on uuritud

neid organisatsioone õiguslikust, organisatsioonilisest, finantsilisest ja funktsionaalsest aspektist lähtuvalt (uuringud I ja II).

Helsinki-Tallinn Euregio puhul uuriti kvalitatiivsete tõendite (strateegiad ja arengukavad) alusel PÜK-organisatsiooni tunnusjooni, samuti selle õiguslikku, organisatsioonilist, finantsilist korraldust ning toimimist reaalses keskkonnas.

Helsinki-Tallinn Euregio võtmeisikutele, Euregio asutajatele ja partneritele esitatud küsimused hõlmasid Euregio valitsemist - suhteid eri sektorite partnerite vahel, võimumehanisme ning organisatsiooni rolli ühiskonnas. Süvaintervjuud 14 eksperti (üliskool, kohalik omavalitsus, ettevõtjad) korraldati ekspertidega mõlemalt poolt Soome lahte, et uurida regionaalse integratsiooni aspekte Helsingi ja Tallinna pealinnapiirkondade vahel, mis on PÜK-organisatsiooni Helsinki-Tallinn Euregio sihtalaks. Eraldi uuriti Euregio kui institutsiooni perspektiive ja arengutrende (uuring II).

“Eluslabori” rakendamiseks vajalikud diagnostilised intervjuud tehti 14 isikuga, kes on kaasatud või võiksid olla potentsiaalselt kaasatud selle meetodi juurutamisse Tallinna ja Helsingi piiriüleses koostöös (uuring III).

Osa uurimistöö tulemustest on saadud ühe objekti, Helsinki-Tallinn Euregio süvendatud uurimise põhjal. Nende tulemuste tõlgendamisel on raske hinnata seda, kuivõrd need on laiendatavad teistele piiriülestele koostööorganisatsioonidele. Loogiliselt võiks eeldada nende laiemat rakendatavust, samas võivad seda piirata erisused eri PÜK-organisatsioonide arengutasemetes ja kvalitatiivsed erinevused nende vahel.

Käsitlemaks regionaalset arengut ja innovatsiooni edendamist spetsiifilises rahvusvahelises kontekstis, on kasutatud nii organisatsiooniteooria kui ka haldusjuhtimise teooria komponente ja neid omavahel lõimitud.

Teoreetiline raamistik piiriüleste koostööorganisatsioonide uurimiseks

Mitmetasandiline valitsemine ja piiriülesed koostööorganisatsioonid

Detsentraliseerimisprotsesside tulemusel Euroopa riikides on tunnetatav regioonide mõjuvõimu tugevnemine. Kohalikud ja regionaalsed omavalitsused püüavad mõjutada poliitilisi otsustusprotsesse, et olla globaalse majanduse tingimustes konkurentsivõimelisemad. Võimu üleandmist riigi tasandilt teistele haldustasanditele on kirjeldatud kui “mitmetasandilist” või “mitmekihilist” valitsemist (Hooghe 2001). Regionaalses arendus- ja innovaatilises tegevuses osalevad erinevad organisatsioonid ja asjaosalised (*stakeholders*), kes koordineerivad oma tegevust ja moodustavad koostöövõrgustikke.

Peale avalikku sektorit esindavate subjektide (*actors*) on oluline koht ka ettevõtetel ja ettevõtete esindajatel, kuna ettevõtete edukus ei sõltu mitte ainult neist endist,

vaid oluliselt ka valitsemisstruktuurist ja -institutsioonidest. Ettevõtete aspekt leiab töös käsitlemist koostööpõhise regionaalse innovatsiooni kontekstis.

EL-i tingimustes lisanduvad mitmetasandilise valitsemise mustrisse peale üleriigilise valitsemistasandi ka EL-i tasand ja regionaalse arengu poliitika ühiseks elluviimiseks loodud PÜK-organisatsioonid. Mitmetasandiline valitsemine on dünaamiline protsess, millel on horisontaalne ja vertikaalne dimensioon, kuid see ei hajuta mingil viisil poliitilist vastutust.

EL-i regionaalse ja territoriaalse ühtekuuluvuse saavutamise peamiseks vahendiks on tõukefondid ning neid kasutatakse mitmetasandilise valitsemise käigus, samas on need innovaatiliseks mooduseks rakendada subsidiaarsuspõhimõtet. Läänemere regiooni riikide õiguslike raamistike analüüs näitab, et erinevalt Hooghe'i (2001) kartusest, et riigi suveräänsus hajub eri valitsemistasandite vahel, kus piirkondliku tasandi haldusorganid kasutavad Euroopa poliitikate mõjutamisel eri vorme ja kanaleid, säilitavad riiklikud institutsioonid piisava kontrolli PÜK-organisatsioonide üle.

Doktoritöös käsitletakse piiriülest koostööd ja selleks loodud korraldusmudeleid mitmetasandilise valitsemise raames. Mitmetasandilisest valitsemisest on viimasel kümnendil saanud põhitermin kirjeldamaks territoriaalsete suhete muutusi Euroopas. Edasine diskussioon PÜK-organisatsioonide üle on otseselt seotud mitmetasandilise valitsemise teooriaga. Perkmann (2003) eristab kahte piiriülest vastastoimet: piiriülene koostöö kui "suuremal või vähemalt määral institutsionaliseeritud koostöö eri piirkondlike haldusorganite vahel üle riikide piiride" ja piiriülene regioon, mis on "seotud territoriaalne üksus, mis koosneb piiriülese koostöö algatustes osalejate haldusterritooriumitest" (Perkmann ja Sum 2002). Euroopas on piiriülesed regioonid enamasti kohalike ja regionaalsete omavalitsuste hallatavad territooriumid, mis on seotud EL-i mitmetasandilise regionaalpoliitika juurutamise võrgustikesse (Perkmann 2003, Anderson, O'Dowd ja Wilson 2003). Üheks laialt levinud institutsionaalseks PÜK-i struktuuriks on euroregioon, mis on haldus-territoriaalne struktuur PÜK-i edendamiseks naabruses asuvate riikide kohalike ja regionaalsete omavalitsuste vahel, millel on ühiseid riigipiire.

PÜK-organisatsioonide arengu analüüsi põhjal võib väita, et esmalt on need teatud aega tegutsenud kui partneritevahelised vabatahtlikud koostöövõrgustikud, mis on koostöö edenedes hiljem institutsionaliseeritud. Koostöövõrgustikes on partnerid tegutsenud vastastikku kokkulepitud reeglite alusel ning "toimides isegi mitte avaliku õiguse, vaid eraõiguse alusel" (Malchus 2004). Doktoritöös analüüsitakse Euroopa Liidus ja Euroopa Nõukogu poolt kehtestatud õiguslikke raamistikke, mis aitaksid ületada mõningaid juriidilisi taksitusi PÜK-organisatsioonide töös. Kriitiliselt on suhtunud avaliku sektori domineerimisse PÜK-organisatsioonide töös (Scott 1999). Autori tehtud empiiriline uuring (uuring I) kinnitab selle kriitika õigsust mõningal määral. Töös (uuring I) analüüsitakse EL-i määrust Euroopa Territoriaalse Koostöö Rühmituse kohta ning Euroopa Nõukogu raamkonventsiooni lisaprotokolli Euroregioonide Koostöö Rühmituse kohta. Mõlemad õiguslikud raamistikud

võimaldavad anda piiriülesele koostööle juriidilise vormi, kaasates sellesse laiemat partnerlust avaliku sektori esindajate kõrval. Laiema partnerluse eelis on eeskätt selles, et suureneb PÜK-organisatsiooni kompetents.

Kuigi teoreetilistes allikates vastandatakse korraldusmodeli dünaamilist külge (*governance*) tema staatilisele küljele (*government*) ning rõhutatakse just nimelt protsessile ja tulemustele, mitte formaalsele institutsionaalsele korraldusele suunitlust, on autori analüüsile tuginevalt oluline ka institutsionaalsete süsteemide ülesehitus. Selle kaudu määratletakse rollid ja omavaheline suhtekorraldus regionaalarengut mõjutavate poolte vahel.

Organisatsiooni valitsemise puhul on oluline, et pooled teeksid koostööd ühiste eesmärkide nimel. Helsinki-Tallinn Euregio kui võrgustiku staadiumist institutsionaliseeritud staadiumisse jõudnud PÜK-organisatsiooni variant on hea näide analüüsima PÜK-organisatsiooni ülesehitust, toimimist ja interaktsiooni eri valitsemistasandite vahel.

Vajadused moderniseerida PÜK-organisatsiooniga hõlmatud regiooni majandusstruktuuri seavad uued nõuded piiriülese koostöökorralduse mudelitele. Märkimisväärselt regioonide konkurentsivõime suurendamise vahendiks on võime minna üle teadmispõhisele majandusele. Sellega seoses tekib vajadus toetada õppimist ja innovatsiooni - järelkult peab ka PÜK-organisatsioonide tegevuses leidma olulise koha innovatsiooniks ja ühiseks õppimiseks vajalike võrgustike ning töövormide loomine.

Õppiv regioon ja piiriülesed koostööorganisatsioonid

Majanduse üleilmastumine vähendab riikide kontrolli majanduse üle ning avab regioonid üha enam rahvusvahelisele konkurentsile. See on tekitanud vajaduse regionaaltasandi sekkumise järele poliitika kujundamises, mille käigus regioonid saavad võimaluse kujundada oma arenguperspektiivi kiirete tehnoloogiliste muutuste ning kapitali mobiilsuse tingimustes (Amin ja Thrift 1994). Üleminekul teadmispõhisele majandusele on regioonide võimet toetada õppimist ja innovatsiooniprotsesse peetud oluliseks konkurentsieelise allikaks (Amin ja Thrift 1994; Jessop 2000). Innovatsiooni saab kujutada sotsiaalse tegevusena, mille korral hulk asjaosalisi osaleb kollektiivses õppeprotsessis. Avalik poliitika saab kaasa aidata väliste allikate leidmisele ning tugevdada asjaosaliste enesearendamisvõimet soodsa õppimiskeskonna loomise ning koostöötakistuste eemaldamisega. Innovatsioon ja areng on osaliselt kattuvad kontseptsioonid. Kuna autor käsitleb regionaalarengut toetavat innovatsiooni, siis käsitletakse innovatsiooni kõige laiemas tähenduses. Innovatsioon antud kontekstis ei tähenda mitte ainult radikaalseid muudatusi, vaid see võib leida aset kõikides majandusvaldkondades, toetades seega teadmispõhist majandusarengut. Õppiva regiooni teooria tekkis 1990-ndatel (Florida 1995) reaktsioonina juhtivate tööstusriikide üleminekule teadmispõhisele majandustegevusele. Õppivate regioonide teke peegeldab

sotsiaalse ja institutsionaalse mõõtmise tähtsuse kasvu majanduses (Lawson *et al.* 1998). Porter on oma teoses “Competitive Advantage of Nations” (1990) märkinud, et riigid ja regioonid saaksid suurendada oma konkurentsieelist, arendades spetsialiseerunud omavahel seotud majandusharude komplekse ning neid ideid - kas ainult ideid? - rakendatakse jätkuvalt linnade ja regioonide tasandil. Uued väljakutsed majanduses tingivad ka vajaduse uute valitsemismudelite järele (Brenner 1999; Scott 1998).

Doktoritöös on omavahel püütud ühendada teoreetilised lähenemised, mis käsitlevad innovatsiooni edendamist regioonide majanduskasvu saavutamiseks ning haldusjuhtimise teoorias käsitletavaid koostöö korraldusmudeleid. Amin ja Thrift (1994) on rõhutanud ettevõtluse ja innovatsiooni toetamise tähtsust just sotsiaalset ja institutsionaalset mõõdet arvestades ehk ettevõtete ja institutsioonide koostööd ning vastastikust usaldust süvendades. Üha tähtsamaks peetakse liikumist avatud innovatsiooni mudeli poole (Chesbrough 2003), mida käsitletakse uuringus III. Innovatsiooni tähtsustumine majanduses on toonud kaasa paradigma muutuse: individuaalselt õppimiselt on mindud üle kollektiivsele õppimisele. Üha tihedamini kasutatakse termineid “õppiv regioon” ja “õppiv organisatsioon” (*learning organisation*). Sealjuures saab õppiva organisatsioonina käsitada nii organisatsiooni kitsamas tähenduses kui ka organisatsiooni ümber loodud koostöövõrgustikku. “Kuna õppeprotsessid vajavad jätkuvust ja stabiilsust, siis neid soodustab ruumiline lähedus” (MacKinnon 2002), mis saab oluliseks ka piiriülese koostöö ja PÜK-organisatsioonide jaoks. Autori uuring II käsitleb PÜK-organisatsiooni kui õppivat organisatsiooni. Paljude autorite käsitusel on ühine aspekt see, et õppiv organisatsioon luuakse, kui õppetulemused institutsionaliseeritakse (Alas 2006).

Piiriülesest õppimisest kasu saamine eeldab valitsemisstruktuuride olemasolu, mis edendavad piiriülest koostööd. Perkmanni sõnul ei valitse piiriüleseid regioone traditsioonilisel viisil, vaid paljude avaliku ja erasektori asjaosaliste vaheliste võrgustike abil ning sõltuvalt nende sotsiaal-majanduslikest suhetest (Perkmann ja Sum 2002). Kuna õppiva regiooni definitsiooni võib rakendada nii arenenumatele kui ka vähem arenenud regioonidele (Florida 1995), siis sobib see hästi PÜK-organisatsioonidega, mis on samuti eri arengutasemel (uuring I). Tihedat koostööd ühiskonna eri sektorite vahel, nagu erasektor, avalik sektor ja kodanikuühiskond, millele lisanduvad teadusasutused, nimetatakse “kolmikspiraali” tüüpi koostööks (Etzkowitz 1998; Leydesdorff *et al.* 2006; Johnson 2008). Need sektorid täiendavad üksteist innovatsiooniprotsessi käigus. “Küpsemad” PÜK-organisatsioonid toimivad “kolmikspiraali” tüüpi koostöö platvormina (uuring I).

Õppiva regiooni edendamine tugevdab omakorda ka piiriüleseid sidemeid ning võrgustikke, mis toetavad innovaatilist tegevust ning paremat teadmiste ja oskuste kasutust. PÜK-organisatsioonidel on oluline roll teadmistevahetuse ning koostööpõhise regionaalse innovatsiooni korraldamisel ning seega ka regiooni konkurentsivõimesse panustamisel.

Koostööpõhine regionaalne innovatsioon

Alates 1990-ndatest ei kujuta uurimis- ja arendustegevus ega innovatsioonipoliitika omaette valdkondi, vaid on vahendid saavutamaks laiaulatuslikke poliitikaeesmärke, nagu majanduskasv, konkurentsivõime ja võrdsus. Regionaalne institutsionaalne kontekst on oluliseks teguriks võrgustike loomisel, mis soodustavad teadmiste ja koostöö edendamist olemasolevate materiaalsete ja inimressurssidega (MacLeod 2000; Malmberg ja Maskell; 2006). Teadmised, innovatsioon ja loovus on muutunud odavast tootmisest olulisemaks ning Euroopa regioonid võistlevad omavahel inimressursi ning ettevõtete ligimeelitamisega. Klastripoliitika (Porter 1990) on regionaaltasandi poliitikavahendeid, millele tuginedes saab luua ettevõtete võrgustikke ja tingimusi innovaatiliste lahenduste väljatöötamiseks. Varem keskendus klastripoliitika teadmistepõhisele tööstusele “tugevates” klastrites, kuid innovatsioonipoliitika paradigma muutus on toonud kaasa “rätsepatöö” (*taylor-made*), mis on rakendatav konkreetsetes regioonis ja vastavalt regiooni arengutasemele ja vajadustele. Kuigi me elame globaliseerunud maailmas, on suur osa tegevusest ikkagi lokaalne, sest me elame oma igapäevast elu oma konkreetsetes lokaalses keskkonnas ning seetõttu on vaja ka “rätsepatööna” pakutavaid teenuseid. Paljud avalikest teenustest on tarvitavad ainult kohalikul tasandil, nagu koolid, tervishoid jne. (Eriksson *et al.* 2005).

Innovatsioon on otseselt seotud teadmiste leviku ja uute tehnoloogiatega ning PÜK-organisatsioonil on oma roll innovatsiooniprotsesside ning “eluslabori” kontseptsiooni edendajana, kus lõpptarbijaid kaasatakse uurimis- ja innovatsiooniprotsessidesse ning uute toodete, teenuste ja ühiskondliku infrastruktuuri loomisse. “Eluslabor” võib oma olemuselt olla nii keskkond (Ballon *et al.* 2005), meetod, käsitlus (De Leon *et al.* 2006; Eriksson *et al.* 2005) kui ka innovatsiooniplatvorm (Niitamo *et al.* 2006). Siinses uuringus (III) käsitletakse “eluslaborit” innovatsiooni meetodina. Õppiva regiooni teoorias on olulisel kohal kohalik teadmus (*knowledge*) ning selle kasutamine konkurentsieeliseks, koondades regioonides kohalikke ettevõtteid tööstusharude kaupa klastritesse. Ettevõtete ja avaliku sektori institutsioonide geograafiline lähedus “vaikiva teadmuse” (*tacit knowledge*) kasutamisel on olulise tähtsusega ka piiriülese koostöö mudelites (uuring III) ning oluline PÜK-organisatsioonide kontekstis, kus esineb peamiselt “vaikiv teadmus” (uuring II). Vaikiva teadmuse all mõistetakse eelkõige töötajate töö käigus saadud oskusi ja kogemusi, mida on raske teistele edasi anda. See hõlmab sageli kultuurilisi eripärasid ning organisatsioonis töötavatele isikutele teadaolevaid tavasid, mida on keeruline organisatsiooniväliste isikutele edastada. Autori hinnangul võib “eluslaborit” pidada ka üheks innovatsioonisüsteemi institutsionaalseks vormiks, kus avaliku sektori, erasektori ja kolmanda sektori esindajad teevad koostööd. Seega võib ka innovatsiooni pidada kollektiivseks õppeprotsessiks, kus eri sektorite esindajate teadmised üksteist täiendavad.

Piiriülene koostöö ei ole ainult tehniliselt ühe või enama valitsemissüsteemi sidumine, vaid ka eri sotsiaalsete ja väärtussüsteemide kokkusobitamine. Koostöösidemete tekitamine on erinev näiteks ettevõtete vahel, ettevõtete ja teadusasutuste, avaliku sektori institutsiooni ja ettevõtte või avaliku sektori ja teadusasutuse vahel.

Arendusprotsessid lähevad keerukamaks, kui eri sektorite koostöö tulemusena välja pakutud ideid hakatakse rakendama uudsete meetoditega ning tooteid ja teenuseid looma koos kodanike/lõpptarbijatega. Eriti keerukas on kogu taolist koostööd korraldada piiriüleses kontekstis. PÜK-organisatsiooni roll selliste protsesside juhtimisel on nii võimalik kui ka vajalik.

Uuringute põhitulemused

Rahvusvaheline võrdlusuuring andis võimaluse võrrelda PÜK-organisatsioonide tunnusjooni, kitsaskohti ning arengupotentsiaali. Uuriti nende ülesehitust, vormi, rahastamist ja funktsiooni. Uuringu tulemused andsid aluse liigitada PÜK-organisatsioonid “algtaasel” olevateks ja “küpseteks”.

PÜK-organisatsioonide õiguslik staatus

Piiriülest koostööd toetavad sarnased lahendused eri riikide õiguskorras. Vastanute hinnangul takistab partnerite ebavõrdne juriidiline staatus koostöö tasakaalu ning mõjutab EL-i raha saamist projektidele, kuna programmides osalemiseks peab organisatsioon olema juriidiliselt registreeritud.

Uurimistöö koostamise ajal ei olnud EL-i regulatsioon Euroopa Territoriaalsetest Koostöö Rühmitustest (ETKR) veel vastu võetud ning seega ükski PÜK-organisatsioon ei olnud seda veel rakendanud. ETKR annab võimaluse ühtse avalik-õigusliku vormi kasutuselevõtuks, mille kohta lõplik otsus jääb EL-i liikmesriigi enda teha. Praeguseks ajaks on ka Euroopa Nõukogu võtnud vastu Madridi raamkonventsiooni (territoriaalsete kogukondade ja võimuorganite vahelise piiriülese koostöö Euroopa raamkonventsiooni) 3. lisaprotokolli, mis võimaldab Euroregionide Koostöö Rühmituste (EKR) loomist, kuid mõnevõrra lihtsamatel alustel kui ETKR. Sarnaselt ETKR-ga võib EKR kaasata ainult avalikes huvides asutatud üksusi, mida kontrollib ja rahastab avalik sektor. EKR-i liikmeteks ei saa selle regulatsiooni kohaselt olla erasektori esindajad. Samas peab organisatsiooni registreerimise kohaks siiski valima ühe liikmeks oleva partneri asukohariigi, mis aga võib tekitada väärarusaamisi eri riikide partnerite vahel tulenevalt riikide halduskorralduse ja halduskandjate pädevuse erisustest. Eeltoodu kehtib ka EKR-i kohta. ETKR võimaldab koostööd ka riikidega, mis ei kuulu EL-i, kui seda lubavad nende riikide seadused, ning EKR-i puhul saab sõlmida eraldi raamlepinguid selliste riikidega. Mõlemad raamistikud jätaavad siiski vaba valiku organisatsioonide sisu ja tegevuste küsimustes.

Organisatsioon

Institutsionaliseerituse tase on PÜK-organisatsioonidel erinev. “Algtasemel” PÜK-organisatsioonid koosnevad ainult kohalikest ja regionaalsetest võimuorganitest, “küpsed” organisatsioonid hõlmavad ka mittetulundusühingute (MTÜ), ülikoolide, kaubanduskodade jne esindajaid. “Küpsed” PÜK-organisatsioonid on enamasti võtnud

kasutusele “kolmikspiraali” tüüpi koostöömudeli ning praktiseerivad selle eri variante valitsemises. Uurimistöö käigus korraldatud küsitlustele vastanud avaldasid kartust, et “kolmikspiraali” tüüpi koostöömudeli kasutus võiks muuta juhtimisstruktuuri liigselt keerukaks ning formaalsustega kaasnevate kohustuste täitmine takistaks reaalseid koostöötegevusi.

Rahastamine

PÜK-organisatsioone rahastatakse EL-i, riiklike, regionaalsete või kohalike programmide ja projektide kaudu või eraisikute ja erasektori vahenditest. Mõned “küpsed” PÜK-organisatsioonid toimivad ka EL-i programmide juhtorganitena, kuid enamik osaleb siiski programmides projektide esitajatena. Koostöövormina registreeritud PÜK-organisatsioone rahastatakse enamasti liikmemaksudest ning võrgustikuna toimivaid organisatsioone peamiselt projektipõhiselt.

Funktsioonid

Partnerite funktsioonide ja kompetentside võrdsus on PÜK-organisatsioonides olulised. PÜK-organisatsioonide rollid ja funktsioonid on erinevad, sõltudes piiriülese regiooni vajadustest ning piiriülese koostöö arengustaadiumist. Riikide keskvalitsused tavatsevad suhtuda PÜK-organisatsioonide juhtide hinnangul piiriülesesse koostöösse kui rahvusvahelistesse suhetesse. Keskvalitsused ei tavatse näha PÜK-organisatsioonide rolli regionaalarengut mõjutava mehhanismina. PÜK-organisatsioonide puhul, mis piirnevad EL-i mitte kuuluvate riikidega, esineb suundumus, et riikide valitsused kontrollivad piiriüleseid koostöösuhteid kartuses, et PÜK-organisatsioonid tegelevad nii-öelda oma välispoliitikaga, mis võib olla vastuolus riigi välispoliitikaga.

Helsinki-Tallinn Euregio arengulugu ja selle analüüsi põhjal tehtud järeldused

Helsinki-Tallinn Euregio (Euregio) on koostöövõrgustikust kujunenud ja 2003. aastal mittetulundusühinguna registreeritud PÜK-organisatsioon. MTÜ asutajateks on Helsingi linn, Uusimaa Liit, Harjumaa Omavalitsuste Liit, Tallinna Linn ja Harju Maavalitsus. Kuna Eesti poolelt püüti leida Uusimaa Liidule kompetentsidelt vastav partner, siis kaasati organisatsiooni liikmeskonda Harjumaa Omavalitsuste Liidu kõrval ka Harju Maavalitsus Eesti riigi esindajana. Taoline lahend on mõnevõrra problemaatiline, kuna riigi valitsusasutus maavalitsuse kujul osaleb nende probleemide lahendamisel, mis kuuluvad kohalike omavalitsuste pädevusse. Sel teemal on peetud regulaarseid diskussioone Siseministeeriumiga. Taoline haldus-territoriaalsete süsteemide erinevus Eesti ja Soome vahel on mõningaseks takistuseks ka PÜK-organisatsiooni tasakaalustatud koostööle.

Euregio on registreeritud Eestis siinseid õigusakte järgides ning põhikirjaliselt on välditud ka vastuolusid Soome vastavat valdkonda reguleerivate õigusaktidega. Euregiol on

partnerite asutatud ning rahastatud büroo asukohaga Tallinnas ning esindajaga Helsingis. Euregio missiooniks on edendada piiriülest integratsiooni Helsingi-Uusimaa ning Tallinna-Harjumaal vahel. Hiljem on seda missiooni täpsustatud viidetega toetada regioonidevahelist konkurentsivõimet ja regionaalset teadmistepõhist majandusarengut. Euregiot rahastatakse liikmemaksudest ning EL-i programmide kaudu.

Mõnevõrra kiirendas üleminekut koostöö institutsionaliseerimisele (PÜK-organisatsiooni loomisele) 1990-ndate lõpus avanenud EL-i-poolne rahastamisvõimalus, mida sai kasutada üksnes eraldi organisatsiooni olemasolu korral. Institutsionaliseerimise protsess kestis üle kolme aasta Eesti ja Soome seaduste ühitamise vajaduse tõttu. Organisatsiooni liikmeskonda esindavad juhatuse tasandil poliitikud (sealhulgas abilinnapead ja omavalitusliitude juhid) ning sekretariaadi tasandil ametnikud. Oma tegevustes on Euregio algusest peale loonud töögrupe, kuhu on olnud kaasatud ülikoolide ja arendusorganisatsioonide esindajad ning hiljem ka ettevõtete esindajad. Euregio tegevuse suunitluseks koostatud strateegiates on organisatsiooni rollidena sõnastatud järgmised: koostöö vahendaja, edendaja ja algataja. Tegevused on ulatunud projektitaotluste vormistamistest kuni uusimate ja innovaatiliste trendide tutvustamiseni valitud koostöövaldkondades. Nagu näitas Euregio võtmeisikute uuring (uuring II), leiti, et Euregio peaks keskenduma väga laiale tegevusareaalile alates teadmiste vahetusest regionaalse planeerimise valdkonnas kuni sotsiaalteenusteni.

Helsinki-Tallinn Euregio arengudokumendid (kolmeks aastaks koostatud strateegiad ja üheks aastaks koostatud tegevusprogrammid) defineerivad Euregio prioriteetidid ja tegevused, kuid ei ole sätestanud rakendusmehhanisme partnerite selgete rollide ja vastutusega. Tegevused on kujunenud liikmesorganisatsioonide konsensuslike otsuste tulemusena ning välistegurite mõjutusel, nagu näiteks Eesti liitumine Euroopa Liiduga. Euregio algperiood 2000.-2002. a oli peamiselt võrgustiku kujunemise, koostöövaldkondade väljaselgitamise ning töögruppide loomise etapp õppevisiitide ja kogemuste vahetusega. 2003.-2005. a hõlmas Euregio strateegia laialdaselt koostöötegevusi, nagu omavalitsuste haldussuutlikkuse tõstmist regionaalses planeerimises, hariduses, teaduses, narkoennetuses, päästetöös, ettevõtluses. Sel perioodil sai juba kasutada EL-i programme. 2005.-2007. a strateegia keskendus teaduste ja kunsti kaksikregiooni arendamisele, ruumilisele planeerimisele ning koostööle teiste maade PÜK-organisatsioonidega. 2007.-2009. a strateegia hõlmas jätkusuutlikku regionaalset planeerimist, ühise ettevõtluskeskkonna loomist ning inimressursside arengut. 2009.-2013. a strateegia sõnastab prioriteetideks koostöö suurenemise ruumilises ja regionaalses planeerimises, innovaatilise ja barjäärivaba ühisturuga regiooni loomise ning teaduste ja kunsti kaksikregiooni arendamise. Strateegiate laiaulatuslik sisu näitab, et organisatsioonilt oodatakse sekkumist regionaalarengu protsessidesse väga laial skaalal. Komplekssete kompetentside täitmine nõuab ka uute koostöömeetodite rakendamist. Võtmeisikutega tehtud intervjuudest selgus, et asjaosalised eeldasid Helsingi ja Tallinna pealinnaregioonide jätkuvat integratsiooni. Tõdeti, et kui organisatsioonile pandud ülesanded varieeruvad ja arenevad, peab organisatsioon ise samuti õppima ning arenema.

Helsinki-Tallinn Euregio arenguloo üldistamise põhjal võib formuleerida hulga järeldusi. Euregio löid kohalike omavalitsuste esindajad olukorras, kus ei olnud olemas üldisemat strateegiat kahe regiooni lõimimiseks, mis määratleks täpsemalt sihtseisundi, kuhu tahetakse jõuda ja etappide järjekorra. Võib rääkida üldisest taotlusest Tallinna ja Helsingi piirkondade senisest suuremaks integreerimiseks ja leida sellekohaseid viiteid mitmesugustes arengudokumentides, mis ei asenda aga kindlasti veel konkreetset sellesuunalist strateegiat. Strateegilised tegevussuunad, mille alusel üldine integratsioonitaotlus järk-järgult sisuga täitub, kujunevad välja pigem Euregio töö käigus tema osaliste (asutajad, kaasatud asjaosalised, Euregio töötajad) initsiatiivina. Olemasoleva informatsiooni alusel võib taolist olukorda pidada küllalt tüüpiliseks ka teiste PÜK-organisatsioonide puhul.

Kui jätta kõrvale Helsinki-Tallinn Euregio algperiood, mil tegeldi valdavalt kogemuste vahetamisega omavalitsuste traditsioonilistes tegevusvaldkondades, on tegevuses keskendunud innovatsioonile selle eri vormides, mis ei ole kuulunud omavalitsuste traditsiooniliste funktsioonide hulka ning millega kohaliku omavalitsuse üksused on hakanud tegelema alles viimasel ajal. Eriti kehtib see Euregio Eesti poole kohta. Seega saab väita, et Euregio raames edendatav ühistegevus avaldab teatud mõju ka omavalitsuste tegevusmustrite kui terviku moderniseerimisele.

Helsinki-Tallinn Euregio tegevuses on toetunud küllalt laiale osaliste ringile, mis loob eeldusi, et suuresti just nende tegevuse kaudu mõjutataksegi tegelikku regionaalarengut ja innovatsiooni. Samas näitas küsitlus, et tegevuses osalejad peavad põhiliseks regionaalarengu mõjutajaks ikkagi Euregio asutajate, st omavalitsusorganite ja nende liitude omavahelist mõju.

Osalised ja Helsinki-Tallinn Euregio töötajad on olnud varmad välja pakkuma olulisi tegevussuundi, paljudel juhtudel on neid tegevusi ka käivitatud. Samas eeldab taolise tegevusega laiemast mastaabist saavutamine ja tegevuste järjepidevuse tagamine strateegiate ja tegevusprogrammide kaudu seda, et neid tegevusi aktsepteeriks ja neile annaks finantseerimisloa Euregio juhatus, kuhu kuuluvad vaid asutajad.

Rahvusvahelise organisatsiooni puhul on strateegiline planeerimine ja programmide koostamine keerukas ja aeganõudev ettevõtmine. Tuleb palju vaeva näha, et saavutada juhatuses esindatud eri poolte huvide tasakaalustatus ja kooskõlastatus. (Näiteks küsimus, kui suur osa tegevuses saab olla Soome mõnevõrra arenenuma tegevuspraktika ülekandmisel Eestisse, kui palju peavad strateegiad ja programmid sisaldama muud tegevust). Kui majandusorganisatsioonides on tavapärane, et väliskeskkonnas tekkinud muutustele reageerimist takistab struktuuriüksuste tasandil avalduv inerts (A. Chandleri klassikalised uuringud), siis Euregio tüüpi rahvusvaheliste organisatsioonide puhul tundub “pudelikaelaks” kujunevat initsiatiivide läbisurumine strateegiate ja programmide kinnitamise tasandile.

Innovaatiliste koostöövormide uuringute tulemused

Kolmandaks uurimisülesandeks oli analüüsida, kuidas edendada konkreetsema sihitusega PÜK-vormide loomist, nagu piiriülene “kolmikspiraali” tüüpi koostöö ja piiriülene “eluslabor”, kasutades PÜK-organisatsiooni loodud eeldusi (uuringud II ja III). Diagnostilistest intervjuudest selgus, et kui meetod on Soomes küllalt tuntud, siis Tallinna esindajate tõlgendused, eriti küsimuses, kuidas piiritleda “eluslaborit” objektina, hajusid väga tugevalt. Osa intervjueeritavaid tõlgendas “eluslaborit” näiteks linnaosa või transpordisüsteemina, teised näiteks virtuaalse kogukonnana. Suhteliselt üksmeelselt leiti, et “eluslabori” meetodi perspektiivseteks rakendusvaldkondades Tallinnas võiksid olla eelkõige sellised valdkonnad nagu transport ja logistika, meedia, turismikorraldus ning turvalisus.

Perspektiivsetest tehnoloogiatest eluslabori rakendamisel tõsteti esile eelkõige info-kommunikatsioonitehnoloogiat. “Eluslabori” meetodi rakendamisest olid huvitatud paljud tehnoloogiaettevõtted, ülikoolid ja omavalitsusjuhid. Avaldati kartust, et elanike kaasatuse aspektist võib saada takistuseks Soomest mõnevõrra nõrgem osalusdemokraatia traditsioon Eestis. Meetodi tutvustamiseks käivitatud protsess näitas, et “eluslabori” meetodi rakendamine on institutsionaalselt väga keerukas protsess, kuna see hõlmab peale tehnoloogiate ka muudatusi mõtteviisis ning institutsionaalse koostöö tavades. Samuti tingib see suure poliitilise toetuse ja sotsiaalsete võrgustike edendamise vajaduse.

Järgnevalt on kokkuvõtvalt esitatud etapid piiriülese „eluslabori loomisel“ (Tabel 1).

Tabel 1. Etapid piiriülese “eluslabori” loomisel.

	Etapp 1 Algatamine	Etapp 2 Tegevused seoses rakendusmehhanismide loomisega	Etapp 3 Rakendusprotsess
Informatsiooni hankimine “eluslabori” kohta	PÜK-organisatsiooni korraldatavad teadlikkuse tõstmise üritused, foorumid, seminarid, konverentsid, õppevisiidid jne potentsiaalsetele “eluslabori” partneritele	Edasise huvi tekitamine “eluslabori” vastu huvitatud partnerite seas, informatsioon toime mehhanismidest	Informatsiooni hindamine
Piiriülese “eluslabori” partnerluse tekitamine PÜK-organisatsiooni põhjal	Avalik sektor väga huvitatud, avalik sektor küsib informatsiooni teenuste arendamise viiside kohta linnaruumis/regioonis	Sobivate partnerite leidmine avalikust ja erasektorist mõlemalt poolt piiri piiriüleste teenuste loomiseks	Läbirääkimised potentsiaalsete piiriüleste partneritega sobilike juriidiliste vormide, koostöömodelite, partnerluse, rahastamisskeemide ja intellektuaalse omandi õiguse küsimuste üle
Piiriülese “eluslabori” koostöö institutsionaliseerimine	Ülikoolid ja väikese ning keskmise suurusega ettevõtted pakuvad võimalikke lahendusi, valitakse kasutajate grupid, kellega lahendusi testida	Sobiliku institutsionaalse mudeli üle otsustamine, mis tugineb PÜK-organisatsioonile laiendatud partnerlusega	Piiriülese “eluslabori” paigutamine PÜK-organisatsiooni ning tema õigusliku staatuse määratlemine osalevate riikide institutsioonide süsteemis ja halduskorralduses
Piiriülese “eluslabori” toimimine	Teenuste lahenduste testimine piiriüleselt koostöös asjaosalistega (ettevõtted, ülikoolid, omavalitsused, kodanikud)	Valitud toimimismudelite kooskõlastamine; Lõppfaasina “eluslabori” kui rahvusvahelise juriidilise organisatsiooni loomine	Piiriülese “eluslabori” lõplik käivitamine; “eluslabor” toimib; Loodud tehnoloogiate multiplitseerimine tehnoloogiaettevõtete poolt teistesse riikidesse; Potentsiaalselt võimalik multiplitseerida “eluslabori” korraldamise kogemust teistesse piiriülestesse regioonidesse

Uurimistulemuste süntees

Doktoritöös käsitletud teemade aktuaalsus on seotud ressursipõhiselt majanduselt teadmistepõhisele majandusele ülemineku suundumustega. Taolised muutused tingivad ka vajaduse muudatuste järele valitsemises. Mitmetasandilise valitsemise teooria rakendamisel kaasatakse valitsemisse horisontaalne ja vertikaalne poliitiline otsustustasand ja luuakse eeldused paremaks strateegiate koordineerimiseks Euroopa Liidu tasandil. PÜK-organisatsiooni avaldatav mõju regionaalarengul eeldab sobivat organisatsiooni struktuuri, millele on antud õiguslik staatus, sellest tulenevad funktsioonid ja vorm ning kinnitatud ressurssidega kindlustamise allikad ja kord.

Rahvusvahelise võrdlusuuringu tulemusel jaotati PÜK-organisatsioonid “algtasemel” ja “küpsel” tasemel olevateks. Peamine takistus PÜK-organisatsioonide arengus algtasemelt küpsle tasemele üleminekul on seotud ebastabiilsete finantsmehhanismidega ning kitsa liikmeskonna ja väheste eri sektorite partnerite kaasatusega. “Küpsed” PÜK-organisatsioonid on koostööks arendanud välja laiema partnerluse kui ainult kohalikud ja regionaalsed võimuorganid.

Teoreetiline uurimistöö, analüüs ja tegevusuuringu käigus saadud tõendid praktika kohta kinnitavad, et PÜK-organisatsioonil kui institutsionaalsel mehhanismil on regionaalarengus märkimisväärne roll innovatsiooni edendamisel. Nagu empiirilised tõendid näitavad, edendab avaliku sektori, erasektori ja ülikoolide koostöö innovatsiooni regioonis, mida kirjeldatakse “kolmikspiraali” tüüpi koostööna. Siiski pole selles mudelis kodanikud otseselt innovatsiooniprotsessidesse haaratud. Seega käsitletakse “eluslabori” kontseptsiooni kui potentsiaalset järgmist etappi peale “kolmikspiraali” tüüpi koostööd. Uuringu tulemused näitavad, et “eluslabori” kontseptsiooni mõistmine erineb suurel määral, arvestades nii meetodit ennast kui ka vajalikku keskkonda ning kasutusvaldkondi. Uurimistöö tulemusena näidatakse, et piiriülesele koostööle saab luua institutsionaalse raamistiku, ja esitatakse mudelid selle kohta, kuidas “küps” PÜK-organisatsioon loob eeldused laiema piiriülese koostöö tegemiseks piiriülese “kolmikspiraali” tüüpi ja “eluslabori” vormis koostööks ning kuidas piiriülest “eluslaborit” saab arendada omaette juriidiliseks institutsionaalseks mehhanismiks. PÜK-organisatsioonide institutsionaliseeritud mudelid tuginevad autori poolt reaalses töösituatsioonis saadud praktilisele kogemusele.

Tabel 2. Institutsionaliseeritud piiriülese koostöö mudelid (autori koostatud).

Mudelid	Omadused	Fookus	Eelised ja puudused
PÜK-organisatsioon /euroregioon (algfase) Uuring I	Õiguslik staatus: valitsemine vastastikuste lepingute alusel; ei ole ühist formaalset valitsemisorganit ega ühist formaalset juhtorganit Organisatsioon: avaliku sektori institutsioonide võrgustik (regionaalsed ja kohalikud võimuorganid); minimaalse töötajaskonnaga, täidavad funktsioone piiritlestes regioonides; mõlema riigi töötajad ei ole kaasatud; teised ühiskonnagrupid ja asjaosalised ei ole kaasatud Rahastamine: tegevused põhinevad projektidel ja rahastamisprogrammidel Funktsioonid: peamiselt <i>ad hoc</i> projektipõhised tegevused, poliitilised-kultuurilised kontaktid	Üksikud valitud tegevused koostöö raames: piiritlettud inimesele kontaktid, informatsiooni ja kontaktide vahetus ja PÜK-organisatsiooni liikmete esindajate vastastikused visiitid	<u>Eelised:</u> Paindlik vorm koostöö alustamiseks eeldades, et osalejate huvi on tugev <u>Puudused:</u> Raske saavutada konsensust organisatsiooni vormi ja finantsimehhanismide küsimustes, kui ei ole ühist juriidilist vormi; Nõrk platvorm ühiskondlikeks muudatusteks teiste sektorite liikmete puudumise tõttu; Rahastamine ebapiisav ja jätkusuutmatu; Liiga kitsas tegevuste ulatus, et mõjutada regionaalarengut
PÜK-organisatsioon /euroregioon ("küps") Uuring I	Õiguslik staatus: spetsiaalne ühine formaalne vorm lepingute alusel või juriidiline vorm avaliku õiguse alusel, järgides ühe liikmesriigi seadusandlust, või Euroopa Territoriaalse Koostöö Rühmituse vormis või Euroregioonide Koostöö Rühmituse vormis (tulevikus), töötades liikmete koostatud arengukavade alusel; tavaliselt ühine juhtorgan ja töötajaskond; teiste asjaosaliste kaasatus ühiskonna projektipõhisel Organisatsioon; avaliku sektori institutsioonide liikmelisus (regionaalsed ja kohalikud võimuorganid või riiklikud + regionaalsed ja kohalikud võimuorganid), millel on ühine piir; mõnedes "küpses" vormides võib liikmelisus sisaldada ka ülikoole või arenguagentuure,	Regiooni arendamine kõige tildisemas mõttes; võimalus valida eri fookusvaldkondi teatud perioodiks, nt turismi arendamine, innovatsiooni	<u>Eelised:</u> Ühine juriidiline vorm, mis võimaldab ühiseid tegevusi; Juurdepääs jätkusuutlikumale avaliku sektori rahastamisele liikmesriikide kaudu; Laiem tegevuste valik ja tugevam ühise regiooni identiteeditunnetus kui algfaasemel PÜK-organisatsiooni puhul <u>Puudused:</u> teiste sektorite esindajate kaasatus ainult <i>ad hoc</i> ja projektipõhiselt

Modelid	Omadused	Fookus	Eelised ja puudused
	mõttekodasid, jne. Rahastamine: liikmemaksud ja riiklikud ning EL-i rahastamisprogrammid Funktsioonid: tegevused ulatuvad praktilistest tegevustest, piiritlese regiooni elanike elu parandamisest kuni strateegilise ja ruumilise planeerimiseni, regiooni majandusarenguni ja infrastruktuuri arendamiseni		
Piiritlese "kolmikspiraal" tüüpi koostöö Uuring I ja II	Õiguslik staatus: multilateraalsed lepingud, mida toetab mitteformaalne koostöö, organisatsioon tugineb "kõrpele" PÜK- organisatsioonile Organisatsioon: avaliku ja erasektori institutsioonid (regionaalsed ja kohalikud võimeorganid, ettevõtted ja/või nende assotsiatsioonid, peamiseks eestvedajateks on ülikoolid ja teadusasutused) piiriregioonides/üle riigi piiride; aktiivne erasektori ja teadusasutuste esindajate kaasatus Finantseerimine: liikmemaksud ja EL-i programmid, riiklikud sihtprogrammid, teadusfondid Funktsioonid: lai skaala tegevusi	Lai koostöö arendamine avaliku, erasektori ja teadusasutuste vahel ning teadussaavutuste rakendamise edendamine regiooni konkurentsivõime suurendamiseks; ülikoolid on kesksel kohal	Eelised: Loodud PÜK- organisatsioon edendab "kolmikspiraali" tüüpi koostööd; põhimõtteliselt hea koostöövorm sünergia efekti saavutamiseks; hea vorm ülikoolidest tulevate ideede realiseerimiseks ja kasutamiseks; potentsiaalselt suur mõju regionaalsele teadus- ja arendustegevusele Puudused: Keerukas juhtimismehhanism eri sektorite laia partnerluse tõttu ; Komplekssed rahastamismehhanismid, et tagada tasakaalustatud partnerlust

Modelid	Omadused	Fookus	Eelised ja puudused
Piiriline "chulabor" Uuring III	<u>Õiguslik staatus:</u> algfaasis reguleerivad koostööd multilateraalsed lepingud või mitteformaalsed kokkulepped, mis tuginevad "küpsel" PÜK-organisatsioonile; "küpsel" tasandil on võimalus huvitatud osapoolte formaalseks juriidiliseks vormiks (nt osühing) <u>Organisatsioon:</u> algetapis projektipõhine koostöö osalevate partnerite vahel, "küpses" etapis avaliku, erasektori ja akadeemiliste institutsioonide koostöö; püsiv töötajaskond, ettevõtte erinevate koostöösundadega teenindamas koostööklasrit Rahastamine: peamiseks rahastajaks on osalevad tehnoloogiaettevõtted, algetapis ka "küps" PÜK-organisatsioon, lisarahastamine avalikult sektorilt Funktsioonid: foorum, valitud projektid ühise piirilese teenuse arenguks	Valitud projektid innovaatiliseks elukeskkonna korraldamiseks; tehnoloogiafirmad ja kohalikud elanikud on kesksel kohal	<u>Eelised:</u> Vajadused elukeskkonna parandamiseks on ühiskonnas olemas ning on leitud innovaatilised tehnoloogilised lahendused nende rakendamiseks ; Pidev otsene elanike/lõpptarbijate kaasatus piirülestesse tegevustesse ja teenuste arendamisse; Avaliku ja erasektori rahastamisvõimaluste kombinatsioon (sh. riskikapital, jne.); Tehnoloogiaettevõtete poolt nõutav finantseerimine avalikult sektorilt võib olla suhteliselt väike, kuna nende põhivägi seotub väljatöötatud innovatsiooniga <u>Puudused:</u> Keeruline käivitada ja rakendada paljude erinevate huvide ja partnerite tõttu; Konsensuse saavutamise eri sektorite partnerite kaasatuse tõttu keeruline; Komplitseeritud on intellektuaalse omandi õiguse küsimused

Helsinki-Tallinn Euregio toimimise seitsmeaastane kogemus näitab, et ka ainult avaliku sektori liikmetega organisatsiooni ülesehituse ja funktsioneerimise raames on olnud võimalik opereerida küllalt laia tegevussuundade spektrit, vahetada perioodiliselt prioriteete vastavalt uutele nõuetele ja võimalustele ning tõusta strateegiliselt olulisemate projektide elluviimise tasandile. See eeldab ühelt poolt korralikku kogemust opereerimaks kahe küllalt erineva administratiivse kultuuri tingimustes, samuti seda, et hoitakse ülal operatiivset kontakti organisatsiooni juhatuse, sekretariaadi, töötajate ja liikmete vahel ning ühendatakse aktiivne paindlik tegevus koostöövõrgustikes, mis võimaldab paindlikult reageerida väliskeskkonna võimalustele, hakkamasaamisega küllalt suurt täpsust nõudvate kooskõlastamis- ja kontrolliprotseduuridega.

Tuleviku keerukaks dilemmaks on küsimus juhatuse liikmete koosseisu võimalikust laiendamisest näiteks teatud ettevõtliitide või ülikoolide esindajatega. See võiks suurendada organisatsiooni võimet reageerida väljakutsetele ja võimalik et suurendada ka organisatsiooni tegevuseks vajalikke finantsressursse, samal ajal aga teeks see tegevussuundade kooskõlastamise protsessi veelgi keerukamaks.

Siiski võib kokkuvõtvalt väita, et Euregio raames juurutatav ühistegevus koos eri sektorite asjaosalistega avaldab teatud mõju nii omavalitsustele kui ka regioonile tervikuna, sest Euregio tegevustes on keskseks tõusnud innovatsiooniprotsesside edendamine selle eri vormides.

Edasise uurimistöö käigus kavandatakse uurimise raskuspunkt üle kanda innovatsiooniprotsesside algatamise staadiumilt PÜK-organisatsiooni rollile juba käivitatud arengu- ja innovatsiooniprotsesside juhtimises ja selle tegevuse efektiivsusele.

LITERATURE REVIEW

Abowd, G. 1999. Classroom 2000: An Experiment with the Instrumentation of a Living Educational Environment. *IBM Systems Journal* 38 (4), 508-530.

Anderson, M. 1997. Transfrontier co-operation – history and theory. In *Grenzüberschreitende Zusammenarbeit in Europa: Theorie – Empirie – Praxis*. Edited by G. Brunnand and P. Schmitt-Egner. Baden-Baden: Nomos, 78–97.

Anderson, J., O’Dowd, L. And Wilson, M. 2002. Why study borders now?” *Regional and Federal Studies* 12, 1–12.

Association of European Border Regions. 2004. *European charter for cross-border regions*. Gronau: AEBR.

Association of European Border Regions. 2004. *Synthesis report: towards a new community legal instrument facilitating public law based transeuropean co-operation among territorial authorities in the European Union*. Gronau: AEBR.

Association of European Border Regions. 2006. *White paper on European border regions final version*. Gronau: AEBR.

Baldwin, R., Braconier, H., Forslid, R. 1999. Multinationals, Endogenous Growth and Technological Spillovers: Theory and Evidence. *CEPR Discussion Papers* 2155. C.E.P.R. Discussion Papers.

Ballon, P., Pierson, J., Delaere, S. 2005. Test and experimentation platforms for broadband innovation: Examining European practice. The 16th European Regional Conference by the International Telecommunications Society, Porto, Portugal, 4-6 September.

Bennet, A., Bennet, D. 2000. Characterizing the Next Generation Knowledge Organization. *Knowledge and Innovation: Journal of the KMCI*, 1 (1), 8-42.

Bomann, J. 2005. *Identity and Institutions Shaping Cross-border Cooperation*. M.A. Thesis, University of Tartu, Estonia.

Boman, J. and Berg E. 2007. Identity and institutions shaping cross-border cooperation at the margins of the European Union”. *Regional and Federal Studies*, 17 (2) 195–215.

Brenner, C. 2003. Learning communities in a learning region: the soft infrastructure of cross-firm learning networks in Silicon Valley. *Environment and Planning A*, 35, 1809 – 1830.

Brodzicki T. 2002. Is The Membership In The Eu Going To Induce Regional Convergence? Paper provided by Economics of European Integration Department, Faculty of Economics, University of Gdansk, Poland, Working Papers no 0203, <http://gnu.univ.gda.pl/~keie/ao3.doc> (10.02.2009).

Brunet-Jailly, E. 2002. Economic Integration and the Governance of Cross-Border Regions: Forms and Functions of Cross-Border Urban Regions - North American Functional Regions, European Territorial Regions. *Annual meeting of the American Political Science Association, Boston Marriott Copley Place, Sheraton Boston & Hynes Convention Center, Boston, Massachusetts, 28 August.* <http://www.allacademic.com/> (13.03.2007)

Böttger, K. 2006. Grenzüberschreitende Zusammenarbeit in Europa, Erfolge und Misserfolge der Kooperation am Beispiel der EUREGIO (Rhein-Ems-Ijssel), der Euregio Maas-Rhein und der Euregion Neisse-Nisa-Nysa. *Occasional Papers*, 32. Stuttgart: Europäisches Zentrum für Föderalismus-Forschung.

Castells, M. 1996. *The rise of network society. The Informational Age: Economy, Society and Culture*. Blackwell: Oxford.

Chandler, A. 1998. *Strategy and Structure: Chapters in the History of the American Industrial Enterprise*. Cambridge, MA: MIT Press.

Chesbrough, H. 2003. The Era of Open Innovation. *MIT Sloan Management Review*, 44 (3) 35-42.

Chesbrough, H. 2003. Open Innovation. The new Imperative for Creating and Profiting from Technology. Boston: Harvard Business School Press.

Church A. and Reid P. 1999. Cross-border Co-operation, Institutionalization and Political Space Across the English Channel. *Regional Studies*, 33 (7), 643- 655.

Conference of Local and Regional Authorities of Europe. 2002. *Recommendation 117 of congress of local and regional authorities of Europe*. Strasbourg: CLRAE.

Conference of Local and Regional Authorities of Europe. 1991. *Resolution 227 of standing conference of local and regional authorities of Europe*. Strasbourg: CLRAE.

Council of Europe. 1995. *Additional protocol to the European outline convention on transfrontier co-operation between territorial communities or authorities*. (ETS, 159.) Strasbourg: CoE.

Council of Europe. 2005. *Fourth annual report to the Committee of Ministers covering the year 2004*". DGI (2005) 4. Committee of Advisers for the Devel-

opment of Transfrontier Cooperation in Central and Eastern Europe. Strasbourg: CoE.

Council of Europe. 1985. *European charter of local self-government*. (ETS, 122.) Strasbourg: CoE.

Council of Europe. 1980. *European outline convention on transfrontier co-operation between territorial communities or authorities*. (ETS,106.) Madrid: CoE.

Council of Europe. 2006. *Similarities and differences of Instruments and policies of the Council of Europe and the European Union in the field of transfrontier cooperation*. Strasbourg: CoE.

Council of Europe. 2006. *Practical guide to transfrontier cooperation*. Strasbourg: CoE.

Council of Europe. 2002. *Promoting transfrontier co-operation: an important factor of democratic stability in Europe*. Report by Hans-Martin Tschudi. Strasbourg: CLRAE.

Council of Europe. 1998. *Protocol No. 2 to the European outline convention on transfrontier cooperation between territorial communities or authorities concerning interterritorial cooperation*. (ETS, 169.) Strasbourg: CoE.

Council of Europe. 2004. *Proposal for a protocol (no 3) to the European outline convention on transfrontier co-operation between territorial communities or authorities concerning the establishment of euroregional co-operation groupings (ECG)*. Memorandum of the Secretariat prepared by the Directorate of Co-operation for Local and Regional Democracy Directorate General I – Legal Affairs. LR-CT (2004)15. Strasbourg: CoE.

Council of Europe. 2005. *Recommendation on good practices in and reducing obstacles to transfrontier and interterritorial cooperation between territorial communities or authorities*. Rec (2005)2. Strasbourg: CoE.

Council of Europe. 2006. *Report on The Current State of the Administrative and Legal Framework of Transfrontier co-operation in Europe*. Strasbourg: CoE.

Council of Europe. 2009. *Protocol No. 3 to the European Outline Convention on Transfrontier Co-operation between Territorial Communities or Authorities concerning Euroregional Co-operation Groupings (ECGs)*. CETS No.: 206.

Cross-Border Cooperation – Cross-Thematic Study of INTERREG and ESPON activities. 2007. Denmark: INTERACT Point Qualification and Transfer.

Crossworks. 2008. *R&D Investment. R&D Capacity. R&D Cooperation*. www.cross-works.eu (14.04.2008)

Davenport T. H., Prusak. L. 2000. *Working Knowledge: How Organizations Manage What they Know*. Harvard Business School Press.

Dearstyne, B. W. 2007. Blogs, Mashups, & Wikis Oh, My! *Information Management Journal*, 41 (4), 24-33.

Dürschmidt J. 2006. So near yet so far: blocked networks, global links and multiple exclusion in the German–Polish borderlands. *Global Networks* 6 (3), 245–263.

Eriksson, M., Niitamo, V. P., and Kulkki, S. 2005. State-of-the-Art in Utilizing Living Labs Approach to User-centric ICT innovation - a European approach. http://www.vinnova.se/upload/dokument/Verksamhet/TITA/Stateofheart_LivingLabs_Eriksson2005.pdf (22.07.2009)

Estonian Institute for Futures Studies. 2008. *Possibilities to Use the Concept of Living Laboratories in Tallinn*. Report. Tallinn: Estonian Institute for Futures Studies.

Estonian Institute for Futures Studies. 2008. *Theoretical background of the Living Laboratories. Concept and overview of the Literature*. Report. Tallinn: Estonian Institute for Futures Studies.

Etzkowitz, H. and Leydesdorff, L. 1998. The endless transition: a ‘triple helix’ of university-industry-government relations. *A Review of Science, Learning & Policy*. 36 (3), 203–208.

European Parliament. 2005. *Report on the role of “Euroregions” in the development of regional policy*. Committee on Regional Development. Rapporteur: Kyriacos Triantaphyllides (2004/2257(INI)) A6-0311/2005.

European Parliament. 2005. *Report on the proposal for a regulation of the European Parliament and of the Council on establishing a European grouping of cross-border cooperation (EGCC) (COM(2004)0496 – C6-0091/2004 – 2004/0168(COD))* Committee on Regional Development. Rapporteur: Jan Olbrycht.

European Parliament. 2006. Regulation (EC) No 1638/2006 of the European Parliament and of the Council of 24 October 2006 laying down general provisions establishing a European Neighbourhood and Partnership Instrument. *Official Journal* L 310, 09/11/2006 P. 0001–0014.

European Parliament. 2006. Regulation (EC) No 1080/2006 of the European Parliament and of the Council of 5 July 2006 on the European Regional Development

Fund and repealing Regulation (EC) No 1783/1999. *Official Journal L* 210, 31/07/2006 P. 0001–0011.

Firestone, J.M. 2001. Key issues in Knowledge Management. *Knowledge and Innovation: Journal of the KMCI*, 1 (3).

Florida, R. 1995. Towards the learning region. *Futures* 27, 527–536.

Grabher G. and Stark D. 1997. Organising diversity: evolutionary theory, network analysis and postsocialism. *Regional Studies* 31, 533– 544.

Green paper on Territorial Cohesion. 2008. COM (2008) 616, 3.

Grover, V. 2001. General Perspectives on Knowledge Management: Fostering a Research Agenda. *Journal of Management Information Systems*, Summer, 5-21.

Gualini, E. 2003. Cross-border Governance: Inventing Regions in a Trans-national Multi-level Polity. *DISP* 152, 43-53.

Hautamäki, A. 2008. Innovaatiopolitiikka usien haasteiden edessä. (New Challenges in Innovation Policies) Sitra report, Helsinki, Electronic publication (22.07.2009)

Hellriegel, D. Jackson, S.E., Slocum J.W. 2002. *Management: A Competency-Based Approach*. Cincinnati: South-Western.

Helsinki Living Lab. (homepage). www.helsinkilivinglab.fi (20.05.2009)

Hooghe L, Marks G. 2001. *Multi-level governance and European integration*. New York: Rowman & Littlefield Publishers, Inc.

Hospers, G.J. 2006. Borders, Bridges and Branding: The Transformation of the Oresund Region into an Imagined Space. *European Planning Studies*, 14 (8).

Jacobs, J. 1985. *Cities and the Wealth of Nations*. Vintage.

Jessop, B. 2000. The state and the contradictions of the knowledge-driven economy. In *Knowledge, space, economy*. Edited by J.R. Bryson, P.W Daniels, N.D. Henry, and J.S. Pollard. London: Routledge, 63–78.

Johnson H.A.W. 2008. Roles, resources and benefits of intermediate organizations supporting triple helix collaborative R&D: The case of Precarn. *Technovation*, 28 (8), 495-505.

Knippenberg, H. and Markusse, J. 1999. 19th and 20th century borders and border regions in Europe. *Nationalising and denationalising European border regions*,

1800–2000: views from geography and history. Edited by H. Knippenberg and J. Markusse, Dordrecht: Kluwer. 1–19.

Koren, A. 2006. Knowledge transfer and innovations in a global world: reflections on head-teachers training project. *International Journal of Innovation and Learning*, 3 (2), 186–197.

Kosonen, R., Loikkanen, K. and Heliste, P. 2004. Kaksoiskaupunkeja vai kaupunkipareja? Tapaustutkimukset Helsinki–Tallinna, Tornio–Haaparanta, Imatra–Svetogorsk. (In Finnish). *Helsinki School of Economics*, B-57, Helsinki: HeSE.

Kramsch, O. 2002. Navigating the spaces of Kantian reason: notes on cosmopolitical governance within the cross-border *Euregios* of the European Union. *Geopolitics* 6 (2), 27–50.

Krigul, M. 2004. University Cooperation Development. <http://www.euregioheltal.org/index.php?pg=sisu&id=106&keel=eng> (14.03.2008)

Lawson, C., Moore, B., Keeble, D., Lawton, Smith, H. and Wilkinson, F. 1998. Inter-firm links between regionally clustered hightechnology SMEs: a comparison of Cambridge and Oxford innovation networks. In *New technology based firms in the 1990s*. Edited by W. During, and R. Oakley. London: Paul Chapman, 181–196.

Leibs, S. 2008. Web 2.0, Confusion 1.5. *CFO* 24 (3), 33–34.

Lisbon Strategy Post 2010. Regional strategies for innovation. A network event of the Lisbon Regions and ERRIN, 18th June 2009, Brussels.

Leydesdorff, L., Dolfsma W., Van der Panne G. 2006. Measuring the knowledge base of an economy in terms of triple-helix relations among ‘technology, organization, and territory’. *Research Policy*, 35 (2), 81–199.

Lundvall, B. ed. 1992. *National Systems of Innovation; Towards a Theory of Innovation and Interactive Learning*. London: Pinter.

MacKinnon D., Cumbers A., Chapman K., 2002. Learning, innovation and regional development: a critical appraisal of recent debates. *Progress in Human Geography* 26 (3), 293–311.

Malchus, V. 2004. A new legal instrument for transeuropean cooperation among territorial authorities in Europe. Manuscript.

Malhotra, Y. 2001. *Knowledge Management and Business Model Innovation*. Hershey PA, Idea Group Publishing.

Markopoulos, P., and Rauterberg, G. W. M. 2000. LivingLab: A White Paper, 35, I. A. P. R.

Morgan, K. 1997. The learning region: institutions, innovation and regional renewal. *Regional Studies* 31, 491- 503.

Niitamo, V.-P. 2009. Presentation on a Living Labs' seminar, organised by the Estonian Development Foundation. www.arengufond.ee (accessed 09.12.2009).

Nokia presentation 2005. Open Service Innovation in Living labs. www.Nokia.fi (accessed 09.12.2009)

Nonaka, I., Takeuchi, H. 1995. The Knowledge Creating Company. New York: Oxford University Press.

Näkymätön näkyväksi – tieto, osaaminen ja Knowledge Management. 1997. (In Finnish). *INFO* 8. Helsinki University of Technology.

Odendahl, T., and Shaw, A. 2002. Interviewing elites. In *Handbook of interview research: Context and methodology*. Edited by J. Gubrium and J. Holstein. Thousand Oaks, CA: Sage, 299-316.

OECD. 2003. *OECD Territorial Review. Vienna-Bratislava Austria/Slovak Republic*. Paris: OECD Publications.

O'Keeffe, T. 2002. Organizational Learning: a new perspective. *Journal of European Industrial Training*. 26 (2), 130-141.

Paasi, A. 1996. Regions as social and cultural constructs: Reflections on recent geographical debates. *NordREFO*, 90-107.

Paasi, A. 1996. *Territories, boundaries and consciousness: the changing geographies of the Finnish-Russian border*. Chichester: John Wiley.

Paasi, A. 2001. Europe as a process and discourse: considerations of place, boundaries and identity. *European Urban and Regional Studies* 8 (1), 7-28.

Perkmann, M. and Sum, N.-L. eds. 2002. Globalization, regionalization and cross-border regions: Scales, discourses and governance. In *Globalization, regionalization and cross-border regions*. Edited by M. Perkmann, and Sum N.-L. New York: Palgrave.

Perkmann, M. 2003. Cross-border regions in Europe: significance and drivers of regional cross-border co-operation. *European Urban and Regional Studies* 10, 153-171.

- Perkmann, M. 2007. Construction of new territorial scales: a framework and case study of the Euregio cross-border region. *Regional Studies*, 41 (2), 253-266.
- Pierre, J. and Peters, B.G. 2000. *Governance, Politics, and State*. New York: St. Martin Press.
- Piliutyte, J. and Radvilavicius, S. 2004. Comparative analysis of Euroregions on the territory of Lithuania. Strasbourg: CoE.
- Pitoska, E. 2006. Euro-Balkan Cooperation: Reasonable Doubts Regarding the Developing Contribution of European Initiatives in the Weaker Borderland Regions. Paper presented at 46th Congress of the European Regional Science Association, Volos, 26-28 August.
- Polanyi, M. 1966. *The Tacit Dimension*. London: Routledge and Jegan Paul.
- Popescu G. 2008. *The conflicting logics of cross-border reterritorialization: Geopolitics of Political Geography*, 27.
- Porter E.M. 1990. *Competitive Advantage of Nations*. New York: Free Press.
- Prusak, L. and Matson, E. 2006. *Knowledge Management and Organizational Learning: A Reader*. Oxford Management Readers.
- Radvilavicius, S. 2007. Baltic Euroregional network: spatial development in the Baltic Sea region. INTERREG III B neighbourhood program. Presentation at the 2nd annual conference of the NEEBOR network. NEEBOR regions towards better European integration, Olsztyn, Poland, 6–7 September.
- Rogers, E. 2003. *Diffusion of innovations*. New York: Free Press.
- Ruoppila S. 2000. *Possibilities of Joint Public Services Provision between the Cities of Helsinki and Tallinn*, Net Effect Ltd and Tallinn University of Technology Report.
- Salmelin, B. 2007. Open Innovation and eServices - Living Labs as facilitating environment. Co-Creative Research and Innovation to Connect the Lisbon Strategy to People. European Network of Living Labs Event, Guimarães, Portugal, 21-22 May.
- Schneider-François, F. and Salambo L. 2008. *The European grouping of territorial cooperation guides*. Paris: Mission Opérationnelle Transfrontalière.
- Senge, P.M. 1990. *The Fifth Discipline*. London: Century Business.
- Simmie, J. ed. 1997. Innovation, Networks and Learning Regions? (Regional Stud-

ies Association, London) <http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=/published/emeraldfulltextarticle/pdf/2300110508>. (29.07.2009)

Ståhlbröst, A. 2008. Forming Future IT - The Living Lab Way of User Involvement. Doctoral Thesis, Luleå University of Technology.

Sveiby, K.-E. 1996. The Learning organisation. <http://www.sveiby.com/portals/0/articles/KOS1.html> (03.05.2008)

Walters, B. 2007. What is web 2.0 and what does it mean to you? *New Mexico Business Journal*, 31 (10), 24-24.

Wiig, K. 2000. *Knowledge Management in Innovation and R&D.* AspenWorld 2000 Proceedings, Cambridge, MA: Aspen Technologies.

Wills J., Parker M., Wills G. 2009. *Social and Community Informatics and Social Theories of Networks*. United Kingdom: University of Southampton, Wealthy Mind Publishers.

LIST OF AUTHOR'S PUBLICATIONS AND CONFERENCE PRESENTATIONS

Publications

Lepik, K-L., Krigul, M. Terk, E. 2010. Introducing Living Lab's Method as Knowledge Transfer from One Socio-Institutional Context to another: Evidence from Helsinki-Tallinn Cross-Border Region. *Journal of Universal Computer Sciences*, 16 (accepted, will be published in autumn of 2010)

Lepik, K-L., Krigul, M. Terk, E. 2010. Problems of initiating international knowledge transfer: Is the Finnish Living Lab method transferable to Estonia? *Journal of Technology Diffusion*, 1 (2) (accepted, will be published in autumn of 2010)

Lepik, K-L., Krigul, M. Terk, E. 2010. Development of Metropolitan Regions and Possibilities of Innovations-related Cooperation between Cities: The Case of Tallinn and Helsinki. *Tietokeskus, City of Helsinki Urban Facts* (accepted, will be published in Finnish in September 2010)

Lepik, K-L., Krigul, M. 2009. Cross-border cooperation institution in building a knowledge cross-border region. *Problems and Perspectives in Management*, 7 (4), 33-45.

Lepik, K-L. 2009. Euroregions as Mechanisms for Strengthening of Cross-border Cooperation in the Baltic Sea Region. *TRAMES*, 13 (3), 265–284.

Lepik, K-L., Krigul, M. 2009. Innovating Through Building a Knowledge Cross-Border Region. *Many Faces of Innovation - From literature synthesis to empirical studies, Laurea Publication A-series*, A70, 42-67.

Lepik, K-L., Krigul, M. 2009. Cross-Border Cooperation Enhancing Sustainable Business Growth Environment. *Insights into the Sustainable Growth of Business, ISM University of Management and Economics*, November 19-21, Vilnius, Lithuania. Article on CD.

Lepik, K-L., Krigul, M. 2009. Possibilities to use Living Lab's Method in Cross-Border Context". *Proceedings of the 3rd International Conference on Methodologies, Technologies and Tools enabling e-Government (MeTTeG'09), September 28-29, Vigo, Spain*. Edited by L. A. Rifon and L. A. Sabucedo. Vigo: Servizo de Publicacions da Universidade de Vigo. 85-91.

Lepik, K-L. 2006. Harjumaa Uusimaa - A Rising Twin-Region of Science and Art. *European Week of Regions and Cities, Workshop on Fostering Regional Innovation*, October 9-12, Brussels, Belgium. Article on CD.

Conference presentations

Lepik, K-L., Krigul, M. 2010. Transformation of Helsinki-Tallinn Capital Regions into a Cross-border Knowledge Region. *Socio-Economic Spatial Systems and Territorial Governance*, March 3-5, Tartu, Estonia.

Lepik, K-L., Krigul, M. 2009. Cross-Border Cooperation Enhancing Sustainable Business Growth Environment. *Insights into the Sustainable Growth of Business, ISM University of Management and Economics*, November 19-21, Vilnius, Lithuania.

Lepik, K-L., Krigul, M. 2009. Possibilities to use Living Lab's Method in Cross-Border Context. *3rd International Conference on Methodologies, Technologies and Tools enabling e-Government (MeTTeG'09)*, September 28-29, Vigo, Spain.

Lepik, K-L., Krigul, M. 2009. Innovation Management via Living Lab Method in a Cross-Border Organisation. *4th Workshop on Organisational Change and Development: Advances, Challenges and Contradictions*, September 10-11, Krakow, Poland.

Lepik, K-L., Krigul, M. 2009. Innovating through building a knowledge cross-border region. *Laurea University of Applied Sciences International Conference Beyond the Dawn of Innovation*, June 15-17, Laurea, Finland.

Lepik, K-L. (. 2007. CBC structures in Europe. The nature and role in CBC of Euroregions. *a summer school "Cross-border cooperation to support environment and sustainable development in the Baltic Sea Region"*, August 20– 25, Tartu, Estonia.

Lepik, K-L., Krigul, M. 2007. Helsinki-Tallinn Case: Dialogue, Exchange and Collaboration between urban and regional planning organisations. *Cross-Border Cooperation and Regional Development*, March 15-16, Malmö, Sweden.

Lepik, K-L, Krigul, M. 2006. The advantages, obstacles and good practice examples of Euroregional co-operation. *Legal Status of Cross-Border Cooperation Structures*, December 4-6, Vilnius, Lithuania.

Lepik, K-L. 2006. The Development of Sub-regional Brands: Talsinki. *Nordic Forum Regional Branding - An Asset in times of globalisation*, November 22, Tallinn, Estonia.

Lepik, K-L. 2006. Harjumaa Uusimaa - A rising twin-region of science and art. *European Week of Regions and Cities, Workshop on Fostering regional innovation*, October 9-12, Brussels, Belgium.

Lepik, K-L. 2006. Models of regional co-operation, *EBS Executive Training Centre's Development programme for county governors*, March 17, Tallinn, Estonia.

CURRICULUM VITAE

Personal data

Name: Katri-Liis Lepik
Date and
Place of Birth: 26.09.1976, Tallinn
Citizenship: Estonian
Address: Katsimatsi, Saunja village, Kuusalu municipality 74636,
Harju County, Estonia
Phone: +372 52 99 267,
E-mail: kats@retked.ee

Education

2005 – now Estonian Business School; Management Institute,
PhD student in Management Science
2001 – 2002 Frostburg University, Maryland, USA;
Master of Educational Sciences
1995 - 2000 Tallinn Pedagogical University; BA English linguistics

Special Courses

2002-2005 Estonian Business School, Local government leaders
development program (MPA level courses)

Work experience

2003 – now NPO Helsinki-Tallinn Euregio; manager
2008 – 2008 Estonian Business School, lecturer
2002 - 2006 Tallinn University;
Department of Political Science and Governance, lecturer
2002 – 2003 Tallinn City Office, Department of foreign relations and
European integration, senior officer
1997 – 2002 Association of Estonian Cities; Senior specialist of foreign
relations, coordinator of the European Commission's Town
Twinning programme

Administrative responsibilities

2007 – now European Committee of Region, European Grouping of
Territorial Cooperation Expert Group; expert

Honours & Awards

2009	ESF DoRa programme scholarship
2003	Tallinn Pedagogical University scholarship “Project competition for working out and launching new curriculum or courses in English”
2001	Maryland National Guard scholarship
2001	Rowe International Student scholarship
2001	Baltimore Estonian Society scholarship
2000	Center for International Mobility award

Field of research

Institutional models of cross-border cooperation, cross-border cooperation organisations, linkages between universities, enterprises and public sector; knowledge transfer in cross-border cooperation, regional innovation and competitiveness