



**NORDREGIO**  
Nordic Centre for Spatial Development

# Cross-border labour mobility in the Central Baltic region

Petri Kahila, Johanna Roto, Liisa Perjo and  
Stefanie Lange Scherbenske

NORDREGIO REPORT 2013:2





Cross-border labour mobility in the Central Baltic region



# Cross-border labour mobility in the Central Baltic region

Petri Kahila, Johanna Roto, Liisa Perjo and  
Stefanie Lange Scherbenske



**NORDREGIO**  
Nordic Centre for Spatial Development

Cross-border labour mobility in the Central Baltic region

Nordregio Report 2013:2

ISBN 978-91-87295-15-7

ISSN 1403-2503

© Nordregio 2013

Nordregio  
P.O. Box 1658  
SE-111 86 Stockholm, Sweden  
nordregio@nordregio.se  
www.nordregio.se  
www.norden.org

Petri Kahila, Johanna Roto, Liisa Perjo and Stefanie Lange Scherbenske

Cover photo: Stefanie Lange Scherbenske

### **Nordic co-operation**

*Nordic co-operation* is one of the world's most extensive forms of regional collaboration, involving Denmark, Finland, Iceland, Norway, Sweden, and the Faroe Islands, Greenland, and Åland. *Nordic co-operation* has firm traditions in politics, the economy, and culture. It plays an important role in European and international collaboration, and aims at creating a strong Nordic community in a strong Europe.

*Nordic co-operation* seeks to safeguard Nordic and regional interests and principles in the global community. Common Nordic values help the region solidify its position as one of the world's most innovative and competitive.

### **The Nordic Council**

is a forum for co-operation between the Nordic parliaments and governments. The Council consists of 87 parliamentarians from the Nordic countries. The Nordic Council takes policy initiatives and monitors Nordic co-operation. Founded in 1952.

### **The Nordic Council of Ministers**

is a forum of co-operation between the Nordic governments. The Nordic Council of Ministers implements Nordic co-operation. The prime ministers have the overall responsibility. Its activities are co-ordinated by the Nordic ministers for co-operation, the Nordic Committee for co-operation and portfolio ministers. Founded in 1971.

### **Nordregio – Nordic Centre for Spatial Development**

conducts strategic research in the fields of planning and regional policy. Nordregio is active in research and dissemination and provides policy relevant knowledge, particularly with a Nordic and European comparative perspective. Nordregio was established in 1997 by the Nordic Council of Ministers, and is built on over 40 years of collaboration.

Stockholm, Sweden, 2013

# CentralBaltic JobFerry



EUROPEAN UNION  
EUROPEAN REGIONAL DEVELOPMENT FUND  
**INVESTING IN YOUR FUTURE**



**CENTRAL BALTIC  
INTERREG IV A  
PROGRAMME  
2007-2013**

The “CentralBaltic JobFerry” project is part-financed by the European Union (European Regional Development Fund) within the Central Baltic INTERREG IV A Programme 2007-2013.



**LATVIJAS  
UNIVERSITĀTE**  
ANNO 1919



**NORDREGIO**  
Nordic Centre for Spatial Development



**Institute  
of Baltic  
Studies**



**TURUN AMMATTIKORKEAKOULU**  
TURKU UNIVERSITY OF APPLIED SCIENCES

The project partners in the “CentralBaltic JobFerry” project are University of Latvia (lead partner), Nordregio, Institute of Baltic Studies and Turku University of Applied Sciences.

This publication has been produced with the assistance of the European Union. The content is however the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union or the Managing Authority.



# Table of Contents

<b>Preface</b> .....	11
<b>Summary</b> .....	13
<b>1 Introduction</b> .....	15
<b>2 Labour mobility – research and policy perspectives</b> .....	17
2.1 Factors influencing mobility decisions .....	18
2.2 Obstacles to labour mobility .....	18
2.3 Impacts generated by labour mobility.....	20
2.4 EU policies addressing labour mobility.....	21
2.5 Labour mobility in the Baltic Sea Region.....	22
<b>3 The Central Baltic region – facts and data</b> .....	23
3.1 Socio-economic context .....	24
3.2 Migration flows.....	29
3.3 Cross-border commuting .....	32
<b>4 Cross-border labour mobility in the Central Baltic region</b> .....	33
4.1 Labour market policies .....	33
4.2 Labour markets in the case study areas.....	36
4.3 Labour demand .....	38
4.4 Obstacles to cross-border labour mobility .....	42
4.5 Policy recommendations .....	43
<b>5 Towards a common labour market in the Central Baltic region – Conclusion</b> .....	47
<b>References</b> .....	49
<b>Annex</b> .....	63



# Preface

This report summarises the outcomes of work package three of the Central Baltic INTERREG IVA project “CentralBaltic JobFerry”. The project received funding from the Central Baltic Programme 2007-2013 approved under Priority 2: “Economically competitive and innovative region”. The programme area covers regions from Estonia, Finland, Åland, Latvia and Sweden.

Four partners from Estonia, Finland, Latvia and Sweden cooperated in the “CentralBaltic JobFerry” project between May 2011 and August 2013. The University of Latvia was the project leader while Nordregio (SE) had the responsibility for work package three related to the research of professions and analysis of the cross-border labour market. The Turku University of Applied Sciences (FI) and the Institute of Baltic Studies (EE) were the other project partners.

The project aimed at increasing the cross-border mobility of job and education seekers by, for example, identifying those professions currently exhibiting a high demand for labour and by generally enhancing the flow of information across the Central Baltic

region. The project’s main outcome is a multilingual platform that provides information for job and education seekers as well as employers and experts concerning job and educational opportunities in the region. The platform can be accessed at <http://cbjobferry.eu/>.

The project activities within work package three took place within four case study areas: Latvia and Estonia (whole countries) as well as the region of Southwest Finland and the region of Östergötland (Sweden). The outcomes and analyses outlined in this report are based on case study reports prepared by the project partners including literature reviews, surveys and interviews carried out in 2012.

The authors would especially like to thank the following persons for their contributions to this report: Zane Zeibote and Romans Putans, University of Latvia, Kadri Uus, Maarja Käger, Merilin Metsma and Doris Pavlov, Institute of Baltic Studies as well as Tuomas Valve and Tero Reunanen, Turku University of Applied Sciences.

Stockholm, June 2013



# Summary

The principle of the free movement of people is one of the core principles of the European Union. Migration and labour mobility is viewed as an important way of matching labour demand and supply, and thus of increasing employment and competitiveness. The present report is an outcome of the Central Baltic INTERREG IVA project “CentralBaltic JobFerry” and focuses on cross-border labour mobility in the Central Baltic region.

Increasing labour mobility is a policy goal both at the EU level and for the Baltic Sea Region. National labour market policies in the Central Baltic regions of Estonia, Finland, Latvia and Sweden do not however explicitly address this issue. Although these national labour markets often display different characteristics they nevertheless face a number of common challenges such as a shrinking labour force, due to e.g. large age cohorts (baby boomers) retiring, and increasing labour demand in certain sectors (e.g. health care). Migration for work-related reasons is already significant in the Central Baltic region with considerable migration flows between both Estonia and Finland and Finland and Sweden. However, overall, cross-border labour mobility remains relatively low in the rest of the Central Baltic region.

In order to show how cross-border labour mobility could be facilitated, labour market actors from the Central Baltic countries were interviewed by the

project partners. Based on the information gathered from the interviews and desktop research, the report provides a detailed picture of the labour market situation in the Central Baltic region. The report specifically analyses those sectors and professions facing labour shortage. According to this analysis all countries face labour shortages within the health care, social services, engineering, ICT and construction sectors. Furthermore, the report identifies obstacles to cross-border labour mobility both at the institutional and individual levels. Even though the obstacles to cross-border labour mobility differ between the various countries surveyed here, primarily due to differences in their socio-economic and policy contexts, common obstacles have been identified: In general there is a lack of knowledge and cooperation on cross-border labour mobility among all actors in the region. More specifically, problems relating to the portability of social benefits and pension rights can clearly be seen to be impeding cross-border mobility. The absence of good language skills is an additional and important obstacle here among potential employees.

In order to tackle these obstacles increased cooperation is required between labour market actors within the regions/countries and specifically between the countries of Estonia, Finland, Latvia and Sweden. Furthermore, job seekers would benefit from better practical support and the provision of targeted information.



# 1 Introduction

A significant decline in the size of the working age population in the coming decades is to be expected due to changes in demographic structures. At the same time the increasingly competitive global economic environment accelerates the structural change that sets new requirements for labour force and skills. That will lead to labour shortages in Europe during the next two decades. In addition, highly-skilled labour will be increasingly demanded by the labour markets (OECD 2012).

These challenges are highly relevant for the Central Baltic region where all of the countries in the region are likely to face major demographic challenges in the near future. Increasing cross-border labour mobility between the Central Baltic countries could contribute to the better matching of labour supply and demand and thus to improved employment rates. This report focuses on cross-border labour mobility understood as flows of workers moving across national borders within the Central Baltic region. The report also looks at migration patterns in order to understand the nature of migration flows within the Central Baltic region.

The main questions to be answered in the context of this report are:

- How do labour market institutions address cross-border labour mobility issues in the Central Baltic region?
- What are the obstacles to cross-border mobility in the Central Baltic region?
- What can be done to overcome these obstacles and thus increase cross-border labour mobility in the Central Baltic region?

The report is divided into three parts. Chapter 2 shows how labour mobility is addressed in research and policy terms. Chapter 3 documents the primary facts and data concerning the Central Baltic region. Cross-border labour mobility in the Central Baltic region is the focus of chapter 4 specifically including a discussion on labour demand, the obstacles to labour mobility and policy recommendations. Chapter 5 discusses a possible common labour market in the Central Baltic region.



## 2 Labour mobility – research and policy perspectives

Market integration has always been one of the key objectives of the European Union. The presumption has been that internal borders are barriers to cross-border interaction and that removing them increases labour mobility (e.g. Ernste 2004). It is, moreover, presumed that labour mobility<sup>1</sup> is mainly inhibited and restrained by the existence of various economic disturbances and by shortages of both knowledge and information. The assumption here is that labour mobility is still mainly based on rational-choice theory, in which people sum up the likely costs and benefits of their actions and pursue the highest profit possible for their labour (Borjas 1989). However, rational-choice theory can be regarded as inadequate to the extent that it does not cover all aspects of the individual decision-making process to move, because it cannot explain the social norms and collective actions behind the individual decision-making process. In addition, it does not pay attention either to the external factors behind a given individual's reasoning. As such, it is less useful where adopted and place-based norms and rules direct individual decision-making and societal structures and regulations tacitly regulate many of our daily actions (van Houtum & van der Velde 2004).

The term 'mobility' is utilised in many ways when we are discussing society in general. It may be used broadly as a reference to general social or cultural change (e.g. Greenblatt et al. 2009). The concept of mobility is also used in discussions relating to social mobility dealing with changes in people's position within the social structure, such as the transition from employment to unemployment (e.g. Goldthorpe 2003). Additional specific references to mobility relate to geographic mobility, i.e. to a change in geographical position.

The links between geographic and occupational mobility are multifaceted on the individual as well as on the societal level. It can be argued that geographic mobility is, from an economic point of view, a requirement for individuals to effectively enter the labour market.

The benefits of geographic mobility in this sense include the increasing possibility of finding employment, greater economic well-being and the avoidance of unemployment, but it is not possible for everyone to take advantage of these alternatives. There are always particular obstacles to be overcome before advantage can be taken of geographic mobility. Geographic mobility may, from a social point of view, lead to better employment opportunities, higher motivation and employment satisfaction. It may also inhibit the problems associated with social exclusion caused by unemployment. A number of negative influences can however also be associated with geographic mobility, such as the loss of social networks.

Labour demand is an outcome of various structural factors and processes in the economy. Economic phases of growth and decline can be viewed as the most significant factors in respect of the development of labour demand. Economic growth normally increases labour demand and creates new employment in different branches of economy, while economic decline generally leads to unemployment rising (Freeman 2008). The situation in this respect is however rarely straightforward and, as such, unemployment and labour shortages can exist simultaneously in the various branches of economy within a single country. Europe's economies have all witnessed ongoing structural change relating to the growing importance of services and the decreasing importance of agriculture and manufacturing. This economic transformation has profoundly altered the situation in the labour market, with the most important labour demand now being for qualified persons in service industries. The process of globalisation has further transformed company production cycles and led directly to the outsourcing of products and services, and more broadly to deregulation and the expansion of free trade. One outcome of globalisation has been the increased fluidity of jobs and activities between countries to the extent that it is now on a larger scale than was ever previously the case. As such, labour mobility has also become more common and variations in employment levels between countries can be considerable.

---

<sup>1</sup> By labour mobility we mean the geographical and occupational mobility of labour both within a country and between countries.

Differences in rates of economic development between countries and regions stimulate migration and labour mobility. Inequalities in economic development are especially noticeable in countries currently undergoing a major restructuring to the capitalist system, or which have other deep economic problems. It also seems that the pattern of migration has changed during the last few decades. The existence of dual labour markets (including a core workforce with high wages and a secondary workforce lacking the privileges of core workforce) influence migratory patterns. Migrants who are willing to take the “3-D jobs” (dirty, dangerous and degrading) find it relatively easy to gain employment (Taran 2005). However, unemployment among foreigners has grown in many countries in recent years.

## 2.1 Factors influencing mobility decisions

In the economics research literature mobility decisions are based on expected benefits and costs. Economic research consider income differentials (in both wages and social benefits and employment opportunities) to be one of the most important determinants of mobility. Mobility decisions are not only however determined by differences in employment opportunities or wages but are also related to rather more intangible or ‘soft’ factors. In some studies cross-border mobility within the EU has been found to be only weakly related to regional employment rates. Survey results also show that mobility decisions are also not generally steered by the expectation of better welfare or public services in the destination country (Bonin et al. 2008; Heinz & Ward-Warmedinger 2006; Paci et al. 2010).

Mobility decisions are influenced by different kinds of factors (such as family ties, differences in GDP and cultural factors). Friberg (2013) notes that a range of factors from the micro, meso and macro levels help to shape the opportunity structures of migrants. The micro level relates to individuals while macro and meso level structures are shaped within such relationships and networks of relationships:

- Micro level: Education and skills, employment situation, income level, income security, social status, family status.
- Meso level: transnational social and family networks, migrant community formation, labour recruitment systems, labour market dualisation, employment niche formation, ethnic status hierarchies.
- Macro level: income differentials, economic cycles, unemployment levels, labour market regulation, wel-

fare policy & social rights, immigration policy.

It has been suggested that regional economic differentials play only a minor role in influencing migration patterns while individual and household-related factors are the most important determinants to mobility. Several characteristics relating to the likely mobility of workers can be identified. These characteristics generally show that young people tend to be more mobile than older people, homeowners are less mobile and so on (e.g. Bonin et al. 2008; Paci et al. 2010).

Nevertheless, income differences and labour market situations continue to be viewed as important determinants of mobility decisions. The role of economic factors is considered significant particularly in relation to mobility between the new and the old EU Member States. According to the Special Eurobarometer on geographic and labour market mobility (EC 2010a), Europeans living in the new Member States are more likely to be motivated to work abroad for economic reasons while the citizens of EU-15 countries are more likely to be motivated by lifestyle or cultural factors. Current wage gaps remain substantial as drivers of migration from the new Member States to the EU-15 countries. In addition, unemployment remains an important factor motivating mobility for many Europeans and almost half of the EU’s population would consider leaving their regions or countries if they were unemployed. However at the same time, 28% of Europeans are not interested in working abroad no matter how high the wages offered (EC 2010a; OECD 2012).

## 2.2 Obstacles to labour mobility

Obstacles to labour mobility are found on both the institutional and the individual levels. Issues related to the lack of language skills, cultural differences, economic costs, housing markets, the portability of social benefits, the recognition of qualifications and the lack of transparency in respect of vacancies are often mentioned as the main mobility barriers (Heinz & Ward-Warmedinger 2006).

### Obstacles at the institutional level

The lack of knowledge and information is one of the most central obstacles to labour mobility and also underpins and affects other obstacles. Employers, employees and other authorities have only a limited amount of knowledge about the inherent possibilities related to cross-border labour mobility. Moreover, the general level of awareness in respect of labour mobility and the opportunities related to it seems to be low across the EU (see for example OECD 2012). Basic un-

certainty over the ability to find a job remains an important obstacle to mobility and the EU-wide information flow relating to open vacancies is poor (see for example Bonin et al. 2008; OECD 2012; Zaiceva & Zimmermann 2008).

Employers may lack knowledge and even basic information about the opportunities associated with a foreign labour force while significant challenges remain in respect of the recognition of foreign qualifications which can hinder labour mobility. It should however be noted that sometimes the greatest obstacles to labour mobility are to be found in the attitudes of employers in the country of origin rather than in the country of destination. Further, working experiences from abroad may not be recognised or accredited in the national system of the home country (Van Dalen & Henkens 2009).

Difficulties also remain over the recognition of qualifications both at the level of individual employers and at the administrative or institutional level. Both mobile workers within the EU-15 and mobile workers from EU-8<sup>2</sup> tend to be over-qualified for their jobs which points to continuing problems relating to the recognition of professional qualifications (OECD 2012). Problems over the general transferability of human capital and occupational skills are perhaps the key mobility obstacles at the institutional level (Bonin et al. 2008).

Differences in the national regulation of professional qualifications also continue to exist which, again, can make intra-EU labour mobility difficult especially in regulated professions (such as for example in the medical field) where additional recognition from the destination country is often also required (OECD 2012). Moreover, for the citizens of the new Member States, problems in relation to the recognition of qualifications are likely to be even more complicated than those for EU-15 citizens (Heinz & Ward-Warmedinger 2006).

Further, housing market frictions can also be viewed as an obstacle. Housing market policies can significantly increase the costs of mobility (Heinz & Ward-Warmedinger 2006; OECD 2012; Paci et al. 2010; Zaiceva & Zimmermann 2008). High housing costs in booming regions may function as a hindrance to labour mobility while rent controls may impede mobility further by restricting the supply of housing (Paci et al. 2010). Several studies note that homeownership can also be a constraint to mobility and that the rise in homeownership could have impeded mobility even though it remains difficult to establish clear statistical

links between housing indicators and labour mobility (Paci et al. 2010; Zaiceva & Zimmermann 2008).

As barriers to mobility, housing market frictions are also related to economic disparities between countries and regions in general. Economic disparities have long been viewed as mobility drivers as mobile workers move from regions with high unemployment and low wages to regions with a better general economic situation and higher salaries.

The limited portability of pensions and social security entitlements when moving between two Member States is another key mobility barrier identified in several studies on labour mobility in the EU (see for example Heinz & Ward-Warmedinger 2006; Zaiceva & Zimmermann 2008). The lack of portability of pension rights can also be considered as a particular obstacle for older workers (OECD 2012) whereas problems related to the portability of social benefits impede the cross-border mobility of all age groups.

### **Obstacles at the individual level**

Even though obstacles at the institutional level are assigned an important role in the literature, many studies also emphasise the significance of barriers observed at the individual level (Bonin et al. 2008; Heinz & Ward-Warmedinger 2006; Zaiceva & Zimmermann 2008). Obstacles related to the lack of appropriate language skills, cultural differences and problems in finding a suitable job have been identified as the primary barriers explaining expected mobility (Bonin et al. 2008). Moreover, these 'soft' factors are often more challenging to address in policy terms (Zaiceva & Zimmermann 2008).

The absence of appropriate language skills is a particularly important obstacle to mobility. Half of EU citizens speak at least one foreign language with English being the most widely spoken foreign language (EC 2005). However, national languages have a dominant role in daily life especially in the workplace and fluency in the respective language is usually essential to find a job (OECD 2012). Intangible obstacles related to personal attitudes, individual characteristics and family issues such as the presence of the partner are additional 'soft' factors here; in many cases moreover they have a much more restrictive effect than the various tangible obstacles outlined above (Van Dalen & Henkens 2009). The role of cultural differences in explaining low mobility has also been emphasised in several studies on intra-EU mobility (see for example Bonin et al. 2008). In addition, the absence of effective professional networks can make it even more challenging to find a qualified job as all available positions are not necessarily announced e.g. on main job search engines (OECD 2012).

---

2 The EU-8 comprises the following 8 countries: Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Slovenia and Slovakia.

## 2.3 Impacts generated by labour mobility

Labour mobility and migration have both positive and negative impacts on both the sending and the receiving country. The issue of the impact of out-migration on national economies has been widely discussed in the research literature. The traditional theoretical approach has been that the out-migration of young skilled people can lead to 'brain drain' and negative consequences for the development of the sending region or country. The picture is however, in practice, more nuanced, complex and influenced by a variety of factors (Galgoczi et al. 2011; Hedberg & Malmberg 2008).

Lately a discussion has arisen around the positive impacts for the sending countries or regions of the out-migration of highly educated people and the traditional focus has shifted to include the possible positive impacts that the emigrant labour force can have on their country of origin in the form of contacts, increased business activities between the sending and receiving countries and remittances. Many workers also move back to their countries and regions of origin with new skills and access to broad transnational networks. Re-emigration can thus, it is argued, lead to so-called 'brain circulation' rather than 'brain drain' or 'brain gain'. Emigration can also decrease the pressure on labour and housing markets in countries where the share of young people in the total population is high (Hedberg & Malmberg 2008).

The potentially negative impacts in the form of 'brain drain' and human capital losses should not however be overlooked. Often the economic development of a region with high out-migration is weaker than in other regions while extensive emigration can also lead to increased demographic challenges if the share of the working age population dramatically decreases. Labour shortages in critical sectors or occupations may arise in regions and countries with high out-migration which among other things may have a negative impact on productivity growth (Hedberg & Malmberg 2008; Galgoczi et al. 2011).

Regional economists and economic geographers on the other hand focus on the positive effects of increasing population in the destination country caused by immigration stating that immigration increases population in different parts of a country and can thereby increase specialisation, infrastructure investments and strengthen regional competitiveness. Particularly in regions facing demographic challenges the immigration of the young working age population has positive impacts on e.g. the dependency ratio. In receiving countries the additional labour supply can help over-

come labour shortages in specific sectors or skill groups (Hedberg & Malmberg 2008; Galgoczi et al. 2011).

Traditional theory suggests that the migrant labour force has a negative effect on that segment of the domestic labour force with similar competences but a positive effect on other groups. Hedberg & Malmberg however note that this approach lacks empirical evidence and that the effect on wages in destination countries is generally low (Hedberg & Malmberg 2008). According to Galgoczi et al. (2011) the main negative effects on the receiving country focus on the pressure placed on those already disadvantaged on the labour market, including the possibility of rising inequality and the undermining of working conditions and salaries as well as a possible increase in unemployment.

Furthermore, migrant workers are among those groups most affected by economic downturns, partly because they are often employed in sectors such as construction or tourism which tend to be most susceptible to economic downturns and reductions in business confidence (IOE 2009). The migrant labour force is also subject to greater discrimination in economic downturns and while data on this are lacking, the current crisis appears to be no exception. "In times of economic insecurity migrants always seem to be among the first to be blamed, and this crisis is no different," notes Patrick Taran, Senior Migration Specialist at the ILO International Migration Programme (ILO 2011).

The OECD (2012) states that labour mobility can be expected to have a significant effect on economic growth. At the same time when it comes to intra-EU migration, challenges arise in situations where there is a demand for similar kinds of skills in several countries. In order to meet the demographic challenges and labour shortages faced by most of the EU countries, the OECD suggests facilitating easier migration from non-EU countries. In addition, increasing labour market participation rates and the employment rates of female, young and older workers could facilitate the meeting of these skill shortages together with making sure that training and education match the skills demanded by employers.

It should however be noted that it is not possible to unambiguously or definitively state whether cross-border labour mobility has a negative or positive impact on the sending and receiving countries. The effects of mobility and migration are always determined by many factors such as the skill and age composition of the migrants, the state of the labour market in the receiving countries, the tasks performed by the migrant and the duration of migration (Galgoczi et al. 2011).

## 2.4 EU policies addressing labour mobility

The principle of the free movement of labour is a core issue in the European Union and considered a symbol for European integration although, for various reasons, labour mobility within the EU has remained relatively low. The European Union addresses cross-border labour mobility in several ways and has introduced incentives for e.g. the recognition of foreign professional qualifications and the improvement of public employment services in order to facilitate cross-border labour mobility. The European Social Fund (ESF) regulations mention labour mobility as part of its Lifelong Learning Policy. Between 2000 and 2006, one third of the ESF programmes addressed labour mobility issues (including geographic and occupational mobility) (EC 2010b).

### Leonardo da Vinci programme

The Leonardo da Vinci programme is an example of a practical initiative dealing with cross-border mobility. It is part of the European Commission's Lifelong Learning Programme and funds several types of "mobility actions" related to vocational education and training such as "People in the labour market" or "Professionals in vocational education and training". For more information, please see [http://ec.europa.eu/education/lifelong-learning-programme/ldv\\_en.htm](http://ec.europa.eu/education/lifelong-learning-programme/ldv_en.htm)

The Europe 2020 Strategy prioritises smart, sustainable and inclusive growth while highlighting the "high-employment economy" as fundamentally important in achieving social and territorial cohesion. One of the headline targets states: "75% of the population aged 20-64 should be employed by 2020". In order to increase employment rates, the Europe 2020 Strategy calls for the "promotion of labour mobility across Europe" which is followed-up by related flagship initiatives such as "Youth on the move"<sup>3</sup> and "An agenda for new skills and jobs"<sup>4</sup>. The flagship initiatives are designed to help increase labour participation through targeted education and the development of specific skills in order to enable people (especially young people) to either enter or remain with the labour market (EC 2010c).

<sup>3</sup> More information: [http://ec.europa.eu/youthonthemove/index\\_en.htm](http://ec.europa.eu/youthonthemove/index_en.htm)

<sup>4</sup> More information: [http://ec.europa.eu/education/focus/agenda-for-new-skills-and-jobs\\_en.htm](http://ec.europa.eu/education/focus/agenda-for-new-skills-and-jobs_en.htm)

In line with the Europe 2020 Strategy, the European Employment Strategy (EES) shares the targets mentioned above. The EES aims to create better and more jobs throughout the European Union. It provides a framework for the Member States to discuss labour market issues and to coordinate their employment policies. Annually, the Member States and the European institutions draw up "employment packages" consisting of guidelines for national employment policies, national reports on current employment policies and a Commission report with policy recommendations to each member country. The Joint Employment Report from 2013 states that there are signs of deterioration in the job matching process across the EU which may result, in part, from barriers to geographic and occupational mobility (EC 2013a).

In April 2012, the European Commission presented its current "employment package" in order to respond to the financial crisis and the unemployment situation in Europe. It urges the Member States to strengthen their employment policy and presents some key areas for reform. Among other things, the employment package emphasises the need to invest in skills in order to address mismatches in Europe's labour markets. Creating a genuine EU labour market is one of the main objectives of the employment package with improving labour mobility and matching jobs with job-seekers being highlighted measures. The Commission is also fully engaged in removing the continuing legal and practical obstacles to free geographic mobility with, for example, improving the portability of pensions being a particular focus here. The Commission has also encouraged the Member States to allow for the portability of unemployment benefits for a period of up to six months.

Further, the current employment package introduces several changes to EURES - The European Job Mobility Portal. EURES is a cooperation network between the European Commission, the Public Employment Services of the EEA countries and other organisations. EURES implements the labour market policy goals of the European Union by providing information, advice and job-matching services not only to workers and employers but also to citizens who want to move and work abroad. Making EURES a "true European placement and recruitment tool" is one of the primary goals of the current "employment package" through e.g. online services that map European job offers geographically (EC 2012).

## 2.5 Labour mobility in the Baltic Sea Region

Geographical and occupational mobility is understood, in the context of the EU Strategy for the Baltic Sea Region (EUSBSR), to make an important contribution to the economic development and competitiveness of the Baltic Sea Region (BSR). The strategy aims to increase cooperation between countries under the Horizontal Action (HA) “Neighbours” in order to address cross-border labour market issues (EC 2013b).

### Baltic Sea Labour Forum

Transnational labour market cooperation in the Baltic Sea Region is in practice facilitated by, among others, the Baltic Sea Labour Forum which was established as an outcome of the Baltic Sea Labour Network project. The project (2008-2011) addressed the issue of transnational cooperation in respect of labour market questions by bringing together representatives from the trade unions, employers, politicians, labour market experts, academics and public officials to work on cross-border labour mobility. The project aimed at providing a comprehensive picture of the Baltic labour market and its challenges by utilising research knowledge. It created a platform for decision-makers and facilitated the exchange of experience between them. The Baltic Sea Labour Forum was established to promote continuous transnational cooperation between labour market actors. For more information, see [www.bslabour.net](http://www.bslabour.net).

Under the Horizontal Action “Neighbours”, the following actions are prioritised: (1) “Fostering labour market related activities especially in the cross-border context” and (2) “Promoting youth and student exchanges and co-operation in the Baltic Sea Region”. Action 1 focuses on overcoming potential obstacles to cross-border mobility such as challenging legal issues for employers and employees while Action 2 concentrates on involving students and young researchers in mutual cross-border cooperation and integration. Both Actions will be implemented through so-called flagship projects in the coming years. The projects focus on information

networks and the monitoring of labour markets, cooperation - particularly with Russia within the Baltic Sea Labour Forum - and the further enhancement of transnational labour mobility in the BSR (EC 2013b).

The Central Baltic Programme (EC 2010d) has underlined the labour market challenges in the programme document. “High threshold and low mobility on the labour market” is identified for certain groups as one weakness in the programme area. One of the major questions related to the development of a stable labour market in the programme area is the “better utilisation” of both the internal and the potential external labour force. The programme suggests that better utilisation of the labour force is a prerequisite for the development of the Central Baltic region’s ability to confront internal and external challenges such as globalisation and labour market imbalances.

The programme supports activities to lower thresholds for labour force mobility and to minimise ‘brain drain’ from the Central Baltic Programme area. Distinct results have been expected in the areas of improving the mobility of the labour force, applying innovative methods, optimising cooperation between various actors and advancing matching labour market demands for skilled people. In addition, the programme underlines the importance of measures to improve the quality and status of vocational training. The programme also sets out to define the basic tools with which to approach these labour market challenges, namely cooperation, the exchange of experiences, best practices and innovative approaches.

Other pan-Baltic actors such as VASAB (Long-Term Perspective for the Territorial Development of the Baltic Sea Region 2010) also address cross-border mobility in the BSR. In this respect VASAB draws attention to the East-West, North-South and urban-rural divides in the Baltic Sea Region. According to VASAB, urban-rural disparities may increase due to recent cross-border labour mobility from the new EU Member States to the Western BSR states. VASAB states that in order to cope with the issue, a dialogue at the pan-Baltic level has to be established. A better and more reliable transport infrastructure should also be coupled with labour market policy in order to enhance the cross-border mobility of the labour force in the BSR (VASAB 2010).

# 3 The Central Baltic region – facts and data

The countries in the Central Baltic region have a long tradition of cooperation based on their shared historical and cultural background despite differences in administrative cultures and language barriers. Close cooperation is well developed between the Nordic Countries of Finland and Sweden, between the former soviet states of Estonia and Latvia as well as between the Finno-Ugric countries of Estonia and Finland. Cooperation is not however limited to these examples and actually takes place between all Central Baltic countries. A large number of actors have already participated in international and inter-regional projects and activities within the EU, the Baltic Sea Region and the Nordic co-operation context, such as INTERREG programmes, Council of the Baltic Sea States or Nordic Council of Ministers programmes. The countries of the region can thus be seen as a well-integrated part of Europe.

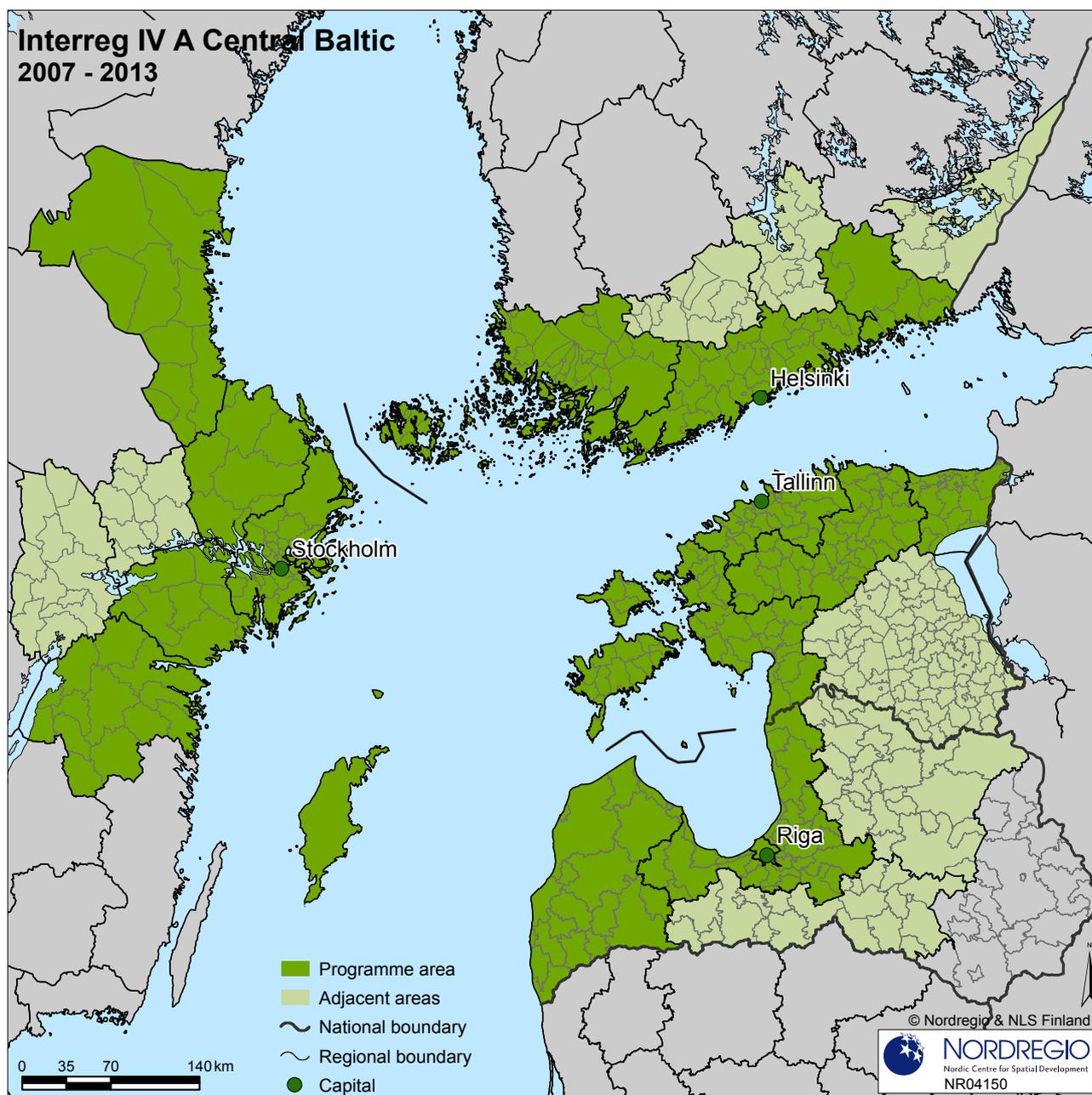
The Central Baltic region includes four capital cities: Tallinn, Helsinki, Riga and Stockholm (see map 1) which provides an obvious strength to the development of the region (EC 2010d).

The Central Baltic region has approximately 40 universities and 20 polytechnics as well as a highly educat-

ed and skilled labour force. This creates strong human capital which supports the development of the labour market in the region. The role of small and medium-sized companies is rather weak but there are many well-managed and globally successful companies present in the Central Baltic region. The innovation capacity of the region is also quite high with a strong IT and R&D infrastructure (EC 2010d).

The labour market in the Central Baltic region however faces many challenges such as high unemployment especially for certain groups (e.g. young people) and increasing disparities between sectors and regions in terms of the availability of a competent labour force. Moreover, ongoing demographic developments pose further challenges in terms of the labour supply issue. In order to respond to these challenges, the Central Baltic Programme (2007-2013) stresses the need for cooperation, the exchange of experiences and innovative approaches (EC 2010d).

In this chapter, pertinent facts and the available data on the development of the region and its labour markets are presented together with information on migration flows and cross-border commuting between the countries making up the Central Baltic region.

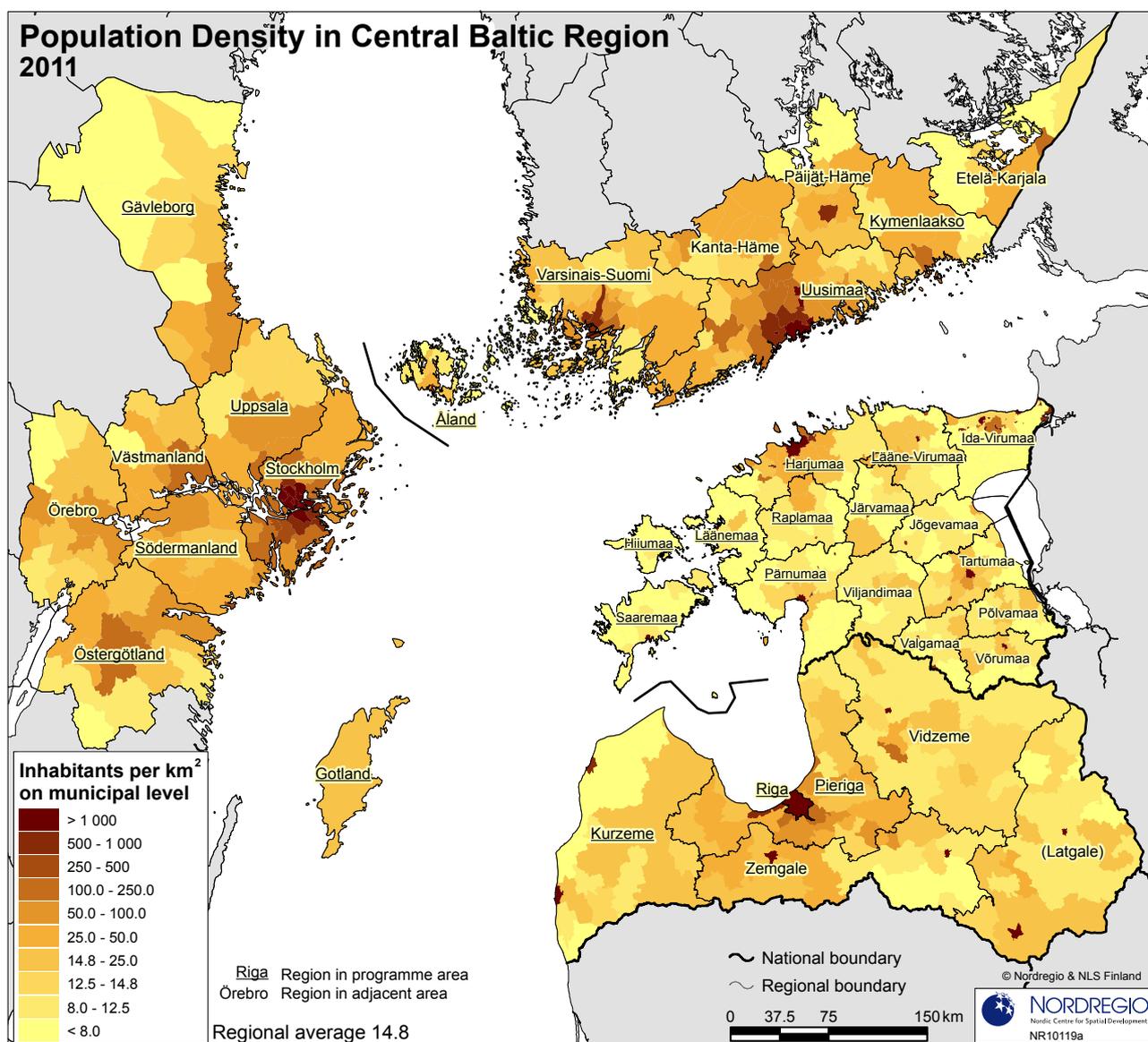


**Map 1:** The Central Baltic region including capital cities and the case study areas.

### 3.1 Socio-economic context

The Central Baltic region is home to some 10 million people. At the regional and sub-regional levels the population is quite heavily polarised in spatial terms and clearly concentrated in larger urban settlements and regional centres. In all Central Baltic countries the capital region is the most important urban agglomeration although the relatively dense network of small and medium-sized cities functions as the backbone for the urban system. One third of the population lives in the capital cities while half of the population is concentrated in the 25 largest municipalities (see map 2).

In demographic terms the countries of the Central Baltic share a number of similarities yet differences remain. Four common primary demographic processes can be highlighted, namely, increasing labour mobility, urbanisation, ageing and the decreasing share of working age population. The impacts of these processes are highly dependent on the issue of migration. The main demographic differences between the Central Baltic countries relate to overall population development. Over the last decade (2001-2011) the Central Baltic region saw an overall increase in population but this was due, primarily, to rapid increases in the Finnish and especially the Swedish population. At the national level

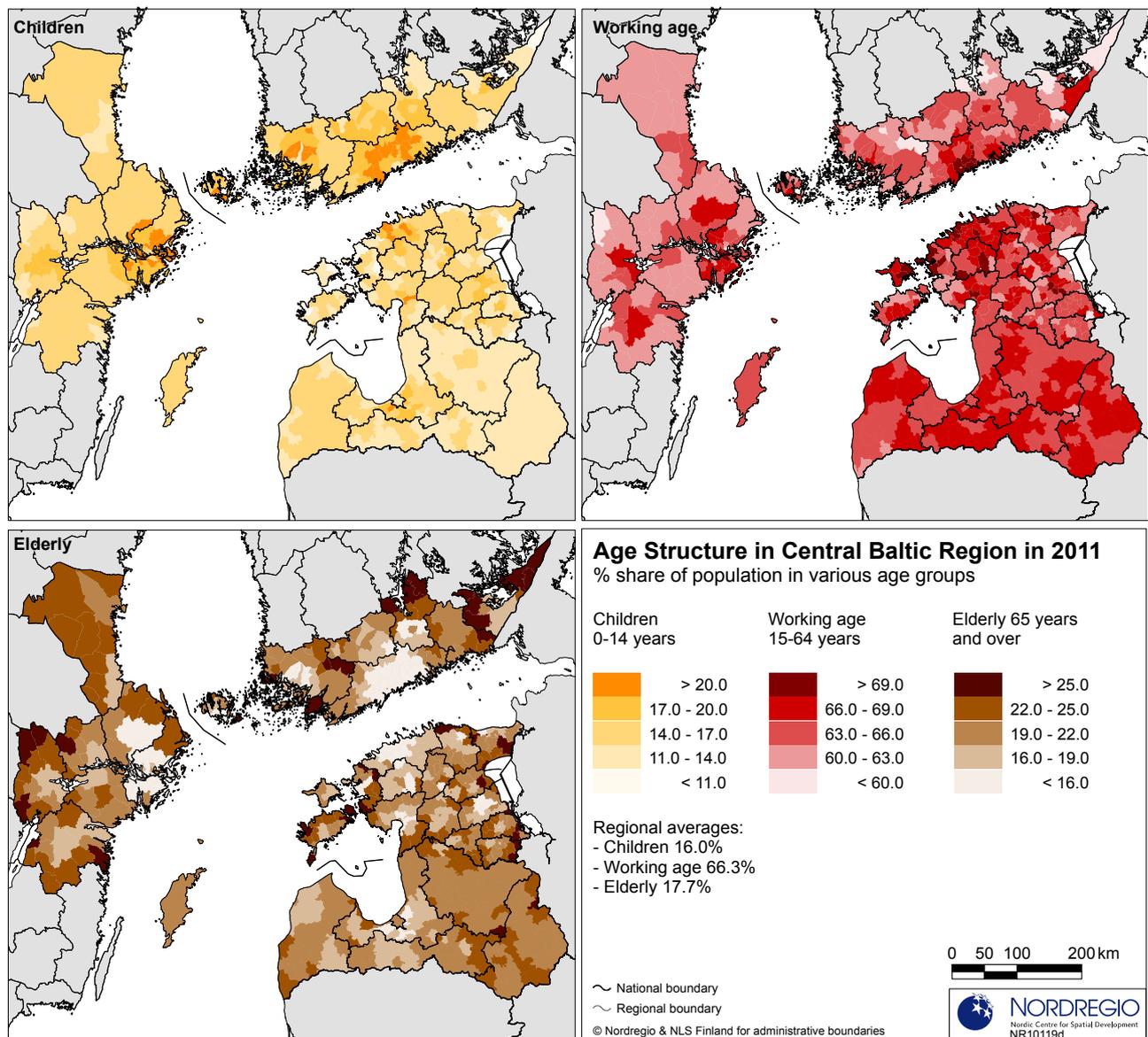


**Map 2:** Population density in the municipalities of the Central Baltic region in 2011.

Finland and Sweden saw a total population increase of around the EU average, that is to say by around 0.4% a year with the Central Baltic areas experiencing an even faster rate of population increase, annually 0.6% in Southern Finland and 0.8% in Eastern Sweden. Estonia and Latvia however experienced an annual population decline of -0.3% and -0.6% respectively. In all four countries the capital regions and other cities with agglomerations were the best performers as regards population change. A significant share of the small, rural municipalities experienced population decline. The key drivers for these population change trends relate to strong migration surpluses in the city regions and a combination of out-migration and natural losses in the small municipalities particularly in Estonia and Latvia (Hansen et al. 2011; NSIs; Schmitt & Dubois 2008).

Migration flows not only affect the total number of

people but also the age structure. People in the same age group are not equally moving in and out of each municipality and region. In the Central Baltic region half of the migrating people are between 20 and 34 years old. In general, cities and regions with good education and employment opportunities attract more young and working age population than rural municipalities. This has led to a situation where there are evident differences between the more 'elderly' rural areas and the 'younger' cities. Young and well-educated people primarily out-migrate from rural areas. This has a significant impact on the potential labour force (i.e. less people of working age) as well as on the population structure (i.e. more people of pensionable age) in these areas. In the largest cities migration processes work in an altogether different manner. Instead of skewing the age structure as in rural areas they contribute to the



**Map 3:** Share of population in various age classes in Central Baltic region

creation of a comparatively balanced age structure.

In addition the potential labour force is affected by the general age structure in the Central Baltic region. In all the countries the first and large baby boomer generation (i.e. post-World War II age classes) is now in the process of retiring leading to a decline in the working age population in general. An important difference between Finland and Sweden on the one hand and Estonia and Latvia on the other exists. In Finland and Sweden the soon retiring age groups are larger but the losses in labour force can partly be compensated with relatively large age groups that are currently also entering the labour market whereas in Estonia and Latvia the share of children is lower and similar potential do not exist. Thus on average the impacts of ageing will be approximately the same across the Central Baltic region (EC 2010d; NSIs; Schmitt & Dubois 2008; VASAB

2010). Map 3 shows the municipal level differences between the shares of children, working age population and elderly population.

The decline in the size of the working age population may be slowed by attracting more labour migrants. Immigration could function as a partial solution to both servicing the elderly and contributing to an increase in the working age population but it is not enough to solve the challenges caused by the large structural changes that are expected in the coming years (Tanner 2011; Westin 2006).

In 2011, 4.7 million people were employed in the Central Baltic region. That was a decrease of some 300 000 persons compared to the peak employment figures of 2008 before the economic crisis. However despite the decrease in employment, the region still registers 130 000 more employees today than a decade

ago (Eurostat 2012). This indicates both that we have seen an increase in the working age population and in labour market participation rates. During the third quarter of 2012 employment rates among the popula-

tion aged 15-64 years were highest in Sweden (75.6%), a bit lower in Finland (70.75) and Estonia (68.1) and around the EU average of 64.6% in Latvia (64.5%) (see figure 1).

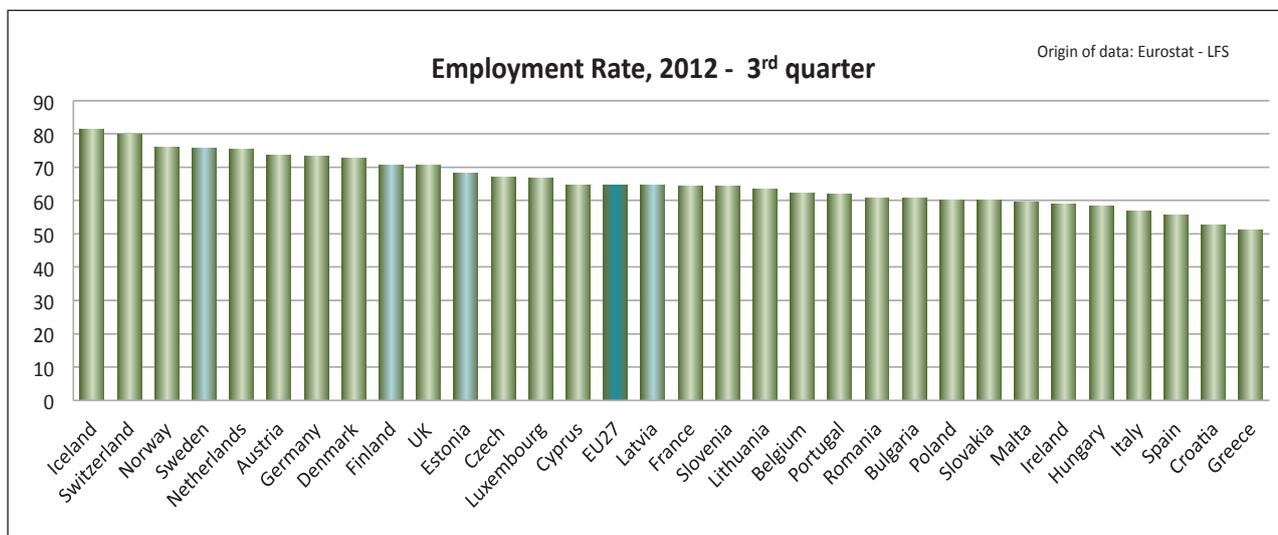


Figure 1: In Sweden, Finland and Estonia the employment rate was higher than the EU average.

These employment rates reflect the strong asymmetric impact of the economic crises on the regional labour markets in the European Union. At the beginning of 2008, all the Central Baltic countries enjoyed good employment situations and unemployment rates were below the EU average. By the end of 2008, unemployment rates had increased across the region but Estonia and Latvia in particular, were heavily impacted by the crises, with the increase in unemployment particularly dramatic. In a short period of time unemployment rates increased by 10%. However, taking into account the fact that unemployment rates were generally at a lower level before the crisis, the impact of such a significant increase was not as severe as in other European regions. Also both Estonia and Latvia have managed to reduce the unemployment rate more rapidly than other European countries in a similar situation. During the third quarter of 2012 the unemployment rate in Estonia was already below the European average of 10.3% (see figure 2) (Bartsch & Scirankova 2012; EC 2010e; Eurostat 2012). In Finland and Sweden the national unemployment rate (around 7%) is low compared to European average although larger than it used to be in Sweden. It should also be noted that although the un-

employment rate is almost the same in Finland and Sweden, the share of economically active people in Sweden is larger than in Finland thus indicating the existence of a healthier labour market situation.

The Central Baltic countries are relatively small in economic terms and are thus often simply unable to compete with major, more diversified European economies. The share of people with tertiary education is high throughout the region; some of the counties hold the highest share of highly educated labour in the EU (EC 2010e). For the Baltic States low salaries create a challenge: As shown in figure 3, the mean equivalised net income by employed person in Estonia and Latvia reaches only approximately 30% of the figures for Finland and Sweden where median incomes are higher, on average, than in EU as a whole. It should however be noted that this difference is significantly smaller when looking at purchasing power standards. An increase in the number of attractive jobs, especially for highly skilled workers, as well as the higher wages that go with such jobs, is likely however to contribute to a process of ‘brain gain’ in the Baltic countries in the medium term (Baltic Development Forum 2011a; Eurostat 2012).

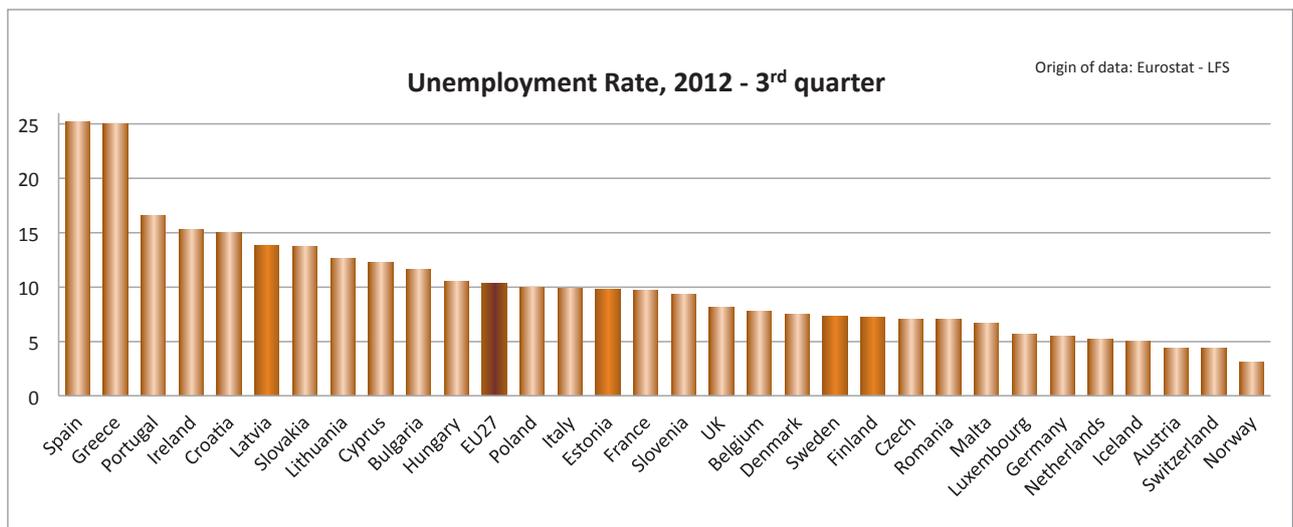


Figure 2: Annual average unemployment rate in 2011.

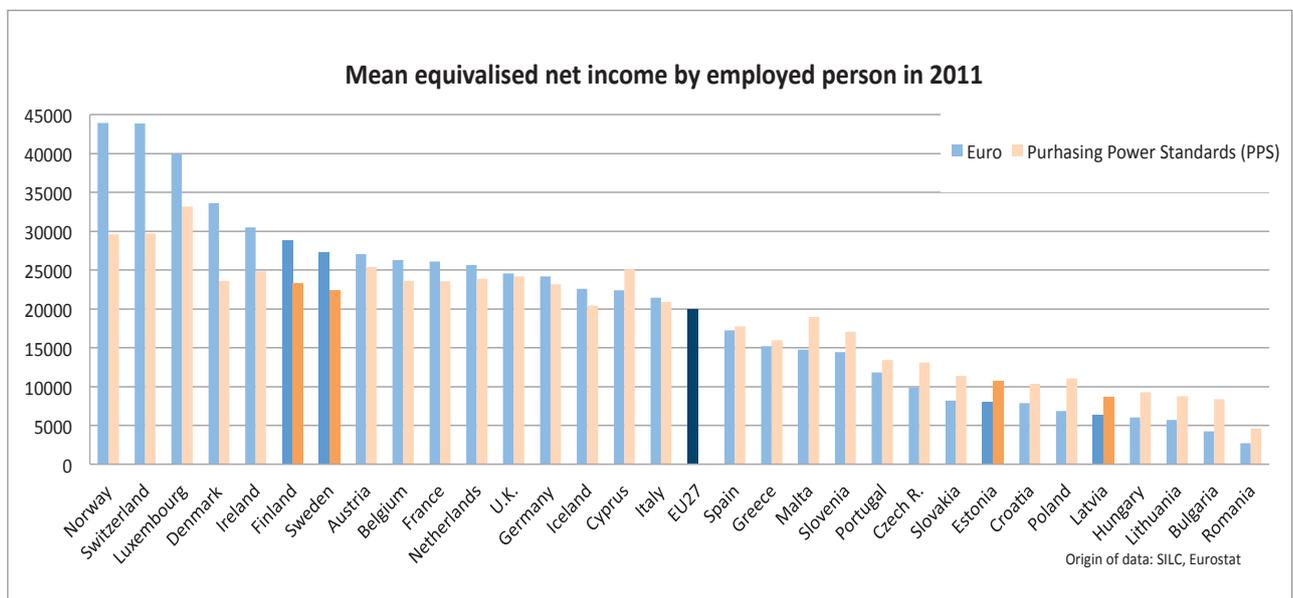


Figure 3: Mean equivalised net income by employed person in 2011.

Over the last two decades, the transformation of national economies and the effects of political integration in combination with the skilful exploitation of the region's assets and strengths has contributed to rising economic and social interdependencies between the Nordic and Baltic countries. This fact has boosted the overall competitiveness and well-being of the people in the region (VASAB 2010). In general the region has experienced economic growth over the last decade. Although Latvia was heavily impacted by the crisis the Central Baltic region as such has bounced back relatively well compared to many other European areas. The Central Baltic region created an annual GDP (PPP adjusted) of slightly above €255 billion in 2009. This is

equivalent to about 2% of the EU27 economy. In economic terms the old division between the Eastern and Western parts of the region is still visible, i.e. in terms of GDP per capita the disparities between the different countries is substantial. Measured by PPS per capita, the Finnish and Swedish regions in the Central Baltic had the same or higher figures than the European average whereas in Estonia and Latvia only the capital regions performed around the EU average. Overall, the crisis has shifted the region's economic balance further towards the Nordic countries (Baltic Development Forum 2011b; Eurostat 2012; IMF 2012).

Trade and investment flows are relatively high between the Central Baltic countries. In 2006 almost 40%

of Estonian trade took place within the Central Baltic region whereas for Finland and Latvia the value was from 15% to 20% of the total. Although the Central Baltic region and Finland in particular is of importance for Sweden, the share of Central Baltic trade is significantly lower at 7% due to the magnitude of the trade (IMF 2012).

## 3.2 Migration flows

The Central Baltic countries have rather different backgrounds in terms of migration and their foreign populations. In Sweden the first large immigration flows between the 1950s and 1970s were mostly related to rising labour demand in the country's growing industrial sector with the migrants coming mostly from other European countries but particularly from Finland. In the 1980s and 1990s the share of refugees and family migrants increased exponentially in Sweden. The inflow of migrants led to a situation where 15-20% of the Swedish population now has a foreign background. In 2012 immigration to Sweden was around 103 000 persons (Migrationsinfo 2013; SCB 2013). The largest foreign groups are people from Finland, Iraq and Poland.

In Finland the share of foreign population has historically been low. Until the 1980s, Finland experienced net emigration especially to Sweden. While the share of foreigners as a percentage of the entire population has increased steadily since 1990, it is still considerably lower than in other Northern or Central European countries. During the last two decades the number of foreign citizens in Finland increased from 26 000 to 156 000. Approximately 300 000 people in Finland, or 5% of the total population, have a foreign background (foreign born, speaking a foreign mother language, or having foreign citizenship) (Tanner 2011). The largest foreign groups in Finland are Russians and Estonians.

After gaining their independence from the Soviet Union in 1991 both Estonia's and Latvia's main migration issue has been the status of Russian-speaking residents, the legacy of the Soviet Union's Russification policy in which millions of people were removed from their homelands and sent to other parts of the territory. Thus in the early years of independence the main emigration flows were the return migration to Russia of former USSR citizens (Heleniak 2006). During the last decade a clear change in emigration flow directions has however taken place in both of the countries with the flow now mostly towards Northern and Western Europe.

According to Statistics Estonia (2013) almost 70% of the population in Estonia is ethnic Estonian. The share of ethnic Russians is 25% while the share of other for-

mer USSR minorities, mostly from the Ukraine and Belarus, is around 3-4%. Only 2% of the population belongs to other nationalities or comes from other countries. In 2011 Estonia lost about 2500 inhabitants due to negative net migration: over 6200 persons emigrated from Estonia mostly to Finland, the UK and to other Central European countries. At the same time about 3700 people immigrated to Estonia. The immigrants were mostly return-migrants from Finland, Russia and the Ukraine. From the perspective of return migration it is interesting to note that Estonia has the highest share of population with experience of working abroad in Europe (European social survey 2008).

According to the Latvian population census, 62% of the population in Latvia was ethnic Latvian in 2011 (Statistics Latvia 2013). The share of ethnic Russians is 27%, Byelorussians 3% and Ukrainians 2%. The share of foreign population both measured by the country of birth or by citizenship is around 14%. Emigration from Latvia has become a major national challenge as the working age population is decreasing. It is also notable that due to emigration, the ethnic Latvians' share of the population is decreasing over time. The main countries of origin of people immigrating to Latvia are Russia and Belarus (Heleniak 2006).

Migration<sup>5</sup>, and in particular international migration, is hard to orchestrate. The flow of international migrants to Finland and Sweden has increased year on year in recent decades but the raw numbers nevertheless remain rather low compared to the Western and Southern European countries (Hansen et al 2011). At the same time in Estonia and Latvia, the 2004 EU enlargement resulted in a substantial increase in cross-border labour mobility although this was dominated by migration primarily to Western Europe and the Nordic Countries (VASAB 2010).

During the last decade the main migration flows in the Central Baltic region have changed markedly. In 2004 (when Estonia and Latvia became EU Member States) Sweden was one of three Member States (along with the UK and Ireland) that did not impose limits on labour mobility from the new Member States. Finland (together with a number of other European countries) removed restrictions concerning workers from the new Member States in 2006. EU enlargement and the free movement of EU citizens have had a major effect on migration flows, precipitating increased emigration from Estonia and Latvia. The impact of EU enlargement on Finland and Sweden has however been rather modest.

---

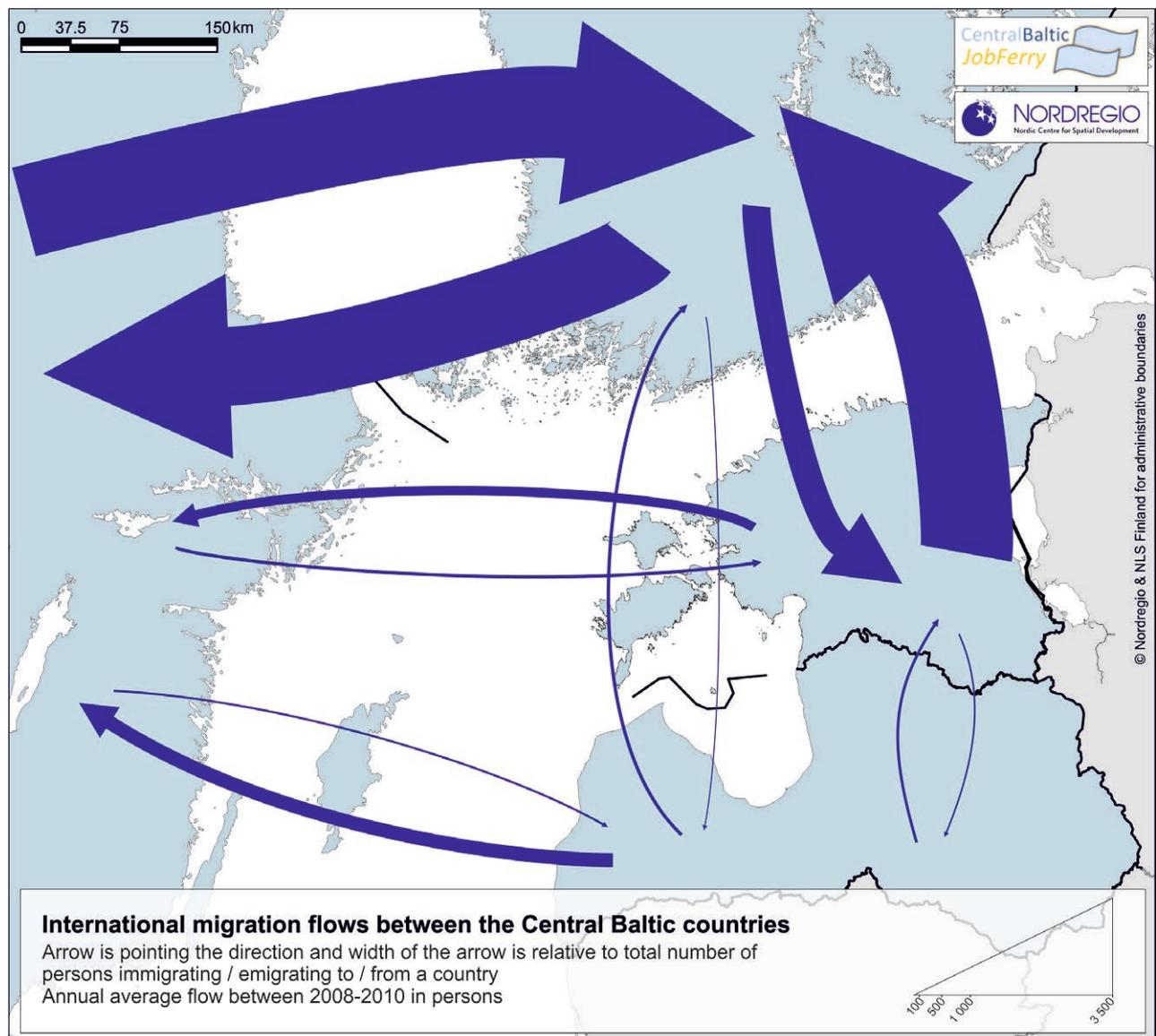
5 Figures in the chapter come from the national statistical institutions.

While for instance the UK and Ireland have experienced significant migration flows from the new Member States, Finland and Sweden have experienced only minor migration flows from these countries. One important reason for this is that in Finland and Sweden trade unions retain significant industrial power and political influence. For instance, in Sweden they oblige foreign companies (e.g. in the construction sector) to pay foreign (e.g. Latvian) workers Swedish salary rates (Gáková, & Dijkstra 2008; Westin 2006).

Migration flows increased between Finland and Estonia due to the introduction of the EU's free movement rules. In 2000 about 10 000 Estonian citizens lived in Finland. This number had increased to 17 000

when Finland granted free access to the labour market for workers from the new Member States, and by 2012 almost 40 000 Estonian citizens lived in Finland. The number of Estonian citizens in Sweden is much lower, however the number increased from 2 200 persons in 2004 to 4000 persons in 2012. Although the number of Latvians living in Finland (1300) and in Sweden (4500) is relatively low, the migration flows show the same pattern (NSIs 2013).

When looking at the Central Baltic region, the migration flows between Finland and Sweden and Finland and Estonia are clearly the most important (see map 4), with thousands of people moving annually between these countries.



**Map 4:** Migration flows between the Central Baltic countries.

The main reasons for moving abroad in the Central Baltic region are for work and family. Based on the statistics almost two thirds of intra-regional migrants are between 15-44 years old. Some national differences do however exist. Immigrants from Latvia are generally younger whereas people migrating between Finland and Sweden are, on average, older – a fact that can partly be explained with reference to the return migration of Finns who moved to Sweden for work in the 1960s and 1970s and are now returning to Finland to retire. This issue is also visible in the Swedish migration discussion as the number of Finns is the only decreasing migrant group in Sweden– both due to return migration and for natural reasons.

Intra-regional migration in the Central Baltic region is generally advantageous for the receiving country as the migrants from other Central Baltic countries have, on average, a higher educational level and better professional skills than international migrants. This is also visible in unemployment statistics where there is no difference between nationals and migrants from the Central Baltic countries (in general, immigrants tend to display higher unemployment rates than nationals).

At the same time, the outflow of workers may not necessarily reflect a long-term ‘brain drain’, as many newly mobile workers plan to work in another EU country only temporarily and subsequently return to their home country. This ‘brain circulation’ process

can create a win-win situation (Holland et al 2011) but can also become a major challenge especially in rural regions.

Cross-border migration is difficult to measure in exact volumes mostly due to lack of documentation and differences in the statistics. All Central Baltic countries define international migrants similarly: an immigrant/emigrant is a person, who has previously been a permanent resident of a country, moves to reside permanently in another country for a period of >12 months. However, there are significant differences between the origin and destination numbers between the countries. Based on the statistical data from the national statistical institutions, table 1 indicates the challenges when comparing this registered migration flows data between the countries. The table shows the number of migrants (to and from) between the Central Baltic countries in 2010. The span of the figures shows the difference between the countries’ official national data. According to Statistics Estonia, 1020 persons emigrated from Finland to Estonia whereas Statistics Finland counts 636 persons. This anomaly can, in part, be explained with reference to the differences in the register systems. Some attempts to address these issues in the Central Baltic region have already been made. For example Estonia and Finland have signed an agreement on the exchange of population register data.

International migration between the countries (to and from) in 2010					
	from	Estonia	Finland	Latvia	Sweden
to					
Estonia			636 – 1 020	21 – 133	74 – 145
Finland		3 475 – 4 043		133 – 194	2 684 – 2 875
Latvia		9 – 67	35 – 45		78 - 89
Sweden		105 – 566	2 795 – 2 828	232 – 780	

**Table 1:** International migration between the Central Baltic countries (Source: NSIs).

Another issue here relates to persons staying in another country for a shorter period of time. Many cross-border migrants plan to work in another country for only a limited period of time and do so on a regular, often seasonal, basis. Migration is usually not regarded as a once-and-for-all decision, but rather as part of a long-term adjustment process where people respond to longer-run expectations in both markets and personal circumstances (Gáková, & Dijkstra 2008). Therefore they

are not included in the registration data (applicable to stays >12 months) and thus are also not included in the statistics.

### 3.3 Cross-border commuting

In addition to cross-border migration, cross-border commuting is also a relevant issue in the Central Baltic region. Cross-border commuters are persons who are

living in one country and working in another. Due to the lack of statistics, the data on the amount of cross-border commuters is mainly based on various studies and estimates. Based on a Nordic commuting study (Nordisk pendlingskarta 2009) that combines register data to tax information, 2660 persons lived in Sweden and worked in Finland in 2009. 3244 persons lived in Finland and worked in Sweden. These numbers are very low compared to the number of Estonians commuting to Finland. The Estonian embassy in Finland estimates that about 20 000 Estonians commute to Finland on a regular basis and that the number of persons who have worked for a short period in Finland is several times larger (EPB 2010).

Uncertainty related to the actual number of cross-border commuters remains very high and the information from national population registers and various studies is not able to fully describe the dynamics in this field. In 2010, Ahas et al. (2010) carried out a study

based on mobile positioning data using information about the clients of EMT (the biggest network service provider in Estonia). The study revealed that 28 000 users of the EMT network visit Finland on a regular basis. In the case of Latvia this number amounted to some 7000 persons. These figures cannot easily be treated as a direct proxy for the amount of cross-border workers. It should moreover be noted that other reasons may exist to explain the regular cross-border visits made by these people. Indeed, the numbers also include children and other persons outside the labour market. In general, it can be concluded that getting accurate data related to work-related cross-border mobility is highly problematic but it can be safely assumed that the numbers are much higher than the official estimates suggest. The number of Finns commuting to Estonia is much lower and mostly linked with the Finnish firms' investments in Estonia.

# 4 Cross-border labour mobility<sup>6</sup> in the Central Baltic region

Chapter 4 is based on work done by all project partners in 2012. Desktop research (e.g. policy reviews) and interviews have been conducted in four case study areas: Latvia and Estonia (whole countries) as well as the region of Southwest Finland and the region of Östergötland (Sweden) (see map 1). Thus the information given is not entirely comparable between the case study areas.

In order to identify relevant labour market-related trends the following chapter combines both quantitative and qualitative data. In the first round of data

collection, literature reviews and official data sources were used to map the labour market situation in each country in order to identify those professions and sectors facing a labour shortage as well as the primary obstacles to cross-border labour mobility. The second round of data collection was carried out through interviews with 60 representatives from the various national and regional labour market institutions in the respective case study areas (see table 2). The results of the interviews were combined with material from previous studies and other available statistical evidence.

Institution	Number of interviewees per country			
	EE	FI	LV	SE
Ministry	2	-	4	1
National education agency	1	-	1	1
Regional authority	-	-	-	1
EURES network	3	2	1	3
Employment agency (public & private)	3	2	2	3
Educational institution	5	3	1	2
Labour union	2	-	2	2
Employer organisation	4	2	2	5
Total	60			

**Table 2:** Number of interviewees per institution and country.

## 4.1 Labour market policies

The issue of cross-border labour mobility, focusing on labour demand and supply, is addressed in labour market policies in the Central Baltic countries to some extent. Finland and Sweden do make reference to cross-border mobility in some of their key policy documents though in Estonia and Latvia the issue is less developed. Latvia has however introduced a targeted policy for emigrated Latvians that want to relocate back to Latvia.

Labour market policies in the case study areas do not seek to underline any specific target group. The labour market demand in the case study areas is gen-

erally concentrated in the same kinds of branches of the economy, as the most desired occupations are those with employees working in the health care and information technology sectors. Most typically people are recruited to certain professions directly without recourse to special initiatives or a particular emphasis on labour market measures. Only a small number of the interviewees mentioned young persons and students as a potential target group in advancing cross-border labour market mobility. For instance, it was noted in relation to the Southwest Finland case that it could perhaps be a strategy to concentrate on foreign students who are about to leave school and enter the labour market.

<sup>6</sup> By cross-border labour mobility we mean the geographical mobility across national borders of labour between the regions and countries of the Central Baltic Region.

## **Estonia**

In Estonia, the absence of sound statistical data or other research information concerning the effects of cross-border labour mobility makes it difficult for the relevant authorities and other actors to fully comprehend the issue and the tasks facing them. There is, currently, no long term strategy in place at the national level addressing this issue. The labour market development programme 2009-2013 does however state that Estonia should make better use of emigration and immigration. The programme also emphasises that there is a need for further analysis and continuing assessments of labour mobility and the usefulness of existing measures (Ministry of Social Affairs 2008). Currently no additional systematic measures are planned in terms of enhancing or supporting mobility even though some activities have been successfully adopted a number of individual actors on an ad hoc basis.

In Estonia several organisations exist that deal with labour market issues. However, according to the interviewees, there has been very little recent activity related to cross-border mobility by stakeholder groups, except for that conducted in the context of EURES (European Employment Service).

Cross-border labour mobility (incl. commuting) is allotted a rather low status on the Estonian labour market policy agenda. Overall knowledge of the field is low even among the relevant stakeholders meaning that the opportunities associated with cross-border labour mobility are neither fully understood nor utilised. As cross-border commuting and mobility has become more important, several activities oriented towards developing the cross-border labour market have emerged both from public and private stakeholders (e.g. some focused training courses) but could nevertheless be further improved.

The EURES network works well in Estonia. The local contact point also makes very active use of the wider network and has good cooperative relationships with other Central Baltic labour market stakeholders, particularly in Finland. People who have a concrete interest in working abroad or entering the Estonian labour market receive access to good support services. However, there is no wider debate or clearly visible marketing of the opportunities inherent in the concept of a wider Central Baltic labour market.

The Labour Market Development Programme 2009-2013 notes that an analysis of labour mobility, an assessment of mobility support measures and an evaluation of additional measures are required (Ministry of Social Affairs 2008). A report by the Estonian State Chancellery further states that the labour market measures supporting labour mobility in Estonia have

not been sufficient and that there are currently no long-term measures related to enhancing and supporting mobility (Estonian State Chancellery 2011).

## **Southwest Finland**

Relatively limited attention has also been paid to cross-border mobility within the EU in Finnish policy. It is however emphasised in the Finnish context that it remains important to promote work-based immigration as a way of improving the availability of a reliable and skilled labour force (Ministry of Employment and the Economy 2011). The Finnish National Programme within the 'Europe 2020' context emphasises the need to better integrate immigrants into the Finnish labour market and increase the employment rate of immigrants (Ministry of Finance 2012). It does not however make any reference to measures to promote the matching of labour demand and supply as this relates to immigration and cross-border mobility. Some individual projects have addressed the issue of cross-border mobility in the EU but the activities and initiatives have not been systematically coordinated by any particular actor.

The existence of Employment and Economic Development Offices as well as employment agencies has a significant influence on the labour market in the region of Southwest Finland. The public and private sectors still do not cooperate well enough to ensure that well educated workers are attracted to Finland. Labour market institutions in Finland are competent but the process is not integrated, there is a lack of cooperation and of the targeted sharing of information within Finland but also between Finland and the other countries of the Central Baltic. Thus far then few concrete efforts have been made to enhance labour mobility to Finland.

On a practical level it is clear that EURES advisors from Estonia and Finland are cooperating and supporting immigrating workers by organising info sessions related to job seeking. The SPURTTI project pursued by the Centre for Economic Development, Transport and the Environment in Southwest Finland has been an active player in enhancing labour mobility and support for foreign workers entering the Finnish labour market. However, the interviewees nevertheless detect some overlap here and a clear lack of coordination between several projects in Finland each of which is trying to facilitate labour immigration. The issues should, as our interviewees suggest, be addressed at the national level, preferably by the Employment and Economic Development Offices.

According to the interviewees, a positive attitude exists towards the development of a common cross-border labour market, e.g. Turku-Åland-Stockholm or

Helsinki-Tallinn. Although a number of projects have been implemented in these areas, labour mobility especially between Sweden and Finland has remained rather limited. However, Finnish companies have a lot of activities in the Baltic countries while many Estonians work, for instance, in the home nursing and domestic service sectors in Finland.

### **Latvia**

In the Latvian policy-making context, cross-border mobility has thus far been viewed predominantly as a 'one-way street' of emigrating Latvians. It is, moreover, now generally agreed that Latvia is at risk of experiencing labour shortage and that the country will thus need to rely on an incoming immigrant labour force to respond to the demand for labour in various sectors. In 2013, the Latvian Government agreed a re-emigration plan which aimed to attract back Latvians who had left the country before or during the current recession. The plan also aims to strengthen business contacts with Latvians living abroad and encourage them to act as business ambassadors for Latvia (Baltic Business News 2013).

Taking into account the size of Latvia's population and the rate of labour force emigration during the period 2006-2009, the notion of labour mobility (including the cross-border labour market) has been a much discussed topic. It is clear that all labour market actors (e.g. employers, employees, sectoral associations and public authorities) are aware of the main issues and of the opportunities involved. In this regard, Latvian State Employment Agency and EURES managers in Latvia are influential actors in the cross-border labour market, particularly in terms of the provision and dissemination of information.

A number of cross-border labour market partnerships and co-operative arrangements have already been established, in particular concerning those professions requiring lower qualification standards. For instance in the wood working industry fruitful cooperation already exists between educational institutions (e.g. Ogre State Technical School) and wood working industry companies in Latvia, Sweden and Finland. Ogre State Technical School educates and prepares wood working industry specialists in accordance with the specific needs of the employers. The Latvian Chamber of Commerce and Industry also works closely with international partners, including those from the Central Baltic region countries and thus has an impact on the cross-border labour market in this region.

The primary authorities regulating the Latvian labour market are the Ministry of Economics and the Ministry of Welfare. In 2011 the Ministry of Econom-

ics produced an informative report detailing projections of labour demand and supply in the medium term and indicating the main challenges and recommendations in respect of the Latvian labour market up to 2016 (Ministry of Economics 2011). An important role here is also given to the social partners, e.g. Free Trade Union Confederation and the Employer's Confederation. The National Employment Agency and EURES assist and support national employment policy. However, as yet, no labour market development plans, specifically relating to labour mobility, have been put in place.

### **Östergötland (Sweden)**

Cross-border labour mobility has not been specifically addressed in Swedish policy documents in this general area. However the National Reform Programme 2012 states that for a small country such as Sweden, cross-border labour mobility is a precondition for a functioning economy. No measures targeting the cross-border mobility of the labour force currently exist in the programme (Government Offices of Sweden 2012).

The National Strategy for Regional Competitiveness, Entrepreneurship and Employment emphasises cross-border cooperation as one way for regions to achieve critical mass and attract complementary skills on the labour market. Actors at all levels have to be active in the development that could take place via adapted legislation or improved cross-border infrastructure. It is also stated that the provision of information on regulatory differences needs to be intensified; here specifically concerning cross-border services between Sweden and Norway (Government Offices of Sweden 2007).

Most of the interviewed regional actors seemed to have at best only a vague idea of how different actors in the region work with issues related to the cross-border labour market. Many of the interviewees noted that they do not know which actors work with this issue. The level of knowledge in respect of cross-border mobility, particularly within the Central Baltic region, seems low.

The EURES advisors were optimistic about the role of the EURES network in promoting cross-border mobility and think that the network has been successful in promoting this goal. The confederation cooperates with labour union organisations in other countries and exchanges information and experiences. It does not work directly with labour markets but instead works with member-related issues in this field.

The East Sweden Regional Council does not usually work with cross-border labour market issues as such but has, according to the interviewees, previously been involved in a number of projects targeted at the Baltic countries. Providing up-to-date information on com-

petence provision in the region to, for example, educational institutions, employer agencies and student counsellors is considered important. Activities related to cross-border mobility arranged by the employment agency are not sufficient if the employers themselves are not also active in hiring mobile job-seekers. Municipalities should work more actively on attracting a foreign labour force to come, live and work in their municipalities. The EURES network deals with issues related to cross-border mobility. The level of cooperation between Sweden, Norway and Denmark has traditionally been high but cooperation with Finland and the Baltic countries should be further developed. There is however no specific person at regional or national level responsible for cooperation with the Baltic countries.

In some cases, entrepreneurs in Östergötland have sought to develop their own international contacts though they cooperate more often than not with actors in Central Europe or in Russia rather than those located in the Baltic Sea Region countries. The focus here is on immigrants coming from outside the EU, e.g. Iraq or Somalia rather than attracting a mobile labour force from within the EU.

## 4.2 Labour markets in the case study areas

The labour markets in all the case study areas are currently undergoing a period of structural change. Among other things, the importance of the service sector is expected to increase while the role of the primary and industrial sectors is becoming less important. This chapter is mainly based on interviews with experts and policy-makers from the case study areas and focuses on current labour market developments in each of these areas.

Looking at all of the case study areas together, the industrial sector will become increasingly specialised and knowledge-intensive with a rising demand for an ever more highly-skilled labour force. In Finland and Sweden the public sector has traditionally been strong and it is expected to remain important.

Estonia and Latvia have recently been experiencing high rates of out-migration. This, combined with other demographic challenges, represents a significant threat to the functioning of their labour markets. As noted in chapter 4.1 the situation has been addressed in Latvia in policy terms by aiming to make it easier for Latvian emigrants to return to the Latvian labour market.

### Estonia

The Estonian labour market is moving towards a more knowledge-based society and economy. This is visible both in the sectors of employment that will potentially face a demand for labour in the coming years and in the national priority sectors for economic growth. In general it is expected that more people will be employed within the service sector and that future growth will be dependent on higher value-added jobs especially within the technical branches of the economy. In the Estonian Research and Development and Innovation Strategy 2007-2013, information and communication technology (ICT), biotechnology and material technology are defined as the main priority fields. They are also expected to have “a profound effect on productivity growth and strong influence on all aspects of society’s functioning” (Estonian Ministry of Education and Research 2007). Although the share of these sectors in the economy as a whole is not that large it is important to take into account the related labour needs. These sectors are perceived to be the drivers of future economic growth and of the restructuring of the economic structure which is expected to increase the country’s share of higher value-added activities.

The Estonian labour market needs to address two main challenges: On the one hand there is the question of out-migration where mostly young and educated Estonians are moving abroad in order to work in qualified and well-paid jobs. On the other hand there is an increasing interest in bringing in cheaper labour from third countries although the national labour immigration regulation is strict. According to the law as it currently stands, employers should first try to meet the local labour market demand with local workers. Unemployment in Estonia remains persistently high and as regards jobs that do not need special qualifications it could be argued that there is probably no real need for foreign workers to be brought into Estonia. Given this regulation and also to the relatively low salary levels it is also challenging to recruit specialists and experts; something that clearly contradicts the generally stated goal of moving towards a more knowledge-based society and economy.

### Southwest Finland

In Finland the labour market and its regulation are strongly based on labour legislation and collective agreements. Labour market legislation functions as the basis for regulating the labour market but specific employment terms are determined according to collective agreements within each branch – a fact that e.g. impedes the opportunity to access cheap labour.

Southwest Finland is the third largest city-region in Finland with a rather diversified labour market. Even though the majority of the population is employed within the service sector, primarily production and industry are also relatively significant for the region from a Finnish point of view. The role of customer targeted specialist jobs is however increasing even in these sectors. The industry sector in Southwest Finland is export-oriented as approximately half of the industrial production is exported mainly to other European countries. This makes the region rather dependent on the vagaries of global markets (EURES 2013).

The global economic crisis has had a strong negative impact on Southwest Finland compared to other parts of the country. By the end of 2012, the unemployment rate was higher than the national average. Within the region itself the unemployment rate was highest in Salo, Turku and Uusikaupunki whereas in the small island municipalities the unemployment rate was low (Centre for Economic Development, Transport and the Environment 2013).

The key industries of the region (metal and technology branches) have undergone major structural changes in recent years. The machine industry and the maritime sector in particular within shipbuilding are heavily dependent on foreign investment and markets. Many large companies operating in the region such as Wärtsilä, Sandvik and Valmet Automotive, have had to come through a rather challenging environment. The maritime industry and shipbuilding has probably faced the most significant challenges with the sector itself receiving additional national support in 2010. In spring 2013 the situation worsened still further as the largest company, STX Europe, was put up for sale. If, however, the sector's economic problems can be resolved and new orders are received in the near future, the opportunities presented by the region – including access to a highly qualified labour force – can once again be effectively utilised.

A similar story can be seen in relation to the electronics sector where Nokia used to have a large office and factory facilities in Salo municipality which was however suddenly closed in 2012 with some 850 persons losing their jobs. Even though the unemployment rate in the Salo region is still the highest in Southwest Finland, many highly-skilled professionals have managed to employ themselves in smaller companies or in start-ups in the electronics sector. Surveying the future development of the labour market in Southwest Finland it is generally expected that the high-tech industry will eventually regain its former position, at least in part. Biotechnology is also now identified as a 'coming' sector due in the main to the confluence of existing re-

search, current development paths and historic industrial employment patterns.

The region is also characterised by some rather stable branches of employment. The public sector remains a significant employer both in terms of administration and the health care sector. The food processing industry is also still an important employer in the region (Raisio, Marli) and due to the stable economic basis of these companies the sector is expected to retain its position into the future.

### **Latvia**

Latvia was deeply impacted by the global economic crisis during the period 2008-2010 but since then the situation in the labour market has been slowly improving on the back of increasing economic activity. Even though the unemployment rate has decreased significantly since 2010 creating new jobs remains a challenge. As such, the medium- and long-term situation in the labour market will continue to depend upon continued global economic development and growth.

Low wages and thus low total costs have, historically, been a competitive advantage for Latvia's manufacturing industry. It should however be noted that under the EU mandated conditions of free movement it will no longer be possible in the long term to maintain this low wage culture. What is required then is a productivity increase and a greater diversity of export products. These factors will play a crucial role in Latvia's future, allowing it to compete in the international markets more successfully (Ministry of Economics 2011).

In labour market terms, the main long-term challenges relate to the gradual decline in labour resources determined by the ageing population, emigration and the decline in the number of people entering the labour market. It is estimated that by 2020, the working age population in Latvia will be reduced by some 15% from current figures. Moreover, the demographic burden could increase by up to 21%. At the same time the economically active labour supply will decrease by 8% from 2011 figures while labour demand will increase by 10%. Three potential new sources of labour supply for Latvia can be identified, namely, existing jobseekers in Latvia, Latvians studying and working abroad and qualified foreign specialists within specific sectors (Ministry of Economics 2011).

### **Östergötland**

Östergötland County, with about 430 000 inhabitants, is located in Eastern Sweden. Manufacturing industry has traditionally been the biggest employer in Östergötland County. Even though the amount of people employed in the manufacturing industry has been con-

tinuously declining it remains the most important sector. The largest private companies in the region are Saab AB (Linköping), Toyota Industries Europe AB (Mjölby) and Siemens Industrial Turbomachinery (Finspång) – each has a turnover of one billion €/year (Affarsliv.com 2012).

The role of the service sector is however becoming more important. In 2009, the health care sector became the largest employment sector in the region. In 2010, manufacturing industry employed 16% while the health care sector employed 17% of those working in the region. The largest employers in the region are Östergötlands County Council and Linköping University. Compared to the national average, Östergötland has a larger number of people in agriculture and education whereas employment in the financial, information and communication services sector is relatively low (East Sweden Regional Council 2011 & SCB 2012).

Sub-regional variations within the county do however exist. Manufacturing industry is still the largest employment sector in 10 of the 13 municipalities located in the county and in Finspång municipality almost half of the labour force works in this sector. Forestry and agriculture are particularly concentrated in smaller municipalities in the southern part of the county (East Sweden Regional Council 2011 & SCB 2012).

The upcoming retirement of large age groups will most likely result in a labour shortage and in increasing labour demand. The availability of a sufficient labour force is not only dependent on young people entering the labour force but can also, in part, be facilitated by immigration (The Swedish Public Employment Service 2012; SCB 2012).

As in Finland, the employers' and labour organisations have a significant role to play in Sweden. Labour market issues are often bound into collective wage agreements which retain an important position in the Swedish system. It is sometimes suggested however that the Swedish labour market is not flexible enough and that this inflexibility can be seen as a hindrance to growth internationally.

### 4.3 Labour demand

The potential labour demand in specific occupations in each case study area was identified with the work done in connection with the literature review, statistical data gathering and the interviews conducted. The balance between these three types of sources varied between the countries in relation to the national availability of data and the type of previous recent studies conducted. The professions with an identified labour demand in each case study area were first defined nationally.

Thereafter the professions were classified in line with the International Standard Classification of Occupations (ISCO). The ISCO list was used in order to better compare the professions between the case study areas and to identify similar needs or potentials as regards the Central Baltic countries. The ISCO list used in this study follows the latest available ISCO-08 standard, adopted in December 2007.

#### **International Standard Classification of Occupations (ISCO)**

ISCO is one of the main international classifications for which the ILO is responsible. It can be used as a tool for organising jobs into clearly defined set of groups in line with the qualifications required, the duties undertaken in the job and the sector to which it belongs. It aims to provide for the comparable, international reporting and exchange of statistical data about occupations and thus works as a model for the development of the national classification of occupations based on an international, comparable standard (ILO 2013).

In Estonia and Latvia the work began with the mapping of the current situation with a literature review, data analysis and an analysis of the available vacancies listed in the main job search engines in each country. In Estonia the three main job search engines were analysed in May and November 2012. The announced vacancies were classified in terms of the main sectors and the vacancies in temporary and short-term jobs were excluded. In Latvia the largest 11 job search engines were used as the basis for this analysis.

In Finland and Sweden work began with the use of national labour market anticipation tools which both quantify the results gained from the official data search and the expert interviews into a so-called 'lack index'. The index is then used to locate all of the professions in the following scale: surplus of job seekers (further divided into surplus and some surplus in Sweden), balance between supply and demand and lack of job seekers (further divided into some lack and lack in Sweden). Where there is a surplus of job-seekers significant competition exists for all available jobs whereas in professions with a lack of job seekers competition is low but employers face a significant challenge in identifying a qualified labour force.

In Finland the tool is called "Occupational barometer". The barometer, a labour market anticipation processes tool, is published three times a year nationally and for each Economic Development, Transport and the Environment - region (ELY Centre regions). The

Employment and Economic Development offices (TE Offices) gather the data from their own records and provide an estimate of the market situation for 200 occupations (The Centre for Economic Development, Transport and the Economy 2013).

In Sweden the tool is called 'yrkeskompassen' (profession compass) and is published by the Swedish Public Employment Service. Yrkeskompassen combines the existing labour market situation and future prognosis for some 200 professions. The prognosis produced is based on an appreciation of the labour situation in five and ten years' time and is based on interviews with 12 500 employees and includes both the private and public actors. The results of the interviews are combined with the official statistics relating to future old age pensions provision, the level of education and labour mobility and shown as a lack index (The Swedish Public Employment Service 2012). For Sweden an analysis made by Statistics Sweden was also included in the labour market analysis. Statistics Sweden publishes an annual labour market tendency survey. This sample survey provides information on the labour market situation and the outlook for 72 educational and training categories. The main focus here is placed on the need for a qualified labour force as 58 of the categories demand higher education (SCB 2011).

The identified professions with a potential labour demand are not listed exhaustively for each country. The aim was to identify the key professions facing a potential labour shortage in the coming years and the most relevant professions with potential employment possibilities. In total 50 demanded professions for each country were selected (see annex 1).

## Estonia

Labour demand in Estonia is related to ongoing structural change. The number of workers in the primary production sector and in labour-intensive industries is declining e.g. in the agriculture sector and the textile industry (Ministry of Economic 2010). Due to the increasing degree of automation, a higher level of production would not necessarily lead to higher labour demand in these sectors.

Additionally, the decreasing share of working age population and the rising number of Estonians who are leaving the country in order to live and work abroad, influences the availability of a qualified labour force in Estonia. Rising labour demand is expected within specific sectors such as services, ICT and health care as well as for highly qualified specialists.

On the other hand, a potential surplus of employees, due to overproduction problems in the education system, is identified in relation to public and business ad-

ministration, economics and social sciences graduates.

Based on the case study analysis in Estonia, the following key sectors and related professions with potential labour demand were identified:

- Professionals within health care and social work will be highly sought after in the future due to the ageing society and the declining potential labour force. This is especially so for doctors and nurses with various specialisations. As many newly educated doctors and nurses go abroad, especially to Finland, Estonia faces labour shortages in this field. Therefore there is a growing demand for (foreign) health and social workers in Estonia in order to redress the balance.

- Different engineering professions are listed as professions with a high labour demand. Electro-technology and electrical engineering as well as material technologies, biotechnologies and gene technology are the sectors with growing employment opportunities.

- The role played by information and communication technologies (ICT) is constantly growing. In the case of the Estonian ICT sector, the lack of skilled professionals has already been identified and it is estimated that about 3000 new employees will be required in the ICT sector by 2017. The greatest demand however can be seen in relation to qualified specialists with a higher education background, particularly system analysts and software developers. Also technicians in ICT operations and ICT user support professionals are also likely to be in high demand.

- The education sector will also suffer from relative labour shortages in the coming years although no specific level of education has been highlighted. Already now, professionals within higher and vocational education are one of the largest groups in respect of the foreign labour force in Estonia.

- The business services sector is expected to increase in importance as economic development increases. Export and trade managers and commercial sales managers/representatives in particular are demanded by Estonian companies that are interested in export markets.

Employment opportunities in the construction and craft-related professions (including metals and machinery) are expected to decrease in number compared to 2007-2009. However the sector is expected to remain important for potential cross-border labour mobility; especially to Finland. Within the sector carpenters, joiners, welders, electrical mechanics and fitters in particular as well as CNC operators were mentioned as

sought after professions.

It is relatively easy to find a job in both low-skilled occupations and temporary/short-term jobs, e.g. as cooks, waiters and hairdressers as well as in the agricultural sector and in low-skilled areas of manufacturing industry. There is a certain level of labour demand in these sectors but as the labour force is relatively accessible it is unlikely that there will be a lack of labour in these sectors.

### **Southwest Finland**

An ageing population is also a concern in Southwest Finland both for the labour market and for the region more generally, i.e. the rate of retirement exceeds the rate at which the compensatory work force is entering the labour market. Additionally, the region has already gone through significant structural changes in recent years and many high-skilled professions within the engineering and ICT sectors have disappeared. Thus a surplus of professionals in these sectors can be seen. On the other hand the following sectors facing labour shortage have been identified:

- In general the labour demand is especially high in the health care sector as well as in sales jobs. In the health care sector all kinds of professionals are demanded: from medical doctors and nurses to nursing assistants. The region faces considerable challenges in recruiting a skilled labour force within the health care and social services sectors.

- Labour demand in the sales sector encompasses occupations with varying qualifications. On the one hand there is a potential demand in the financial administration sector and real estate services and on the other hand for sales representatives and telemarketers.

- Potentially demanded professions are also to be found within the construction sector (including the machine and metal industry e.g. welders, machinists and CNC-operators). Although the sector is dependent on regional and economic development, qualified workers are potentially demanded, especially within shipbuilding, metal industries and in nuclear power technology.

- Additionally, several sectors have been identified as having a demand both for a low and medium-skilled labour force, such as personal service workers (i.e. cooks, waiters, hotel and restaurant workers, professionals within the transport sector (i.e. bus and truck drivers and also various logistics and storage labour tasks) and some elementary occupations (i.e. cleaners and food industry butchers).

### **Latvia**

In Latvia potential labour demand will increase in both the primarily and secondary sectors but not as much in the service sector as in the other case study areas. This is due in part to the likely trajectory of Latvian economic development and related priorities such as the need to attract foreign investment in the manufacturing sector as well as the need to transform the public service sector.

The highest labour demand in Latvia is expected:

- In the health care sector especially among medical doctors, nurses with different specialisations and assistant nurses. One of the main future challenges is to make working conditions within the health care sector more attractive in order to minimise work-related out-migration among these professionals.

- In the private sector in general.

- Within the engineering and ICT sector. Civil engineers within the building and construction industry and ICT specialists will continue to be in high demand in the coming years.

- Within the business and administration sector, especially in relation to higher level sales representatives and trade and marketing experts.

- Among workers with medium or low qualifications such as those within the service and sales sectors (i.e. cooks, hairdressers, salespersons, those within the tourism sector) and building and related trades workers (i.e. plumbers, carpenters, metal workers, welders).

The level of labour demand in elementary occupations varies from sector to sector. The demand for manufacturing workers, especially within the textile and food industry is based on expectations that these sectors will remain important within the context of the Latvian labour market. Due to high unemployment there is currently a surplus of labour with low qualifications.

### **Östergötland (Sweden)**

In Östergötland it is expected that labour demand will increase for those with upper secondary as well as post-secondary education and decrease for those with only a minimum compulsory level of education. The main demand for labour force among those with an upper secondary education is expected to occur within the healthcare and education sectors. However, there is a potential surplus within the highly educated trade and administration sectors. The share of the population working in the service sector will continue to increase

in the coming decades and fewer persons will likely work in agriculture or in goods production.

The highest demand for labour in the coming years will occur:

- In health care, both for nurses and medical doctors with different specialisations. In Sweden as such the demand for an educated labour force within the health care and social services sectors in general is expected to increase by about 195 000 persons by 2030 while the main increase in demand will occur within elderly care. On the profession level a significant shortage can be identified among persons with a nursing education in the fields of anaesthesia, intensive care and surgical care. Medical doctors and assisting personal will likely also have very good employment prospects.

- In the technical professions such as engineers with both secondary and tertiary education with varied competences, especially in energy and electro-technical engineering, industrial engineering and natural resource engineering. There are also several science parks in the region where the companies require a workforce with high level skills in technical occupations as well as in ICT and with ICT architects, software & system developers and system analysts.

- In the education sector due to population ageing. Even though the declining number of children in some age classes will reduce the demand for teachers in general, there remains a potential lack of specific subject teachers at the secondary level in subjects such as mathematics, languages (different mother tongues) and the natural sciences. Kindergarten teachers has also been identified as an area facing potential shortages as many current employees are set to retire in the coming years.

- In the construction sector which will have a labour shortage in the coming years particularly in growing city-regions with significant population gains. Qualified civil engineers, concrete workers, HVAC engineers, roofers and floor layers will all likely enjoy a preferential labour situation. Outside the larger city-regions the main demand is for engineering technicians as the industry in the region will become increasingly specialised with specialist competences required even by smaller employers. Furthermore, workers in traditional occupations such as sheet-metal workers, CNC operators, welders and plumbers will also be needed.

Within the services and sales sector both the supply of and the demand for workers is expected to remain high in the coming years. Even though many of these occupations are dynamic with a likely continuous level of

labour demand, the sector nevertheless remains highly dependent on the general economic situation. Therefore the level of future need is hard to predict.

### Summary

In general four challenges were highlighted as having an impact on future labour demand in all of the Central Baltic countries:

- Professions in sectors affected by population ageing: In each country professions within the health care sector and medical doctors and nurses in particular were identified as being likely to face a potential labour shortage. This is related to two parallel processes. Firstly even though the current elderly population is healthier than in previous generations, the increasing share of elderly population implies that the demand for various health care services will increase. Secondly, the average age of the people working in the health care sector, particularly as nurses, is relatively high and it is expected that the amount of people retiring from the health care sector in the coming years will be higher than that expected to enter the sector. The old age structure of the existing labour force is also likely to have impact on the education sector, within some teaching professions.

- Occupations in fast developing sectors: Many sectors that are developing quickly due, primarily, to ongoing technical developments face a challenge in finding a qualified labour force. These occupations with a high labour demand include information and communication technology (ICT) and some science and engineering professionals especially in life sciences.

- Occupations in those sectors impacted by the economic crisis: Even though the impacts of the economic crises since 2008 were not identical across the Central Baltic region, some employment sectors were affected in all four countries. As the economic situation in the region is expected to improve in the coming years, the demand for qualified employees in sectors that were negatively impacted by the economic crisis is also expected to increase. This means that those within sales and marketing and in a wide spectrum of occupations within the construction sector may be in greater demand in future.

- Temporary jobs and fixed-term contracts: With temporary jobs we mean in this context professions and sectors where the general in and out-flow of employees is high and the qualifications and skills level of employees are not that important or can be learned rather easily as the occupations involved do not require higher

education. This group includes occupations like restaurant workers, personal care workers, drivers, cleaners and agricultural workers.

In general, the Central Baltic region has gone through similar structural changes which a decline in labour demand for workers with elementary education and an increasing demand for highly qualified labour and specialists. All countries/regions face a labour shortage in the health care sector particularly in respect of medical doctors, nurses with different specialisations and assistant nurses as well as in the social services (e.g. elderly care). Specialists within the engineering and ICT sector are also demanded throughout the Central Baltic region. A number of specific occupations (e.g. plumbers, CNC operators) within the construction sector have also been identified as demanding labour force reinforcement (see, for example, the cross-border mobility patterns within this sector, particularly between Estonia and Finland, outlined above). Labour demand for the education sector (e.g. teachers, kindergarten teachers) has been identified within Estonia and Östergötland (Sweden) whereas the administrative sector in both countries expects to see something of a labour force surplus. The business sector is expected to create job opportunities in all countries/regions however its reliance on the overall level of economic development has to be underlined. For more detailed information concerning those sectors and occupations with labour demand, please see Annex I (Most demanded occupations by sector) & II (Main sectors with labour shortage).

#### **4.4 Obstacles to cross-border labour mobility**

The information in this chapter is based on interviews with experts and policy makers in the case study areas.

In general, a significant amount of information concerning working abroad in the Central Baltic region is already available. However, it is often rather difficult to access or to apply in practice. Indeed, the interviewees emphasised that the relevance, accessibility and applicability of the information made available is crucial. This means that information has to be user-friendly, easy to find and to apply. There is however clearly a lack of simple step-by-step guidelines for job-seekers which explain what is important when moving to another country. At the same time we also lack a simple checklist regarding the recruitment of foreign workers which generally discourages employers from hiring people from abroad.

In Sweden, measures mainly address migrants coming from outside the EU while little practical help is generally offered to mobile workers from within the EU. There is also a lack of easily available assistance and information on EU labour market regulations and rights which makes foreign workers more vulnerable to exploitation. People looking for employment abroad often lack sufficient knowledge of the labour market in their destination country or of issues relating to social benefits, taxes and the recognition of qualifications, housing and transportation costs. Employers also lack knowledge on the issues that need to be considered when recruiting people from abroad. The role of tacit knowledge here has often been stressed by actors working with cross-border labour issues in the Central Baltic region.

The lack of knowledge and information has been highlighted in several EU-wide studies and in various other projects looking at the mobility obstacles between different EU countries. The EURES network aims to provide information to job seekers and employers but it currently does not function effectively in all cases. In some parts of the Central Baltic region, the general level of awareness of both employees and employers on the information services provided by EURES is low.

The Central Baltic countries lack strategies to effectively address the mobility issue by tackling the obstacles outlined above. Estonia and Latvia have experienced strong out-migration especially of highly-qualified and -skilled workers. These issues are not sufficiently addressed in labour market policy at either the national or the regional level.

According to the interviewees, employers in the Central Baltic region do not have enough knowledge about foreign qualifications. They often have difficulty in evaluating the qualifications and skills of cross-border job seekers as there are no easily available general guidelines or “translation schemes” available on the mutual recognition of qualifications. This lack of knowledge in respect of skills and competences restricts employers from employing mobile jobseekers. Employers consider it too risky to employ jobseekers if they are not sure that the jobseekers’ skills are of a sufficient standard.

When cross-border labour mobility is in question, it is of paramount importance that skills and education are recognisable by potential employers. These challenges were highlighted in many of the interviews undertaken. Moreover, it is generally acknowledged that it is difficult enough for employers to evaluate a person’s qualifications when accredited certification is available. The content of education and degrees differ to such an extent between the countries that it is almost impossi-

ble for employers to quickly and accurately determine a foreign job applicant's qualifications. No general rules exist on the recognition of foreign qualifications or the validation of learning experiences between the countries concerned. Basically, what is required is a "translation scheme" for national qualification systems and regulations. It may also be appropriate for cross-border job seekers to not only have a certificate but also a more detailed description of the content of their education. In addition the importance of organising complementary training in the target countries was also raised. Complementary training is undoubtedly required in many circumstances but it has to be organised in close cooperation with both public and private sector actors.

The portability of social benefits and the opaque nature of most social sector regulations, as they pertain to foreign nationals, remains a key question within the Central Baltic region and across the EU more generally. The opacity of the regulations may indeed often hinder job seekers from becoming mobile. Finland and Sweden have a long tradition of cooperation over labour mobility issues. However, even here the social security regulations remain unclear. For instance, in the case where a worker is involved in a work-related accident or needs to go on early retirement, it remains rather ambiguous which country is responsible for e.g. rehabilitation. The problems between the other Central Baltic countries are generally similar. Regulatory ambiguities are even more complex between the new Member States of Latvia and Estonia and the old Member States of Finland and Sweden.

High housing costs and the difficulties associated with finding suitable housing is a problem faced by mobile workers in growing regions such as Stockholm or Helsinki. In the Central Baltic region the levels of economic disparity are also viewed as a considerable obstacle to cross-border labour mobility and function as barriers hindering, for example, Swedish workers from moving to Latvia. If the aim is to increase cross-border labour mobility in all directions between the Central Baltic countries, wage differentials are crucial. The interviewees emphasised that proper labour mobility based on demand and supply in each country is difficult to obtain if the economic disparities between countries remain high.

At the same time it was also stressed that making sure that the working conditions of the mobile workers are protected is central to the success of such a venture. Labour organisations in particular stress that poor working conditions for mobile workers can impede mobility.

The interviewees generally forwarded the issue of language skills as the main obstacle to cross-border la-

bour mobility. There is an obvious need to have at least a basic knowledge of the language in the target country. Most tasks in various professions or occupations necessitate that employees have the ability to manage the language, but in some cases communication in English is sufficient. For instance, it might be possible to work in English in branches like ICT and some tertiary services. However, it is obvious that the employability of a person is better, if they have the language skills of the target country. Language related barriers do not relate solely to workplace tasks but also to the capability to obtain information about various issues in the target country. Almost all interviewees highlighted the importance of language especially in relation to information about social security regulations, taxation legislation, pension schemes etc. Language knowledge is also an important factor when considering the expected level of integration into both the workforce and society. Inadequate language skills are rather often a significant factor in lower returns to foreign education and work experience. Most of the interviewees recognise that there is a need for more cooperation between private and public actors in this respect.

There are also other individual factors, such as family reasons, that influence cross-border mobility. The role of cultural differences in explaining low mobility has been emphasised in several studies on intra-EU mobility (see for example Bonin et al. 2008). In the Central Baltic region the general view appears to be that the cultural differences between the countries are relatively small even though differences clearly exist in respect of working cultures. Problems related to cultural differences and issues such as different ways of working are also closely related to the lack of tacit knowledge.

Attracting migrants presents a number of challenges as several obstacles clearly exist to the creation of a more integrated labour market. Apart from the traditional legal and administrative factors – linked to social security, labour legislation and the recognition of qualifications, there are also a number of 'practical' obstacles linked to housing, culture, language and 'psychological' obstacles in particular the issue of returning to the country of origin, the lack of recognition in respect of mobility and people's attitudes. In addition, the integration of migrants both into the labour market and into the society more generally is particularly challenging.

There are also some attitudinal questions on the employers' part that were raised in the context of the interviews. In particular it was noted that not all employers are either willing or able to recruit foreign workers. Problems in this area are often connected to the exist-

ence of cultural differences, although cultures around the Baltic Sea are rather similar.

## 4.5 Policy recommendations

Based on the obstacles identified concerning the development of cross-border labour mobility in the Central Baltic region, a series of policy recommendations have been developed. The recommendations address policy and decision-makers at the EU level as well as those at the national and regional levels in the Central Baltic region. A separate policy brief has been published presenting the policy recommendations in an easily accessible form<sup>7</sup>.

As noted in the previous chapters, the obstacles to cross-border mobility are found both at the institutional and individual levels. These clearly include both tangible obstacles (such as laws and regulations) and intangible obstacles (such as attitudes and the lack of tacit knowledge). Different policy considerations can be discussed in relation to different types of obstacles. In a number of previous studies, the individual level 'soft' factors were often viewed as being more important than the institutional ones. It is essential then to identify relevant policy measures targeting the more intangible and invisible factors (Bonin et al. 2008; Van Dalen & Henkens 2009; OECD 2012). The policy recommendations for the Central Baltic region address both the tangible and intangible issues that can – if resolved – contribute to the development of a functional cross-border labour market.

### > Improve cooperation and clarify regulations

Even though a number of initiatives facilitating cross-border mobility have been taken in several countries, coordination and cooperation between them has been poor and the continuity of actions has remained rather limited. The increased cooperation and coordination of activities should not only take place between the countries but also between different actors within each of the Central Baltic countries.

In the Central Baltic region it is also necessary to try to clarify the complex regulations related to issues such as responsibility for the rehabilitation of mobile workers after work-related accidents. Clearer and less complicated regulations would contribute to reducing the insecurity that mobile workers may experience concerning their rights. It could thereby also encourage more people to be mobile.

Administrative hurdles related to the recognition

of professional qualifications should be removed and additional mechanisms should be developed in order to create more automatic recognition of professional qualifications (see for example OECD 2012). The transparency of qualifications should be improved and the possibility of developing qualification translation schemes of some sort for employers should be seriously considered. This could increase employers' ability to quickly assess the skills and qualifications of foreign job-seekers and make it easier to recruit a cross-border labour force.

### > Improve the availability of information

The lack of information on cross-border issues and open vacancies has been identified as one of the key obstacles to cross-border mobility and it is essential to improve the availability and accessibility of information. The overall level of awareness in respect of opportunities related to cross-border mobility should be promoted among employees and employers as well as to both regional and national authorities. In some cases information may already be available but it is very difficult for individual employees and employers to find or interpret. Therefore it would be beneficial to provide 'one-stop-shop' type of information services with information on what kinds of steps need to be taken.

Developing the EURES tool further is one possible way of intensifying the flow of information. The importance of developing EURES has already been emphasised among other things in the EU Joint Employment Reports. It is important to make sure that the tool is developed in such a way that it can facilitate cross-border mobility by responding to labour market needs and the needs of both employers and employees.

The Central Baltic countries in most cases do not offer extensive personal employment or information services targeted specifically at labour force recruitment from within the EU. Therefore it is important to make sure that information about their rights is always available. Mobile workers within the EU usually do not have direct contact with the authorities who could give them individually-targeted information on issues related to working in the country. It is important then to aim to raise the awareness of the mobile workers in terms of the rights they have in the labour market of their destination country.

It will also be important to try to address the issue of the lack of tacit knowledge in the Central Baltic region. Information should be available not only on formal issues but should also address more intangible issues of which mobile jobseekers should be aware. This often means the kind of information that mobile jobseekers or employees do not know they need and therefore

<sup>7</sup> The policy brief can be downloaded at [http://cbjobferry.eu/assets/Policy-Brief\\_JobFerry\\_03042013.pdf](http://cbjobferry.eu/assets/Policy-Brief_JobFerry_03042013.pdf)

cannot search for.

It would also be beneficial to provide information in different national languages and English as a large number of Central Baltic citizens lack language skills in the other main languages spoken in the region. The information provided in national languages should however always give a realistic picture on the possibilities for employment without fluency in the languages spoken in the destination country. It would also be important to provide information in the mother tongues of the already mobile workers in respect of labour legislation and the rights of employees.

#### **> Install measures to minimise language barriers**

Promoting language learning abroad would increase geographic mobility and further reduce both language and cultural barriers. Member States should promote language learning at all levels and European exchange programmes should be further promoted (Bonin et al. 2008). When aiming to increase cross-border labour mobility, it would be beneficial to promote and develop exchange programmes in the Baltic Sea Region and the Central Baltic region in order to minimise the language barrier and other possible obstacles related to cultural differences.

As such, the availability of low cost or free of cost language courses should be improved. Some labour market projects have aimed at addressing the language barrier by providing education in the national language of the destination country to job seekers interested in moving but who are still in their home country. The provided language learning opportunities have however been small-scale and the projects have been in place for only a limited period of time.

#### **> Improve data collection and forecasting tools**

In addition, the lack of statistical data and the incomparability of the data that does exist in respect of the

Central Baltic countries as regards migration and cross-border labour mobility should be further addressed. In the Central Baltic region there is clearly a need to improve data collection on migration and cross-border labour mobility while also improving data exchange between the countries of the region. Currently the volume of cross-border labour mobility is often underestimated and this is something which influences policy-making, often negatively, in this area.

Based on existing data on labour demand, the possibility of developing forecasting tools on labour supply and demand should be explored more fully. The Finnish Occupational Barometer is an example of the forecasting tools that could be developed and applied in other parts of the Central Baltic region.

#### **> Address emigration due to economic disparities**

The issue of economic disparities between countries is highly relevant for the Central Baltic region. Even though it is, in general, seen as necessary to aim to reduce the mobility costs of individuals in the various ways presented, it has also been noted that reduced migration costs may accelerate the departure of highly skilled and highly productive workers from lagging regions and thereby further increase regional disparities (Paci et al. 2008). As such, it is important to ensure that well-functioning measures aimed at bridging the skill gaps between those remaining in lagging regions and the departing highly skilled workers are put in place.

Estonian and Latvian attitudes to cross border labour mobility have in some cases been rather negative. This at least in part stems from concerns over the possible negative effects of mobility on the 'sending' countries and regions. It is important then to address the possible negative consequences and identify other possibilities, for example by improving available support measures for migrants willing to return to their countries of origin.



# 5 Towards a common labour market in the Central Baltic region – Conclusion

In order to be able to respond to future labour demands in the Central Baltic region, mobile workers and cross-border labour mobility more generally needs to be better supported and facilitated. An increase in labour force participation, longer careers in labour markets and more effective forms of working will not be enough to compensate for natural loss especially within health care services, education and various other technical branches of the economy of some Central Baltic countries (Baltic Development Forum et al. 2011; EC 2010e). For example the Swedish Association of Local Authorities and Regions (2012) estimates that by 2020 every third current employee within the welfare services sector will be over 65 years of age. Thus there will be a need for some 420 000 employees if current service levels are to be maintained – technological developments notwithstanding.

The Central Baltic region encompasses a number of similar labour markets, where manufacturing, health, trade, and other services are the most important sectors. The population in the region is generally highly educated. Even though the economic crisis has had a negative impact on job opportunities, many people have nevertheless succeeded in gaining employment. For instance, in Sweden 1.35 million people found new jobs in 2011; either by entering the labour market or by changing their place of employment. In Finland about 16% of employers are planning to recruit during 2013. This means that even in these economically difficult times, labour markets remain dynamic and many jobs are available within a number of sectors and regions. In some sectors (e.g. within industrial occupations that are dependent on exports) the competition for jobs has become tougher. It has also become increasingly difficult for young and foreign-born people to successfully enter the labour market. Nevertheless, several sectors continue to suffer from labour shortage (The Swedish Public Employment Services 2012; Ministry of Employment and the Economy 2013).

A common challenge facing the entire Central Baltic region is the small market size of the region. The region is dependent on exports and on the smooth functioning of the framework of regulations on exchange between countries. As such, relatively small-scale economic activities such as the setting up or closing down of individual factories can have a significant impact on the development of the region. Due to the small size of the internal markets of each country it is essential for these labour markets continually to look beyond their own national borders for labour.

The four countries reviewed here have different starting points in respect of cross-border labour mobility due to the differing economic and labour market situations pertaining in each. Existing cross-border labour mobility in the Central Baltic region represents some risks considering the disproportional weight of migration and commuting. Recent economic problems in Estonia and Latvia have stimulated cross-border labour mobility to Finland and Sweden. Potentially better earning levels in Finland and Sweden significantly influence the level of cross-border labour mobility.

Significant differences also exist between the countries when it comes to how cross-border labour mobility and its possibilities are reflected. For example in Sweden the main focus is on labour market cooperation with Norway, Denmark and in some cases Finland while cooperation with the Baltic countries is not prioritised and could thus be further improved and thus increased. In Latvia the Latgale region (in the eastern part of Latvia) is one of the most active in terms of labour migration. This is indicative of the regional employment challenge were the question is not whether to move but rather where to move to – to Riga or abroad.

The inflow of cross-border workers has been particularly advantageous in some sectors in Sweden and Finland with a high level of labour demand. For example in Finland, Estonian commuters and migrants work predominantly in elementary occupations with a high

demand for labour, e.g. craft and related trade workers, service workers and construction. 'Downskilling' or taking up employment below one's qualification level has become quite a common phenomenon among immigrants to Finland and Sweden. Even though many Estonians in Finland work in highly qualified health care sector professions, the lack of opportunities to use one's skills is a serious problem in labour market development terms as the full potential of the labour force is not being utilised (Holland et al 2011; Kunnas 2013).

At the same time the outmigration of often young and well-educated people from Estonia and Latvia worsens labour market bottlenecks in these countries. Cross-border labour mobility within the Central Baltic region has allowed for the more efficient matching of employees' skills with employment opportunities but at the same time it has aggravated the internal labour market situation in both Estonia and Latvia. Increased cross-border mobility has offered greater opportunities for individual employees and facilitated a general upskilling of their qualifications. For Estonia and Latvia however cross-border labour mobility may in the long run cause labour shortages, for instance, in the health sector, as the much lower flows from Finland and Sweden to Estonia and Latvia have an entirely different focus.

For example, commuting from Finland to Estonia remains limited and mostly related to Finnish companies in Estonia. It is estimated that some 4000 Finnish owned companies operate in Estonia with the construction sector having the largest number of companies moving to Estonia, the spectrum varies widely from high qualified ICT workers to entrepreneurs to workers in the agricultural sector. The main driver is the taxation advantages in Estonia (Kunnas 2013).

Due to the continuing existence of economic differ-

ences between the countries concerned, the direction of movement in terms of the labour market in the Central Baltic region is unlikely to change appreciably in the near future. If positive economic growth and social development occurs in Estonia and Latvia, cross-border labour mobility will most likely decrease in scale. In addition, it is likely that the rapid growth of an ageing population in the Baltic countries will stem the flow of cross-border labour mobility to Finland and Sweden due to rising domestic demand. The creation of more integrated labour markets in the Central Baltic region such as, for instance, along the model of the much older Nordic labour market cooperation, would have many positive effects on both the regional economy and on welfare more generally.

In planning supporting activities and measures for the development of cross-border labour mobility, young people should be viewed as the main target group. Young people are generally more open and adaptable, have better language skills/ability to learn, and are not yet constrained by the family-related issues. On the other hand, there is a need to create incentives for them to both gain experiences and find good opportunities abroad as well as to stay connected with their home country.

The strength of the positive or negative effects of cross-border labour mobility primarily depends on whether it is temporary or permanent. Returning migrants may offer a boost to economic growth as they bring home skills, capital and new ideas obtained abroad. There is also a possibility that returning migrants will compensate the original losses caused by growing cross-border labour mobility. The potential for returning migrants to deliver a major boost to the national economy is, moreover, particularly relevant for Estonia and Latvia.

# References

- Ahas, Siim, Leetma, Tammaru, Saluveer, Järv, Aasa & Tiru (2010): Regionaalne pendelrändeuurung. Available at <https://valitsus.ee/UserFiles/valitsus/et/riigikantselei/strateegia/politiitika-analuusid-ja-uuringud/tarkadeotsuste-fondi-uuringute-kokkuvotted/Uurungu%201%C3%BChik...pdf>. Downloaded May 2013.
- Andersson, P. & Wadensjö, E. (2008): Arbetskraftens rörlighet i Norden – Drivkrafter och effekter. TemaNord: 2008:534.
- Baltic Development Forum (2011a): Political State of the Region Report 2011. Available at [http://www.bsr2011.eu/wp-content/uploads/2011/10/Political-BDF\\_SoRR\\_Political\\_2011\\_04.pdf](http://www.bsr2011.eu/wp-content/uploads/2011/10/Political-BDF_SoRR_Political_2011_04.pdf). Downloaded May 2013.
- Baltic Development Forum (2011b): State of the region report 2011: The Top of Europe's Quest for Resilience: A Competitive Region Facing a Fragile Global Economy. Available at <http://www.bsr2011.eu/wp-content/uploads/2011/10/State-of-Region-Report-2011-Section-B-CLEAN-09-23-11.pdf>. Downloaded May 2013.
- Bartsch, G. & Scirankova, D. (2012): Large differences in regional labour markets show asymmetric impact of the economic crisis. Eurostat statistics in focus 54/2012. Available at [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-12-054/EN/KS-SF-12-054-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-12-054/EN/KS-SF-12-054-EN.PDF). Downloaded May 2013.
- Bonin, H. et al. (2008): Geographic mobility in the European Union: Optimising its economic and social benefits. IZA Research Report No.19
- Borjas, G.J. (1989): Economic Theory and International Migration. *International Migration Review*, XXIII(3), 457-485.
- Ernste, H. (2004): Border regions in new perspective. In: van Vilsteren, G. & Wever, E. (Eds.). *Borders and economic behaviour in Europe*, pp. 96-115. Assen: van Gorcum. Centre for Economic Development, Transport and the Environment in Varsinais-Suomi (2013): Varsinais-Suomen Työmarkkinoiden, työvoimatarpeen ja talouden kehitys. ELY-Keskus 23.4.2013. Available at [http://www.ely-keskus.fi/fi/ELYkeskukset/varsinaissuomenely/Ajankohtaista/Julkaisut/Sivut/Tyomarkkinoiden\\_tyovoimatarpeiden\\_ja\\_talouden\\_kehitys.aspx](http://www.ely-keskus.fi/fi/ELYkeskukset/varsinaissuomenely/Ajankohtaista/Julkaisut/Sivut/Tyomarkkinoiden_tyovoimatarpeiden_ja_talouden_kehitys.aspx). Downloaded April 2013.
- East Sweden Regional Council (2011): Regionbeskrivning Östergötland 2011 – Underlag och statistik för långsiktig planering. Available at [http://ostsam.se/%5Cfiles%5C1156\\_Regionsbeskrivning%20%C3%96sterg%C3%B6tland%202011.pdf](http://ostsam.se/%5Cfiles%5C1156_Regionsbeskrivning%20%C3%96sterg%C3%B6tland%202011.pdf). Downloaded May 2013.
- EPB (Estonia Public Broadcasting) (2010): Soomes võib tööl olla kuni 100 000 Eesti elanikku. Available at <http://uudised.err.ee/index.php?06221445>
- Estonian Ministry of Education and Research (2007): Estonian Research and Development and Innovation Strategy 2007-2013 “Knowledge-based Estonia”
- Estonian State Chancellery (2011): „Alitsuse poliitika arendamise peamised väljakutsed. Raporti lisa.
- EURES (2013): Tietoa työmarkkinoista – Varsinais-Suomi. Available at <http://ec.europa.eu/eures/main.jsp?lang=fi&acro=Imi&catId=7488&countryId=FI&regionId=FI1&langChanged=true>. Downloaded May 2013.
- European Commission (2005): Europeans and languages – Special Eurobarometer 237-Wave 63.4
- European Commission (2010a): Geographical and labour market mobility. Special Eurobarometer 337/Wave 72.5.
- European Commission (2010b): The European Social Fund and Labour Mobility. Summary fiche.
- European Commission (2010c): Europe 2020 – A strategy for smart, sustainable and inclusive growth.
- European Commission (2010d): Central Baltic INTERREG IV A Programme 2007-2013. Cross-border co-operation programme under the European Territorial Co-operation objective. CCI No. 2007CB163PO066
- European Commission (2010e): The EU Strategy for the Baltic Sea Region: Background & analysis. Available at [http://ec.europa.eu/regional\\_policy/cooperate/baltic/pdf/2010\\_baltic.pdf](http://ec.europa.eu/regional_policy/cooperate/baltic/pdf/2010_baltic.pdf)
- European Commission (2012): European Employment Strategy. Available at <http://ec.europa.eu/social/main.jsp?catId=101&intPagelId=1865&langId=en>. Downloaded March 2013.
- European Commission (2013a): Joint Employment Report
- European Commission (2013b): European Union Strategy for the Baltic Sea Region Action Plan
- European Social Survey (2012): The ESS4-2008 Edition 4.1 . <http://ess.nsd.uib.no/ess/round4/>
- Eurostat (2012): Eurostat. Available at <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home>. Downloaded May 2013.

- Freeman, R.B. (2008): Labour Market Institutions around the World. Centre for Economic Performance Discussion Paper No. 844
- Friberg, J. H. (2013): The Polish worker in Norway. Emerging patterns of migration, employment and incorporation after EU's eastern enlargement. University of Oslo, Department of Sociology and Human Geography. No. 376
- Gáková, Z. and Dijkstra, L. (2008): Labour mobility between the regions of the EU-27 and a comparison with the USA. Regional Focus 02/2008. Available at [http://ec.europa.eu/regional\\_policy/sources/docgener/focus/2008\\_02\\_labour.pdf](http://ec.europa.eu/regional_policy/sources/docgener/focus/2008_02_labour.pdf). Downloaded May 2013.
- Galgóczi, B. et Al. (2009): Intra-EU labour migration: flows, effects and policy responses – Update 2011. ETUI Working Paper 2009.03
- Goldthorpe, J. H. (2003): Social mobility and class structure in modern Britain. Oxford: University Press.
- Government Offices of Sweden (2007): A national strategy for regional competitiveness, entrepreneurship and employment 2007-2013
- Government Offices of Sweden (2012): Sweden's National Reform Programme 2012
- Greenblatt, S., Zupanov, I. & Meyer-Kalkus, R. (2009): Cultural Mobility. A Manifesto. Cambridge: University Press.
- Hansen, K., Rasmussen, R.O, Roto, J. (2011). Demography in the Nordic countries – A synthesis report. Nordregio Working Paper 2011:9. Available at <http://www.nordregio.se/en/Publications/Publications-2011/Demography-in-the-Nordic-countries---A-synthesis-report1/>. Downloaded May 2013.
- Hedberg, C. & Malmberg, B. (2008): Den stora utmaningen: Internationell migration i en globaliserad värld. Underlagsrapport nr. 18 till Globaliseringsrådet.
- Heinz, F. & Ward-Warmedinger, M. (2006): Cross-border labour mobility within an enlarged EU. European Central Bank. Occasional Paper Series No. 52
- Heleniak, T. (2006): Latvia Looks West, But Legacy of Soviets Remains. Migration Information Source, Migration Policy Institute. Available at <http://www.migrationinformation.org/Profiles/display.cfm?ID=375>. Downloaded May 2013.
- Holland, Dawn, Tatiana Fic, Ana Rincon-Aznar, Lucy Stokes & Pawel Paluchowski (2011): Labour mobility within the EU - The impact of enlargement and the functioning of the transitional arrangements. National Institute of Economic and Social Research. Available at [http://pc9.niesr.ac.uk/pdf/211211\\_153456.pdf](http://pc9.niesr.ac.uk/pdf/211211_153456.pdf)
- IOE (2009): Trends in the workplace survey 2009
- ILO (2011). The economic crisis and discrimination against migrant workers. Available at [http://www.ilo.org/global/publications/magazines-and-journals/world-of-work-magazine/articles/WCMS\\_165299/lang--en/index.htm](http://www.ilo.org/global/publications/magazines-and-journals/world-of-work-magazine/articles/WCMS_165299/lang--en/index.htm). Downloaded May 2013.
- ILO (2013): ISCO - The International Standard Classification of Occupations. Available at <http://www.ilo.org/public/english/bureau/stat/isco/index.htm>. Downloaded May 2013.
- IMF – International Monetary fund (2012): International Monetary Fund. Available at <http://www.imf.org/external/index.htm>. Downloaded May 2013.
- Migrationsinfo (2013): Migrationsinfo. Available at <http://www.migrationsinfo.se/>. Downloaded May 2013.
- Ministry of Economic Affairs and Communications (2010): Labour need forecast until 2017.
- Ministry of Economics (2011): Report on Economic Development of Latvia. December, 2011. Available at [http://www.em.gov.lv/images/modules/items/tsdep/zin\\_2011\\_2/zin\\_2011\\_dec\\_eng.pdf](http://www.em.gov.lv/images/modules/items/tsdep/zin_2011_2/zin_2011_dec_eng.pdf). Downloaded May 2013.
- Ministry of Employment and the Economy (2013): Uutiskirje 16.5.2013: Rekrytointitarpeet 2013: Terveys- ja sosiaalialan ammattilaisilla kysyntää – ja heitä on vaikeinta saada. Available at [http://www.tem.fi/index.phtml?110392\\_m=110402&s=5413](http://www.tem.fi/index.phtml?110392_m=110402&s=5413). Downloaded May 2013.
- Ministry of Finance (2012): Europe 2020 Strategy – Finland's National Reform Programme, Spring 2012
- Ministry of Social Affairs (2008): Labour market development programme 2009-2013
- Nordic Council of Ministers (2012): Freedom of movement within the social and labour market area in the Nordic countries. Nord 2012:002. Available at <http://www.norden.org/sv/publikationer/publikationer/2012-014>. Downloaded May 2013.
- Nordic Council of Ministers (2013): Om arbetslivsområdet. Available at <http://www.norden.org/sv/om-samarbetet/samarbetsomraaden/arbetsliv/om-arbetslivsomraadet>. Downloaded May 2013.
- Nordisk pendlingskarta 2009 (2009): TemaNord 2009:555. Available at [http://www.norden.org/sv/publikationer/publikationer/2009-555/at\\_download/publicationfile](http://www.norden.org/sv/publikationer/publikationer/2009-555/at_download/publicationfile). Downloaded May 2013.
- NSIs - National statistical institutes:  
 Latvijas Statistika (Statistics Latvia). <http://www.csb.gov.lv/>  
 Statistikaamet (Statistics Estonia). <http://www.stat.ee/ee>  
 Statistiska centralbyrån (Statistics Sweden). <http://www.scb.se/>  
 Tilastokeskus (Statistics Finland). [http://pxweb2.stat.fi/database/StatFin/databasetree\\_fi.asp](http://pxweb2.stat.fi/database/StatFin/databasetree_fi.asp)

- OECD (2012): Mobility and migration in Europe, in OECD Economic Surveys: European Union 2012, OECD Publishing.
- Paci, P. et al. (2010): International Labour Mobility in Central Europe and the Baltic Region: Evidence from Labour Force Surveys, in Caroleo, F.E. & Pastore, F. (eds.): The Labour Market Impact of the EU Enlargement. AIEL Series in Labour Economics
- Schmitt, P. & Dubois, A. (2008): Exploring the Baltic Sea Region - On territorial capital and spatial integration. Nordregio Report 2008:3. Available at <http://www.nordregio.se/en/Publications/Publications-2008/Exploring-the-Baltic-Sea-Region/>. Downloaded May 2013.
- SCB - Statistics Sweden (2011): Labour market tendency survey for 72 training categories in 2011. Information on education and the labour market 2011:3.
- SCB - Statistics Sweden (2012): Trends and Forecasts 2011: population, education and labour market in Sweden – outlook to year 2030.
- SCB (2013): Statistiska centralbyrån (Statistics Sweden). <http://www.scb.se/>
- Statistics Estonia (2013): Statistikaamet (Statistics Estonia). <http://www.stat.ee/ee>
- Statistics Latvia (2013): Population Census 2011 results. <http://www.csb.gov.lv/en/statistikas-temas/population-census-30761.html>
- Swedish Association for Local Authorities and Regions (2012): Här finns Sveriges viktigaste jobb - en rekrytering-sprognos för välfärdssektorn
- Tanner, A. (2011): Finland's Balancing Act: The Labour Market, Humanitarian Relief, and Immigrant Integration. Available at <http://www.migrationinformation.org/Profiles/display.cfm?ID=825>. Downloaded May 2013.
- Taran, P. A. (2005): 'Decent Work, Labour Migration: New challenges for the 21st Century', International Migration and development. Selection of papers from the UNFPA Expert Group Meeting. Marrakech, Morocco 2005.
- The Swedish Public Employment Service (2012): Var finns jobben? Bedömning för 2012 och en långsiktig utblick. Ura 2012:1
- van Dalen, H. & Henkens, K. (2009): Invisible barriers in international labour migration: The case of Netherlands. Tillburg University. No. 2009-16.
- Vandenbrande, T. (ed.) (2006): Mobility in Europe – Analysis of the 2005 Eurobarometer survey on geographical and labour market mobility.
- van Houtum, H. & van der Velde, M. (2004): The Power of Cross-border Labour Market Immobility. Tijdschrift voor Economische en Sociale Geografie 95, pp. 100–107.
- VASAB (2010): VASAB Long-Term Perspective for the Territorial Development of the Baltic Sea Region
- Westin, C. (2006): Sweden: Restrictive Immigration Policy and Multiculturalism. Migration Information Source, Migration Policy Institute. Available at <http://www.migrationinformation.org/Profiles/display.cfm?ID=406>. Downloaded May 2013.
- Zaiceva, A. & Zimmermann, K. (2008): Scale, Diversity, and Determinants of Labour Migration in Europe. IZA Discussion Paper No. 3595



# Annex

The table below summarises the most demanded occupations by sector in the Central Baltic labour market as identified in the context of this project. Occupations are classified in line with the International Standard Classification (ISCO-08) provided by the ILO, which groups jobs according to the tasks and duties undertaken. This means that they are classified in terms of the skill level of employment. The ISCO distinguishes

between 400 individual occupations which are then grouped into job families. Three main skill levels can be distinguished. Managers, professionals, technicians and associate professionals (ISCO 1-3) are defined as highly skilled jobs. Elementary occupations (ISCO 9) are defined as low-skilled jobs while all other occupations (ISCO4-8) are defined as medium-skilled jobs (OECD 2012) (see chapter 4.3).



## Annex 1: Most demanded professions by sectors in Central Baltic labour market.

1. Professions with potential labour shortage (green)
2. Occupations with potential employment opportunities (yellow)
3. Occupations with potential labour surplus (no marking)

Within minor group\* '=Labour demand identified within group, but occupation not specified

Occupations based on ISCO classification				Relevance				
Major Groups	Sub-Major Groups	Minor Groups	Occupation (examples)	EE	FI	LV	SE	
2 Professionals	21 Science and engineering professionals	214 Engineering professionals	Civil engineers i.e. in building			1	1	
			Chemical engineers			2	2	
			Mechanical engineers	2	1	2	1	
			Within minor group*			2		
		215 Electrotechnology engineers	Engineers i.e. in electronics and electrical	1	2	2	1	
		216 Architects, planners, surveyors and designers	i.e. Architects, GIS engineers and surveyors	2		2	2	
	22 Health professionals	221 Medical doctors	Doctors with different specialisations (medical practitioners )	1	1	2	1	
			222 Nursing and midwifery professionals	Nurses with different specialisations (children, geriatric, emergency...)	1	1	1	1
				Radiographers, lab and x-ray nurses		2	2	2
				Midwives	2	2	2	2
		Within minor group*			2			
		225 Veterinarians	Veterinarians	2	2	2	2	
		226 Other health professionals	Dentists	2	2	2	2	
			Dental Hygienists		2	2	2	
			Pharmacist		2	2		
			Psychologists		2	2	2	
Physiotherapists	2		2	2				
Within minor group*			1					
23 Teaching professionals	231 University and higher education teachers	Lecturers	2		2			
	232 Vocational education teachers	Subject teachers, lecturers	2		2			

		233 Secondary education teachers	Subject teachers in secondary education	2		2	1	
		234 Primary school and early childhood teachers	Kindergarten teacher	2	1	2	1	
			Class teachers	2	1	2	2	
		235 Other teaching professionals	Other language teachers (i.e. teachers of national language for adults)	2		2	2	
			Special education teachers	2	1	2	2	
	24 Business and administration professionals	241 Finance professionals	Accountants	2				
				Financial specialist, analyst	2		2	
			242 Administration professionals	Personnel and careers professionals		2		
		243 Sales, marketing and public relations professionals	i.e. trade managers, consultants	1	1	1		
	25 Information and communications technology professionals	251 Software and applications developers and analysts	Systems analysts	1		2	2	
				Software developers	1		2	2
				Applications programmers	1		2	1
				Within minor group*			1	
			252 Database and network professionals	Database designers and administrators	2		2	
		Systems administrators		2				
3 Technicians and associate professionals	31 Science and engineering associate professionals	311 Physical and engineering science technicians	engineering technicians i.e. in electrical, electronics, mining, HVAC	2	1	2	1	
			Civil engineering technicians	2		2	2	
			Electrical engineering technicians	1	2	2	2	
			Electronics engineering technicians	2		2	2	
			Chemical engineering technicians				2	
			Mechanical engineering technicians	2		2	2	
			environmental engineering			2	2	
			Within minor group*			2	2	
			312 Mining, manufacturing and construction supervisors	Mining supervisors				2
			313 Process control technicians	Power production plant operators				2

		315 Ship and aircraft controllers and technicians	Air traffic controllers				
			Ships' engineers	2		2	
	32 Health associate professionals	321 Medical and pharmaceutical technicians	Medical laboratory technicians			2	
			Pharmaceutical technicians and assistants		2	2	2
		322 Nursing and midwifery associate professionals	Assisting work in care and medical examinations	2	1	1	2
		324 Veterinary technicians and assistants	Veterinary Technician			2	
		325 Other health associate professionals	Dental assistants	2	2	2	2
			Social workers		2	1	
	33 Business and administration associate professionals	332 Sales and purchasing agents and brokers	Commercial sales representatives	1		2	
		333 Business services agents	Employment agents and contractors			2	
			Real estate agents and property managers		2	2	
	34 Legal, social, cultural and related associate professionals	343 Culinary associate professionals	Chefs (in charge)	2		2	1
	35 Information and communications technicians	351 Information and communications technology operations and user support technicians	Information and communications technology operations technicians	1		2	2
			Information and communications technology user support technicians	1		2	2
			Computer network and systems technicians	2		2	2
			Within minor group*			1	
4 Clerical support workers	42 Customer services clerks	422 Client information workers	Survey and market research interviewers			2	2
5 Service and sales workers	51 Personal service workers	512 Cooks	Cooks	2	1	1	1
		513 Waiters and bartenders	i.e. Head waiter, bartender, kitchen workers	2	1	2	
		514 Hairdressers, beauticians and related workers	Hairdresser	2	1	1	
			Cosmetologist		2	2	

			Masseur	2	2	2	
	52 Sales workers	524 Other sales workers	Seller, sales representatives	2		1	
	53 Personal care workers	532 Personal care workers in health services	Practical nurses, personal assistants	2	1	2	2
	54 Protective services workers	541 Protective services workers	Security guards	2	1		
7 Craft and related trades workers	71 Building and related trades workers, excluding electricians	711 Building frame and related trades workers	House builders	2		2	2
			Bricklayers and related workers		2	2	2
			Stonemasons, stone cutters, splitters and carvers			2	2
			Concrete placers, concrete finishers and related workers		2	2	2
			Carpenters and joiners	1		2	2
			Building frame and related trades workers not elsewhere classified			2	2
			Within minor group*			2	
	712 Building finishers and related trades workers	Roofers					
		Floor layers and tile setters			2	1	
		tiler			2	2	
		Insulation workers			2	2	
		Glaziers / Glass technicians			2	2	
		Plumbers and pipe fitters	2		2	1	
		Coarse Plasterers			2	2	
		Air conditioning and refrigeration mechanics			2	2	
		refinishers			2	2	
		Within minor group*			2	2	
	72 Metal, machinery and related trades workers	721 Sheet and structural metal workers, moulders and welders, and related workers	Welder and flamecutter	1		2	2
			Sheet-metal workers			2	1
		722 Blacksmiths, toolmakers and related trades workers	Blacksmiths, hammersmiths and forging press workers			2	2

			Toolmakers			2	2
		723 Machinery mechanics and repairers	Mechanics	2		2	2
			Machine repairers	2		2	2
			Car & Truck mechanics	2		2	2
	74 Electrical and electronic trades workers	741 Electrical equipment installers and repairers	Building and related electricians			2	2
			Electrical mechanics and fitters	1		2	1
	75 Food processing, wood working, garment and other craft and related trades workers	751 Food processing and related trades workers	Butchers, fishmongers and related food preparers			2	
			Bakers, pastry-cooks and confectionery makers	2		2	
			Food industry workers	2		1	
		752 Wood treaters, cabinet-makers and related trades workers	Cabinet-makers and related workers			2	
		753 Garment and related trades workers	Tailors, dressmakers, furriers and hatters			2	
	8 Plant and machine operators, assemblers	81 Stationary plant and machine operators	811 Mining and mineral processing plant operators	Mine workers			
812 Metal processing and finishing plant operators			Metal processing plant operators	2			2
			Metal finishing, plating and coating machine operators				
			CNC operators	1			
			Within minor group*				
814 Rubber, plastic and paper products machine operators		Rubber products machine operators					
82 Assemblers		821 Assemblers	Mechanical machinery assemblers	2		2	
			Electrical and electronic equipment assemblers	2		2	2
83 Drivers and mobile plant operators		831 Locomotive engine drivers and related workers	Locomotive engine drivers				
			833 Heavy truck and bus drivers	Bus and tram drivers			
		Heavy truck and lorry drivers	2	1	2	2	

9 Elementary occupations	91 Cleaners and helpers	911 Domestic, hotel and office cleaners and helpers	Cleaners and helpers in offices, hotels and other establishments		1	2	
	92 Agricultural, forestry and fishery labourers	921 Agricultural, forestry and fishery labourers	Garden and horticultural labourers	2	1		
	93 Labourers in mining, construction, manufacturing and transport	931 Mining and construction labourers	Mining and quarrying labourers			2	2
			Civil engineering labourers			2	2
			Building construction labourers	2		2	2
		932 Manufacturing labourers	Hand packers	2		2	
		933 Transport and storage labourers	Freight handlers and shelf fillers			2	

## Annex 2: Main sectors with labour shortage.

### Main sectors with potential labour shortage in the Central Baltic Region

		EE	FI	LV	SE
<b>Professionals &amp; Technicians and associate professionals (with high education)</b>					
<b>Science and engineering</b>	Civil engineers in building sectors			1	1
	Mechanical engineers		1		1
	Civil engineers in electronics and electrical	1			1
	Engineering technicians i.e. in electrical, electronics, HVAC	1	1		1
<b>Health</b>	Doctors with different specialisations	1	1		1
	Nurses with different specialisations (children, geriatric, emergency, anesthesi...)	1	1	1	1
	Assisting work in care and medical examinations		1	1	
	Social workers			1	
<b>Teaching and education</b>	Subject teachers in secondary education				1
	Kindergarten teacher				1
	Class teachers		1		
<b>ICT</b>	Systems analysts	1			
	Software developers	1			
	Applications programmers	1			1
	Information and communications technology operations technicians	1			
	Information and communications technology user support technicians	1		1	
<b>Business services</b>	Sales, marketing and public relations professionals	1		1	
	ICT sales & trade managers	1			
<b>Workers (with secondary education)</b>					
<b>Service and sales workers</b>	Chefs and Cooks		1	1	1
	Food industry workers			1	
	Hairdresser		1	1	
	Personal care workers in health services (Practical nurses, personal assistants)		1	1	
<b>Building and related trades workers</b>	Plumbers and pipe fitters				1
	Carpenters and joiners	1			
<b>Metal, machinery and related trades workers</b>	Sheet-metal workers				1
	721 Sheet and structural metal workers, moulders and welders, and related workers	1			
<b>Electrical equipment installers and repairers</b>	Electrical mechanics and fitters	1			1
<b>Metal processing and finishing plant operators</b>	CNC operators	1			





ISSN 1403-2503  
ISBN 978-91-87295-15-7

Nordregio  
P.O. Box 1658  
SE-111 86 Stockholm, Sweden  
[nordregio@nordregio.se](mailto:nordregio@nordregio.se)  
[www.nordregio.se](http://www.nordregio.se)  
[www.norden.org](http://www.norden.org)

