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Dear cooperation partner,

We have a great pleasure to introduce the first issue of the joint research publication of two higher education organisations, Kymenlaakso University of Applied Sciences (KyUAS) and Mikkeli University of Applied Sciences (MUAS).

Kymenlaakso University of Applied Sciences and Mikkeli University of Applied Sciences have strongly and concretely deepened their mutual cooperation in the recent years. A big step on that path was taken on 24 January 2012, when KyUAS and MUAS were transferred under a common holding organisation. In addition to education, co-operation in the field of research, development and innovation (RDI) has strengthened. As a part of this cooperation, we have created this joint research publication to be published each year.

The aim of the publication is to present RDI activities and their integration to the education and to the regional development. To our domestic and international partners, this new publication provides a window into the daily activities of the two universities of applied sciences and hopefully creates deepened and new international cooperation in the field of RDI and education.

One of the shared and current focuses of both organisations is the Russian know-how, and therefore we have chosen Russia as a theme for this first issue of the joint publication. The eight articles introduce co-operation projects with our Russian partners and Russia-related development activities in our universities. The articles in this publication present for example projects in the fields of social services and welfare, maritime safety and entrepreneurship. Furthermore, articles discuss the requirements and needs for Russia-oriented education and degree programmes in Finland.

We acknowledge the professionals from various fields for participating in the creation of this joint publication. We would also like to express our warmest commendations to our partners and wish the best success for our future cooperation.

With research and development regards,

Mirja Toikka
Vice-rector
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1

Propositions of a cultural impact on efficient collaborative way of working in the context of Finnish-Russian project work

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Abstract

This article addresses the perceptions of cultural factors of project co-operation and their impact on the collaboration between Finnish and Russian partners. A qualitative case study was conducted, and it was interpretative by nature. The method for data collection was a questionnaire with open-ended questions and it was carried out by e-mail. The findings indicated that Russians use mostly stereotypes that describe Finns as individualistic, and Finns use mostly stereotypes that describe Russians as collectivistic. Collaborative work was affected significantly by adjustment to these characteristics. In addition, based on the findings two propositions have been made for further studies.

1 INTRODUCTION

"Culture consists in patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups, including their embodiments in artifacts; the essential core of culture consists of traditional ideas and especially their attached values." (Kluckhohn 1951; referred by Hofstede 2001, 9).

In order to understand cultures one tends to compare them with one's own culture. Therefore, a comparison of cultures presupposes that there is something to be compared; i.e. that each culture is not so unique that any parallel with another culture is meaningless. Thus, the distinction between the unique and the comparable, the specific and the general, can be made. (Hofstede 2001, 24) Others are not aware of our values simply by looking at us. They may draw certain conclusions from the manner in which we dress, but nowadays, often, business people dress in a similar way. It is only when we say or do something they can gain deeper insight into what makes us tick and that is how we reveal our cultural attitudes. (Lewis 2006, 19).

Further, when we try to understand social systems, we use models. Then sometimes we simplify things which are too complex for us to understand as such by using a model. In this simplification, our subjectivity enters the process. Every person's mental programming is partly unique, partly shared with others. The individual level of the human programming is the unique part. It is the level of individual personality and it provides a wide range of alternative behaviours within the same collective culture. Individual mental programmes can be inherited (e.g. capabilities) and they can be learned. At the collective level, most of our mental programmes are learnt; i.e. we share them with people who have gone through the same learning processes, but who do not have the same genetic "structure". (Hofstede 2001, 2-3).

Stereotypes, like other generalizations, frequently serve as mental shortcuts and are likely to be applied especially when people are busy or distracted. "Stereotypes are forms of information and, as such, are thought to be stored in memory in a dormant state until they are activated for use." (Gilbert & Hixon 1991, 510). Sometimes stereotypes can be explained through an association between particular aspects of the national character and some external variables (Realo et al. 2009, 231). Stereotyping is a result of cognitive limitations which lead to thinking in categories and therefore reducing the information-processing burden on one's brain. Stereotypical thinking can overcome the uncer-

tainty of consciousness, filling the gaps in knowledge with generalized information. For example, in order to compare Finnish and Russian stereotypes, it can be concluded that to Finnish people silence means that you listen and learn. It protects your individualism and privacy. In Finland it is considered impolite to force one's opinions on others --- it is more appropriate to nod in agreement or smile quietly. (Lewis 2006, 7) Russians, in turn, have often been stereotyped as being very collectivist. However, Russia inclined to transform itself into a more individualistic society. Nevertheless, power distance is still valued, which illustrates the respect for authorities. (Grachev 2009, 5). Further, Russians are regarded as rather emotionally stable and extraverted (Raolo et al. 2009, 293). Further, generally speaking, as stereotypes the Finns can be regarded as honest, slow, reliable, true, shy, direct, reserved, and punctual. The Russians can be considered to be warm, emotional and caring people. On the other hand, Russians negotiate like they play chess; they plan several moves ahead. (Lewis 2006, 23, 374-375).

Understanding the context of a study is essential for forthcoming interpretations of the findings. In other words, to understand how a certain phenomenon is connected with its environment facilitates connecting the data analysis into more extended social and cultural contexts. (Anttila 2006, 277). In order to understand the context of this study, it can be stated that work in the projects is one of the most difficult tasks in management. Mobilization of necessary resources, competent people, and the subsequent implementation of the project and then dissolution of the team require significant effort of the project manager. Project management is considered to be the most difficult in the international multicultural environment, where members of the project are distributed between different countries and perform individual functions. An example of such projects is the Tempus grant of the European Commission that funds projects in the territories of the European Union and its neighbouring countries. Having successfully implemented a number of regional and national projects, the Department of Business of Mikkeli University of Applied Sciences has everything needed to plan and implement such a complex international project - qualified staff, sufficient material and financial resources, extensive contacts and relationships with universities, businesses, community organizations, and state authorities in Finland and abroad. For that purpose a project planning group was established which consisted of three active staff members of MUAS, but also of Russian members of Russian and European universities.

This qualitative study was carried out in order to explore and understand cultural differences in the project co-operation and their impact on the collaboration between Finnish and Russian partners. The aim of the paper is to present -- based on the findings -- preliminary propositions of cultural impact on the collaboration for further studies.

2 METHODOLOGY

In 2009, the active Finnish working group of three members was formed to work on the Tempus application writing: one member was from the Department of forestry and two were from the Business department of MUAS. In addition, there were Russian participants represented by the university staff of Northwest Russia (St. Petersburg, Karelia, Komi Republic, and the Arkhangelsk Region). The venue for the first workshop meeting was generously provided by Saint-Petersburg Forest Academy. There were five Rus-

sian and three Finnish participants in the meeting. The three Finns had different roles in the meeting: one who knew Russian people and Russian culture acted as an "ice-breaker". The other one, who had collected all the information about the TEMPUS application (documents etc.) and typed the project application physically, acted as a secretary of the meeting. The third one acted as a "team-leader" and a chair of the meeting. There were also three European partners involved in the project planning process. Yet this article focuses only on the co-operation between Finnish and Russian partners. For the empirical part of the study, four cases were selected as follows: one Finnish member who had previous experiences on the Russian co-operation and the other who did not have any experience at all. From the Russian side, one participant was selected who was more experienced in co-operation with Finnish partner universities, and the other one who was less experienced. By selecting different types of cases from both sides, it was assumed that the study could reveal more aspects and improve the understanding of cultural impact on the collaboration.

The method for data collection was a short questionnaire with four open-ended questions. Actually, the informants were asked to write and describe in a narrative way about the first meeting, as well as of the other nationality, as detailed as possible from the following perspectives: 1. What kind of weather, what kind of meeting room; what kind of atmosphere there was in the beginning, what kinds of expectations did you have? 2. How can you characterize a typical Finn? (a typical Russian person)? 3. What were your first impressions of the Finnish (Russian) participants? Who represents most the typical Finn (a Russian) and what are the most important characteristics by which you selected him/her to be the most typical Finn? (a Russian person), and 4. Could you describe your previous relationships with Finnish people (with Russian people) in terms of the quantity of contacts and the quality of relationships? The first question aimed to make the informant recall the situation and the conditions when the first meeting took place, whereas the second and the third ones aimed at examining the factors related to the cultural characteristics from their own perspectives. Finally, the fourth question was focusing on the quality and the scope of the previous intercultural communication between Finnish and Russian partners. The questionnaire was sent and returned by e-mail.

The data included seven pages of text (1-2 pages per each answer). The data analysis started with the reflective reading of all the answers in order to get the overall picture of the contents. Next, an inductive content analysis was used to analyse the data (Eskola & Suoranta, 187; Silverman 2001, 123), and it has been analysed as follows: First, all the answers were analysed one by one, and all the perceptions of the texts were selected to be analysed further. The main themes were found and then the data was divided further into sub-groups based on the expressed sub-themes. The findings are presented according to three topics: *Description of previous contacts, First meeting in the project planning, and Characteristics of the counter-partners as stereotypes.*

3 FINDINGS

It is very essential for analysis to understand the initial conditions under which the parties have come to the meeting. It was assumed that the experience of intercultural communication in the past, a close acquaintance with the other country representatives reduces the risk of stereotyping.

3.1 Description of previous contacts

The Russian cases were the two dissimilar subjects with different experiences of interaction with the Finns in the past. The woman had a large number of friends and acquaintances among the Finns since childhood, while she was in school. Later in the scientific work she has interacted with a large number of researchers and professors from Finland. While working in St.Petersburg, she was involved in several projects in the frame of Finnish-Russian co-operation and also interacted with the Finns. The young man was from another region of Russia, which does not have a border with Finland and in spite of the past contacts with representatives of other countries, he was familiar with the Finns only by written communication, and brief meetings at international conferences and seminars.

The Finnish cases were also different in terms of their previous interaction with Russians in the past. The first one had different kinds of co-operation at an academic level (teacher exchanges and also co-coordinating student exchange). She had visited St. Petersburg several times during the past four years and she had hosted Russians' visits in her department. The other Finnish participant did not have any previous co-operation with the Russians at all, and her work-based international contacts were also quite limited.

3.2 The first meeting in the project planning

Secondly, to understand the conditions and circumstances where the co-operation started, it is worth describing them as well. In brief, most of the participants did not know each other and therefore they were strained and explored each other during the first meeting. They learned the details of the meeting and had a genuine desire to participate in the project. However, they were unfamiliar to each other and therefore felt stress because of inability to determine the rights and obligations inside the group in the beginning. Nevertheless, it seemed that everybody had come with a positive and open-minded attitude to the meeting.

Furthermore, the atmosphere and conditions during the meeting played quite a big and challenging role in efforts to understand each other. In the beginning, the atmosphere was formal and expectant. There were also two major issues of the meeting venue determining the speed of association in a negative way: the first one is that the venue was provided by the Russian partner, and the second one is that there was a contradiction between the roles of the hosts, who play the leader role usually, and guests. The first issue concerned the meeting room itself – it was Soviet architecture, a huge room with a very high ceiling, with pictures of rectors on the grey walls, and the participants were sitting quite far away from each other. The second issue concerned the fact that Russians are more prone to hierarchical subordination and it seemed to be hard for them to accept guests as leaders (especially if not having prior knowledge or experience of them). However, MUAS was the initiative taker of the project, the inviter and the co-coordinator of the project and thus, MUAS had made the preparations for the meeting (the agenda, a plan for the implementation, etc.) and therefore also acted as the host of the meeting. Under these conditions it took time to relax and focus on working, as well as to have an effective meeting and good outcomes eventually.

3.3 Characteristics of the counter-partners as stereotypes

Taking in account the conditions and circumstances, the descriptions of different perceptions from participants about persons of the other country are presented next. In other words, the descriptions of Russian stereotypes of Finnish people are introduced, and vice versa. There were three main themes in the findings: Physical appearance and behaviour, Personal characteristics, and Being Professionals. The first theme seemed to be related to the first impression of persons, whereas the latter ones are more related to the situation when you already know the particular persons. The results are presented as sub-themes under the three main themes in Table 1, ranked from the most mentioned to less mentioned.

The main themes	Perceptions of Russians	Perceptions of Finns
1. Physical appearance and behaviour	Hierarchical and respective towards authorities. Collective Competitive	Informal clothes Lack of mimics and gestures; yet lively Slow speech Calm and relaxed (sometimes "sluggish")
2. Personal characteristics	Polite and hospitable Reserved or even shy Friendly and warm-hearted "Genuine" Collective	Polite Individualistic Active Modest Adventurous Wealthy Open-minded
3. Being professionals	Good presentation skills Formal Talkative Co-operative Talented and sharp in professional matters Non-verbal communication present	Responsible Cooperative Good negotiators and communicators Good professionals Thorough

Table 1. Summary of the main findings

4 INTERPRETATION OF THE MAIN FINDINGS

In order to understand the main findings of this study, they are interpreted next. It is worth emphasising that we have analyzed characteristics of possible effects on the quality of interaction between Finnish and Russian partners that could affect joint work efficiency. However, although we noticed that also in the interpretation there are big differences between the Finnish and Russian author, we ended up with a joint-understanding of the interpretations.

First, it can be concluded that often negative stereotypes seems to be more common than positive, but if negative stereotypes are not present, then positive stereotypes may lead to negative evaluation about oneself. For example, a perception about the other person as a 'good professional' may challenge the opinion about one's own professionalism. Comparisons are used to approve or disapprove of stereotypes. In practice, in order to achieve common goals the participants needed to perceive the negative sides of all group members that could affect the speed and results of working.

4.1 Respect and politeness

The respect for authority means that the Russians speak in accordance with their position on the social ladder. For example, young members spoke after elders and the debates were lead in the direction in which adults were interested in. Thus, this parameter strongly influences the quality of the joint project work, because younger members are able to generate nonstandard ambitious ideas. For Russians, politeness and hospitality contribute to the development of the results of joint work, but sometimes excessive hospitality and desire to surprise might slow the collaborative work. Actually, friendliness supports Russians' desire to work and complete involvement for the benefit of a common goal. However, the difference between the objectives of this quality can also hinder collaboration, as close informal relationships might be more important to them than the formal aspect of the work. Also the politeness of Finns is often noted. This might be due to ethical values in Europe and in the more developed civil societies. On the other hand, this can also be interpreted so that it is difficult to give a clear description of a person or a saying, if you have to think about politeness.

4.2 Formality

The Russian professional characteristics seem to contribute to productive work positively, except for formality that makes communication difficult, and talkativeness that may lead to unnecessary loss of time. The Russian participants also noted the practical difficulties they faced in communicating. The Finns were dressed in semi-formal clothing in order to avoid giving too formal and strict impression of them. However, the informal style of dress did not match the extent of negotiations. Since the meeting was held in the hall for official delegations, there were the representatives of the two countries and different regions of Russia present and the participants were informed about the upcoming collaboration, the semiformal clothing was interpreted also as an indicator of low inter-

est. In addition, due to the fact that all the Finnish participants were dressed informally and they acted as a team, in the beginning it was difficult to immediately understand which of them was the leader, but then it was illustrated by actions in practice, which facilitated also to minimize stereotyping among the participants. Based on this experience it can be concluded that it is essential to appoint a leader for international meetings who is capable to minimize stereotyping among participants and who is familiar with the methods of intercultural work.

For the Finns, formality seems to be a natural part of the appearance, which can be lessened by informal or semi-formal clothing. Further, lack of facial expression and body language of Finns might have a problem in communication for Russians, because they are more expressive and convey additional information from nonverbal communication channels. For Russians the lack of facial expressions and gestures makes communication dry, devoid of emotional tones, which leads to the transfer of information only but not an attitude to this information.

4.3 Co-operation and competition

The Russians exhibit shyness when entering a new group and the study of this group promotes that. The Russian collective system promotes the adoption of newbies, but at international meetings shyness slows down working together. Also competition among Russians decreases the results of joint work. The desire to achieve high results in different areas may lead to reduce the time, to a larger waste of resources and extensive development. All the professional characteristics of the Finns reflect the positive aspects of collaboration that will contribute to achievement of results.

The slow speech style of the Finns, combined with relaxation and calm behaviour, creates a sense of stolidity, even a low interest, unwillingness to complete the work fast, and the absence of other work. On the other hand, this kind of behaviour provides an insight of stability and confidence, which might be a more relevant interpretation in this case.

Individuality for Russians is elusive. In a collective society all conditions support matters to be decided collectively (see Grachev 2009; Hofstede 2001). The individualism of the three Finnish participants could be interpreted so that each of them keeps oneself to oneself and is not interested in close productive work together. Further, the active and relaxed behaviour of the Finns can be hard to combine for the Russians. Nevertheless, activity might help to take responsibility, stimulate desire to work and provide a significant effect on teamwork.

Modesty for Russians can be an indicator of boredom and being uninterested. As introverts (Hofstede 2001; Lewis 2006), they themselves are rarely modest in spite of religious requirements and the Soviet past. In the working process modesty can mean that a person is content with small achievements and that while working with him it is impossible to achieve great results. Nevertheless, for the Finns modesty seems to be a natural character.

4.4 Propositions based on the findings

To conclude, the collaboration during international project work may be presented as a set of decisions. Those decisions are made and given in a form of agreements and disagreements with other partners' words. For making a decision a person must use the necessary and sufficient knowledge. If knowledge is not enough, the deductive method of thinking is "switched on" – from general to specific. Using these bits of information about the general, a person fills in the knowledge of specific, if there is not enough time to get to know the specific object and an immediate response is needed. Therefore special attention should be paid to negative and irrelevant stereotypes, because they affect decisions in a wrong way. Figure 1 introduces a proposition of cultural impact on the collaborative work, i.e. illustrating different routes for collaborative work by the nationality.

Stereotypes lead to categorization and people are labeling objects according to a similar range of characteristics. The most common categorization is based on the dichotomy "us" and "them". During the project planning days the use of stereotypes started to decrease after people got acquainted with each other, united by the common goal. "Us" and "them" transformed into "we", and we may say that other stereotypes started to vanish since participants got into another state of relationship – partnership. Partnership identifies and emphasizes similarities and weakens differences between partners, therefore negative stereotypes cannot be used. Otherwise it will threaten the quality and po-

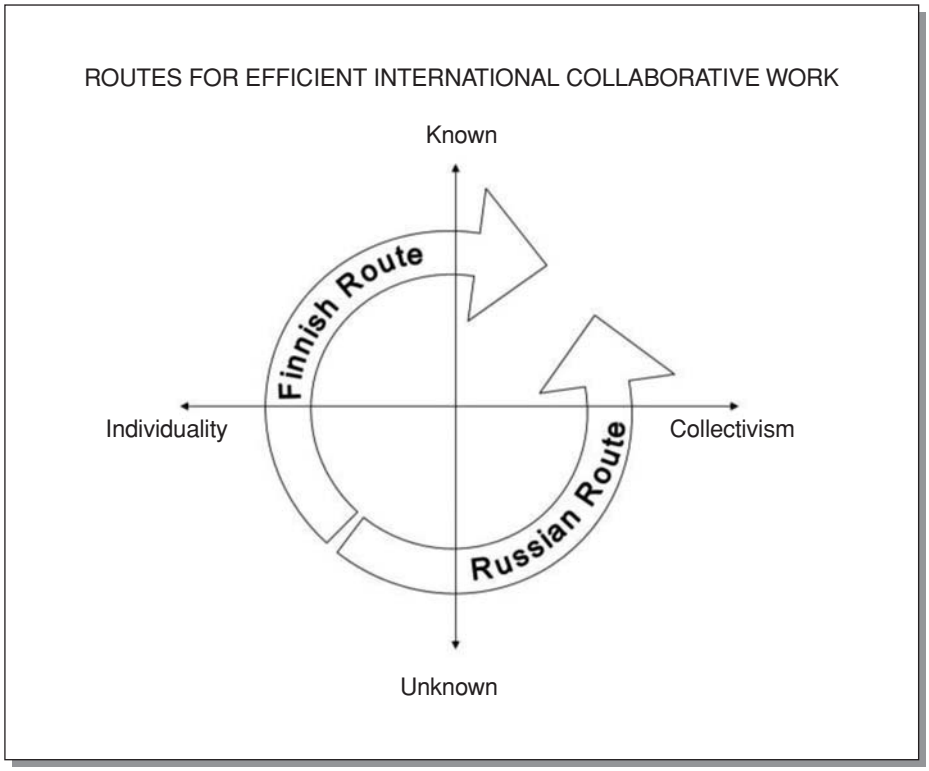

Figure 1. A proposition of cultural impact on the collaboration based on the findings.

tency of the partnership. After all, people seem not to rely on the stereotypes when personal information and experiences are available.

We have considered the two parties that are in concert with each other. At the same time they have a different number of stereotypes about members of another country, which varies depending on the availability of previous contacts and awareness of the representatives of different countries from media sources. The difference in the rate of knowledge and rejection of stereotypes determines the rate at which the subject refuses to use a stereotype on the basis of information received. This rate seems to vary depending on adaptation ability, intercultural experience, character, and age. Further, one more factor - the amount of time; it seems to be critical for the participants in order to abandon the stereotype. Thus, the transition to effective cooperation seems to be dependent on three parameters: Q (quantity of stereotypes), V (speed) and t (time). Thereby, we propose that by adjusting these parameters we can faster come to effective collaboration, which is illustrated in Figure 2. How this proposition is valid beyond this study, could be examined and tested in further studies.

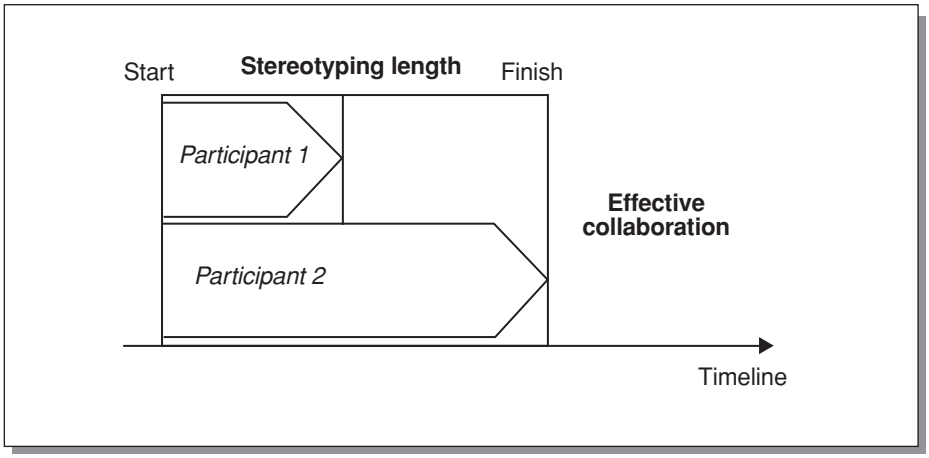

Figure 2. A proposition of the difference of participants stereotyping lengths before effective collaboration starts.

Based on personal characteristics of the participants we came to the conclusion that the length of stereotyping varied significantly among them. Those who were already known to each other, had worked together or met other country representatives, are able to start effective collaboration early. It seems that the effective work would not start until the last participant would lose his or her stereotypes. Therefore special attention should be paid to newbies, young people and those without international experience in order to decrease the length of stereotyping. In this case members of his or her own country should help the person to adapt in the multicultural environment, serving as information guides to other country representatives' facts and characteristics. This is especially important for Russians, since they rely on the collective assistance and listen to authorities (elders, higher rank representatives, officials etc).

5 CONCLUSIONS

To conclude, collaborative work is difficult because of the presence of external objective and internal subjective factors, mainly resulting from the use of stereotypes. Personal meetings within the framework of international project work in our opinion are the best way to organize work in a multi-cultural environment. "Web conferencing", or e-mail correspondence do not provide such good opportunities to compare stereotypes and reality as personal meetings do. It is also important to understand the geographic range of participants, their international experience, age and individual stability of stereotypes in each person.

Since this study was a preliminary by nature, it is worth discussing the limitations of the study. The data of the study has been collected by asking open-ended questions and therefore we find certain problems concerning the informants and the methods: First of all, the question of social desirability should be paid attention to, since people tend to give answers that are expected by the researcher, and demanded characteristics may be given. Secondly, the impact of behaviour emulation should be discussed, since people are acting according to their knowledge about positive stereotypes (magnifying) and negative stereotypes (reduction) and a person behaves according to his own opinion about how he is expected to behave. Finally, we should consider powers of stereotype – people are stereotyping for different lengths of time and the sustainability of stereotyped thinking is unique.

Nevertheless, the findings of this study provided insights and improved our understanding of the cultural topics. The propositions made are based on the findings, yet they should be studied further in order to understand their validity beyond this study. Further, in order to improve the understanding of the topic as well as the propositions introduced, further studies are needed. For example, Influence of stereotypes on behavior (e.g. do Finns tend to be more expressive when communication with Russians), Methods of reducing the stereotypes before meetings, Defining the fastest way of losing stereotypes – individualistic Finnish or collectivistic Russian – and need for adoption of combined way.

In any case, this study was the very first attempt between the authors to reveal cultural impacts during authentic work-related co-operation in practice. This is also a good starting point for the joint research as well as for the joint project works in the future.

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2

Russia know-how from the point of view of competences. Case: Kymenlaakso University of Applied Sciences

Translation from Finnish: Markku Järvinen

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Abstract

Russia know-how is rightfully a part of strategic competence and one of the strategic areas of focus in many educational organizations in Finland. However, this concept is seldom examined: what is it and what does it contain? In this article we ponder Russia know-how from educator and competence viewpoints. The article is based on a common definition of competences in the polytechnic context and on teacher experience. The central themes are competence goals and content of education, which here mean first and foremost that intellectual and cultural segment of education on which a true competence is based and which is especially important to master in the future world which is becoming more and more international. In the globalizing world, our neighbour Russia has remained unfamiliar and strange to many Finns, which has led to many of the possibilities offered by Russia remaining unused. What kind of Russia experts should we educate? Can you succeed in Russia if you have good international competence?

1 Background for Russia know-how and its definition

Since the 1970s, experts of Eastern Europe economy and trade have been educated in Finland. When Finland signed the cooperation agreement with the SEV-organization (Council for Mutual Economic Assistance, CMEA, Comecon) in 1973, it was stated that we needed experts in this field. In the previous year, a special class in eastern trade was started at the Kouvola Institute for Business and Foreign Trade to educate SEV marketing specialists. The curriculum covered the whole SEV area, but the focus was on the study of trade and economic cooperation between Finland and the Soviet Union. This education was a continuation to the Merkonomi-education (vocational qualification in business and administration) and it continued under different titles up to the mid 1990s, when the school became a part of the polytechnic organization. A similar type of education was also provided by the current Saimaa University of Applied Sciences. Annually, about 60 students have studied Russian trade in the Kymenlaakso University of Applied Sciences Degree Programme in International Trade. Many more students are studying the Russian language.

Nowadays, degree programmes and courses providing an introduction to Russia are offered in science universities and in universities of applied sciences. They include studies of language and culture as well as varied courses relating to history, society and economy, and offer the students wide and topical general knowledge of the country. It is up to the student to decide how deeply they want to familiarize themselves with the area, e.g. by means of student exchange, participation in research projects, and practical training (see the universities' websites).

Virpi Kaisto (2009) has analysed the concept of Russia know-how on the basis of various reports and research studies and she has determined that Russia know-how has been defined from the point of view of a particular field of education or from a business viewpoint. From the educational point of view, Russia know-how can be seen as a pool of knowledge which is created by research on Russia as a country, a state, a society, a culture or a language, and education based on that research. From the business viewpoint,

Russia know-how means language skills, mastery of the operational environment and competence in business operations. Russia know-how can also be seen as the ability to understand and forecast the development of Russia and its influence on Finland. Understanding means that we are able to regard Russia as one country among other countries. According to Kaisto, it is useless to argue about the definitions of Russia know-how, but a definition of Russia know-how is necessary, especially in the areas and institutions where it has been raised as a focal point, because the concepts of both Russia know-how and Russia expert are very situation-related and their content varies according to what is meant by Russia in each case and to what the level of competence is compared.

2 A general definition of competences in universities of applied sciences

According to the Polytechnics Act (351 /2003) "the task of the polytechnics is to give higher education *for professional expert duties based on the requirements of working life and its development* and on research and artistic starting points, to support the *professional growth of an individual* and to practise applied research and development work which serves polytechnic education and supports working life and regional development and takes into account the economic structure in the region". When carrying out theses duties, the school must "particularly in its own area practise cooperation with business and other working life and with Finnish and foreign universities and other educational institutions." According to the Polytechnics Decree (352/2003) the aim is to "give the student skills by which they can independently work in expert duties in their field and in development duties and as an entrepreneur."

Therefore, universities of applied sciences should at least know the requirements of working life and its development, professional expert duties, professional growth, and applied research and development work.

When the Bologna process was underway, ARENE (Rectors' Conference of Finnish Universities of Applied Sciences) started in 2004 a project with the aim of integrating the Finnish system of higher education more closely with the European system, by unifying the degree structures of universities and polytechnics and by introducing a uniform measuring system of studies (ECTS). The renewal of degree structures fairly soon led to a comprehensive examination and practical planning of the learning process. In the polytechnic system, the emphasis was on the creation of study content based on European thinking: the core areas of competence were defined at the international, national, degree programme, and course levels. At the same time, national recommendations were made for degree programme-related and common for all polytechnic degrees *competences*, which were seen as extensive competence areas describing an individual's competence and ability to perform profession-related work duties. The definition of common competences (Arene 2007) was finalized as six core competence areas: self-development competence, ethical competence, communication and interaction competence, development competence, organization and community competence, and international competence.

Arene (2010) has continued the definition of competence goals for universities of ap-

plied sciences and given recommendations for application of the National Qualifications Framework, NQF. As for the national framework, it is based on the European Qualifications Framework, EQF. The central goal of the EQF-recommendation is to promote life-long learning. The goal of the European degree framework is to improve the openness, comparability, and transferability of degrees. The recognition of prior learning is important in the realization of life-long learning. The national framework is a description of the degrees offered in Finland and of the special competences of higher education graduates. The aim of the framework is to describe the Finnish degrees and the special competences of the higher education graduates in a uniform, understandable and comparable way, and to standardize the concepts at the same time. (The National Framework of Degrees and Other Competence, Ministry of Education and Culture, 2009)

The Arene team (2010) defines the competences as extensive know-how entities which describe ability, achievement potential, and the ability to perform profession-related duties. It is recommended that these be divided into degree programme-related (professional) and generic competences. The degree programme-related competences form the basis of the development of the student's professional expertise. The generic competences create the basis for functioning in working life, cooperation, and for the development of expertise. The generic competences in the recommendation are: learning competence, ethical competence, work community competence, innovation competence, and internationalization competence. Each competence is further defined for the bachelor's degree and master's degree.

According to Seppo Helakorpi (2009) the axioms of competence include that competence is both individual and communal, the result of formal education, and of informal experience and development. Competence is not only knowing but a more extensive mastery of doing in which social interaction is emphasized more than before. Competence is flexibility, tolerance of uncertainty, and willingness to change. Competence is continuous evaluation and development and is both self and externally assessed. Competence is context-related and its evaluation is value-bound, being in connection with operational culture (collective expertise). Versatility and multidisciplinarity are emphasized in competence.

On the basis of research data, it can be defined that future work is project-type information work requiring thinking which takes place in a global network. To put it simply, this means that people must be able to get along with each other; they must understand the culture-related courses of action behind the working life modes of operation. Only by this attitude can networks be kept together and assemble projects to serve the whole. The question is mostly about leading people, others and oneself. (Oivallus 2011.)

3 Russia as a target of studies in Kymenlaakso UAS

3.1 The competence goals for Russia competence in the degree programme

Based on the general competence definitions and the competence goals set for polytechnic education, the degree programme-related competence goals were defined, e.g. in-

ternational trade competence goals, and as their subgroup, the goals for the degree programme in Russian trade. In the Kymenlaakso UAS study guide (2006), the competence goals were defined as: *"The degree programme gives the student knowledge and skill to operate in the planning and implementation duties of Russian trade and other Russia operations for companies and other organisations in Finland and in Russia."* The content of the degree programme was described as follows: *"In the International trade degree programme option of Russian trade the student acquaints themself with the internationalisation of Russian society and economy, studies Russian language and culture and the practical implementation of business in Russia. The student is required to show a continuous interest in Russia and Russianness, the history and structures of Russian society and a readiness to follow current affairs in Russia".*

In these definitions the goal of the education, general Russia competence, is clearly visible. A Bachelor of Science in Russian Trade is a real generalist in the knowledge and know-how of a certain area. For an educator it is a big challenge. What kind of work can a generalist do? Can a generalist function in professional expert duties at all? Is a generalist an expert?

According to the Polytechnics Act (252/ 2003), the studies are divided into compulsory and optional studies. Of these, *compulsory* are the basic studies (60 ects), professional studies (75 ects, including *optional professional studies* 15 ects) and *optional studies* (15 ects). In addition to these, 210 credits include practical training (30 ects) and the bachelor's thesis (15 ects). For a student of Russian trade, the share of Russian language is at least 17 ects. Many students of Kymenlaakso UAS also take a short language course in Russia or study on exchange for one or two semesters. The student can include in *Optional professional studies* and in *Optional studies* Russian language, business culture or other Russia-related studies. The students are particularly recommended to study on student exchange in Russia. Russia-related studies are currently also available virtually.

Professional studies have included about 90 credits of Russian trade substance studies: society, administration and economy (The history and societal development of Russia, The Russian regions and administration, Russian market economy), doing business in Russia, marketing in Russia, and foreign trade and logistics in Russia international trade practices in Russia, logistics and transport in Russia.

Russian trade studies have included liberal arts, totalling 6 ects (history and societal development, regions and administration, operational culture). This decision was made because the Russia-knowledge of a matriculated Finnish student is, on average, very poor. The general lack of historical knowledge in common thinking and conception of the world is emphasized when Russia is in question; many have never visited it and although a young student who has come to study Russian trade is very interested in Russia, the general attitudes may be reflected in their thinking. The liberal arts content includes regional information about Russia, which is necessary for understanding the Russian economy. Even a superficial knowledge of history helps one to perceive the social situation in modern Russia and understand its business culture. The content of this liberal arts material can also be called professional culture. (Nummela, 2008).

Russian trade education in Kymenlaakso UAS has, for a couple of years, been a part of the Degree Programme in International Trade. The competence acquired by it has been

defined thoroughly. A Bachelor of Business Administration graduated from this degree programme after 3½ years of studies should be able to:

- apply and develop the competence of one's own field of specialisation in international business in practical working situations
- analyse the international business environment on the basis of the essential operational principles and the agreements and legislation which regulate international business
- plan a company's internationalization process by utilising the analysis tools of international operations and apply the customs of international trade
- use English in essential business communication situations orally and in writing, and possibly one other foreign language of their choice in a multicultural business environment.
- use data systems in various work duties
- apply creative problem solving methods in research and development work
- recognise profitable business and analyse business operations and risks
- evaluate the importance of communications and actively develop interactional relationships with both internal and external stakeholder groups, including those required for operating in a global business environment
- evaluate the interaction between the company's own business and its business environment
- develop their own entrepreneurial way of doing business and profitability.

When defined in this way, the competences of Russia know-how can be considered to consist of those factors which are especially related to competence in the Russian operational environment and customs, professional culture related to Russia know-how, and to the general bachelor of business administration competence. In addition, the student trains their competence in practice, which is described more in the next section.

3.2 Practice-oriented training of Russia competence in a working life context

The second part of the education takes place either completely or partly "in cooperation with business and other working life", often outside the university in working life or at least partly guided by an external party. The practice-oriented training includes both the practical training at work plus projects and assignments to be carried out to promote the development of competence, and a bachelor's thesis, which is mostly written for a company or organisation. There are 5 ects units of project studies in the degree. In the project studies, projects are studied as a working method and a student group carries out a project, either by commission or based on their own ideas. Today, commissioned assignments include a lot of project-type studying. Their realisation is integrated directly to the professional studies' teaching process, or a student participates in an RDI project in the university, or in entrepreneur studies, etc. The previously-mentioned general competences are especially required by projects.

Practice-orientation is also realized in the basic training (15 ects) and advanced training (15 ects), which together take about four months. Giving maximum benefit to the stu-

dent creates a lot of pressure for training period arrangements. The student is supposed to get a good idea in the training of what is included in the duties of a their own professional wishes. In addition, the training place should bring the student a topic for their thesis and may also lead to future employment.

The requirements set by employers for trainees and for those looking for their first job are usually concrete requirements for behaviour and adaptation. The knowledge and skills which are defined in the education as the essential professional competence may be the least important for the employers. Few employers expect a recently graduated person to work independently in development and management duties. Many graduates are admitted to these teams to show their competence, but bigger responsibility is given stepwise. Russian trade is a rather demanding field, and for the recently graduated person the first two to three years may be best spent in learning the company's strategies, operational policies, and trade partners; and by arranging meetings and visits and writing memos. If this takes place mainly in Russian, the language skills will certainly improve. For many, telephone conversations can bring a lot of trouble, even if the language skills are otherwise of a high standard. The first job will give the graduate a good chance to develop the Russia-expert identity, to create a solid basis for long-lasting expertise and to fortify the courage required to undertake demanding duties. On average, a bachelor of science in Russian trade receives expert duties about five years after graduation (Nevalainen 2009.)

Customer relatioships and their maintenance, selling and marketing have become the central problems for companies in the Russian trade. Solving these problems requires the skills to collect essential information and to process it in both the target country's and the actor's context. Therefore, good social skills are required, competence concerning people and an understanding of people's everyday life combined with the skill to chart and understand the customer's problems, and a readiness to solve these together. This requires good interaction skills, among which language skills play a key role. Multicultural network know-how, the ability to interact with customers living in another culture and with experts of various fields, is also required. Although one must know how to separate general and substance competence in education, in practical work they form a coherent whole. In an export company, one often has to settle misunderstandings which are may include insufficient completion of documents, but they can be based on the fact that people have different attitudes in the sender's and the receivers' countries towards written text, oral discussions, and the matters agreed in those. In this kind of situation it is difficult to juxtapose international trade competence and cultural competence. If there is no cultural competence, more dissent can occur. If competence in documentation is lacking, matters will not advance in the manner expected by the trading partners.

When correspondence of education with working life is considered, one has to keep in mind that at school many things can be taught, but practical things can be learnt only by doing. At school we can teach things about the Russian business environment, regions, companies, laws, distribution networks, transport modes, administration, etc. One cannot, however, teach how to really operate in an environment. This competence is more about skill than knowledge.

4 Russia competences from the working life viewpoint now and in the future

4.1 Working life requirements and needs for Russia experts

There is a lack of Russia experts and has been for many years. On the other hand, many of those who have studied the region's language, regional knowledge, history and culture do not find work. Why is this the case? Does the education not correspond with the need? Do the employers not know what kind of experts they need? Have the graduates not been able to tell them what they know or do we need a new type of Russia expert?

All of this speculation may be correct. In Kymenlaakso UAS, a couple of surveys have been conducted over the years about what kind of Russia experts companies operating in Kymenlaakso or elsewhere in Finland need (see e.g. Nevalainen 2009). A survey based on more extensive material and with wider geographic coverage was made in the same year at Helsinki School of Economics (Mikkola, Bloigu and Karhunen 2010). The results of the survey do not differ much from the previous research studies, but give a more versatile view of the requirements of Russia competence in companies. The changes that have happened in Russia do have an effect, but the Finnish companies which are exporting to Russia or operating there are nowadays more versatile than they were 10 years ago. Therefore the needs, too, are very much related to the company or to the operation in question.

The Finns' lack of Russian language skills are usually considered a problem, although it is by no means the biggest problem for the companies. The lack of business culture know-how and poor general Russian knowledge seem to be commonly related to the lack of language skills. This situation is emphasized particularly in export companies, whereas the Finnish companies operating in Russia can resort to their Russian staff and utilize communication in a shared language, such as English. Some of the biggest problems hindering trade are customs clearance and logistics, bureaucracy, and corruption. Here it is easy to conclude at least that both language and culture and business competences are important and they cannot be juxtaposed – both competences are needed. Dealing with the bureaucracy and corruption problems often requires more cultural than business competence. From the point of view of competence requirements, the crucial thing is what kind of business operations the company has in Russia and whether it is managed from Finland or the target area.
In 2009 in a survey of companies in the Kymenlaakso region (Nevalainen 2009), more than a half of the respondents replied that they did not have enough knowledge of Russia as a country or in matters related to its culture. Language skills, market information, customer acquisition and the maintaining of customer relationships were also found inadequate. The companies also named some areas in which more competence was required. These were Russian language, business culture, sales promotion, acquisition of new contacts and customers, maintaining of customer relationships, contract matters, and payment transactions.

Companies need experts who have both skills and knowledge. The importance of language skills is high if we consider the problems mentioned by the companies. Only a person with Russian language skills is able to acquire market information, data about the

economy of the Russian regions, to get new customers and to maintain customer relationships. This often includes areas in which it is important to know the goals and plans of the company when acquiring the data, and it is not necessarily sensible to outsource this activity to Russians operating in the target area. This kind of competence should be kept within the company. Many Finnish companies also operate in the EU area, and in general the knowledge of international trade operations and practices is fairly high in Finnish companies. Truly international Russian companies can be found only in the oil and raw materials businesses and in logistics. Internationalization in small and medium-sized Russian companies is in its infancy, and consultation related to it by Finnish know-how gives great opportunities in the future. This requires both language skills and knowledge of practical business operations. (see e.g. Nevalainen 2009.)

Nevalainen also discovered what the students could do as assignments for companies. Companies were willing to receive trainees and to have bachelor's theses written, which has been happening for several years now. In addition, various projects, market surveys and market-area analyses, searching for business partners, marketing and export plans, business-related reports, preparing marketing materials, translation work, and managing contacts with Russia were mentioned. This for its own part tells a little about the sort of Russia experts business life needs now and will need in the future.

4.2 About the future of Russia competence and the need for professional culture

Carrying out business in Russia means not only functioning in an environment which is different from the Finnish one but which is nowadays a very international one. Certainly, the "original" Russian operational environment can be found, too, where the actors have only a minimal idea of international courses of action. However, most Finnish companies operate in the European side of Russia: in North-Western Russia and a part in a quite a small area surrounding St. Petersburg and Moscow. Although many Russian companies are run by aged, old-school business management who do not necessarily have business education, the actions of a younger generation who have acquired a western business education are visible, especially in companies who have recently started their internationalization. However, it is not a matter of moving Western business practices, not to mention business culture, mechanically to Russia. This has not happened anywhere. We still know British, French, and Finnish business cultures and aim to recognize their differences, in order to act in these markets successfully.

In the future, more and more experts will function in a multicultural environment: they sell and buy, carry out investment and development projects in teams, and develop their competence in workshops. This work requires a deep understanding of how people coming from another culture think and act. It is not enough to know how many flowers you can give and whether you can discuss their family with your business partner. One needs to know why the customs are different. If one can explain the reasons behind the differences in customs, one already knows about much more important cultural differences. Mere explanations are not enough, however; one must be able to apply the knowledge in different situations, to put matters in order of importance, to give meaning to phenomena, their consequences, and to speech.

A great way of acquiring experience of a foreign culture is to study and do practical training abroad. Studying abroad develops many kinds of skills, not to mention practical training, where one gets to work in social contexts in which mere language skills are not enough, but often problem-solving skills are also required. These experiences cannot be replaced even by the best classroom teaching. They are the beginning of multi-level and hierarchical schemes, organised mental operational models and data structures.

Surveys of companies have usually included a couple of answers which suggested that making the students read books by Dostoyevsky and Tolstoy would be beneficial. In the discussion in Finland about Russia competence, the need to know Russian history and culture has been emphasized. Timo Vihavainen, professor of Russian history at Helsinki University, wrote an article in Idäntutkimus-magazine about this in 1997, during the time when people in the EU expected the Finns to know their neighbours well. When it turned out that this assumption did not quite correspond with reality, a discussion about Russia competence was initiated. Professor Vihavainen pondered what kind of Russia competence is expected of us by the Russians and what benefits profound Russia knowledge and understanding could bring to us. He states that *"the Russians cannot greatly respect an expert of their country who can sell them vodka or good advice, but whose knowledge of the Russian culture is blatantly insufficient"*. In order to be able to discuss equally with a learned Russian, all Russia experts need to *"know the most important Russian classics in literature, music, and painting. Even this is not enough: they have to know the history in the sense that they can understand the development of Russia during at least this and the previous century…"*. Vihavainen also considers a situation in which the other party is not cultured. Will the studies done go to waste? He answers: *"Even the most uncultured biznesmen is tied to his own history and culture and will speak through those concepts and experience. They are his mental environment, whether he is conscious of it or not "*. The previous citations are naturally true about any foreign country's culture. Knowledge about Russia's high culture is not a goal as such, but it will create a chance to get to know the thought structures and those elements which each person will unwittingly adopt in the transfer of culture from one generation to the next. They are shown in our behaviour in negotiation and purchasing situations and they come across in various emotions.

In international trade, the importance of knowing foreign languages cannot be overemphasized. This is true about the Russian language and Russia. Without this language skill one can, of course, do business in English. This can be done after someone who knows Russian has studied the market situation, found out the competitors, prices and distribution channels, the concrete needs of the customers, the marketing customs and channels, found out the required documents, legislation, etc. There are lots of messages sunk inside the maze of both written and spoken language which cannot be translated; it just has to be understood. It is not important in all situations, but understanding the nuances of the language together with an interpretation of gestures helps to understand what one really wants to convey in a message and how it should be interpreted. A culture-related message can best be perceived in the spoken language. Therefore it is so important to know the Russian language. The ideas of Noam Chomsky (1968) about a language as the mirror of the mind are true of all languages. A language as the mirror of the mind reflects an immense world of human thinking, being and cultural interaction, in all its delicacy.

The culture aspect in its classical civilization-based understanding (liikesivistys) has received very little consideration in polytechnic education. The concept of business cul-

ture, defined like this, was widely used a couple of decades ago, but has been nearly forgotten. What we mean here can be described by the well known image of an iceberg, in which culture is divided into two parts, one under the water's surface, the other above it. Under the surface there are elements like responsibility, commitment, honesty, trust, etc, which are closely related to the concept of culture in general. These elements reflect and can be seen more concretely on the level of business actions and the behaviour of business people in the phenomena nowadays usually called business culture (liiketoimintakulttuuri).

A group of experts (Nummela et al. 2008) is pondering why the relationship between a university of applied sciences and culture is under tension and how culture could be joined as a part of the essence of the university of applied sciences. In many UAS degree programmes such matters are discussed which require a good all-round education to be understood. This is especially important for international business students. Knowledge of the shared history of Finland and Russia provides themes for discussion. Culture also creates better chances for evaluating the realisation of social and societal responsibility, environmental responsibility and other ethical business issues in Russia. The importance of these is defined according to the values prevailing in culture, not only by agreements or by economic profit. In a country where the business culture does not always correspond to our ideas of legal and moral action, it is important to have for oneself a clear policy and sustainable rules. In the modern world we can demand that every actor in the international business environment has the ability to evaluate the consequences of the goals and means of their own action.

5 Russia competences from the point of view of professional expertise

5.1 Professional expertise

Russia competence can be considered a part of the professional competence and expertise created by polytechnic education. The concept of competence is famously difficult to define. Because the UAS-education is defined as education of experts, so can the education of Russia experts be required to meet the same requirements as any other university-level expert education. Typical of expertise, as distinct from vocational skills, is that it is not defined primarily by a professional position or office, but by the matter itself, task, and problem area (Nummela, Friman, Lampinen & Volanen 2008, 27). Therefore, Russia competence could be said to be first and foremost regional expertise, consisting of different knowledge and skills.

Seppo Helakorpi (2009) has defined the competence of an expert to consist of the following: substance competence, work community competence, development competence, and generic skills (see figure 1). Helakorpi emphasizes that the figure can also be seen as a procedural presentation in which the work of individuals creates a communal entity, and in its functioning some requirements for reconstruction are found for the development of the whole organization and its processes. This sets requirements for competence and development for the individuals.

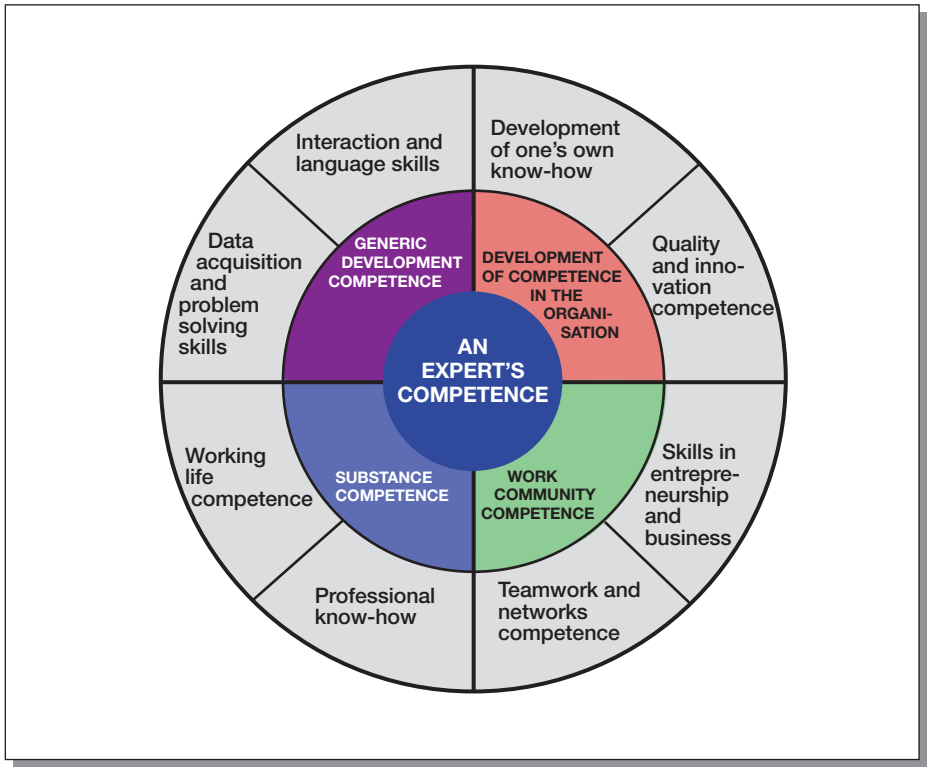

Figure 1. The competence areas in expertise (Helakorpi 2009).

Of the competence areas in the figure, *substance competence* means the professional know-how required in work, the core competence. An expert needs to master the knowledge and skills of the profession and the rules of working life in general, such as ethical instructions. Personal skills and the personal mode of operation in changing situations are part of substance competence.

Work community competence is related to the social nature of the work community. Expertise is also co-operational competence, which means team work, interaction and operating in social networks and leadership. An expert also needs to master business economy in order to be able to carry out financially profitable business. An expert has to be able to make and follow economic reports and base their plans on them, to be able to maintain contact with customer and co-operation groups, and to participate in the company's marketing.

The third part of expertise is ***development of competence in the organisation***, which requires knowledge of the whole organisation's modes of operations and a readiness to develop them. It includes strategic know-how, knowing the development trends in the field, and the ability to act in changing circumstances. It is often in the form of tacit knowledge, in which the organisation's common knowledge and special skills have been "summated". Therefore it is more difficult to be taught and learnt.

The fourth dimension of expertise relates to the developing approach, which requires ***generic development competence***, by which Helakorpi (2009) means the development competence and thinking skills that the continuous development of one's own work and the work community require. One has to possess the readiness for continuous learning. An expert needs to know their field's latest knowledge and applications of development work. They must recognize the problems that arise during the work and have the ability to apply creative problem solving. Development of the person's own work and that of the work community requires insight into societal development and, among other things, consideration of one's own philosophical values and the creation and renewal of one's ethical foundation. An expert is the leader and developer of their own work, which requires, in addition to personal input, participation in education, self-development and development projects, envisioning, innovation, and other shared projects. A person in a managerial position has special emphasis on the management of competence.

In the figure by Helakorpi, both substance competence and work community competence are those types of knowledge which Tynjälä and Nuutinen (1997) classify as declarative data (i.e. facts and book knowledge) and in conceptual knowledge and models. Development competence and generic skills contain know-how which requires methodical, procedural and self-regulated knowledge. Self-regulation includes metacognitive and reflective skills.

Tynjälä and Nuutinen also discuss intuitive knowledge, which is likely to be close to the tacit knowledge mentioned by Helakorpi. These classifications are mostly approximate, but they will likely help to structure the different kinds of competence and the knowledge requirements included in them. One has to bear in mind that expertise always develops as a process in which these elements of expertise integrate with each other. An evaluation of Russia expertise on the basis of the above-mentioned classification is not very easy, because the Russian context changes constantly. However, in the following section we try to estimate what substance skills a Russia expert requires.

5.2 The competence of a Russia expert

The requirements for Russia competence arise from those processes and progressions which take place in the internal and external operational environment in Russia. Therefore, it is a matter of interaction between complex factors in time and place. It is easy to acquire data about Russia, but arranging it in relevant structures and entities is a more difficult task. Therefore Russia experts need to be educated on the basis of scientific data (Eteläpelto 1994). Important analyses estimating the development of Russia are made in the research of various fields of science. For instance, demographic data are required for investments and marketing. The Russian operational environment increasing acquires global features, and the basic starting points, especially in entrepreneurship, have already changed. In order to be able to function as an expert of international operations in Russia one has to know international business as a whole; its models and modes of operation and the international norms and organisations having an effect on it. *Work community and development competences* are needed by everyone. One should also be able to experience know-how concerning Russia and the Russian work community during the studies. Practical training in Russia is extremely important here, but in practice it has

not yet been possible to arrange it in the desired way. The obstacles have been both the problems in the practical application of Russian regulations concerning the use of foreign labour and the students' insufficient skills in the Russian language.

The contexts and interaction situations (selling, purchasing, and negotiations) of international trade include all of the above-mentioned social and mental elements and therefore it is important to include them as a part of the education. Business is always about personal communication and interaction in a specific situation where the behaviour of the actors largely reflects their own reality and previous experiences. The codes of people's own cultures decide in which limits this happens; how much original content it has and how much data and experience of how one should behave in this situation. Their own culture defines also what kind own communications can be used (language, gestures, speech, silence). A young person often lacks experience and knowledge. During the education, one should also have an opportunity to listen to experienced specialists, in order for the path of the novice to proceed in the right direction. Both idea and enthusiasm are important in the construction of one's own expertise.

Generic skills have often been emphasized in qualification listings. In the background of their growing importance is the move from an industrial and information society to a postmodern knowledge based society/economy. The increase in data and service innovations, made possible by technology, creates demands inter alia for data acquisition and problem solving skills. Globalisation has created new problems and mutual dependencies of the economy, from inequality to environmental issues and the regeneration and development needs of the developing economies. It is not enough for development to be able to produce more; a fair development requires new solutions and the recognition of the limits of economic growth, and with it new means of reaching the development goals. All these challenges are also to be faced in Russia. Maybe their significance to the everyday life of the citizens is not yet recognized or admitted there, but a western company and its employees must act with these facts in mind. Understanding them more profoundly is another important element in Russia expertise. Analytical thinking, understanding larger wholes, and responsible development of innovations are generic skills for future Russia experts.

Today, the mastering of meta-skills is emphasized in learning, because they support the mastery of learning of knowledge and analysis of experiences. The further we are from the classroom, the more important it is to give meanings to one's own experiences. According to practical training reports, the most difficult aspect appears to be the lingual reproduction of one's own experience. According to Sinikka Ojanen (2003) *"Giving of meanings is a dynamic process at the core of which is the human being's own world of experience. When a learner finds new relationships of meanings, their own limits become wider and their own worldview becomes richer. When I give meaning to things I interpret my experiences, in other words I aim to understand my experiences".* This kind of interpretation and understanding are important in the acquisition of new knowledge and in connecting it with the previously learned knowledge. The skill of giving meanings is especially important in a foreign operational environment. In order to understand it, one should be able to put it in some order of importance. Here the knowledge of the history and the basis of one's own culture's modes of operation is helpful, because by the same mode of thinking one can also perceive a foreign culture. Dissimilarity is not always important at all, what is important is to understand how doing things differently serves the cohesion

and the maintenance of the vitality of the culture, and how a representative of the foreign culture understands it themself. There is no reason to emphasize the difference of Russia, but one must consider whether the difference is relevant to one's own business, for the promotion of this very project, in this very situation. A typical feature that often arises about the Russian business environment is corruption. When people speak about it continuously, it is easy to see it everywhere. The fact is that it does not exist everywhere and it is not important in all fields of business. When we generalize too much, we can be in a situation where we cannot estimate the meaning of it when it really does exist. By generalizing too much we cannot see the trees in the forest.

In his book "Tacit and explicit knowledge", Henry Collins (2010, 87) has pondered the problem of absorbing what is called tacit knowledge, and states that *"the tacit is communicated by hanging around with an end person"*. By this he means the way of acquiring knowledge where the mediators cannot produce a valuable experience of knowledge but *"the tacit must involve contact"*. For an expert, this requires familiarising oneself with the concrete circumstances, but in their analysis, theoretical knowledge is required. It is not enough to just list the differences. This is what the representatives of business life mostly mean when they state that they do not know the Russian operational culture. An experience-based knowing of reality and analysis of it take time and require giving time to thought. Many students who have been on exchange in Russia say that the most and best knowledge they gained by hanging around in the town; language skills and local knowledge improved, and they could little by little blend in to the environment, to experience it as one's own and to let it take them away. The educator's problem remains how to give credits for this.

For an educator, the biggest problem is how to promote in one's education the development of generic skills. How should the power of reasoning, analytic skills, problem solving skills, interaction skills, and cultural competence be developed? In other words, the skills by which a person processes the information gained from their environment and creates new knowledge. It is partly a question of using processes of which the mechanisms are not known. They can be innate characteristics and therefore they can be taught in a limited way only. The programming of the human mind is, besides being culture-related, also unique.

When defining generic skills, it is important to allocate the task and position specific definitions correctly: what kind of generic competence is required in each task. The competence definitions in job advertisements are often, besides being abstract, also requiring such skills which can be achieved only after an immense and profound work and life experience. When considering education in the future, we should be able to define more accurately how and what kind of generic competence can be and is necessary to be developed at the University of Applied Sciences Level.

6 Conclusions

In Kymenlaakso University of Applied Sciences, Russia competence has been formed of a combination various knowledge, skills, and competences which include general know-how and cultural ideals as well as business competence in the Russian context. The competence goals are defined on the basis of general definitions and also based on a long

teaching experience, competence requirements of working life, and vision. From this basis we can also present what is expected of a Russia expert in the future.

The nature of global activities is not limited to what we and Russia are doing, but what as a whole is made when we, Russia, and the rest of the world act in an almost unlimited environment where everything affects everything else. The importance of attitudes and thinking is emphasized; one must be interested in many kinds of things and people, one must be open to the world, to be able to act ethically and responsibly. It is a good basis for the ability to work together, requiring knowledge and understanding.

In summary, we can conclude that the Finnish Russia expert in the future:

- has a diverse interest in Russia and the current situation in its society
- knows Russian history and culture
- can speak enough Russian to manage their job
- is able to apply their international business competence in Russia
- knows and understands the characteristics of Russian customs and communication culture, and is able to operate and work with Russians productively
- can acquire versatile information from Russia and the Russian business environment and analyse it for the development of one's own operations
- knows how to build networks and add to the social capital of their work and other communities
- understands their responsibility when operating in a foreign country
- works according to sustainable moral and ethical principles

Educators have always been responsible of the development of young people and therefore the young students should be encouraged, during their studies, to think of themselves as citizens, to discuss world events and to question the self-evident. Russia-related studies offer a lot of opportunities for this. Student exchange in Russia opens a totally new life, which raises questions which one does not think of in Finland. In these discussions, it is good to emphasize responsibility in business and the following of ethical principles. Some previous students, already in working life, have told us that only after they had made friends in Russia and been able to see the real life of ordinary Russians there, many things brought up during the studies, e.g. Russia as a market area, opened up in a completely new way, and the order of importance of things changed. At least one of our Russian trade students has moved from sales to relief work – to build Russian civil society.

One should not mystify Russia too much, but it is a different operational environment. The old cliché sayings about not trying to understand Russia with reasoning must be forgotten. There are lots of things in the world that cannot be understood by reasoning. One can increase understanding by acquiring knowledge and friends from Russia, by looking curiously and bravely to the east and remembering that Russia will stay beside us in spite of what we think about it. It still is, especially for the Finns, an unknown, mysterious, surprising, and fascinating country. Understanding it requires studying the past, the ability to perceive in another way the fundamental questions of being, and a sincere will to learn to act in a social reality formed by different kinds of living conditions. Russia will shape all those people who act in Russia or with the Russians. Russia expertise means letting all this have an effect on one's own professional growth. A successful career can also be built on it.

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3

Mikkeli University of Applied Sciences: Russia operations in tourism, catering and event management

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Abstract

Tourism, catering and event management are taught in the Department of tourism, design and business on the Savonniemi campus in Savonlinna and in the Department of environmental and hospitality management and in the Department of culture, youth and social work on the Main campus. Russia knowhow is one of the most important issues nowadays and also for the future degree programmes of the University. In some programmes Russia-related subjects are compulsory, but every student has the possibility to study them on a voluntary basis. Recently the Department of tourism, design and business has developed new Russia-oriented Bachelor and Master Degree programmes, where the emphasis is on Russian clients: what kind of tours and services they want and how to grant their customer satisfaction. The students are required a good command of Finnish, Russian and English to be eligible to apply. Hospitality Management has created a Double Degree programme with two Russian universities and the first Double Degree group started in 2010.
All of the three departments are active in project work with their Russian partners. The projects are successfully integrated into study programmes and they are realized not only by experts and teachers but also by students, who are entitled to credits from project participation. Thus, projects are welcomed, students are motivated and the Russia knowhow of both the university staff and the students is improved.

1 RUSSIA COOPERATION IN TOURISM, CATERING AND CULTURE

Mikkeli University of Applied Sciences has set for itself an objective of being a nationally and internationally recognized Russia specialist. This article describes the Russian operations of three of the University's departments, the Department of tourism, design and business located in Savonlinna, the Department of environmental and hospitality management and the Department of cultural production and event management located in Mikkeli. The three departments have successfully shared the University's ambitions and gained a remarkable knowledge and experience in Russia cooperation.

1.1 Russia knowhow and curriculum

Mikkeli University of Applied Sciences considers Russia and Russian cooperation one of the most important tasks in the development of the University. Every student has an opportunity to gain the working Russia knowhow by taking part in the Russia studies offered by the Department of tourism, design and business since 1996. In Tourism studies, the Russia knowhow is a compulsory module of 5 credits but it is possible to study Russia- related subjects up to 30 credits. Part of the Russia studies is offered as a so called Russia Path study module of 15 credits consisting of three units: Introduction to the Russian society and culture, an Intensive course in St. Petersburg and a Guided Russia-related project, carried out by a student by an order of a private enterprise. Students also have a chance to travel in Russia, as personal experience is the best motivation to further Russia studies. These Russia-related studies are offered also through the Open University of Applied Sciences, where anyone interested can take them for a relatively cheap

price. The Russia Path has proved to be very popular among both students and entrepreneurs. In 2011, a new Russia knowhow oriented Tourism Bachelor as well as Master Degree programmes were launched. The students of these programmes are required to have the working knowledge of Russian, Finnish and English in order to pass the entrance examination and the studies are carried out partially in every one of the three languages. The studies engage both Russian and Finnish lecturers, some of them visiting, some working at the Department of tourism, design and business. The Master's Degree studies are executed partially by contact lessons, partially by e-learning, and the students come from both Finland and Russia.

The Department of environmental and hospitality management has successfully introduced a Russian-Finnish Double Degree programme in Bachelor's Degree in Hospitality Management. Double Degree programmes are practiced with two Russian partner universities, one in St. Petersburg and the other in Yekaterinburg, Ural. The first Russian Double Degree students started in Mikkeli University of Applied Sciences in autumn 2010. The Double Degree students study in an English language group. For the Double Degree, 150 credits come from the student's home university studies, 60 from the partner university studies. This kind of large scale exchange of students is an excellent way of improving the Russia and Finland knowhow of the students and to encourage them to learn more about our cultures and societies.

1.2 Russia related projects

1.2.1 The Department of tourism, design and business

The Department of tourism, design and business has been active in its Russia relations ever since it was established in 1996. Besides Russia studies and field trips, the Department has managed or taken part in several Russia-related projects. In late 1990, a special language course of Service Russian was carried out twice with private companies with an aim to rewrite their products and service to meet the Russian clients better, as well as to give the company employees a working knowledge of Russian. The project was financed by the County Administrative Board. The Department took part also in the Mikkeli University of Applied Sciences' projects called "Russia specialists" and "Services of Russia export in St. Petersburg", which improved the Russia knowhow in the Department. The Design students, for example, took part in an import action of Russian fabrics for Finnish small entrepreneurs and the Tourism students build and attended a tourism fair stand in St. Petersburg representing small tourism companies of South Savo.

In 2006 – 2007, the Department of tourism, design and business personnel took active part in a two-year Interreg project "Networking and Internationalization of Wellness Services in Russia". The project was to create a Wellness product for Russian clients in Finland, launch its marketing in Russia and form a Russian-Finnish network for developing new cooperation between Wellness field actors. The main results of the project were a new network and plenty of information about the needs of Russian clients as well as the local companies' possibilities and prospects in realizing the products. The project was administered by the Mikkeli University of Applied Sciences.

In 2007 – 2008, the Department of tourism, design and business acted an important role in a Tacis project "Development of Welfare and Rehabilitation Tourism in EU and Russia", which was to create Wellness products for Finnish and other foreign customers in Russia. The project was administered by the South Savo Chamber of Commerce. In the project, among other things, a group of Finns tested some Wellness products in St. Petersburg, Russia. One of the main results of the project was the new knowledge about the differences in both ways of doing things and the ways of speaking of things in our countries, which is a very important factor to take into consideration when talking about the Wellness tourism business.

In 2007, the Department worked together with the Department of health care on a preliminary project "Towards Mutual IMT-based Teaching and Learning in Health Care Education between Finland and Russia", which was to find out about the partners' willingness and prospects of introducing e-learning in their work. The results were later taken into account when planning the Department of tourism, design and business's projects of e-learning "Development of International Higher and Secondary Education Business Cooperation in Russian Knowledge (PROVE)" (2010 – 2011, funded by the Finnish Foreign Ministry) and "Developing Integrated and Virtual Learning Environment in Tourism Business (DIVE)" (applied for an ENPI grant in 2011). In PROVE the first steps were made towards joint Russian-Finnish e-learning courses. In the project took part five universities or colleges in South Savo in Finland, the Republic of Karelia and St. Petersburg region in Russia. The student and teacher exchange and intensive courses within the project, as well as the e-learning courses, referred to over 200 persons in Finland and Russia. In personal contact were 110 students, 30 teachers and 7 company representatives. An important result of the project was the tourism company network it managed to create, as the companies serve as a learning environment for the students as well. One of the main incomputable results of the project was the change of attitudes towards e-learning as a possibility of cooperation, and as a prospective way of learning. Even those educational institutions that didn't manage an e-learning course during the project started giving a serious consideration for introduction the facilities and practices of e-learning in their everyday work. In all of these projects, private enterprises were asked to participate, as the Department of tourism, design and business strongly believes in collaboration with the business life. Thus, the knowledge gained by the University staff and students was accessible to the local company representatives as well.

The project DIVE was prepared during PROVE. In case it will be granted by the ENPI CBC programme, 13 tourism field e-learning courses will be realized by eight universities and colleges from South-Savo, Finland, Petrozavodsk and St. Petersburg in Russia. The courses are created by pairs of Russian-Finnish universities/colleges, and the courses are compulsory for their students but available for the students of the other partners, too. Company representatives are invited to study on the courses, and an important goal of the project is to form a network of Russian tourism companies for the students and Finnish tourism companies to collaborate with.

In 2011 the Department was granted a 3-year ERDF project "Developing the Structures of Applied Research in Tourism and Event Production", which aims to more profound understanding of Russian tourists and tourism product development according to the client's needs. This is achieved by studying the existing research and feedback material on Russians, Russian clients and tourism available in Finland, Russia and other coun-

tries. Some Russian experts on tourism are also interviewed in order to get direct feedback of being a Russian tourist in Finland. As the material is abundant but not necessarily focused on tourism, it is studied strictly from tourism's perspective. The concrete outcome of the project will be a manual of a Russian as a tourism client, his needs, preferences, conduct as a tourist, his visions of high quality products and service. The manual can be used in Tourism studies as well as in concrete tour operator work in order to attract more Russian tourists.

1.2.2 The Department of environmental and hospitality management

The Department of environmental and hospitality management has realized several projects in the St. Petersburg region and Leningrad oblast during the years 2005 – 2007; the most important ones of them were an Interreg project "Development of Food Safety within the whole Chain" and a Tacis project "Improvement of the Food Safety Management and Business Practices throughout the Food Chain". Managing two projects at the same time made it possible to work on the same themes and objectives both in Finland and in Russia at once. The project's aim was to improve the safety of food all the way from producers to customers. They analyzed current practices, organized seminars, studied food legislation in both countries and developed systems of self-control in the participating companies. The participating companies' staff was trained in food safety in both countries. The project was administered by Mikkeli University of Applied Sciences and the partners were from South-West Finland, Leningrad oblast and the City of St. Petersburg in Russia. As project experts appeared the University of Helsinki and several Russian State organizations on food and agriculture, as well as two Russian universities. For Finns, the most valuable results of the projects, besides personnel training, was the translation and interpretation of Russian legislation on food production, food safety and food import and export. It appeared that, again, the concepts relating to food production in Russia differed a great deal from those in Finland. On the whole, the project can be considered a great success and it was closed with content.

In 2010 – 2012 the Department is working on a project called "FoodRus", financed by Tekes. The project's objective is to study and develop catering services for Russian clients. The Department works on this project with the Ruralia Institute at the University of Helsinki.

1.2.3 The Department of Cultural Production and Event Management

The Department of cultural production and event management has been working on a Nordic Ministry Council -funded project called "Petrozavodsk Event Management" in 2010 – 2011 together with several partners from Russia and Scandinavia. The project has developed a Bachelor's Degree programme of Cultural Management in North –West Russia, and is being completed in 2012 by an EU Baltic Region project "Promoting Event Management: Training Programmes as Resource for Development of Cultural Industries and Tourism in North-West Russia", aiming at the development of an MA degree in Cultural Management. In the project, students have had the opportunity to study

event management not only in theory, but they have been able to travel and visit different music and other events in Scandinavia and Europe. The partner universities have also been doing some important benchmarking of each other's ways of training event management students. Mikkeli University of Applied Sciences, for example, has organized a Campus festival for years already, and it naturally serves as an important opportunity for the students to learn in practice. Now, the project partner universities intend to start organizing campus festivals of their own as part of the Event Management studies. The Department of Cultural Production and Event Management is also taking part in the national Finnish ESF project "Creative Finland in South Savo" by surveying the experiences and needs of local cultural actors in Russia cooperation and the demand for specially trained producer-managers for the Russian cultural market. The research is important, since it studies the concrete needs of the cultural actors willing to export cultural events into Russia, as they often differ from those of the business actors. An interesting question is also which kind of support services the Mikkeli University of Applied Sciences or perhaps business actors might offer in order to facilitate the culture export actions.

RUSSIA KNOWHOW AS STRENGTH IN MIKKELI UNIVERSITY OF APPLIED SCIENCES

The active and long-running cooperation on different issues with the Russians and Russian institutes has granted the personnel of the Departments of tourism, design and business, the Department of environmental and hospitality management and the Department of cultural production and event management a solid basic knowledge and deep understanding of Russian society, culture and institutions. The projects mentioned above have not always reached the particular target or targets they were designed for, but there have been plenty of moments of success as well. The fact remains, when exploring unfamiliar cultures, failures often teach more than smooth processes of success. The personnel of the three Departments are eager to plan new projects and cooperate with Russians; the amount of cooperating Russian educational institutions has grown to cover the most important regions all over Russia. The staff members of the Departments are having ever more personal and long-term contacts with their Russian colleagues, more students go for travelling and also for practical training in Russia.

Recently the Department of tourism, design and business has invested in its personnel's Russia knowhow and language and culture skills. New Russia specialists have been employed in projects, and there are native Russians as teachers. The Department of tourism, design and business, the Department of environmental and hospitality management and the Department of cultural production and event management are well on their way to the Russia-specialist objective of the University.

4

A new model for exchange of innovation ideas and development of entrepreneurial activities on a Finnish-Russian level

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Abstract

Innovations are the key element in prosperity and wealth of nations. Innovations are encouraged and supported around the world by various means, and Finland is estimated one of the best innovation environments in the world. Innovations not only require bright minds, bold risk taking, and devoted entrepreneurship. The whole society needs to support and encourage generation of innovations. These requirements point out challenges to the Russian innovation environment that the country needs to tackle if to achieve the ambitious goals of the Russia 2020 plan.

A new method of co-operation between Finnish and Russian entrepreneurs, innovators, and innovation support organizations is established in a 2010-2011 project by the Kymenlaakso University of Applied Sciences and the Baltic State Technical University of St. Petersburg. Lectures on the Finnish innovation ecosystem, and the support to innovators have been presented, and innovation ideas of Russian companies, students, and researchers have been collected, analyzed, and evaluated. A number of concrete business actions have been promoted and networking of Finnish and Russian companies catalyzed.

1 Introduction

In modern economies, innovations are considered the most valuable means of increasing wealth and prosperity of nations. A correlation exists between research and innovations, as well as between innovations and the GDP. Based on this causality, it seems justified to invest in research or to apply results from research made elsewhere.

The Russian research environment seems to provide an interesting and somewhat untapped potential for Finnish companies. At the same time, Russian idea-rich entrepreneurs and young professionals are pursuing wealth and success in business. It is in their interest to access and make use of the resources, offered by the neighbouring Finland's innovation system, one of the best in the world.

This report describes a new method of co-operation, in a Finno-Russian cross-border context, to promote and progress innovation generation. Both Finnish and Russian innovation systems are screened to identify their values to entrepreneurs and young professionals with innovative ideas.

The work has been carried out by the Kymenlaakso University of Applied Sciences, together with the Baltic State Technical University of St. Petersburg. It has included some 14 Russian entrepreneurs and more than 40 Russian students and researchers, together with a number of Finnish researchers, corporate executives, and business professionals.

2 Innovations and Wealth

Why are innovations so important in modern societies? It is a common and widely accepted paradigm that sustainable and long-term economic growth in a society stems from innovations. Economic research over the last decades confirms this and indicates that a) investments in R&D create innovations, and b) emergence of innovations increases gross domestic product (GDP) through increasing the labor productivity. This results in increased welfare of the innovative nation (Romer 1986, Griffith et.al 2002, Rouvinen 2002, Aghion and Howitt 2009).

Hulya [2004] has further shown in a comparison study of OECD and non-OECD economies that while there is a strong positive correlation between innovation (measured by patent stock) and per capita GDP in all economies, only large market size OECD countries are able to fully make use of their research and development (R&D) to increase their innovation. Other OECD countries with small market size – such as Finland – may not be able to fully enjoy the fruits of their R&D. However, there is strong indication that this condition is compensated by making use of technology spillover originating from R&D made elsewhere.

This means that small market size countries should not only pursue innovations through own research, but decisively seek to locate and implement research findings in other countries not yet utilized. Here, Russia offers an interesting and potentially vast source of research results with potential applications and new innovations.

On the political level, the value of innovations is widely recognized. The European Union is putting a lot of weight on new policy rules and programmess in order to generate innovations [J.M.Barroso 2011]. Similar goals are set forward by all politicians around the world, including Finland [Tutkimus ja Innovaationeuvosto 2010], and Russia [Kuchins et.al. 2008, en.ria.ru 1 2011]. All nations endure a severe competition to provide the best welfare and prosperity to their citizens, and innovations are considered to play the central role.

The European Union (EU) and Russia have recently started to co-operate on innovations. They both find themselves in danger of falling behind competitors from Asia, notably India and China, and, at the same time, would like to shorten the gap between themselves and the innovation leaders, the USA and Japan. In the EU, four countries – Denmark, Finland, Germany and Sweden – excel in innovations. Their relative innovation performance, compared to the EU27 group is at 25% above the average [Innovation Union Scoreboard 2010]. At the same time, Russia had an innovation performance lagging 37% behind that of the EU27 group. This makes co-operation with Finland in innovations well justified and preferential for Russia.

There are plenty of actions between Russia and the EU on innovations. One being the annual EU-Russia Innovation Forum, started first by Lappeenranta Innovation Oy in 2010. A joint Finnode operation invites Russian innovation start-ups to co-operate with Finnish partners. Research co-operation over innovation topics covers a number of Finnish and Russian institutes and universities (Stenman et.al. 2010, Bilozerov et.al. 2010, to mention but a few). Elsewhere, a German-Russian Technology Transfer Conference was organized in December 2011.

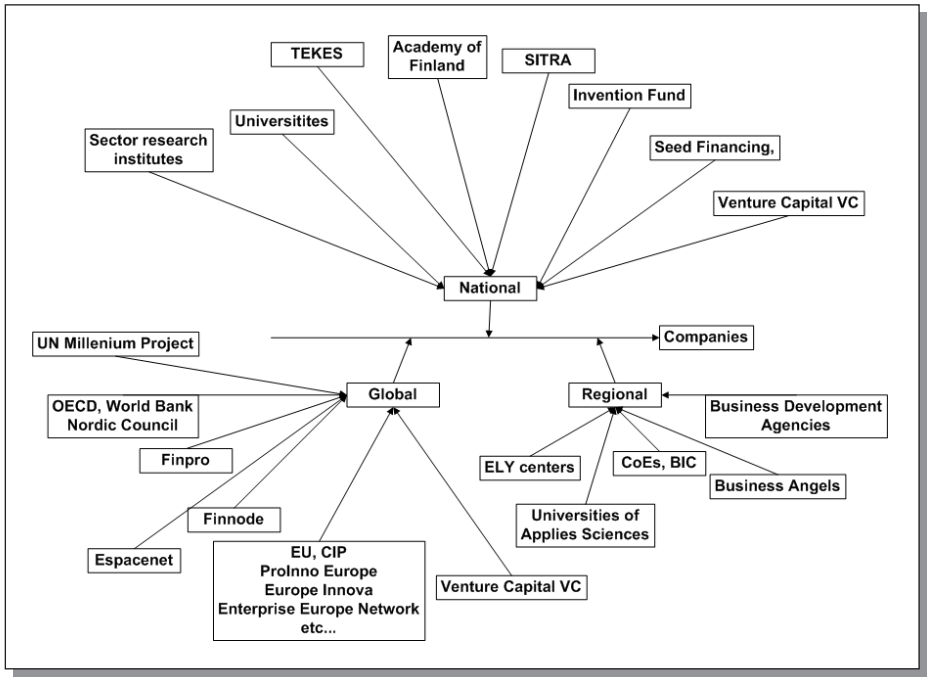

Figure 1. Elements of the Finnish Innovation Ecosystem on regional, national and global level.

3 The Finnish Innovation Ecosystem

As said earlier, Finland is one of the four innovation leaders in the EU27 group. The Finnish innovation system – or ecosystem, as we name it – has earned its reputation through hard work and decisiveness of policy makers over a long period of time. Competence building, networking, regional and national innovation support organizations, education and research institutions, and sources of risk financing have been, but a few, of the elements providing a good basis for nurturing new ideas, and generating innovations [Tekes]

The functioning of the Finnish innovation ecosystem has been studied in the [Veugelers et.al 2009] evaluation of the national innovation system. One of their findings was there was a tendency to transform universities of applied sciences (polytechnics) into nationally- and globally-oriented research universities. This would not serve the interest of the Finnish innovation system, and a recommendation to forge a clear division of labor between research universities and universities of applied sciences was given. So far, this recommendation has not materialized. On the contrary, new policies drawn in the Ministry of Education and Culture seem to place even more emphasis on the high level of research and development in the universities of applied sciences.

Two additional weaknesses were lack of support to a) growth entrepreneurship, and b) internationalization. Since then, Tekes has reformed its strategy, paying more attention

to these two issues, but it is arguable if this will be enough to patch the flaws, altogether. The emphasis and the main goal of the Finnish innovation ecosystem is to help and enable companies to innovate, to bring out new products, services, and solutions and put them on the global marketplace. In this process, universities of applied sciences have a strong position, as local and regional sources of knowledge, research expertise, and skilled labor. The universities of applied sciences seek to serve their local companies and local regions by building a basis for business growth.

Russian companies could benefit from the co-operation with Finnish universities of applied sciences, as well as with other innovation ecosystem players, by several means. First, Russian companies could start joint projects with Finnish research organizations, to tap sources of financing and lay ground for internationalization.

Second, Russian companies could consider partnering with Finnish companies. The roles and tasks of partnership vary, but many Finnish companies are skilled in competing on a global scale. Also, Finnish knowledge and competences on patents, technologies, design, marketing, leadership, and organizational practices could be beneficial for the Russian partners.

Third, Russian companies could establish a subsidiary in Finland. This would enable the Finnish local company to fully utilize all the services and benefits of the Finnish innovation ecosystem. On the other hand, this move should not be made hastily nor based on unsustainable expectations. Local and regional business development agencies and TE-centers would be glad to assist the potential newcomer in evaluating this possibility. Fourth, Russian companies could partner with Finnish organizations – companies, business development units, or research organizations – to analyze and develop possibilities on the Russian market. Many Finnish technologies, services and solutions could have a prosperous market in Russia, were they just to find the right channels and forms to market.

4 Sphere of Russian Innovation Policies and Practices

In Russia, the innovation system is not quite as clear cut as that in Finland. Doing business in Russia is altogether quite hard. The World Bank's governance rankings for 2010 put Russia on place 159th (out of 213 countries) on the 'rule of law' indicator, and 190th on the 'control of corruption' indicator [World Bank, 2011]. This makes life hard even for non-innovating companies – both Russian and foreign.

And although there are many successful foreign companies operating in Russia, so are there many other cases, where corrupt Russian politicians or private Russian companies – as business partners – have initiated administrative leverages or sought court rulings to acquire assets or change terms of partnership with their foreign counterparts [Hanson 2011].

Another obstacle for active research and development in Russian private corporations is the cost of financing. In a recent study, Valdaytsev and Sergeyev [2011] have shown that the capital structure of Russian companies is more debt burdened than that of their

western competitors. The cost of equity is about two times higher than in the EU or the USA, reflecting the higher country risk in Russia. The government supports innovations mainly by two means: Granting innovative companies access to what are called Mega-Projects, and by investing equity into companies with innovation projects (public-private partnerships). Outside this, private companies' research activities are not encouraged. There is a clear, somewhat soviet style, division of responsibility, where research is concentrated to universities and research institutes, such as the Russian Academy of Sciences, and companies should focus on production and market management.

As a very much security oriented nation, Russia is keen to make use of all research results that might have some use in a military context. Public-private partnership is becoming more common in innovation projects, where an innovation could lead to dual usage, civil and military. The government will buy out IPR rights for military usage, and take care of further development in this scope. The private party retains the IPR rights for and may continue the development of the civil application.

Large Mega-Projects include initiatives, like the Rosnano, and the Skolkovo – acronym for the Russian Silicon Valley. The Rosnano was setup in 2007 with a 4 billion USD capital. The sum was to be used as subventions for starting innovation projects on nanotechnology and for direct investment in companies in nanotechnology production up to the year 2015 [Vahtra 2010]. The operation was re-organized in March 2011 to a fully government-owned company seeking to co-invest in nanotechnology projects with substantial potential. Building of nanotechnology infrastructure and training of specialists was placed under a new "Fund for Infrastructure and Educational Programs". As of October 2011, Rusnano has invested in 134 projects with a total value of 17, 5 billion USD [en.ria.ru 2011]

Skolkovo is the brainchild of President Dimitry Medvjedev. It was from his initiative in March 2010 that the building of the Russian version of the "silicon valley" was started. This state-financed new town, just west of the Moscow ring road, was to serve as a dwelling environment for young, creative scientists and businessmen. The Skolkovo Technopark is focusing on five clusters in the fields of IT, Space, Biomed, Energy efficiency, and nuclear technology. By December 2011 more than 300 companies have joined the the Skolkovo project, and 39 companies have received funding, worth 153 million USD [www.sk.ru].

Traditionally, it has been difficult for foreign companies to enter the Russian market, especially in the "fields of strategic interest." Hanson [2011] lists a number of actions indicating that Russia might be lifting some restrictions to become more open for direct foreign investments. These actions include inviting foreign investors to participate in the building of the Skolkovo –project as well as a sharp upward revision of privatization plans, approved in August 2011.

Another new turn in promotion of innovations in Russia is the establishing of Agency for Strategic Initiatives (ASI), first proposed by Prime Minister Vladimir Putin in May 2011. The agency took over responsibilities for innovation policies from the Ministry for Education and Science, considered too bureaucratic for the job. It is still unclear how the new agency will change the Russian innovation system, and its functioning.

Russia has many different initiatives and policy guidelines to foster innovations. However, as Zashev and Dezhina [2010] put it: *"The major flaws in government regulations of R&D and innovation activity are: absence of systemic and consistent approach, of regular evaluation and correction, if necessary, of the government initiatives. Furthermore the dominant role of the government seriously hinders the development of entrepreneurial spirit within the innovation system"*.

Concluding this short description of the Russian innovation environment, we may well say that Russian innovative companies, and individuals, could benefit from co-operating with the players in the Finnish innovation ecosystem.

5 A New Model for Exchanging Innovation Ideas

Kymenlaakso University of Applied Sciences, together with the Baltic State Technical University of St. Petersburg, carried out a project *"Creating a successful model for Finnish-Russian exchange and entrepreneurial development of concrete innovation ideas"* in 2010-2011. The project was partly financed by the Finnish Ministry for Foreign Affairs from the EU ENPI-instrument.

The main objective of the project was to investigate and suggest a new mechanism for facilitating Finnish - Russian economic cooperation, such as joint efforts in the development and commercialization of innovation ideas. The new mechanism aimed at:

- bringing together researchers, lecturers and entrepreneurs both nationally and in a cross-border context
- bridging research capacity in partner universities and strengthening their links with local companies and industries
- defining the mutual areas of joint R&D interest and capabilities
- linking innovation ideas of start-ups, university students and researchers with sources of funding and other innovation support structures.

The project started by screening and matching the partners' mutual interests and areas of knowledge and expertise. The interests of the Finnish partner were to:

a) learn about Russian innovation ideas

b) match prominent ideas with business partners in Finland.

c) find a way to attract new business to South-East Finland based on co-operation of Finnish-Russian companies.

The Russian partner was interested to learn about Finnish and EU ways of building innovations, and the possibility for Russian companies to make use of them. The high level of the Finnish innovation ecosystem was considered attractive for Russian SMEs. Es-

pecially financing from Tekes and EU sources, as well as entering the EU markets, interested the Russian partner and the companies that they interviewed for the project.

As a result, a method was developed where the Finnish partner would produce information on the Finnish and EU innovation processes and market entry, and the Russian partner would provide Russian innovative ideas and start-ups to discuss their ideas with the project team. The dissemination of Finnish and EU practices, as well as business plan processes and commercialization issues were best communicated to Russian partners, and their stakeholders through lecturing. Gathering and assessing prominent Russian start-ups and SMEs and their new ideas for innovations would be based on the lectures, extending the co-operation beyond the initial course.

6 Formulating the Extended Course Process

Executing the new method would then take place in two phases. The first phase was built around two courses, one for the academic audience, and the other for executives from innovative start-ups and SMEs. The curricula of the courses were quite similar, although the course for academic participants would cover the topics on a more general level than the corporate course. The latter provided participants with hands-on tools and contacts to proceed towards commercialization of their ideas.

The two courses, both named *"Commercialization of innovations in an international context"* were held in St. Petersburg in the autumn 2010. With the following topics:

- Developing ideas to innovations
- Importance of internationalization
- Communications and presentation of ideas
- Finnish and EU innovation system
- Sources of financing for innovations
- Building and managing research projects in Finland
- Writing and presenting a business plan
- Venture capital for innovations
- Patents and other intellectual property rights

The courses were taught by five Finnish experts. Dr. Peter Zashev (senior researcher, Emerging Markets Research), Mr. Jorma Rytkönen (research manager, Logistics and Maritime Research), and Mr. Juhani Talvela (research director, Technology and Traffic) all came from the Kymenlaakso University of Applied Sciences. Ms. Kati Velin worked as a project manager at the European Business Innovation Center Kymi, and Mr. Jouni

Lounasmaa was the CEO of Hookie Technologies Ltd. Translation services from English to Russian were provided by the Baltic State Technical University.

The participants included 40 master level students and a few researchers on the academic course, and 14 business persons from 13 companies on the corporate course. The lectures were given during a one-week period in November 2010.

7 Evaluation process

In the second, extended phase of the process participants of both courses were asked to prepare an innovation idea, write a business plan and present the idea to the project team, as well as other course participants. The academic participants would present their own, or ideas originating from the university research. The corporate participants would present an idea of their company, or an idea on which they were considering a new startup.
The innovation ideas and business plans were screened through a two-tier evaluation.

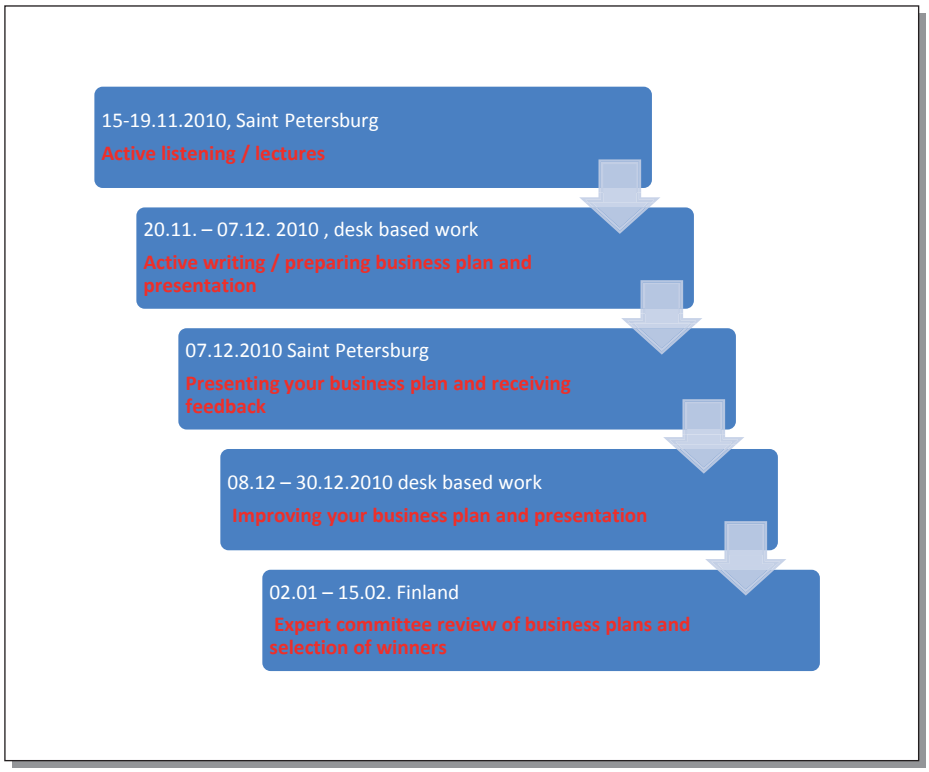

Figure 2. Time table of the extended course, including the evaluation process of the innovation ideas and business plans.
[redrawn from Zashev 2011]

The first evaluation took place in St. Petersburg on December 7th 2010, when business plans were presented and initial feedback was given. There, the project team and other course participants discussed each presented idea or business plan, and made constructive recommendations for improvements.

The second tier evaluation included experts from the Kymenlaakso University of Applied Sciences, and external experts from the local innovation support system, and potential corporate partners. This evaluation was carried out during early 2011. All business plans were studied and evaluated in order to:

a) recognize the perceived novelty of the proposed solution,

b) estimate its market potential and competition,

c) suggest technological or other factors to be further developed or re-engineered,

d) name five key questions to be answered before furthering the innovation process,

e) propose relevant Finnish/EU partners or support organizations to help with further development and commercialization of the innovation idea.

Figure 3. Kati Velin lecturing business plan preparation to corporate participants at the Baltic State Technical University in November 2010.

8 Evaluation results

The two courses generated altogether 15 innovation ideas. Academic course had over 40 participants and came out with four innovation ideas. Three of the presented ideas were based on university research, and one on students' own initiative.

The executive course attracted 14 participants from 13 companies. They generated 11 innovation ideas, including ideas for both radical and incremental innovations. Some of the innovation ideas can be found in Table 1.

The readiness of the presented 15 ideas was quite varying. Some had drawn up complete business plans in English, while others remained as Russian language power point presentations. The scope of the suggested ideas was also very wide. This posed a challenge for the evaluators, since they would need a very wide range of expertise.

1.	Low costs CAD/CAM dental complex including new type of material solutions.
2.	A barcode reader for smart phones to be used as a marketing instrument.
3.	A new piston technology for hydraulic machines enabling lower friction.
4.	A web portal for energy saving information, products and technologies with 34 000 visitors per month.
5.	A new type of plastic and metal frames for glasses with special features.
6.	Distributed call-center software for service providers.
7.	A soil sampling autonomous robot system.
8.	Security arrangement for cloud computing systems and services.
9.	Nano-particle size coal based fuel.
10.	AC/DC conversion with mechanical device enabling efficient motor speed adjustments.

Table 1. Some of the innovation ideas covered a wide range of business areas

The evaluation of innovation ideas and business plans started with assessment by peer course participants and project team members. The project team then screened the ideas and business plans, and gave them preliminary grades. The ideas were then sent to the second tier assessment, where external experts were used to provide views, ideas and questions from another perspective. Such experts included people from business development agencies of South-East Finland, universities, and potential partner companies. Their input made it possible to have a more thorough and comprehensive evaluation, and gave the original innovators better feedback.

As the result of the evaluations, two of the innovative start-ups were successful to find a business partner in Finland. Additionally, a presenter of one innovative idea decided to set up a new company in Finland and continue the development of their idea within that company.

Four other presented ideas are still in motion, and there is a good chance that they will generate Finnish-Russian business co-operation in the future. Four other ideas were not considered ready for the market yet. They were given feedback on the issues that they should work on. And finally, the remaining four ideas were judged infeasible. The reasons for the judgment were many, including low market potential, lack of true interest within the company/idea presenter, patent problems, invention made elsewhere earlier, and too big technological challenges.

9 Discussion

The project has generated plenty of information and a fair understanding of the Russian innovative SMEs' mental environment. Finding companies to participate in the extended course process proved extremely difficult. Most of the business incubators were unwilling to recommend the training and the process to their nurtured companies. Instead of helping the companies to find growth and prosperity, the incubators seemed to be more interested in seeking ways to tap project funding for their own needs.

Russian technical universities do not offer practical courses in commercialization of innovations. This makes it very challenging for Russian technical students to deal with innovations and business issues. And for the researchers there are no processes in place to identify research based inventions, or any support in developing these to innovations. Although Russia boasts large scale initiatives for transforming the national economy towards innovations, there seems to be little evidence of its realization. Discussions with Russian entrepreneurs and students indicated that poor language skills, as well as lack of motivation hinder their active search for opportunities on a global market place. Lack of international connections lowers their visibility to what is happening on the market. This finding is further supported by findings of Zashev and Dezhina [2010] p.20-21. Entrepreneurial spirit is not necessary any lower than in Finland or other parts of the western world, but business interests are more focused on local and national markets where the rules of the game are more familiar to them.

The course and the two-tiered evaluation of the innovation ideas and business plans turned out to be very successful. A good number of ideas and business plans were generated and evaluated. It remains unknown, however, what has become of those ideas and plans that did not directly find Finnish partners or other continuation. In future work the extended course process might need to be extended even further, to enable a more long-term development co-operation between the innovation presenters and the evaluating team. Although it is not feasible to support all innovation ideas, a better result might be achieved by keeping up with and supporting the top 30% innovators.

10 Conclusions

There are remarkable differences in the Russian and the Finnish innovation ecosystems, the latter being evaluated as one of the best in Europe. The lack of coherence and clari-

ty of the Russian support structures for innovations is obvious. In Russia there seems to be common understanding of the importance to thrive innovation activities, but actions seem to be irrational, without a larger framework for innovations. It is not easy for an innovator to find sufficient and professional support from research institutions, public innovation support organizations or similar in Russia.

The business incubators nurturing start-ups and innovative companies are found to not do the job that they would be expected to do. They give Russian innovation start-ups insufficient and far from professional support. This leads us to conclude that the best Russian innovative ideas would do best to base their operations in Finland and make use of the high level of the Finnish innovation ecosystem.

In the course of the project some of the companies dropped out before delivering a business plan. It seemed that they were not willing or capable to prepare the required business plan in English, although they had clearly accepted the terms when rolling in. This leads us to the conclusion that before actual match making is made the Russian innovation start-ups need significant amount of support in business concept clarification, language translation, presentation materials, preparing of professional business plans, etc.

A new model for exchanging innovation ideas has proven to work, and a good amount of sustainable business co-operation has been generated. The method may be used and further developed in a future project, or by South-East Finland business development agencies wishing to attract Russian innovative SMEs to co-operate with Finnish companies, or to establish an operation in Finland.

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5

Life satisfaction among Young Adults in Kymenlaakso and Leningrad regions – A study of eight life domains in divergent cultural contexts

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Abstract:

In this article we analyse the association of different life domains on the subjective well-being (SWB) of young adults in Kymenlaakso in Finland and Leningrad region in Russia. The cultural and societal differences of the regions are for example in the standard of living, social stratification, welfare systems and the distribution of well-being, which is supposed to create different patterns in the impacts of life domains on life satisfaction. The SWB is analysed by quantile regression analysis, which makes it possible to compare the differences within countries and between countries in the quantiles of well-being. According to the results, Finnish society offers more diverse ways to improve life satisfaction than Russian society, which reflects the differences of the societies in institutional settings and equality. The results highlight the need to maintain the equalitarian model in Finland, especially in the regions which experience economic challenges. In Russia, more equal society could be created by public sector investments in social welfare.

Keywords: Subjective well-being, life domains, young adults, quantile regression, Kymenlaakso, Leningrad region

1 Introduction

The subjective well-being (SWB) has gained a growing research attention in social sciences during the last decade. One reason for the interest is the fact that the research of subjective well-being gives a route to people's experiences and preferences, which can be utilized in policy decisions (Kahneman & Krueger 2006; Wattson et al. 2010). One of the major research interests inside the field has been the differences between societies in SWB. For example, a welfare state is seen to support the life satisfaction of people by securing individuals against risks, easing everyday life, creating social equality and supporting social capital (Ervasti & Saari 2011). The lower standard of living, the weaknesses of welfare system and the fast societal change of the transition country may are other reasons for the differences between societies. An interesting question is whether these differences are reflected to the young adults' SWB and what are the mechanism and structures behind societies to control differences in life satisfaction.

Regardless of the wide interest in the topic there are still major gaps and weaknesses concerning the research of young adults' well-being. Firstly, the research of the impact of institutional settings on SWB is in an early stage (Ervasti & Saari 2011). Secondly, young adults have not got equally attention compared to other age groups in the research of SWB (Proctor et al. 2009). The major part of the studies concerning the SWB of young adults is made in North-America, and cross-cultural comparisons are rare (ibid). Thirdly, the earlier studies of SWB have been carried out by traditional linear regression models and their applications, which ignore the information contained in satisfaction distributions (Diener et al. 1999).

The subjective well-being can be divided into affective and cognitive components (Diener 1984; Pavot & Diener 2009, 101). The cognitive component of subjective well-being can be researched by the concept of life satisfaction, in which individuals can evaluate their satisfaction with their life on the whole or on different domains (Diener ym. 1985;

Andrews & Withey 1976; Pavot & Diener 2009, 102). In this article, a cross-cultural comparison in the subjective well-being of young adults is analyzed between the small-town regions of South-East Finland and the surrounding area of St. Petersburg, Leningrad region, in Russia. The task of the study is to examine the differences of the associations of eight life domains: material, health, achievements, social relationships, safety, community, future security and religion, on the life satisfaction of young adults. We aim to answer to the questions: How do the associations of different life domains with life satisfaction vary within the regions in lower and higher quantiles, and what are the differences between the study regions? Our aim is to produce new understanding about the SWB of young adults based on an empirical survey between the different societies. We expect that examining the impact of different life domains we can shed light on institutional and cultural differences between the regions and get a view of pros and cons of both societies improving life satisfaction of young adults.

2 Characteristics of the study regions: Kymenlaakso and the Leningrad region

The economic situation of the study regions differs significantly in terms of the absolute level of welfare, economic development, the equality of income distribution inside the region and the position of the regions in the welfare distribution inside the countries. One of the basic differences between Finland and Russia is in the distribution of welfare. The Finnish social security system has been based on developing universal services since 1950s (Karisto et al. 1999). The strong welfare state has an essential background for understanding the circumstances of an individual, for example in the case of unemployment, although social and economic inequality has risen since the economic recession of 1990's (Julkunen 2006, 219-223), and young adults can be a vulnerable group in the Finnish social system (Kauppinen & Karvonen 2008). The universalistic and equalitarian welfare system of Finland has an aim to equalize the welfare differences in population, help individuals to adapt to different kinds of shocks and life events and keep them as an active part of society (Heikkilä et al. 2008; Saari 2010). The welfare system works as it is associated with a high SWB (Anderson et al. 2009, 17).

Russia is a transition country in which societal change is fast. There are a low subjective well-being, a weak social security system and large welfare differences between the social groups in Russia (Veenhoven 2001; SSPTW 2010, 92-100, 258-263). In Russia, the SWB scores are lower than in other transition countries (Guriev & Zhuravskaya 2009), which has puzzled researchers (Saris 2001; Inglehart et al. 2008, 278; Veenhoven 2001). The economic change has been deep: income deviation in the country and dispersion across the regions increased dramatically from 1992 to 2003 (Solanko 2006). In the Soviet system social protection was an important priority and the change in the system after the end of 1980s has increased the gap between the needs of people and the actual provision of services: only one sixth of Russians regarded social security system as effective and a slightly smaller portion was satisfied with the system (Mikhailova 2011, 7-8). Because of the weaknesses in the social security system, the probability to ending up in the poor or low-income strata is over 50 percent for non-qualified blue-collar workers, unemployed or retired people (Tikhonova 2011, 26). One fifth of the population had lower resources in 2006 than the subsistence minimum budget, while the top fifth of popu-

lation earned almost half of the total amount of the monetary income (Sokolova 2010). Social networks provide for low-income strata daily routine support, which doesn't produce a qualitative change in life, while the social networks of more prosperous people provide support for gaining more money, access to official people, solving problems and getting a good job (Tikhonova 2011, 37-38).

Both study regions have been orientated to industrial production, but the regional division of labour has treated them differently, disfavouring Kymenlaakso and favouring Leningrad region. Kymenlaakso was hit harder by the downturn than most other regions in Finland because of its export-orientated industry (KTK 2011). GDP per inhabitant was in 2008 86 per cent of the national average (MKP 2011).The youth unemployment of Kymenlaakso had the strongest provincial increase in Finland from 2008 (12, 1 %) to 2009 (19, 1 %) (Sotkanet 2011). In addition, youth unemployment (18-24 years old) has been above the national average from 1991 to 2010 (ibid). Kymenlaakso had also the biggest provincial loss of inhabitants in Finland because of internal migration in 2008 (Kaarna 2009, 18). However, the slide of population was just 0, 1 per cent in 2010, from the 182 000 inhabitants of Kymenlaakso (MKP 2011). In a study of rural areas of Finland, outmigration of young adults was associated with lower life satisfaction of staying young adults, but unemployment, poorer education, a lack of social support, passive coping strategies and pessimism were mainly mediators for the association (Ek et al. 2008). The result can be applicable to Kymenlaakso, because the region has been among the five regions of Finland in which the absolute amount of employed and 18-64 year old persons have declined since the 1970s (Myrskylä 2009). The recent downturn and maturing industrial cycle of forest industries have meant the loss of traditional paths to industrial jobs and higher unemployment for the region. However, the welfare state which helps individuals to adapt, may have softened the negative impacts of the recession on young adults.

At least those young adults of Leningrad region who have succeeded in their life have experienced a different side of globalization. During the last decade, the economic development has favoured parts of the Leningrad region, in which the standard of living has been low and the welfare system weak, compared to Finland. The unemployment rate of Leningrad has long been among the lowest in Russia (Heininen et al. 2007, 28), which reflect the economic position of the region as one of the most developed areas of Russia (Kosonen et al. 2011, 20). The region had 1.632 million inhabitants in 2008 and the decrease of population has been 2.6 percent from 1990 (Rosstat 2011). Leningrad region has benefited from its location near St. Petersburg and between the EU and the other parts of Russia, which has supported diverse economic structure and foreign investments (CEMAT 2010; CEMAT 2011; Heininen et al. 2007, 30). The growth of industrial production in the region was clearly above the Russian average from 2000 to 2007 (CEMAT 2005, 1; CEMAT 2007b, 1). The region has also recovered well from the downturn, and some of its sectors have been relatively resistant against the recession due to the home market effect (CEMAT 2011). Incomes have been 25 % lower in the Leningrad region than in St. Petersburg regardless of rapid increase (Heininen et al. 2007), but the difference in purchasing power may be partially evened by the high living cost of St. Petersburg (RSTP 2011). In summary, the relative position of the region is among the best in Russia, but the weaknesses of social welfare and other institutions can be supposed to sustain social inequality between people, or show different strategies to improve life satisfaction compared to Kymenlaakso. It must also be remembered that the economic sit-

uation differs significantly between the cities of Leningrad region (CEMAT 2011). An age group which has probably benefited from the positive development of the best areas is young adults. However, the lack of a strong welfare state has not made possible an equal distribution of well-being, which makes it difficult to estimate the effect of development on the life satisfaction of young adults in general.

3 Empirical data and methods

3.1 Empirical data

The eight domains of life used to explain life satisfaction are: standard of living, health, achieving in life, personal relationships, safety, community-connectedness, future security, and religion. In interviews respondents were asked to evaluate using the scale from 0 to 10 their satisfaction with the following questions concerning these seven items. The original questions of PWI were modified a little in order to make it suitable to Finland's and specially Russia's cultural context and language. The questions asked were the following: [1)] How satisfied are you with the things you have? Like the amount of money, your things or other belongings? (standard of living), [2)] How satisfied are you with your health? (health), [3)] How satisfied are you with the things you want to be good at? (achievement of life), [4)] How satisfied are you with getting on with the people you know? (personal relationships), [5)] How satisfied are you with how safe you feel? (safety), [6)] How happy are you with groups away from your home, whom you hope to care about you? (feeling part of community), [7)] How satisfied are you with what may happen to you later on in your life? (future security), and [8)] How satisfied are you with religion? (religion).

The article is based on survey data gathered from 16 to 29 year-old young adults in South-East Finland by phone interviews and in St. Petersburg by street interviews in the first-half of 2011. The number of respondents was 1400 in the Kymenlaakso region in Finland and 1000 in St. Petersburg in Russia. For the data gathering the quotas of age groups, gender and the place of residence was calculated based on demographic data. Also sampling was based on the population register of Finland. The place of residence was either the 18 districts of the Leningrad region in Russia or the municipalities of the Kymenlaakso region in Finland. The street interviews of the Leningrad region, based on the quotas, were carried out in public places such as transport stations (underground and bus), main streets, fuel stations and shopping centres. The respondents were selected by random interval sampling, in other words by picking up for example every 5th, 6th or 7th person (depending on the popularity of the place) for the interview. The data is gathered from the towns of the Leningrad region, which means that rural areas are not represented equally in the data.

3.2 Methods

Earlier studies of subjective well-being in Russia and Ukraine have shown that economic factors are by no means the only influences on happiness and satisfaction with life

(Abbott & Sapsford 2006). Other important influences are being in good health, feeling in control of one's life, having strong personal support and trusting people (Abbott & Sapsford 2006). Most of the earlier studies have been based on conventional regression analysis (e.g. Abbott & Sapsford 2006;) or logit models (e.g. Hayo 2007; Hayo & Seifert 2003). What has been neglected so far is the information that is contained in satisfaction distributions. Ordinary least squares regression techniques give one picture of the data, focusing on the conditional mean and therefore the analysis is implicitly interested in the satisfaction of the average person. This analysis hides the information about quantiles where the satisfaction might crucially differ from the average. Quantile regression provides an equally convenient method for estimating models for conditional quantile functions (Koenker & Hllock 2001), and thus it can help us to obtain a more complete picture of the factors affecting individual well-being. While conventional regressions focus on summarising the averages of the distributions, quantile regressions are able to describe the entire conditional distribution of the dependent variable.

In studying subjective well-being, the average effects might under- or overestimate the impact of explanatory variables. A focus on the average is therefore unsuitable for the analysis of complex interactions of variables in distributions containing heterogeneous individuals, as unequal variation implies that there is more than a single slope describing the relationship between a response variable and predictor variables (Cade & Noon 2003). The quantile regression model explaining life satisfaction, first introduced in the seminal contribution by Koenker and Basset (1978), can be written as

$$y_{it} = x'_{it}\beta_\theta + u_{\theta y} \qquad \text{with } \text{Quant}_\theta(y_{it}|x_{it}) = x'_{it}\beta_\theta \qquad (1),$$

where y_{it} is the dependent variable (satisfaction to life as whole), x is a vector of regressors, β is the vector of parameters to be estimated, and is a vector of residuals. The explanatory variables included the 8 items of the PWI scale (Cummins 2003; International Wellbeing Group 2006; Wills 2009): "Satisfaction with personal security", "Satisfaction with groups of people belonging to", "Satisfaction with security for the future", "Satisfaction with relations with other people", "Satisfaction with health", "Satisfaction with standard of living", "Satisfaction with life achievements", and "Satisfaction with religion". Quant $_\theta(y_{it}|x_{it})$ denotes the θth conditional quantile of y_{it} given x_{it}. The θth regression quantile, $0 < \theta < 1$, solves the following problem:

$$\min_\beta \frac{1}{n}\left\{\sum_{i,t:y_{it}\geq x'_{it}\beta}\theta|y_{it}-x'_{it}\beta| + \sum_{i,t:y_{it}<x'_{it}\beta}(1-\theta)|y_{it}-x'_{it}\beta|\right\} = \min_\beta \frac{1}{n}\sum_{i=1}^{n}\rho_\theta(u_{\theta t}) \qquad (2),$$

where $\rho_\theta(.)$, which is known as the "check function", is defined as:

$$\rho_\theta(u_{\theta t}) = \begin{cases} \theta u_{\theta t} & \text{if} \quad u_{\theta t} \geq 0 \\ (\theta-1)u_{\theta t} & \text{if} \quad u_{\theta t} < 0 \end{cases} \qquad (3).$$

Equation 2 is solved by linear programming methods.

The regression coefficients of the quantile regression show the impact of the explanatory variables to the subjective well-being. The differences between study regions are tested with a permutation test. To illustrate the basic idea of a permutation test, suppose we have two groups A and B whose regression coefficients are $\beta_{A,i}$ and $\beta_{B,i}$, and we want to test, at 5% significance level, whether there is a difference between the impacts of regression coefficients to the life satisfaction as whole. Let n_A and n_B be the sample sizes corresponding to each group. The idea of the permutation test is to determine whether the observed difference between regression coefficients is large enough to reject the null hypothesis H_0 that the two groups have identical probability distribution. In the stages the permutation test was done as follows:

1. Calculate difference in observed regression coefficients
2. Pool the observation of groups A and B
3. Calculate the difference of the sample regression coefficients and save result
4. Repeat stage 3 for m times
5. Calculate the p-value for observed difference by using the exact distribution of possible differences.

4 Results

4.1 Life satisfaction in Kymenlaakso and Leningrad regions

To examine an individual's life satisfaction, we use the earlier used life satisfaction question. It covers the response to the question "How dissatisfied or satisfied are you with your life overall?" It is effectively tracking an individual's life satisfaction ordinally on an eleven point Likert scale, ranging from "not satisfied at all" (0) to "completely satisfied" (10). A histogram showing the distribution of life satisfaction is shown in Figure 1. In Kymenlaakso the distribution is narrow, indicating that most of the young adults have

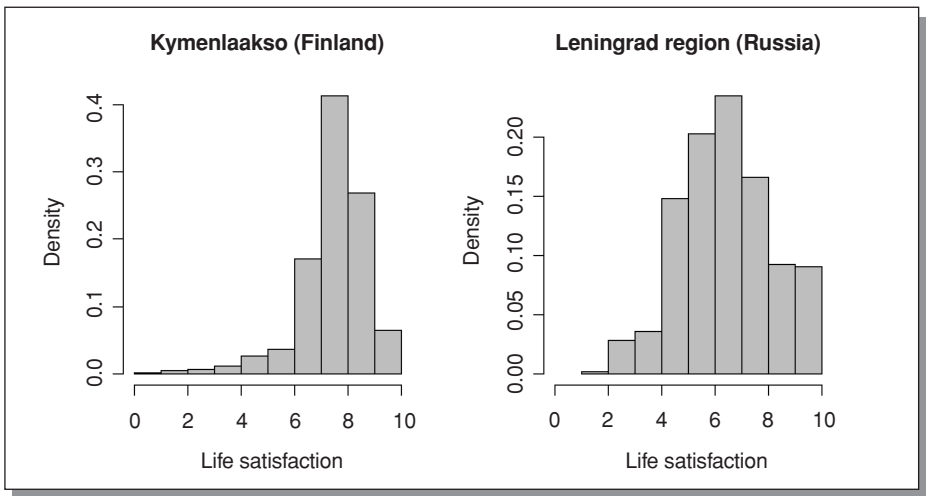

Figure 1. Life satisfaction of the young adults in Kymenlaakso and Leningrad regions.

a high life satisfaction. In Leningrad region the distribution is wider, meaning lower life satisfaction and greater variance on it. Thus, the distribution shows that the proportion of high life satisfaction is also lower in Leningrad region.

Summary statistics on Table 1 show differences between the study regions in the life satisfaction and its domains. Life satisfaction was higher and standard deviation lower in Kymenlaakso than in the Leningrad region (Table 1). The standard of living and safety were the domains of life in which there were major differences in absolute figures between the regions. In other domains the differences were smaller and the sense of community was even higher in Leningrad than in the Kymenlaakso region. Health, achievements, personal relationships, future security and religion were at little higher level in the Finnish than in the Russian data. High standard deviations indicate a greater inequality of SWB in Russian society in all of the domains. In this respect, the statistics sup-

Region	Variable	Mean	sd	p10	p25	p50	p75	p90
Kymen-laakso (n=1370)	Life satisfaction ***	7,97	1,25	7	7	8	9	9
	Standard of living ***	7,41	1,77	5	7	8	9	9
	Health *	8,25	1,56	6	8	9	9	10
	Achievement of life ***	7,87	1,31	6	7	8	9	9
	Personal relationships ***	8,60	1,18	7	8	9	9	10
	Safety ***	8,68	1,26	7	8	9	10	10
	Feeling part of community *	7,94	1,39	6	7	8	9	9
	Future security ***	7,76	1,38	6	7	8	9	9
	Religion *	6.62	2.58	3	5	7	9	10
Leningrad oblast (n=581)	Life satisfaction	6,90	1,74	5	6	7	8	9
	Standard of living	5,48	2,44	2	4	6	7	9
	Health	8,05	2,06	5	7	8	10	10
	Achievement of life	7,50	1,97	5	6	8	9	10
	Personal relationships	8,19	1,89	6	7	9	10	10
	Safety	7,18	2,49	4	6	7	9	10
	Feeling part of community	8,12	1,94	5	7	9	10	10
	Future security	7,32	2,16	5	6	8	9	10
	Religion	6.30	3.18	2	4	7	10	10

Table 1. Summary statistics of variables. Asterisks after life domains indicate significance levels of the t-tests between Kymenlaakso and Leningrad region. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

port earlier findings where satisfaction varies considerably between people, across different domains of life and across time in Russia much more than in Western Democracies (Saris Andreenkova 2001). Another interesting fact is that the satisfaction with health, personal relationships and community is better at the upper quartile of Leningrad region than in Kymenlaakso and the satisfaction with achievements and the future security is higher at the top decile. Thus, it seems that the subjective benefits of the development of Leningrad region is directed to the top decile in material sense and to the top quartile in social sense.

4.2 Regression results

The result from OLS regression revealed major differences between the regions (Table 2). The domains affecting life satisfaction were diverse for the young adults of Kymenlaakso, but fewer for the young adults of the Leningrad region. In Finland, the impacts of the future security and the standard of living were the strongest, but also all other domains except religion were significant (Table 2). In the Leningrad region, life satisfaction was explained by the variables measuring the standard of living, health, future security and religion. The biggest differences between the countries were at the future security and health, where the regression coefficients were higher in Kymenlaakso than in the Leningrad region. With religion the association with life satisfaction was higher in the Leningrad region (Table 2). However, the comparison of the regression coefficients is difficult to interpret as there are differences in the intercepts (Table 2).

Table 2. OLS regression table. (R2 Kymenlaakso 0.426; R2 Leningrad region 0.300) t statistics in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Variable	Region	
	Kymenlaakso	Leningrad region
Intercept	1.284 *** (5.324)	2.655 *** (7.730)
Standard of living	0.190 *** (11.820)	0.170 *** (5.554)
Health	0.138 *** (7.263)	0.082 * (2.177)
Achievement of life	0.067 ** (2.754)	0.087 (1.857)
Personal relationships	0.078 ** (2.885)	0.099 (1.929)
Safety	0.079 ** (3.259)	0.048 (1.532)
Feeling part of community	0.078 *** (3.314)	-0.038 (-0.816)
Future security	0.205 *** (8.901)	0.105 ** (2.847)
Religion	0.003 (0.331)	0.061 ** (2.883)

The main results of our article are based on a quantile regression model which provides evidence for our claim that the OLS results only provide an incomplete picture about the causes and correlates of life satisfaction. Table 3 shows the results of quantile regression and offers new understanding about the structures and mechanisms behind the differences in the life satisfaction distributions.

Estimated coefficients show that there were no significant differences between Kymenlaakso and the Leningrad region in the impact of the standard of living on life satisfaction (Figure 2). In Kymenlaakso the association of living standard with life satisfaction decline from the bottom to the up, which is in line with earlier studies showing the saturated association between living standard and life satisfaction (Easterlin 1995). The lack of large differences between the countries indicates that regardless the higher standard deviation, improving the standard of living for the lowest quantiles of well-being is not a more effective way to improve SWB in the Leningrad region than in Kymenlaakso. There must be adaptation to the weaknesses of the material situation in the Lenin-

grad region, which explains why the impact of material well-being is about the same level in the objectively wealthier Finnish region than in the poorer Russian region. In earlier studies lower aspiration levels in rural areas have been utilized in the comparisons of cities and rural areas, in order to explain mixed results of objective measures and subjective satisfaction with material well-being (Hayo 2007). In addition, regardless of absolute income gains of the Leningrad region (CEMAT 2007a, 5), rapidly developing society can cause frustration to the upwardly mobile individuals because the reference point runs also upward (Graham & Pettinato 2001; Selezneva 2011).

Table 3. Quantile regression table.
t statistics in parentheses. * p < 0.05, ** p < 0.01, *** p < 0.001

Kymenlaakso					
Variable	**q10**	**q25**	**q50**	**q75**	**q90**
Intercept	**-1.719 ****	0.378	**1.328 *****	**2.765 *****	**3.9556 *****
	(-2.918)	(0.909)	**(3.430)**	**(8,995)**	**(10.726)**
Standarda of	**0.249 *****	**0.196 *****	**0.189 *****	**0.148 *****	**0.077 ****
living	**(6.099)**	**(7.304)**	**(10.052)**	**(5.766)**	**(2.597)**
Health	**0.218 *****	**0.145 *****	**0.083 ****	**0.0925 *****	**0.102 *****
	(4.239)	**(5.452)**	**(3.259)**	**(4.003)**	**(3.632)**
Achievement	0.057	**0.088 ****	**0.137 *****	**0.083 ***	0.068
of life	(1.032)	**(2.844)**	**(5.428)**	**(2.523)**	(1.577)
Personal	0.060	**0.088 ***	**0.091 ***	0.081	0.075
relationships	(0.794)	**(2.307)**	**(2.456)**	(1.924)	(1.646)
Safety	0.025	0.022	**0.070 ***	**0.073 ***	**0.140 *****
	(0.355)	(0.649)	**(2.525)**	**(2.563)**	**(3.341)**
Feeling part of	**0.151 ***	**0.101 ****	**0.075 ***	0.071	0.001
community	**(2.040)**	**(2.923**	**(2.518)**	(1.804)	(0.022)
Future	**0.289 *****	**0.272 *****	**0.200 *****	**0.170 *****	**0.150 *****
security	**(4.172)**	**(7.234)**	**(6.453)**	**(5.499)**	**(3.567)**
Religion	0.044	-0.012	0.001	-0.001	0.002
	(1.639)	(-0.884)	(0.049)	(-0.058)	(0.148)
Leningrad region					
Intercept	**1.565 ****	**1.608 ****	**1.957 *****	**3.152 *****	**4.781 *****
	(2.692)	**(3.191)**	**(4.795)**	**(8.029)**	**(5.913)**
Standard of living	**0.220 *****	**0.174 *****	**0.159 *****	**0.206 *****	**0.159 *****
	(3.726)	**(3.417)**	**(4.078)**	**(6.332)**	**(3.341)**
Health	0.083	0.075	0.103	-0.008	-0.010
	(1.100)	(1.007)	(1.573)	(-0.157)	(-0.155)
Achievement	-0.025	0.111	-0.012	**0.149 ***	**0.298 *****
of life	(-0.298)	(1.274)	(-0.189)	**(2.514)**	**(3.514)**
Personal	0.089	0.030	**0.150 ***	0.149	0.138
relationships	(0.932)	(0.363)	**(2.402)**	(1.834)	(1.360)
Safety	0.077	**0.121 ***	0.065	0.010	-0.070
	(1.609)	**(2.506)**	(1.827)	(0.192)	(-0.923)
Feeling part of	0.021	-0.009	-0.009	-0.029	-0.077
community	(0.279)	(-0.128)	(-0.172)	(-0.461)	(-0.695)
Future security	0.049	0.080	**0.171 ****	**0.117 ***	0.070
	(0.659)	(1.543)	**(2.843)**	**(2.224)**	(0.788)
Religion	-0.007	**0.063 ***	**0.08 ****	**0.091 *****	0.063
	(-0.190)	**(2.079)**	**(3.073)**	**(3.826)**	(1.494)

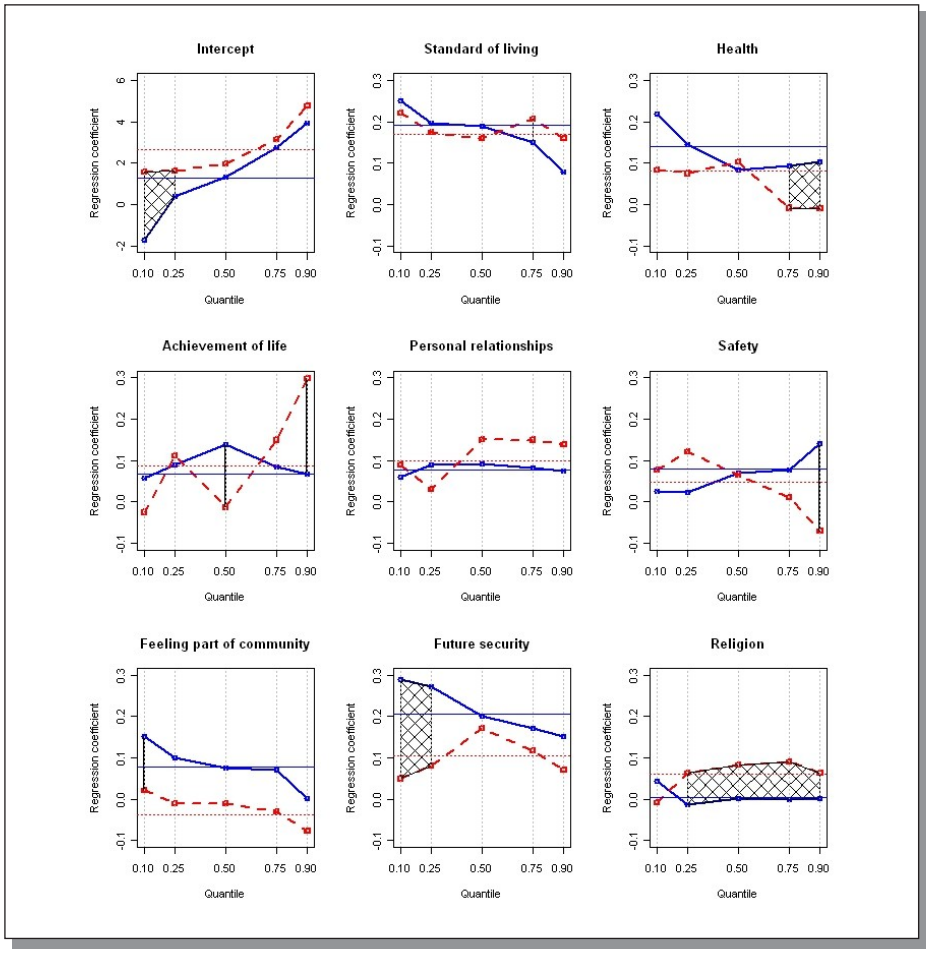

Figure 2. Estimated regression coefficients in 10, 25, 50, 75 and 90 percent quantiles in Kymenlaakso (solid line) and in the Leningrad region (dashed line). Significant differences ($p<0.05$) between study regions are indicated by raster. In the permutation test m was set to 1000.

The other main findings of the quantile regression are related to the health, achievements of life, future security and religion. In Kymenlaakso, health is significantly associated with life satisfaction in every quantile (Table 3). The differences between quantiles in Finland show that health is one of the most effective ways of improving the life satisfaction of young adults. In Leningrad region health is not associated with life satisfaction at all (Table 3) which indicates that health is not a determinant for life satisfaction. An interesting finding is that in the top quantiles the difference between the regions is significant; showing that in Kymenlaakso health is a resource for achieving higher life satisfaction but in the Leningrad region life satisfaction is not dependent from health (Figure 2).

The meaning of subjective achievements on life satisfaction was highlighted in the Leningrad region (Table 3), because in 75 and 90 percent quantiles it had a statistically

significant association with life satisfaction. Achievements of life are connected with the standard of living, since the low incomes, constricted resources and poverty limit the possibilities to self-fulfilment, and therefore weaken also the subjective well-being (Fahey et al. 2005, 41; Layard 2005, 30–31: Luhmann et al. 2011). In Kymenlaakso the achievement of life explained life satisfaction in 25, 50 and 75 percent quantiles (Table 3). Results underline differences of the societies as they emphasize the competitiveness in Russia and the equalising welfare state in Finland. Most of the life domains are associated with life satisfaction in 25, 50 and 75 percent quantiles in Finland, offering various paths for equalising the differences whereas in the Leningrad region these associations are missing (Table 3). One example of this is shown in Figure 2. Association of achievement of life on life satisfaction is higher in the 90 per cent quantile in the Leningrad region that in Kymenlaakso, whereas in 50 percent quantile the difference between the regions is opposite.

This same inclusive feature was found also in future security in Kymenlaakso but not in the Leningrad region as future security produced life satisfaction only for 50 and 75 percent quantiles (Table 3). The result indicates the differences in the equality of people between the societies. In the Leningrad region there is no option to gain life satisfaction at the 10 and 25 percent quantiles: the problems of everyday life and life in general may be too unstable for future planning. In Kymenlaakso future security has the highest association on life satisfaction in the 10 and 25 percent quantiles, indicating that society contains mechanism for inclusion which declines standard deviation in life satisfaction. These differences between the countries were also statistically significant (Figure 2), because the regression coefficients are significantly lower in 10 and 25 percent quantiles in Leningrad than in Kymenlaakso. The reasons for this are related to the weaknesses of societal institutions which do not guarantee sufficiently stable rules and norms (Gudkov 2011). Feeling part of the community strengthens this inclusiveness, because it doesn't have association with life satisfaction in the Leningrad region but has it in Kymenlaakso favouring people in the weakest position (Table 3).

The religion was associated with life satisfaction in the Leningrad region in 25, 50 and 75 percent quantiles but not in Kymenlaakso (Table 3). Apart from the 10 percent quantile the differences between the regions are significant (Figure 2). These findings support the understanding of religion in the field of psychology for helping individuals to cope, either positively or negatively, with different kinds of life situations (Pargament & Ano 2004). From this perspective, the impact of religion in the Leningrad region can be explained by the challenging living conditions of the region, which support the role of religion as a part of the coping process.

6 Discussion and conclusions

The results revealed major differences between the Kymenlaakso and Leningrad regions in how subjective well-being can be improved among young adults. In Kymenlaakso future security, standard of living and health are the most effective ways to improve the life satisfaction of those young adults who are in a weak position in the 10 and 25 per cent quantiles, but also all other domains except safety and religion are effective. Accordingly, the standard of living was effective in the Leningrad region, but only safety and reli-

gion, which were ineffective in Kymenlaakso, were the other domains which had an impact on the life satisfaction of poor young adults (25 percent quantile).

In Kymenlaakso the distribution of life satisfaction was narrow and this characteristic was explained by an equalitarian welfare model. In Kymenlaakso the SWB was supported in more diverse ways, which reflects a higher standard of living but also a wider institutional support structure and mechanisms of society. These factors support especially young adults in the 10, 25 and 50 per cent quantiles, prohibiting exclusion from society. In the Leningrad region society was not as inclusive and the position of unsatisfied young adults was more problematic. Because the inclusive mechanisms of society were weaker, the life satisfaction distribution was also wider in the Leningrad region. However, religion was significantly associated with life satisfaction, indicating an adaptation of young adults by the immaterial factors of religion to the challenging life environment.

In addition to highlighting the standard of living, the result showed the meaning of institutional settings for life satisfaction. The societal structures like welfare system and cultural assumption behind the Finnish equalitarian model or Russian market-driven development produce different ways to control life satisfaction. According to the results, the downturn of Kymenlaakso has not challenged the subjective well-being of young adults and diversity in the sources of subjective well-being. Accordingly, it can be said that the positive impact of market forces on the economy of the Leningrad region has not changed the challenges caused by social inequality. This can be seen in low life satisfaction, strong standard deviations of the domains but also fewer effective domains in order to improve life satisfaction. More detailed further research could be made, because the social development of the Leningrad region is territorially differentiated, which means that there are wealthy zones – in near St. Petersburg and in successful local centres leaning on industrial plants – and problematic zones, in which the incomes can be about 20 to 25 percent from the wealthy zone (CEMAT 2007a, 6). In addition, it must be taken into account that the results of this study do not concern the rural areas of the Leningrad region, which are especially in the eastern part of the region suffering from an out-migration of young people (ibid).

The research produced a new understanding of the SWB of young adults by cross-cultural comparison and quantile regression. The cross-cultural perspective offered a view to the societies of divergent histories, like the development of welfare system in Finland and the transition from the Soviet system to a market economy in Russia. These differences prolong also different historical experiences of young adults in a more equal Finnish and unequal Russian societies. The divergent societal structures of the regions can be seen also as different paths from the bottom of well-being to life satisfaction. For this study, quantile regression offered also possibility to understand how SWB can be improved at different levels of well-being in Finland and in Russia. Thus it deepened the traditional research of SWB by the perspective of different strata of the societies, which is a central issue for the understanding of the subjective level experience in a wide societal perspective. For policy decisions, the results highlight the need to maintain equalizing structures in Finland, especially in the regions which experience economic challenges. Satisfaction with the standard of living and hope for a better future is important for the life satisfaction of young adults. In Russia, a more equal society should be created by social welfare investments into the public sector, which would support the cohesion of society and more diverse routes to improve well-being for the lower strata.

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6

Cross-border cooperation in the field of social services and welfare: visions and future steps

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ABSTRACT

The structures of public social and welfare services in Finland are changing, social service network in Russia is rather new, the development of public social and health service system is still in progress in Russia and welfare professionals in both countries are facing new welfare needs and social problems. Thus, it is besides economically, most of all humanly and ethically, necessary to invest in effective projects and other forms of cross-border cooperation in the field of social and welfare services. Regional educational institutions have their responsibility in this progress. Mikkeli University of Applied Sciences (UAS) (The degree program in social services) and St. Petersburg State Institute of Psychology and Social Work have taken their first steps of cooperation in 2011 and some key areas of cross-border cooperation between the institutions can be identified. Development of working methods and models of social and welfare services, production of comparative welfare data, student and teacher exchange, benchmarking of learning environments and developing R&D networks as well as strengthening the regional co-ordination and cooperation of development work can be seen as examples of cross-border cooperation. In the research and development work in Mikkeli UAS there are themes such as children's and youth's welfare, international social problems, social work with Russian immigrants and rehabilitative work that could serve as a basis of development when planning new forms of cross-border cooperation with Russian partners in the field of social services, health and welfare.

1 INTRODUCTION

This article considers some main possibilities for cooperation between the Finnish and Russian education organizations in the field of social services and welfare. The incentives for developing cross-border cooperation in the field of social services and welfare are discussed and some key areas of cooperation are described. Also concrete examples of cooperation between Mikkeli University of Applied Sciences (Mikkeli UAS) and St. Petersburg State Institute of Psychology and Social work are described.

The first steps in the partnership between the Degree programme in Social services of Mikkeli UAS and St. Petersburg State Institute of Psychology and Social Work were taken in 2011. Concerning research, development and innovation activities (RDI) Mikkeli UAS has four expertise fields of which the Degree programme in Social services belongs to the Health and welfare expertise field. Although this article concentrates on the cooperation between Finnish and Russian social service educators, future visions about the forms of cross-border cooperation could be seen as an address for the expertise field of Health and welfare as a whole.

2 INCENTIVES FOR DEVELOPING CROSS-BORDER COOPERATION IN THE FIELD OF SOCIAL SERVICES AND WELFARE

Social and health care is one of the priorities when developing economic and social cooperation between Russia and Finland. For example, Finland's plan of action for cooper-

ation in its Russian neighbouring areas (2009-2011) highlights social and health care as one of the key areas of cooperation. Furthermore, in November 2011 Finland and Russia signed a memorandum of cooperation in the field of social and health care with the main areas of cooperation being health promotion, prevention of infectious diseases, development of social and health services and legislation, development of occupational safety and health and development of cooperation in the field of scientific research. Developmental activities between the countries have focused on special issues such as improving children's and youth's health and social well-being, preventing substance use, supporting families at risk of social or economic exclusion and improving job opportunities and independent living of handicapped people. (Suomen ja Venäjän lähialueyhteistyön toimintaohjelma 2011.)

Other incentives for developing cross-border cooperation between Russia and Finland are national and regional level initiatives and programs targeted at enhancing the export of well-being know-how and technologies. At the national level, the Ministry of Trade and Industry published in 2007 a report on the commercialization and export of publicly funded social and health services as part of export promotion for the Finnish well-being cluster (Salonen et al. 2007). According to the report, the special areas of Finnish social services and social welfare that could be internationally utilized, are models of elderly care and work with handicapped people (for instance accessible and safe environment, activities of independent living, new models of home care and outpatient clinics for aged people), mental health services (especially low-threshold outpatient services), rehabilitation services and child welfare services.

There are also many challenges in the international cooperation. A heterogeneous group of social and health service providers, lack of commercialization, lack of co-ordination in the process of commercialization of welfare services and the difficulty to commercialize immaterial services may partly explain the lack of internationally commercialized social services. Thus, the international cooperation in this field has focused more on the exchange of expertise in international projects and on the exchange of know-how and the utilization of professional expertise than on the international commercialization of social and welfare services. (Salonen et al. 2007.)

The national and governmental level agreements and strategies mentioned above can be seen as incentives also for regional and local social and health care actors and educational institutions when developing new forms of cooperation with Russian partners. The main regional sphere of interest of the Mikkeli UAS is the region of South Savo in Eastern Finland. In the Provincial Strategy for South Savo (Uusiutuva Etelä-Savo 2009), the development of Russia know-how and networking skills especially in the area of St. Petersburg has a key role. Regional educational institutions have their responsibility of carrying out the strategy. The export of social and health care expertise, development and exchange of service concepts and teacher and student exchange are examples of the crucial success factors in the field.

3 KEY AREAS OF COOPERATION IN THE FIELD OF SOCIAL SERVICES

In this chapter some potential future forms of cross-border cooperation that could serve

as a platform for educational, research and developmental cooperation between higher education actors in the field of social services and welfare in Russia and Finland are presented (Figure 1).

The development of *working methods and models of social services may* contain applications of client-specific service concepts based on current welfare needs and welfare gaps. Although the personnel of municipal services is in a key role when developing new methods of client work and models of social and welfare services, regional educational institutions such as universities of applied sciences can be important partners especially in the education of professionals as well as in planning and implementing development processes. Over the years, several Finnish and Russian actors have launched initiatives to address social problems in the neighbouring areas in Russia by developing client work methods and new forms of services and social work activities. The project partners have for example launched preventive work against substance use among the youth, developed elderly care and work practices with handicapped people, supported families in danger of social exclusion (e.g. refuges for the victims of domestic violence, support services for families, opening of child welfare units) and strengthened social work practices and civic society (Aarva 2011).

The establishment of "good practices" of cooperation is undoubtedly reasonable when deepening cooperation in the core areas of cooperation. However, also new initiatives are required to respond to increasing welfare needs and welfare gaps in a society. For example according to the Finnish evaluation report on the Finnish-Russian neighbouring area cooperation 2004-2009 (Aarva 2011), the forms and contents of cross-border cooperation have remained strictly traditional, focusing on the same target groups, which may hinder the creation of new initiatives in the field of social services and welfare.

The production of comparative welfare data is necessary in order to identify welfare gaps, welfare needs of citizens and future tendencies of social problems. The data production enables systematic planning and implementation of research and development projects, compared to coincidental partnership and project planning. Thus, joint research projects producing comparative data on wellbeing, welfare gaps and the needs of welfare of individuals, families and communities can be seen as a basis when starting to plan common development projects. Finnish local and regional welfare reports for different age groups (children, youth, people of working age and elderly people) might be concrete examples of collecting welfare data and using it in strategy work and in development of welfare activities among citizens.

Especially when searching for the ways of cooperation between Russian and Finnish higher education institutions *student and teacher exchange and benchmarking of learning environments* are key areas of cooperation. For Finnish students practical training in social services in Russia should be seen as a value-added experience in the current situation where the number of Russian citizens in the Eastern Finland is growing and Russian people compose the biggest immigration group of Finland's immigrants. For Finnish social welfare professionals, understanding of Russian communities in Finland and skills to work with Russian immigrants are essential parts of their multicultural competences. For Russian social work and social service students, an exchange program in Finland may, besides the socio-cultural competence and common client work practices, enable them to familiarize themselves with the special questions concerning Russian

immigrants in Finnish society and Russian clients of social services. Teacher exchange might open chances to benchmark learning and pedagogical practices. For example in St. Petersburg State Institute of Psychology and Social Work simulation education of client cases of social work is an essential part of pedagogy and might be worth benchmarking for Finnish colleagues. On the other hand, the Elixiiri–centre of welfare services in Mikkeli UAS might serve as a Finnish example of developing the learning environment in cooperation with the working life.

Several Finnish actors have worked in Russia over the years: planned and implemented research and developed projects and worked to produce innovations in the field of social and health care. The service structures differ between these countries (Finland and Russia), administrative culture and working culture are different. In addition, there are numerous education institutions as well as other actors in St. Petersburg, not to mention the whole Russia. Therefore it is necessary to co-ordinate the cooperation and to create networks when planning and implementing joint projects. For example, Aarva (2011) concluded in the Finnish evaluation report on the Finnish-Russian neighbouring area cooperation that there have hardly been any changes in the themes of social and health care projects and actors since the end of 1990. The same partners have launched projects which have established institutional bonds of cooperation but at the same time may have delayed the creation of new initiatives. Instead of single and separate projects, more systematic regional and national co-ordination and cooperation of planning and implementation of development work and the creation of larger developmental ensembles might be justifiable – most of all, the question is about strategic planning and development.

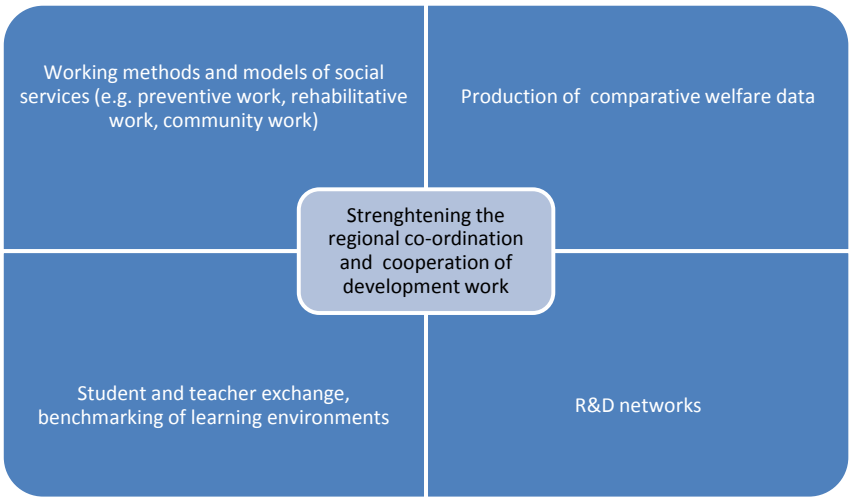

Figure 1. Future visions about the forms of cross-border cooperation between Finnish and Russian educational institutions in the field of social services and welfare.

4 FIRST STEPS AND KEY AREAS OF CO-OPERATION BETWEEN MIKKELI UAS AND ST. PETERSBURG STATE INSTITUTE OF PSYCHOLOGY AND SOCIAL WORK

In previous chapters the context of cross-border cooperation between Finland and Russia has been described. In this chapter concrete steps and future visions of cooperation between Mikkeli UAS (The degree program in social services) and St. Petersburg State Institute of Psychology and Social Work will be described.

The forms of cooperation are described in Figure 2. Both Mikkeli UAS and St. Petersburg State Institute of Psychology and Social Work are higher education institutions educating professionals of social services and welfare at bachelor and master level. The first steps of cooperation between the institutions have been visits and the exchange of knowledge and experiences. At the first stage it has been important to build confidence between the actors. After that more concrete forms of cooperation have been implemented: teacher exchange between the degree programs and joint publication. Student exchange and joint presentations in scientific conferences as well as project cooperation are future forms of cooperation.

Some key areas of research and development work between the institutions have been presented also in Figure 2. Cooperation in the field of international social problems might contain common research and development projects concerning acute international issues of social work and social policy, such as illegal immigration, abuse of children and youth in internet and through information technology, human trafficking, development of social work practices among immigrants and counseling and co-ordination of services for Russian members in the Eastern parts of Finland.

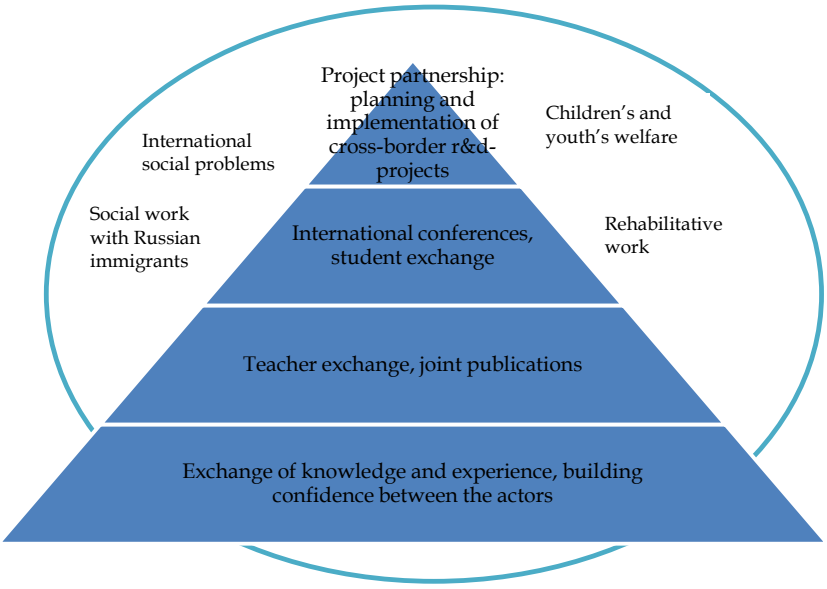

Figure 2. Key forms and future steps of cooperation between Mikkeli UAS (The degree programme in social services in the expertise field of health and welfare) and St. Petersburg State Institute of Psychology and Social Work.

Further, in the research and development work of Mikkeli UAS there are some themes that could serve as a basis of development when planning new forms of cross-border co-operation with Russian partners. For example, in the centre of youth field expertise Juvenia, coordinated by Mikkeli UAS, several research and development projects relating for example to children's and youth's welfare, living conditions, media education and active citizenship have been carried out in Eastern Finland (Juvenia 2011). Further, the degree programme in social services has been a partner in the projects that have promoted health and welfare among working aged people and developed new ways to use art and culture in elderly care. Other upward research and development themes are for example the development of service concepts combining rehabilitative work and nature (so called green care or social farming), study on rehabilitative social work among the victims of trafficking, development of learning environments of the students of social services and evaluations of social work projects.

5 DISCUSSION AND CONCLUSIONS

Since the beginning of 1990 several cross-border research and development projects have been launched in Finland and in its' Russian neighbouring areas. Evaluations of projects have increased knowledge about cross-border project cooperation. The projects have undoubtedly entrenched new practices and been beneficial both for Finnish and Russian citizens and practical workers. The cross-border cooperation has to promote the wellbeing of citizens, families and communities and thus it is necessary to identify local and regional needs for more effective social services and client work practices.

Regional educational institutions have their responsibility in the R&D work in the field of social services and welfare. Development of working methods and models of social and welfare services, production of comparative welfare data, student and teacher exchange, benchmarking of learning environments and developing R&D networks as well as strengthening the regional co-ordination and cooperation of development work can be seen as examples of cross-border cooperation between Finnish and Russian educational institutions.

The structures of Finnish social and welfare services are changing, the social service network in Russia is rather new, the development of public social and health service system is still in progress in Russia and social workers as well as other social welfare professionals in both countries are working with large and hard social problems, such as substance abuse problems, social malaise of children and youth, consequences of segregation between different societal groups and social exclusion. Thus, it is besides economically, most of all humanly and ethically necessary to invest in effective projects. The regional co-ordination of project planning and implementation as well as information sharing on the effects of projects might lead to more systematic project work and to better effectiveness of research and development projects, compared to single projects launched by individual organizations.

Incentives of cross-border cooperation should encourage actors to develop networks and partnership as well as environments for learning together. For example, non-governmental organizations (NGOs) have a key role in child welfare work in the area of St.

Petersburg as well as in other Russian neighbouring areas. To ease the establishment of partnership with Russian social and health care actors, already existing relations and networks should be utilized. Of the Finnish actors for example civic organizations, National Institute for Health and Welfare, former County Administrative Boards and some Universities of Applied Sciences have been active in Russia-Finland cross-border cooperation. These organizations and their Russian know-how should be seen as a resource for regional actors who start to plan and implement joint research and development projects with their Russian partners.

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7

Mikkeli international computational mechanics workshops

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ABSTRACT

Since 2006, Mikkeli University of Applied Sciences MUAS has organized an international workshop for computational mechanics in collaboration with St. Petersburg State Polytechnic University Computational Mechanics Laboratory, CompMechLab in Mikkeli, Finland. The Workshop idea is to collect mechanical simulation experts worldwide to solve industrial engineering problems, share experiences, exchange information, build networks and to spend a lovely summer week at the very heart of the country of thousand lakes. Practically, the ComMechLab staff represents the international attendees of the workshop, only few other researchers have been participating. As the content of the workshop, the CompMechLab team simulates and solves mechanical R&D problems of the Finnish industry, such as wind load stresses of a lighting pole, crash simulations of crash-safe lighting poles, drop shock analyses of electronic devices, bending and stresses of a warehouse truck mast, and paper machine roll coating long-term durability. The workshop consists of five 8-hour workdays. In the leisure time, the CompMechLab team and their accompanying persons enjoy the clean Finnish nature at a lakeside accommodation resort. The leisure time also consists a karting race, previously also a dinner cruise, and the final banquet at a local manor.

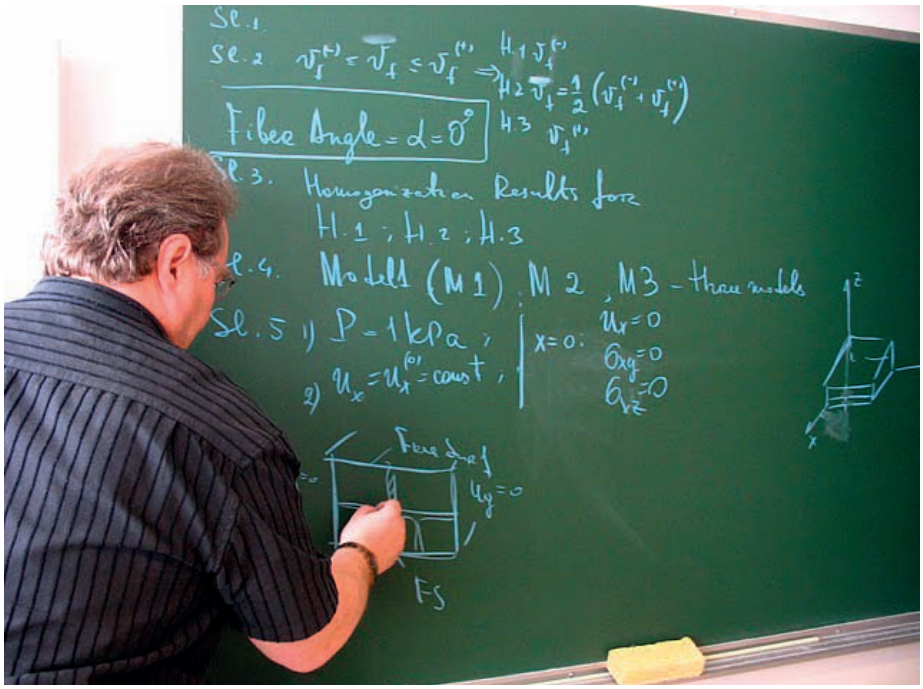


Photo: Martti Kemppainen

Professor Borovkof is clarifying a simulation task for a work group.

1 INTRODUCTION

Mikkeli University of Applied Sciences (MUAS) lies at the heart of the beautiful Finnish Lake District in South-Savo region. It is a modern higher education institution, offering high quality education in eight fields of study, leading to both Bachelor and Master de-

grees. MUAS serves the Eastern Finland with three campuses in three towns, Mikkeli, Savonlinna and Pieksämäki. MUAS fields of study are

- humanities and education
- culture
- natural sciences
- natural resources and the environment
- tourism, catering and domestic services
- social services, health and sports
- technology, communication and transport
- social sciences, business and administration

There are altogether 20 degree programmes, three of which are in English. Annually, over 760 new students are starting their studies, and the total amount of students is about 4500. Staff number is 400, of which 200 are full-time lecturers. About 40 of the staff members have a doctoral or licentiate degree.

In addition to education, MUAS also carries out Research and Development projects for Finnish industry and organizations in practically all the eight fields of studies. The annual total volume of these projects is around 5.8M€, while the whole MUAS budget is over 50M€.
The Computational Mechanics Laboratory (CompMechLab) was founded in 1987 at the Mechanics and Control Processes Department of Physics and Mechanics Faculty of Leningrad Polytechnic Institute, afterwards St. Petersburg State Polytechnic University

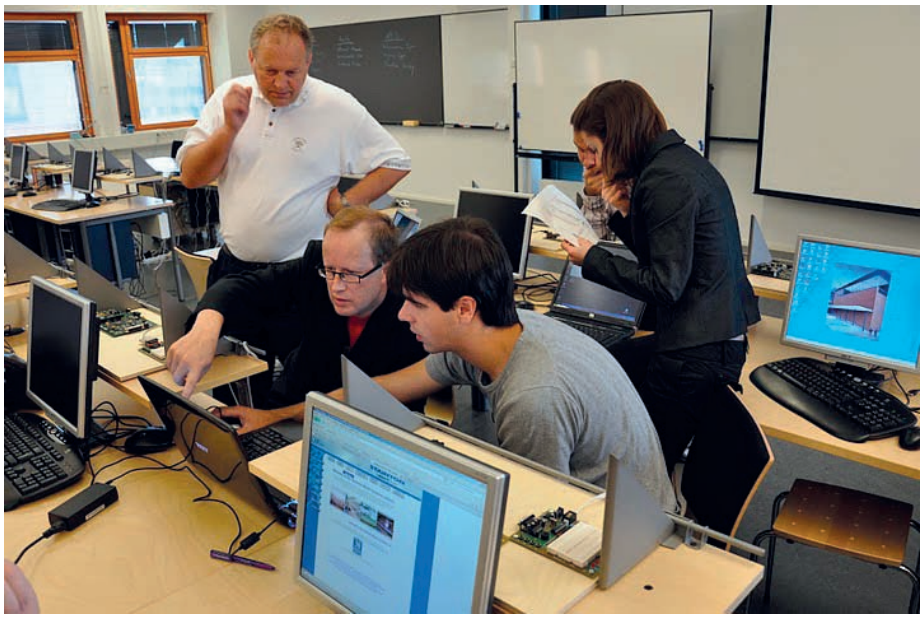


Photo: Martti Kemppainen

Spesificating a simulation task.

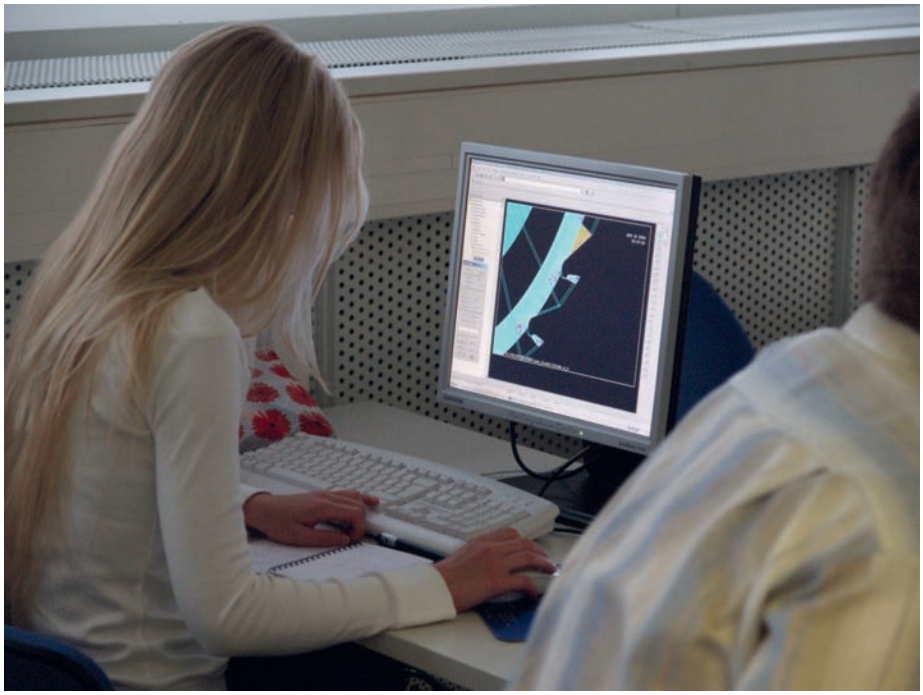


Photo: Martti Kemppainen

Simulating sawmill blade dynamic behavior.

(SPbSPU). CompMechLab is directed by Professor Alexey I. Borovkov. In addition to M.Sc. and post-graduate education in applied mechanics, the laboratory has intensive research activities within the following topics:

- Mechanics of deformable solid bodies, mechanics of structures and machines, mechanics of composite structures.
- Computational mechanics, especially computational simulation employing the Finite Element Method (FEM).
- Development of physical and mathematical models with high correlation to real structures in modern mechanical engineering and computer-aided engineering (CAE).
- Adaptation of science-intensive CAE software systems into the scientific research and engineering activities among industrial companies, and expert consulting of customers' analysis results.

CompMechLab is a member of The International Association for the Engineering Analysis Community NAFEMS.

The co-operation between these two organizations located only 320 km apart from each other begun in 2005, when Miktech, the Innovation and Technology Center of Mikkeli city, organized an excursion for the local companies and related organizations to meet their colleague organizations in St. Petersburg. Being aware of the mechanics of mate-

Photo: Martti Kemppainen

Detailed specification discussions concerning the simulation tasks.

rials activities at MAMK, Miktech chose CompMechLab as one of the excursion hosts. Possibilities of fruitful co-operation were clearly recognized already in the first meeting, and MAMK soon had a suitable simulation task from Finnish industry for CompMechLab to prove the quality of their services.

A few months later, when the simulation results were discussed at SPbSPU, the author proposed on a lunch to Professor Borovkov that CompMechLab should visit Mikkeli in the same manner as the Mariinski orchestra conducted by Valeri Gergiev: doing some work and relaxing the rest of the time in the beauty of Finnish nature. Professor Borovkov replied that they can't play. The author said no problem, you can simulate, which is far more interesting from the Finnish industry point of view. So, the first workshop took place during August 7th – 11th 2006 at Mikkeli.

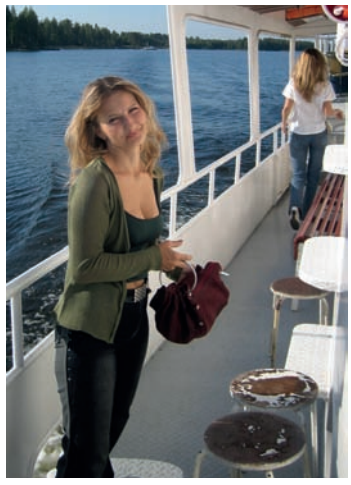


Photo: Martti Kemppainen

An accompanying person enjoying a Saimaa cruise.

2 WORKSHOP PROGRAM

The workshop program outline has been established to the following form since the first Workshop: The CompMechLab staff arrives to their accommodation, the Finnish Youth Institute's lake resort Riuttalanhovi by their own cars on Sunday before the Workshop, and settles down there. The workshop begins on Monday at 9 AM with greetings of Miktech and MUAS, and then the 4-6 simulation tasks are introduced. In some favorable cases the simulation tasks are known beforehand, and the

Photo: Martti Kemppainen

CompMechLab staff dinner specialities at the Riuttalanhovi lakeside resort.

specifications are emailed to CompMechLab for beforehand preparation. The attendees have a lunch at MAMK restaurant Talli at noon, and after that the simulation models preparation and solution work continues till 4 PM, when the day is done and the CompMechLab staff can join their accompanying persons either at Riuttalanhovi or anywhere they wish. On Tuesday evening, the attendees have a karting race at Visulahti Leisure Time Park in Mikkeli.

On Friday afternoon, the workshop has a results seminar, where the industrial customers and MUAS people are invited to. In the seminar Professor Borovkov first gives a lecture about ComMechLab's recent activities and research projects. After the lecture, CompMechLab researchers present their results of the industrial simulation problems, and the industry people can ask detailed questions about their case from the CompMechLab staff. After this 3-4 hours seminar, the attendees can enjoy the MUAS sauna-department before the banquet, which is arranged in the evening in some of the local manors.

On Saturday and Sunday the CompMechLab staff can enjoy leisure time at their lakeside resort while some of them spend the weekend travelling Finland and doing some shopping.

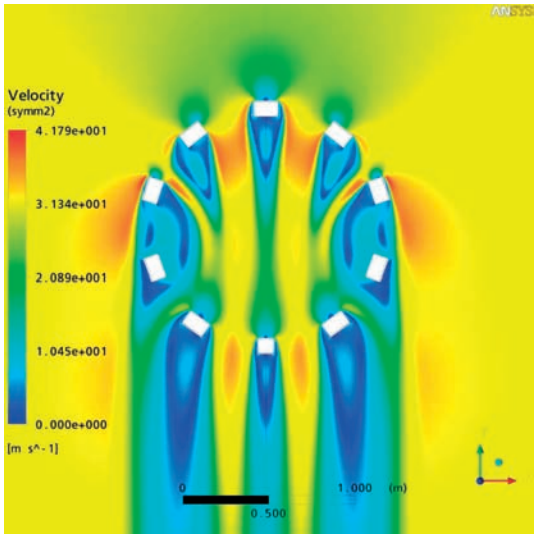
3 SIMULATION CASE EXAMPLE

During the six workshops 2006-2011 altogether around 30 simulation problems have been solved. About 20 of the problems are directly introduced and backed by the industry, while the rest are applied sciences problems of MUAS' public-funded R&D projects, serving the Finnish industry. Most of the direct industrial problems are secret and cannot be published, but in the following chapter a widely interesting example is introduced.

3.1 Wind load and strength analysis of a design lighting column

Company Tehomet Ltd from Kangasniemi, 50km west from Mikkeli, is the largest lighting column manufacturer in the Nordic countries. In addition to the standard products, they are often requested to manufacture architect-designed, one-off tailored lighting solutions. In this case, Tampere City wanted to have a design lighting column into the Viinikka roundabout in Tampere City.

From the technical point of view the design has to conform to the European Standard EN-40, which defines the wind loads and structural strength that the lighting column has to meet. Due to the unique design of the column, the wind loads cannot be computed using standard formulas. So, CompMechLab researchers first built a 3D Computer Aided Design (CAD) model of the column, and then used the CAD model to create a Computational Fluid Dynamics (CFD) model of the column, where the wind motion related to the column was given. The CFD analysis of the model then results in the wind speed and the related air surface pressure distribution on the column surfaces, which

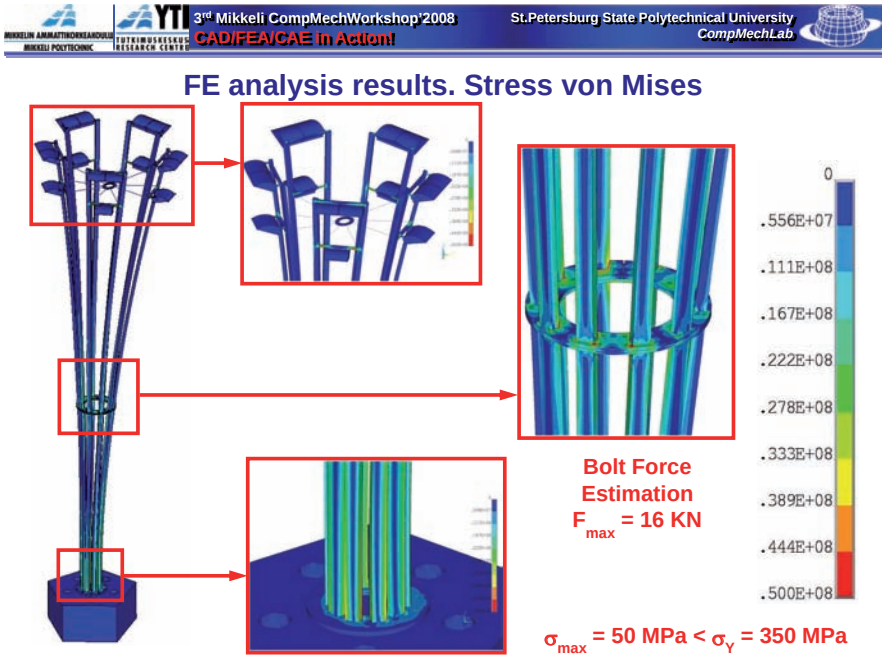


Simulated wind velocity distribution around the Viinikka steel lighting column stresses.

gives the wind drag forces to the column. Then, these forces are used as an input in a Finite Element Method (FEM) model and solution, which gives the structural deformation and stresses in the lighting column steel tubes. One important result is also the toe bending moment of the whole column, so that the column's concrete foundation dimensions and mass can be optimized.

4 CONCLUSION

The Mikkeli International Computational Mechanics Workshop is a nice example of how open-minded seeking for co-operation can lead into innovative and fruitful results.



Simulation results of the Viinikka steel lighting column stresses.

The workshop gives the CompMechLab staff not only interesting professional tasks in a different, inspirational working environment, but also the possibility to relax and enjoy the beauty of Finnish lakeside nature along with their accompanying persons. For the Finnish industry, the workshop gives a chance to get cost-effective professional help to their mechanical simulation problems and for the MUAS staff some change to the everyday work and a good chance to develop their professional know-how within mechanical simulations.

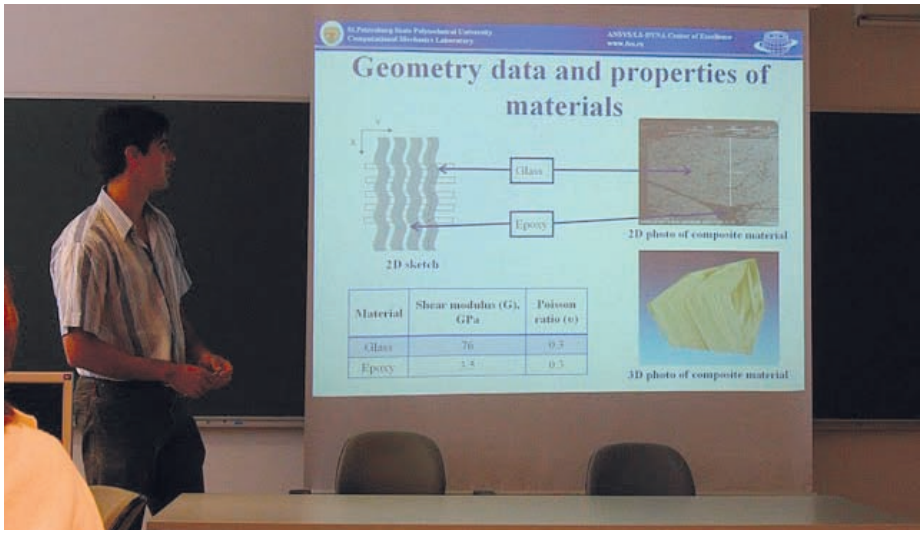


Photo: Martti Kemppainen

Results seminar on Friday afternoon.

8

Developing rescue operations in the Gulf of Finland - RescOp

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Abstract

RescOp - Development of rescue operations in the Gulf of Finland is a Finnish-Russian project focusing on improving maritime safety through research, development and training.

The main focuses are research on risk management and simulation, development of voluntary maritime search and rescue services and training of rescue and oil combating vol-unteers as well as strengthening the co-operation between these various operators.

Rescop is part of a larger pursuit to enhance overall safety in the Baltic Sea by developing voluntary based search and rescue activities to reach international standards. Project consortium consists of 11 partners from Finland and Russia and they represent different fields of expertise related to the maritime safety issues.

Duration of the project is 36 months, between 3/2011 - 3/2014 and it is funded by the South-East Finland – Russia ENPI CBC Programme (European Neighborhood and Partnership Instrument Cross Border Cooperation) and by the partner organisations themselves.

Photo: Jaakko Pitkäjärvi

1 Enhancing maritime safety through cross-border cooperation

1.1 Project background

For many years, concerned actors in Finland and in Russia deemed it urgent and utterly important to strengthen the voluntary maritime search and rescue services in the GoF area. This was seen important for many reasons, one of them being the fact that efficient maritime rescue services also form a basis for developing the maritime tourism and yachting. To support this important goal, the situation in the target region also called for more reliable and accurate simulation models for ice navigation to be used as a basic tool in training and for planning of activities and equipment needs.

These concerned actors are now the project partners combining their expertise and knowledge and working together to reach the goals set. Many of them have extensive history of cooperation in similar actions successfully and this common background was essential for the development of the current project. For example, Kymenlaakso University of Applied Sciences and Kotka Maritime Research Association have cooperated in various projects in the past and have comprehensive networks with various operators in the maritime sector all around the GoF. By combining the strengths and resources of all partners, the goals set can be met.

1.2 Partners and cooperation

In Finland, the voluntary life boat association, Finnish Lifeboat Institution, supports authorities in search and rescue (SAR) operations. To give an overview of the importance of the voluntary maritime search and rescue operations in the GoF and the task at hand, it's good to bear in mind that the voluntary SAR history in Finland dates back to the turn of the 19th Century. The Finnish Lifeboat Institution was founded in 1897 and it is a member of The International Lifeboat Federation (ILF).The Finnish Lifeboat Institution is the umbrella organisation for voluntary maritime rescue associations in Finland. The mission is to save lives and assist people in distress at sea and on inland waters. The Institution also aims to promote safety in boating and good seamanship.

The rescue work is based exclusively on the contribution of volunteers. In Finland there are more than 2000 volunteer crewmembers in 29 associations and further 30 associations covering inland waters. The volunteers are on stand-by regardless of weather con-di-tions on a 24-hour basis during the entire open-water period.

The fleet consists of more than 140 vessels that complete over 900 missions annually. Every year the volunteers provide rescue services to about 2000 people in our waters. Providing emergency round-the-clock stand-by with a three man minimum crew corresponds to over 730 man-years of labor annually. Similar preparedness maintained by the authorities would require a fourfold resource bank.

On the Russian side there is a lack of this kind of voluntary service and of resources to help boaters. The Russian voluntary rescue society in Kronstadt was established in 2008

but does not have enough equipment or a comprehensive training programme to be able to act in emergency situations or SAR operations. However, they do have professional instructors and 40 volunteers to work with, and they are a member of the International Maritime Rescue Federation. During the 3-year project the goal is to enhance the prerequisites for developing their operation.

In the future, the aim is to have joint training and maritime safety operations in the GoF waters based on trilateral co-operation where Russian, Finnish and Estonian rescue associations will follow the same training structures and have joint, internationally accepted rules for their operations.

In addition, to improve overall maritime safety, RescOp cooperates to develop the competence of crews navigating in the Gulf of Finland through simulator-based training and cooperation between VTS (Vessel Traffic Service) and other authorities in SAR and other crisis situations at sea. The aim is to also enhance cooperation between MRCC (Maritime Rescue Co-ordination Centre), VTS and the voluntary rescue services. This is crucial on a cross-border level, too, and joint training sessions between Russia, Estonia and Finland are currently being planned.

This project aims to improve maritime training standards, especially regarding VTS and SAR -related activities. The need of training has to be based on knowledge, which is in turn based on an analysis of the risks and consequent risk control options. The use of a crisis management simulator jointly with SAR personnel, VTS operators and navigators has been seen important in order to enhance the SAR operations effectiveness at the border zone of Estonia, Finland, and Russia and to improve the safety measures for boating near the border zone.

Smooth cross-border co-operation between various operators in the maritime safety field is another important task. Related to the voluntary actions, preparing a system to train environmental volunteers for oil combating operations in the North West of Russia is an important element.

Altogether 11 partners from Finland and Russia work together for these mutual goals. Kotka Maritime Research Association is the Lead Partner and therefore responsible for

Trilateral meeting between Finnish, Russian and Estonian maritime safety experts.
Photo: Matti Erävala

the overall project management. Kymenlaakso University of Applied Sciences is responsible mainly for the crisis management simulators and SAR related training together with Admiral Makarov State Maritime Academy from the Russian side. Aalto University School of Engineering concentrates on risk management research, and cooperates in this work with Saint-Petersburg State Marine Technical University and Central Marine Research & Design Institute Ltd. The Finnish Lifeboat Institutions' input is essential for the development and implementation of a training programme for the Russian Voluntary Maritime Rescue Society in Kronstadt. The Committee for Nature Use, Environmental Protection and Ecological Safety works closely together with the St. Petersburg State University, Division of International Baltic and Arctic projects and the Saint-Petersburg State Unitary Enterprise Pilarn to establish voluntary oil combating teams for the North-West Russia to cooperate with the SAR volunteers in case of an accident involving an oil spill.

The project also has a comprehensive list of associates who support the action and provide their expertise to ensure successful project implementation. The associates are: Finnish Environment Institute, The Finnish Border Guard, WWF Finland, St. Petersburg Search and Rescue Service, St. Petersburg State Small Vessel Inspection of Ministry of Emergency Russia, Maritime Rescue Coordination Center, St. Petersburg Sea Port Administration, Emercom and the Baltic Fund for Nature.

1.3 Target groups and beneficiaries

There are three main target groups for the project. The first group is the maritime search and rescue service authorities, Search and Rescue (SAR) officials and the voluntary rescue and oil combating associations. The second group is the maritime transport field, which through the risk analyses and training modules will both understand the risks related to their operations and further improve their skills and cooperation though the training modules. The third target group is the whole supply chain of the area, which will get benefit through the improved safety and security elements and therefore ensuring the speed and reliability of marine cross-border operations.

Beneficiaries of the project are several governmental bodies and authorities, personnel of VTS Centres in Finland, Russia and Estonia, Universities and maritime training institutions (personnel and students), personnel of training centres, personnel of MRCC in Finland and in Russia and Finnish and Estonian voluntary rescue services, countries and inhabitants around the Gulf of Finland, maritime transport actors, shipping companies, boaters, fishermen, yacht owners and tourists.

1.4 Aims and objectives

The project aims to enhance Finnish-Russian cooperation regarding risk management to improve maritime safety and also to reduce transboundary environmental risks. Project actions are also believed to improve competitiveness and sustainable economic development of the maritime transport system around the Gulf of Finland.

Knowledge-based tools will be developed for risk management, including the main challenges in various environmental conditions throughout the year. Improved maritime safety is a key factor in efficient and economic shipping operations, especially in hazardous environmental conditions, such as all the ports in the Gulf of Finland (GoF) with heavy oil traffic, freezing every year.

2 Research, training and development

The project is implemented in five work packages, administration and communication being the work package supporting all the others. Kotka Maritime Research Association is as a lead partner responsible for the overall administration and communication as well as information dissemination of the project.

2.1 Research on risk management

The purpose of the research is to define the hot spots of expected oil spills, giving the direction and justification for the planning of SAR activities. The main task is to develop knowledge-based tools for maritime transportation risk assessment and management in various environmental conditions. Based on the findings, an accurate model of ship movements in ice, including an analysis of proper maneuvering characteristics and proper description of the ice-breaking process, will be developed. Also the case of very close encounters (head-on and moving astern and for overtaking) will be covered.

The high-risk areas regarding marine accident casualties will be visualized and defined, and based on the above findings risk control options will be proposed in order to provide quick and efficient SAR operations.

2.2 Competence of crews by training

The Crisis Management Simulator Centres (CMS) Network between Russia, Finland and Estonia was developed in a series of EU-funded projects. The main focus of the network in these projects was oil spill response operation management training. New functions of the CMS network for management rescue operation will be in focus of RescOp.

Developing the competence of crews navigating in the Gulf of Finland is of utmost importance and this will be achieved through developing simulator based training and cooperation between the related bodies and authorities of SAR and other crisis situations at sea. With simulator trainings also the cooperation between MRCC, VTS and voluntary rescue service will be enhanced.

2.3 Voluntary rescue service development

Developing the Russian voluntary rescue services is the core module of the entire project. The research on risk management made in the framework of RescOp is expected to give grounds and justification for detailed planning of the rescue activities and

Training facilities in St. Petersburg. Photo: Tanja Tuominen

training required. The practical goal of this work is to have new resources to help the officials and national border guards to improve the safety and security level in the Gulf of Finland area and to offer better rescue coverage and service both for maritime transport and tourism, as well as boating and yachting.

A training programme for the voluntary rescue association of Kronstadt will be created. The planned activities contain both the preparation of training programmes and workbooks for the association and preparation and execution of various trainings. During the project two full-scale training exercises will take place both in Russia and Finland. The exercises in Russia are conducted to focus on the local needs and management systems

Kronstadt voluntary rescue service members visiting Kotka maritime rescue society.
Photo: Natalia Goltsova

to be developed, while the trainings in Finland are more related to ensure the harmonization in the training methods based on international rules and standards.

Review of the training systems in Finland, Estonia, and other Baltic states will be made and elaborated based on international rules and policies to adapt them to fit the conditions and legislation of the Russian Federation. Russian instructors will be trained according to the established system to ensure continuance of the training programme after the project ends.

Simulated exercises have also been planned in order to include all staff in complex trainings performed on a training simulator to execute SAR operations, coordinate actions of the rescuing services involving search and rescue units in the area.

2.4 Training environmental volunteers

The main aim is to prepare environmental volunteers for oil combating operations in North-Western Russia and the basic idea is to establish a system for this oil combating group to work in close cooperation with the voluntary rescue services. During the project, voluntary land-based oil combating teams will be established and trained to offer new potential for oil combating activities in Russia, coordinated by the official rescue organisa-tion.

First, the current status of voluntary oil combating potential is reviewed and volunteers are recruited from universities in St. Petersburg. Training seminars and simulator-based exercises, as well as practical field training will be arranged. Also the existent oil combating methods will be reviewed and developed further with assistance from associated partners acting as experts in the project, and a guidebook will be prepared to give the necessary base-line knowledge both for experts and the public aiming to participate in the SAR and oil-spill related operations in Russia.

3 Expected outputs and preliminary results

Due to the early stage of the project, no final outputs are available yet. Reports, conference papers and papers in scientific journals are expected later on.

3.1 Expected outputs

In addition to contributing to the previously mentioned concrete results and the overall broader objectives of improving maritime safety and reducing transboundary environmental risks by establishing voluntary oil combating system to the eastern part of GoF, the project is also expected to enhance Finnish-Russian cooperation and cooperation between various operators in maritime safety issues.

Other main results are to provide updated information on the risks and potential risk locations in the target area and to gain better understanding of the risks related to maritime operations. Stronger cooperation between various maritime actors and positive change in the status of voluntary maritime SAR services, as well as increased awareness of the importance of voluntary oil combating, are relevant questions that are addressed throughout the project by various actions.

For further purposes, the project hopes to be able to give recommendations on the allocation of response resources in the Gulf of Finland. This will help in arranging effective assistance to any vessels and boats in distress.

3.2 Results and conclusions so far

Research on risk management has been launched by acquiring necessary information. The risk management simulation model will be compiled by Aalto University. It is based on, for example, vessel incident data collected from the Finnish Lifeboat Institution and the Finnish Border Guard, the recreational vessel registry data and data from the Automatic Information System been collected from Magistrate and HELCOM. A preliminary analysis of the gathered data has been made.

Development of the incident-based SAR simulation model containing what is called the RescOp Simulation Model (ROSM), a core element of the Risk Management Model, is conceptually made into a logical framework, based on expert knowledge gained from project partners and associates and based on the results of the preliminary data analysis. The implementation of the ROSM in computer code has been commenced (initial stage).

Also ship motion modeling, a theoretical study of interaction of ships in ice conditions, has been studied. This investigation has been made by Saint-Petersburg Technical University by using a mathematical model developed by the Central Marine Research & Design Institute of the movement of a ship in the channel behind an icebreaker. The model is a combination of analytical dependencies and logic connections describing the movement of a ship in ice in interaction with an icebreaker. The main outcomes of practical significance are expected later on in the project. At this stage, recommendations for the future development of sea rescue services are expected, both for Finnish and Russian part of the Gulf of Finland.

Technical requirements for joint simulator rehearsals were assessed and the prerequisites have been met. Preparations and preliminary plans have been made for this Finnish-Russian simulator network to enhance the competence of the crews by joint trainings. There are also plans to include the Estonian simulator into this network. This work is coordinated by Kymenlaakso University of Applied Sciences and the Makarov Academy.

For the development of the Russian voluntary rescue services, the Finnish training programme has been introduced and steps have been taken to further develop the programme to correspond to country specific needs and regulations. While the training

manual and detailed training schedule are under construction, the first basic practical trainings (rescuing from the water, navigation, local pilotage and diving etc.) of rescuer volunteers have already started in Kronstadt under the guidance of rescuers of the St. Petersburg State SAR Service. The current situation and conditions of the Search and Rescue Services have been examined. A basis and prerequisites for full scale trainings in Kronstadt have been created.

Committee for Nature Use, Environmental Protection and Ecological Safety of SPb has prepared a theoretical educational programme for environmental volunteers, with the help of other partners and associates. Also analyses of Russian and Finnish experiences in oil combating trainings with volunteer participation are well on their way.

A risk of inability to implement a theoretical educational programme for environmental volunteers was imminent, because of noncompliance with the national educational standards. However, the universities have found it possible to integrate it into their curriculum. An unforeseen positive result has been the level of interest from the universities in the voluntary oil combating issues. Currently, 2 universities from SPb have signed agreements to participate in the educational programme for environmental volunteers. A training plan consisting of theoretical and practical parts was compiled and plans for its implementation have been made.

3.3 Conclusions

When approaching the end of the first year of project implementation, RescOp has pro-ceeded according to plans. It has become clearly evident that even though cross-border cooperation has its challenges, it can also be very fruitful and rewarding. When the coop-eration is based on mutual trust and the actors share a common goal and enthusiasm, a lot can be achieved. Fortunately, this is the case in RescOp, and while at this stage a lot remains to be done, the devotion of the project personnel promises good results.

There are, however, questions to be addressed before the ultimate goals can be achieved. One of the most important tasks is to get the status of voluntary search and rescue services, as well as voluntary oil combating troops in Russia, accepted on the official level as a legitimate and important part of maritime safety. Finland has a long history in this work, and lessons learned can now be utilized to benefit others.

Photo: Veijo Parviainen

Photo: Igor Kalinin


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