Centralbaltic Job Ferry

Case study: Estonia
(Input to synthesis report)

Institute of Baltic Studies

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Introduction

This case study was carried out in the context of the Centralbaltic Job Ferry (CB Job Ferry) project, that focused on research on cross-border mobility between Finland, Estonia, Latvia and Sweden and development of a mobility platform with extensive information targeted at employers, employees and other stakeholders dealing with employment-related cross-border mobility issues in these countries. The case study report introduces the main results from the quantitative and qualitative analysis carried out in Estonia. The case study was prepared as an input for a joint synthesis report covering all four countries addressed within the project, therefore it should be read as a complementary document to the synthesis report and not as a separate study.

The analysis introduced in this document is based on literature review, data analysis and interviews conducted with regional and national level labour market actors in 2012. Although some regional level actors were involved in the study to better understand certain issues in various levels of policy making and implementation, the subject of the case study is the territory and population of Estonia as a whole. The report follows the guidelines that were produced by Nordregio Nordic Centre for Spatial Development (the leader of the research work package within the project and co-ordinator of the synthesis report), that suggested the general framework for literature review, data analysis as well as proposed key questions for the interviews.

The main goal of the interviews conducted for this report was to find out the views that the regional and national level actors have on labour demand and cross-border mobility as a possible solution to labour shortage or oversupply in various fields of activity. The information received from the interviewees was used in combination with statistical data in order to develop a list of the relevant professions to be included in the mobility platform developed as part of the Centralbaltic Job Ferry project (http://cbjobferry.eu/).

The first chapter of the report provides some background information on the case study region, Estonian labour market policy and institutions, and case study methodology. The second chapter focuses on the current state of the affairs in terms of cross-border mobility, also outlining the situation in the border regions with Finland and Latvia. The third chapter takes a look into the future labour market needs and priority areas in terms of cross-border mobility. Finally, some conclusions from the current analysis (particularly based on new qualitative information gathered in the context of the case study) are provided.

This report was prepared by Kadri Uus, Maarja Käger, Merilin Metsma and Doris Pavlov, Institute of Baltic Studies. The authors would like to thank all interviewees and external experts for their contributions.

The Centralbaltic Job Ferry project was carried out in 2011-2013 and it was co-financed from the Baltic INTERREG IV A Programme 2007 – 2013.
1. Background information

1.1 Case study region

Due to its small size (1.3 million inhabitants in 45 227 km²), in Estonia the entire territory of the country was chosen as a case study region in the context of the Central Baltic Job Ferry project. While somewhat higher attention was paid to areas near the borders with Finland and Latvia, regional differences do not play a major role in terms of cross-border work mobility in Estonia (Finland is a single most popular destination for mobile workers from all parts of Estonia) and there are also no strong regional policies and measures in place regarding this topic.

To start with a general overview of the key statistics, as of 31.12.2012, the territory of Estonia was divided into a total of 226 municipalities, 33 of them being urban and 193 rural. 68% of the population lived in towns. Ca 30% of total population (401 000 inhabitants) lived in the capital city of Tallinn (located in a 85 km distance from Finland’s capital, Helsinki). The labour force participation rate was 67.6% in 2011, which was somewhat higher than expected after the economic recession in 2008-2009 (in comparison with 2010, this means that even though the working age population decreased by 5000, the number of people participating in the labour force increased by 9100 at the same time). In general, Estonia’s working age population has been decreasing since year 2000 but the impact on the labour market has been offset by increased labour force participation rates during the recession and the subsequent recovery (partly for the reason that previously inactive family members have returned to the labour market in the light of general insecurity affecting other family members that used to be the main breadwinners).

According to the data from Statistics Estonia, the unemployment rate fell to 12.5% and the annual average number of the unemployed was 86 800 in 2011. Long-term unemployment constitutes a major problem in Estonia, the share of long-term unemployed forms almost 60% of the total unemployment. While in the context of the global economic crisis around 107 000 jobs were lost in Estonia, 2010 and 2011 has brought along rapid recovery, mainly in the manufacturing industry; industrial production increased remarkably in the field of computers, electronic and optical equipment.

1.2 Estonian labour market institutions

This sub-chapter shortly describes the institutions that play an important role within the labour market in Estonia and potentially for the cross-border labour market within the Central Baltic Region.

Estonian Ministry of Social Affairs has the main responsibility in terms of general policy making and national co-ordination of the labour market issues. There are four departments under the authority of the Deputy Secretary General on Labour Policy: Labour Market Department,

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2 Ministry of Foreign Affairs webpage. Available at: http://www.vm.ee/?q=en/node/5670, 7 January 2012.
3 Viillmann, N. and Soosaar, O. (2012), „Labour Market Review 1/2012”. This is the source for all further sections in this sub-chapter.
4 Ibid.
European Social Fund (ESF) unit, Working Life Development Department and Labour Policy Information and Analysis Department. Ministry of Social Affairs registers providers of labour market services and temporary work agencies, companies involved in occupational health and safety training; it also maintains a database of collective agreements. For this case study, we have interviewed one representative from Labour Market Department and one representative from the Labour Policy Information and Analysis Department.

**Estonian Ministry of Education and Research** has the tasks to guarantee the expedient and effective development of education, research, youth and language policies and the high level and competitiveness of research and development activities.

**The Ministry of the Interior** co-ordinates the residence and working rights issues related to employment of foreign workforce in Estonia.

**Estonian Unemployment Insurance Fund** is the provider of the labour market services in Estonia. The Fund is not subordinate to a ministry, but is governed by a Supervisory Board which brings together representatives of the government, employers and employees, with two members appointed for each group and six members in total. According to the Unemployment Insurance Act, the Government of the Republic appoints two members of the Supervisory Board. The Confederation of Estonian Trade Unions and the Estonian Employees' Unions' Confederation both appoint one member and the Estonian Employers' Confederation appoints two members. A three-member Management Board is responsible for managing the daily operations of the Fund. The Fund has 15 regional offices. The objective of the Fund is the payment of unemployment insurance benefits, benefits upon collective termination of employment contracts and benefits upon the insolvency of employer in accordance with the Unemployment Insurance Act and other legislation. For this case study, we have interviewed the heads of three regional offices.

**EURES** (EURES-European Employment Services) is a network of public employment services within the EU/EES and Switzerland, with the task of promoting the free movement of labour. Estonian Unemployment Insurance Fund incorporates the positions of EURES advisors in Estonia. For this case study, we have interviewed three representatives of the EURES network in Estonia (EURES manager and coordinator on national level and one regional level EURES adviser).

**The Estonian ENIC/NARIC Centre** is the academic recognition information centre in Estonia. It is a subdivision of Archimedes Foundation which is an independent body established by the Estonian government with the objective to coordinate and implement different international and national programmes and projects in the field of training, education and research. The Estonian ENIC/NARIC Centre belongs to the international networks of ENIC and NARIC. The European Council and UNESCO network ENIC (European Network of National Information Centres on Academic Recognition and Mobility) and the European Union network NARIC (National Academic Recognition Information Centres) are international networks created for facilitating the true and fair recognition of education obtained abroad and for promoting academic and

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professional mobility.\textsuperscript{9} For this case study, we have interviewed the manager of the ENIC/NARIC Centre.

**Estonian Health Insurance Fund** is the only organisation in Estonia dealing with compulsory health insurance. The Health Insurance Fund covers the costs of health services required by the person in case of illness regardless of the amount of social tax paid for the person concerned.\textsuperscript{10}

**Estonian National Social Insurance Board** is a subordinate institution of the Ministry of Social Affairs. The main task of the Social Insurance Board is the co-ordination of the payment of the social insurance benefits, state pensions and compensations.\textsuperscript{11}

**Estonian National Labour Inspectorate** is a government agency also operating within the area of government of the Ministry of Social Affairs. Its main function is to arrange for the exercise of state supervision in the working environment over compliance with the requirements of legislation regulating occupational health and safety and labour relations and apply state enforcement on the basis and to the extent prescribed by law.\textsuperscript{12}

**The Estonian Employers’ Confederation** represents the largest number of employers among local employers' organisation and covers all economic sectors of Estonia. The aim of the Confederation is to represent its members’ interests in communications with legislative and executive powers and employee organisations, as well as to represent its member organisations at international, state and regional levels. The Confederation’s priorities include reducing unemployment and labour force shortage, and creating new jobs by way of promoting flexible forms of working and reducing the number of obligations imposed on entrepreneurs.\textsuperscript{13} For this case study, we have interviewed one representative from the Confederation.

**The Estonian Chamber of Commerce and Industry** is the largest representative of Estonian entrepreneurs and businesses. The mission of the Chamber is to develop entrepreneurship in Estonia. It provides many business-related services – consultation (legal, foreign trade, EI-related), business match-making (trade missions, trade fair visits, presentations), information services (business contacts, co-operation proposals etc.), training and foreign trade documents.\textsuperscript{14} For this case study, we have interviewed acting director general of The Estonian Chamber of Commerce and Industry.

**Estonian Association for Personnel Development PARE** is an association of Human Resource professionals from private and public sector. PARE has 300 legal and private persons as members. Active members participate in different working groups on voluntary basis. PARE aims to support the development of Human Resource Management in Estonia. Its goal is to focus more on the development of people management.\textsuperscript{15} For this case study, we have interviewed the managing director of PARE.

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\textsuperscript{9} Estonian ENIC/NARIC Academic Recognition Information Centre webpage. Available at: http://www2.archimedes.ee/enic/index.php, 9 November 2012.

\textsuperscript{10} Health Insurance Fund webpage. Available at: http://www.haigekassa.ee/eng/ehif, 9 November 2012.


\textsuperscript{13} Estonian Employers' Confederation webpage. Available at: http://www.tooandjad.ee/en/about, 9 November 2012.


\textsuperscript{15} Estonian Association for Personnel Development PARE webpage: http://www.pare.ee/eng/avaleht, 9 November 2012.
The Estonian Trade Union Confederation comprises of 19 branch unions that represent state and municipal government officials, education workers, health care workers, transport workers (including road, railway, sea and air transport), industrial workers (including energy, light industry, food industry, timber and metal industry) and people employed in the service sector (postal, communication, trade, hotel and cleaning sector workers, etc). The organisation represents employees’ interests in collective agreements and protects employees’ rights in employment relations, consults employers on developing a sustainable labour market and the government on developing a socially sustainable economic model. For this case study, we have interviewed the president of The Estonian Trade Union Confederation.

The University of Tartu is one of the biggest universities in Estonia with ca 18 000 students. The University of Tartu is the only classical universitas in Estonia; it incorporates nine faculties and four colleges covering subjects as diverse as medicine and philosophy, genetics and computer science. For this case study, we have interviewed the head of the Career and Psychological Counselling Service.

Tallinn University of Technology is the only technological university in Estonia and the flagship of Estonian engineering and technical education. There are ca 14 800 students. The university also aims for synergy between different fields (technological, natural, exact, social and health sciences). For this case study, we have interviewed the head of Career Service and the deputy manager of International Relations Office.

Tallinn University is the third largest university in Estonia and it has ca 10 000 students. The university incorporates 19 institutes and 6 colleges. Its main strengths lie in the fields of humanities and social sciences, but it also has a growing branch of natural and exact sciences, as well as a notable tradition of teacher training and educational research. For this case study, we have interviewed a career counsellor at the Career and Counselling Centre.

The Estonian Qualification Authority as a private legal entity (foundation) was established in order to continue developing the occupational qualifications system launched by the Estonian Chamber of Commerce and Industry in 1997. The Estonian Qualification Authority is developing a support structure for occupational qualifications system in order to increase the competitiveness of Estonian employees and promote the development, assessment, recognition and comparison of their occupational competence.

Estonian Youth Work Centre is a national centre for youth work under the administrative authority of the Ministry of Education and Research and its main objective is to develop and organise youth work in the framework of the national youth policy.

CV Keskus and CV-online are the two biggest private job-mediation companies/online job search engines in Estonia.

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18 Tallinn University of Technology webpage. Available at: http://www.ttu.ee/university/, 9 November 2012.
19 Tallinn University webpage. Available at: http://www.thu.ee/?LangID=2&CatID=2818, 9 November 2012.
Regarding the institutional framework in general, the Estonian labour market is quite flexible, characterised by a weak role of the trade unions and modest regulation of labour market by the government.\textsuperscript{22} The merger of the Unemployment Insurance Fund and the Labour Market Board in 2009 has led to positive outcomes in better management of service provision, although numerous areas need more attention and development.

In the coming years, the general goal is to tighten the institutional cooperation and to define more clearly also the responsibilities of the Ministry of Education and Research, the Ministry of Social Affairs, the Unemployment Insurance Fund and local governments in reducing and preventing unemployment.\textsuperscript{23} It is considered vital to improve the cooperation of national agencies with local government institutions (workforce activation measures, resolution of social problems, etc.). While the national level regulations and rules do not hinder finding “tailored” solutions to regional/local problems, at the time of the development of this report, there had been no major structured activity calling forward such developments.\textsuperscript{24}

\subsection*{1.2 Estonian labour market policy}

The “Estonia 2020” strategy defines the general development framework for Estonia in the perspective of the following eight years, addressing also the labour market issues. One of the top priorities is to increase the impact of active labour market policy and sustainability of financing in this field for the purpose of raising Estonia’s competitiveness. One of the key goals is to decrease the duration of unemployment through increasing the effectiveness of the provision of labour market services and enabling the growth of their impact.

Unemployment prevention is an important issue to be addressed, since it is clearly more costly and complicated to eliminate the consequences of unemployment. Considerable attention has to be paid to prevent and reduce long-term unemployment and unemployment among young people. The goal is to bring the youth unemployment down from its peak of 32.9\% in 2010 to the pre-crisis level (12\% in 2008) at minimum.

It will be necessary to reinforce, in practice, the link between provision of active labour market measures and the benefits/allowances disbursed to people. The principle that receiving benefits entails obligations for the recipient to actively search for a job needs to be implemented into practice more clearly.

Regarding the ageing workforce, in the future it will be important to provide more measures for helping older people to return to the labour market and to facilitate their working life. An objective is also to establish initiatives for increasing the employment opportunities for people with disabilities.

\begin{flushright}
\textsuperscript{23} Ibid.
\end{flushright}
An amendment to legislation entered into force in 2011 that allows the unemployment insurance premiums to be used also to cover provision of active labour market measures. Thus three financial sources can be used to finance active labour market measures: the state budget, structural funds and revenue from unemployment insurance premiums. Combining these sources of financing is expected to ensure the effectiveness and sustainability of financing for active labour market policy.

To evaluate whether the active labour market policy is leading to the desired effects, it will be necessary to continue with a systematic monitoring and evaluation for assessing the impact of active labour market services.25

In sum, the goal in the years ahead is to prevent unemployment and to increase the impact of active labour market measures through tighter cooperation between state and local government, making the service provision of by the Unemployment Insurance Fund more effective and creating special programmes for increasing the employment of youth, elderly and disabled people.

### 1.3 Methodology

The methodology of the case study derives from the guidelines for the analysis developed by Nordregio (in co-operation with other partners), which suggested literature review, data analysis and interviews with relevant actors in each region/country as key methods to be used. In Estonia, altogether 19 interviews were conducted during March, April and May 2012 (mostly face-to-face interviews, in some cases over phone or Skype (with representatives working outside Harju and Tartu counties)).

Table 1. Interviews conducted for the qualitative analysis

<table>
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<tr>
<th>Target group</th>
<th>No of int.s. in Estonia</th>
<th>Organisations represented</th>
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<td>Public employment agencies</td>
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<td>Estonian Unemployment Insurance Fund</td>
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<td>1. Tallinn and Harju Regional Office</td>
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<td>2. Tartu Regional Office</td>
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<td>3. Võru Regional Office</td>
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<tr>
<td>Employer associations (Chamber of Commerce, industry unions, etc.)</td>
<td>4</td>
<td>1. Estonian Chamber of Commerce and Industry</td>
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<td>2. Estonian Employers Confederation</td>
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<td>3. Estonian Association of Information Technology and Telecommunication – (participation in seminar (22 May 2012) focused on hiring foreign specialists)</td>
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<td>4. Estonian Association for Personnel Development PARE</td>
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<td>Labour market organisations (as employee)</td>
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<td>Estonian Trade Union Confederation</td>
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<th>(employee organisations)</th>
<th>organisations are rather underdeveloped in Estonia)</th>
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<tr>
<td>EURES advisers</td>
<td>3. Estonian Unemployment Insurance Fund/ EURES Central Office (2 interviewees)</td>
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<td>2. EURES contact point within Estonian Unemployment Insurance Fund’s Valga Regional Office</td>
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<tr>
<td>Educational institutions</td>
<td>1. University of Tartu, Career and Psychological Counselling Service</td>
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<td>2. Tallinn University of Technology, Career Service</td>
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<td>3. Tallinn University, Career and Counselling Centre</td>
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<td>4. Tallinn University of Technology, International Relations Office</td>
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<td>5. Estonian IT College</td>
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<td>National level</td>
<td>Ministry of Social Affairs</td>
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<td>representatives</td>
<td>1. Labour Market Department</td>
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<td>(departments, national</td>
<td>2. Labour Policy Information and Analysis Department</td>
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<td>authorities responsible</td>
<td><a href="#">Archimedes</a></td>
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<td>for labour market issues etc.)</td>
<td>3. Estonian ENIC/NARIC Centre, Archimedes Foundation</td>
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2. Cross-Border Mobility: current situation

2.1 Cross-border labour market and mobility in Estonia: background

Estonia is a member of the EU and European Economic Area (EEA) and therefore Estonian citizens have the right to work in any other EU and EEA country under the same conditions as citizens of that country.26 The same applies for Switzerland. Restrictions on working abroad may result from other countries’ specific regulations.

Citizens who are originally from the EU, EEA or Switzerland do not need a working permit to work in Estonia. To apply for a right of residence they must register their residence with the local authorities within 3 months after arriving in Estonia. EU citizens who have lived in Estonia permanently for 5 successive years on the basis of the right of temporary residence shall obtain the right of permanent residence.27 The EU citizens´ living and working principles in Estonia are regulated by the Citizen of the European Union Act, for the citizens of other countries, the Aliens Act applies.28 The social protection, working conditions and salaries of persons working in Estonia are regulated by the Employment Contracts Act (together with the General Part of the Civil Code Act and Law of Obligations Act), Collective Agreements Act and Occupational Health and Safety Act.29

Foreign workers that are the citizens of a country outside the EU, EEA or Switzerland need a work permit to work in Estonia – before hiring such a person, an employer must make an attempt to find (using public competition and job search engines) an Estonian citizen or a foreign worker with a right of residence who would fulfill requirements for the job. If there are no suitable candidates, the Estonian Unemployment Insurance Fund gives the employer a permission to hire a foreign worker. After this, the Police and Border Guard Board will issue a residence permit for employment to the foreign worker.30 The interactive roadmap for recruitment of foreign labour http://egoprise.ibs.ee/ provides a step-by-step overview of the entire process.

The “Labour market development programme 2009-2013” (initiated by Ministry of Social Affairs and dealing with prevention of unemployment and inactivity, bringing unemployed and inactive people to labour market, making better use of labour immigration and emigration) stipulates that in order to support labour mobility, the following activities are needed:

- analysis of labour mobility;
- development of specific measures supporting mobility and evaluation of the need for additional measures;

• preparing proposals to ministries. \(^{31}\)

According to the recent report by the Estonian State Chancellery “The main challenges of the development of government policies”, the development of labour market measures supporting mobility has not been sufficient in Estonia. Currently there are no long-term measures for enhancing and supporting mobility. \(^{32}\) The report outlines that Estonia should increase labour mobility and employment flexibility on the EU level. To ensure effective implementation of labour law and to combat undeclared work, cooperation between member states’ authorities is very important. The report also indicates that Estonia needs better estimates and understanding of foreign labour demand, and that it is important to cooperate on the EU level for prognosis of future needs. It is also stressed that Estonia should simplify and shorten the processes of applying for residence and work permits.

It can be said that currently Estonia does not have a specific cross-border labour market and mobility policy in place. While work-related cross-border mobility is a field that is of growing importance in Estonia, there is still little sound statistical data and related research information available. It can also be said that in terms of public policy, no clear understanding of the long-term effects of cross-border mobility exists and long-term planning remains limited.

There has not been much activity related to this field by any of the main labour market institutions except EURES (incorporated in the structure of the Estonian Unemployment Insurance Fund). The potential stakeholders have shown little initiative in terms of activities oriented at the development of the cross-border labour market, partly presumably because of the limited understanding of this field. While different organisations deal with related issues, the activity is not very systematic (although various stakeholders provide some information, organise events and try to answer the questions of those interested in cross-border work(ers), these activities are rather unstructured and happen on \textit{ad hoc} basis).

Also, at the societal level at large, there is a certain level of cautiousness and prejudice related to cross-border work which is often seen as the first step towards emigration. The currently ambivalent attitudes in the society and lack of a long-term national strategy related to this field unfortunately do not provide a conductive ground for the development of joint cross-border labour markets and for taking full advantage of related opportunities.

\section*{2.2 General overview of employment of Estonian residents abroad}

Since specific data about cross-border commuters from Estonia to Latvia and Finland and vice versa is not available, we can only give a general description about the employment of Estonian residents abroad.


**Number of Estonians working abroad**

In the first quarter of 2011, the estimated number of Estonians working abroad amounted to 19 000 (having increased 16.3% compared to the previous year). In the third quarter, i.e. summer months which constitute the high season for temporary work, this number amounted to 26 000 (7.5% decrease compared to the same period in 2010). In general, the number of Estonians choosing to work elsewhere has been rather steadily increasing since 2004 (since Estonia gained membership in the EU).

**Figure 1. Estonian residents employed abroad, 2004–2011**

![Graph showing the number of Estonians employed abroad from 2004 to 2011](image)


It was only in the first two quarters of 2010 when a decrease (by 7%) could be observed in employment outside Estonia. An assumption can be made that this decrease largely resulted from returning workers that had been mainly engaged in seasonal work based on fixed-term contracts. In the labour market still hit by the recession, finding and maintaining a permanent job abroad was more difficult and/or finding employment in the home country was considered more likely.

Uncertainty related to the actual number of cross-border commuters still remains very high, 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. carried out a study based on mobile positioning data, using information about the clients of EMT, the biggest network service provider in Estonia, based on which estimations were made about the whole population. The study revealed that 28 000 users of EMT network visit Finland on a regular basis, in case of Latvia this number amounted to 7000. These figures, of course, cannot be treated as exact measures of cross-border workers as there might be other reasons for regular visits, the number also includes children, etc.

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37 Ahas et al. (2010), „Regional study of commuting“.
In general, it can be concluded that getting accurate data related to work-related cross-border mobility is highly problematic.

**Destination countries**

In 2003-2008, the most popular destination countries for Estonian workers were Finland, Sweden, Norway and United Kingdom.\(^{38}\) Figure 2 presents a more detailed distribution of Estonian residents working abroad by country of employment. Finland clearly remained the key destination country also in 2012.

Figure 2. Estonian residents who were or are employed abroad by country, 2003–2008

![Bar chart showing distribution of Estonian residents working abroad by country, 2003–2008](chart.png)


**Profile of cross-border workers**

Concerning the structure of the cross-border workers, we can assume that no major changes have occurred in the socio-demographic profile of the Estonian people working abroad during the three years that have passed from the publication of the “The Scientific Report on the Mobility of Cross-border Workers within the EU-27/EEA/EFTA” in 2009\(^ {39}\). The general profile is following:

**Sex:** predominantly male (approx. 70%)\(^ {40}\)

**Citizenship:** Estonian\(^ {41}\)

**Native language:** Estonian\(^ {42}\)

**Age:** younger and medium level\(^ {43}\)

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\(^{42}\) Ibid.

According to Krusell (2009) 51% of Estonian residents who are/have been working abroad are 15-29 years old and 43% 30-49 years old.\textsuperscript{44}

**Skill level:** medium-skilled workers\textsuperscript{35}

**Educational level:** vocational/ professional secondary education dominates:

approx. half of the workers have vocational or professional secondary education, followed by workers without professional skills; the share of workers with higher education is the smallest (14%).\textsuperscript{46}

**Employment status/contracts:** permanent employment and short-term employment on fixed-term contracts\textsuperscript{47} (e.g. seasonal workers)

**Illegal employment:** relatively low level\textsuperscript{48}

**Prevalent type of cross-border workers:** weekly or seasonal commuters and daily commuters\textsuperscript{49}

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**Challenges related to cross-border mobility**

In terms of problems related to cross-border mobility, MKW’s report\textsuperscript{50} outlined language barriers and infrastructural problems as main obstacles. The financial crisis has clearly had a negative impact also on the cross-border labour markets but the expert interviews carried out in the framework of the CB Job Ferry project confirm that the nature of the barriers has not changed dramatically compared to the time that the MKW report was published.

Based on the interviews carried out, the following issues can be considered as main obstacles to cross-border mobility:

- **Language skills** (both for incoming and outgoing mobile workers) – this clearly remains a challenge in Estonia. There are not many free/ low-cost language learning opportunities provided by the state and the experts outlined that even if opportunities for learning the language have been created, the participation levels are not very high.

- **Employers’ mindset in Estonia** (problem for incoming workers) – Estonian employers (and the society in general) are still not very open towards foreigners. The commonly held view is that it is somewhat more difficult to deal with foreign workers compared to Estonians (as summarised by one of the interviewees: ‘you do not always know what to expect – how they react in certain situations’, etc.)

- **Family issues** (a challenge for both incoming and outgoing workers) – often the family stays in the country of origin and long-distance relationships are inevitably difficult. If the family travels with the cross-border worker, they often face administrative difficulties, problems related to fitting in, etc.

- **Knowing one’s rights/security** (problematic for outgoing workers) – while the situation with employees’ rights is undoubtedly better than it used to be ca 15 years ago, it is still an issue. The interviewees that have regular direct contact with mobile job seekers emphasised that it is

\textsuperscript{44} Krusell, S. (2009), "Employment of Estonian residents abroad" Quarterly bulletin of Statistics Estonia", 2/09.


\textsuperscript{48} Ibid., pp 120, 137.

\textsuperscript{49} Ibid., pp 120.

\textsuperscript{50} Ibid.
still important to make sure that everything is legal and that safety and security of the employee is ensured by the employer.

- **Problems related to potential reintegration to the local (home) labour market when returning** (problematic for both incoming and outgoing workers) – while working abroad is normally an enriching experience in many ways, it also often brings with it weakened contacts and level of tacit knowledge about the labour market in the country of origin.

- **Getting necessary information in a user-friendly way** (problematic for both incoming and outgoing workers) – while there is a lot of information available, it is difficult to get a good and well-structured, practical step-by-step overview related to various things that need to be done when starting employment abroad; the distribution of responsibilities between various organisations is often not very clear either.

- **Transportation linkages** (a challenge for both incoming and outgoing workers) – while transportation linkages do not constitute a major problem in the case of Finnish-Estonian border region, the connections between Latvia and Estonia could be better.

- **Last but not least, ambivalent attitudes towards work-related mobility in the society and lack of a long-term national strategy related to this field** create challenges for mobile workers in Estonia. The interviews revealed or reflected on a perception that cross-border mobility is seen as “giving the finger to the devil” – it is believed that people only start this way and actually end up emigrating after some time. While EURES network is doing a very good job in Estonia, there are a lot of mixed feelings related to their work which is sometimes seen as counterproductive to the goal of keeping the Estonian talents and skilled workers in Estonia.

### 2.3 Mobility and employment in the cross-border regions

#### 2.3.1 Finland and Estonia cross-border region

**Finland - Estonia**

(comparison with the MKW report: data about 2007 has been partly reviewed based on fresher data, some minor inconsistencies have been removed).

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Area in sqkm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25 400</td>
<td>17 654²⁴</td>
<td>17 654²⁵</td>
</tr>
<tr>
<td><strong>Total number of inhabitants</strong></td>
<td>2 126 518</td>
<td>834 314²⁴</td>
<td>834 731²⁵</td>
</tr>
</tbody>
</table>


Inhabitants per square kilometer | 83.7 | 47.3<sup>58</sup> | 47.3<sup>57</sup>
---|---|---|---
Total number of employees | 696 000 | 425 000<sup>59</sup> | 393 800<sup>59</sup>
Unemployment rate | 6.2 | 4.8<sup>60</sup> | 13.2<sup>61</sup>
Employment rate | 50.7 | 64.6<sup>62</sup> | 61.1<sup>53</sup>
GDP (nominal) per capita | 36 990 | 14 329<sup>63</sup> | 12 492 (2009)<sup>65</sup>
GDP (PPS) per capita (EU 27=100)<sup>66</sup> | 118 | 70 | 64 (2010)
Number of cross-border commuters | From Finland to Estonia – 500 | From Estonia to Finland – 20 000<sup>67</sup> | No accurate data available, similar to 2007

### Qualitative assessment

There is a strong prevalence of Estonian labour force commuting to Finland in this cross border region. The Finnish labour market makes a significant part of out-commuting in Estonia, the reasons are mainly related to favourable income-levels, cultural aspects, language spoken in the country, geographical location, and relatively low level of risk for weakened family ties. 80% of people working in Finland have found their job through relatives and friends.

*From Estonia to Finland*

The Estonian commuters in Finland are predominantly working in the elementary occupations sector as craft and related trade workers, plant and machine operators and assemblers, service workers, shop and market sales workers.<sup>69</sup>

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<sup>56</sup> Ibid.

<sup>57</sup> Ibid.


<sup>65</sup> Ibid.

<sup>66</sup> Statistics Estonia statistical database, „GDP (PPS) per capita“ Available at: [http://www.stat.ee/29955](http://www.stat.ee/29955). Information about all related rows from that source


In the 1st quarter of 2011, the estimate of the number of Estonians working in Finland by Estonian Ministry of Foreign Affairs (based on data from Statistics Estonia) was 14,900, out of whom 10,700 were employed in the construction sector (this constitutes a 51% increase in the total number of workers employed in Finland compared to the previous year; the number of construction workers has doubled). According to Finnish Association of Construction, approximately 30,000 Estonian construction workers were working in Finland in 2010. As stated earlier, according to official statistics there were ca 16,000 Estonians working abroad altogether in 2010 – the remarkable variance in these numbers leads to an assumption that not all Estonian residents working abroad are reflected in official statistics.

From Finland to Estonia

In the MKW’s report published in 2009, a large share of the Finns’ commuting to Estonia was linked with the Finnish firms’ investments in Estonia (mainly in the construction industry). We can conclude that this aspect has not changed. The number of Finnish companies coming to Estonia has been observed to be increasing. Yet, currently there is no accurate data available about how many Finnish residents are working in Estonia.

Citizens of the EU, European Economic Area (EEA) and Switzerland that plan to work in Estonia more than 90 days within a 6 month period have to register their residence with the local authorities within 3 months after arriving in Estonia; their data is then included in the Estonian population register. As of April 2012, the population register includes the data of 4,934 persons.
of Finnish origin (born in Finland) in the age group of 15-74 i.e. working age population in the
Estonian-Finnish cross-border area (Hiiu, Ida-Viru, Lääne, Lääne-Viru and Saare counties).
However, there is no information on how many of these people are engaged in cross-border work.
Out of the total number, 4178 persons, i.e. 84.7%, have Finnish citizenship. 74

2.3.2 Latvia and Estonia cross-border region

Latvia – Estonia
(comparison with the MKW report: data about 2007 has been partly reviewed based on fresher
data, some minor inconsistencies have been removed).

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Area in sqkm</td>
<td>18 049</td>
<td>17 73675</td>
<td>17 73676</td>
</tr>
<tr>
<td>Total number of inhabitants</td>
<td>1 174 239</td>
<td>397 91677</td>
<td>396 57978</td>
</tr>
<tr>
<td>Inhabitants per square kilometre</td>
<td>65.1</td>
<td>22.479</td>
<td>22.380</td>
</tr>
<tr>
<td>Total number of employees</td>
<td>523 000 (2006)</td>
<td>180 30081</td>
<td>169 20082</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>6.4</td>
<td>6. 383</td>
<td>10. 984</td>
</tr>
<tr>
<td>Employment rate</td>
<td>43.3</td>
<td>58.385</td>
<td>56.186</td>
</tr>
<tr>
<td>GDP (nominal) per capita</td>
<td>3 320</td>
<td>8 57487</td>
<td>7 21488</td>
</tr>
<tr>
<td>GDP of whole country (PPS) per capita (EU 27=100)</td>
<td>56</td>
<td>70</td>
<td>64 (2010)</td>
</tr>
<tr>
<td>Number of cross-</td>
<td>From Latvia to</td>
<td>No accurate data</td>
<td></td>
</tr>
</tbody>
</table>

74 Information request by the authors to AS Andmevara, data from the Estonian population register as of April 2012.
75 Statistics Estonia statistical database, „RV0291: Population, area and population density, 1st of January “. Available at:
76 Ibid.
77 Ibid.
78 Ibid.
79 Ibid.
80 Ibid.
81 Statistics Estonia statistical database, „TT4645: 15-74 year old employment status by county 2007. Available at:
82 Statistics Estonia statistical database, „TT4645: 15-74 year old employment status by county 2011 – employed“ Available at:
83 Statistics Estonia statistical database, „TT4645: 15-74 year old employment status by county 2007“ Available at:
84 Statistics Estonia statistical database, „TT4645: 15-74 year old employment status by county 2011 – unemployment rate“.
85 Statistics Estonia statistical database, „TT4645: 15-74 year old employment status by county 2007“ Available at:
86 Statistics Estonia statistical database, „TT4645: 15-74 year old employment status by county 2011 – employment rate“.
87 Statistics Estonia statistical database, „RAA050: Gross domestic product by county“. Available at: http://pub.stat.ee/px-
88 Ibid.
89 Statistics Estonia statistical database, „GDP (PPS) per capita“ Available at: http://www.stat.ee/29955. Information about all
countries originates from that source.
In comparison with Estonia and Finland, cross-border mobility between Estonia and Latvia remains considerably lower and the issue with available information and accuracy of available statistical estimations is even more problematic. The qualitative assessments deriving from the MKW’s report are described below.

From Estonia to Latvia:
The strongest inflow of workers can be observed in the sectors of construction (a pillar of Latvia’s economic growth), financial intermediation and business services, and in other growing branches.

From Latvia to Estonia:
Most popular sectors are manufacturing (textile, meat and furniture industry), health care (growth of 6.8% in 2007), hotels and agriculture.

As of April 2012, the Estonian population register includes data about 4681 persons of Latvian origin (born in Latvia) in the age group of 15-74 i.e. working age population in the Estonian-Finnish cross-border area (Pärnu, Põlva, Tartu, Valga, Viljandi and Võru counties). However, there is no information on how many of these people are engaged in cross-border work – although it is clear that this number is considerably lower. Only 2220 out of persons of Latvian origin that have registered their residence in Estonia, i.e. 47.4%, have Latvian citizenship – we can guess that the rest are people that have born in Latvia but acquired Estonian citizenship as well as permanent residence in Estonia.\(^{91}\)

### 2.4 Current labour market needs and key sectors for employment of foreigners

As part of gathering new information about the current situation in the Estonian labour market, an analysis of current labour demand was carried out based on vacancies listed in the main job search engines in Estonia. The table below gives an overview of the listings as of May 2012 (a review was carried out in November 2012 to check for potential seasonal effects – the evaluation showed that the proportional distribution of vacancies across different sectors was largely the same and there were no major changes).

Three job search engines were reviewed:

- **Estonian Unemployment Insurance Fund database**: 1249 job ads, 2596 posts/vacancies (as of 7.05.2012).


\(^{91}\) Information request by the authors to AS Andmevara, data from the Estonian population register as of April 2012.
• **CV-online database:** 2820 vacancies (as of 3.05.2012)

• **CV Keskus database:** 4323 vacancies (as of 7.05.2012); includes some overlapping and some vacancies in other countries

Estonian Unemployment Insurance Fund’s database is the main public job search engine in Estonia. CV-online and CV Keskus are the two biggest private job search engines in Estonia – they are also the most popular among both employers and job seekers. It has to be kept in mind that the Unemployment Insurance Fund’s database is somewhat biased towards low- and medium-skilled positions. An assumption can be made that as the database is run by an agency dealing with unemployment issues, many employers don’t see it as a best place to find high-skilled specialists and therefore do not post such vacancies there.

The table below gives an overview of sectors in which there is currently a large number of vacancies (> 100; cells marked in orange). It also provides information (cells marked in blue) about sectors in which the number of vacancies is not that large but which can be considered important for at least one of the following reasons:

- need for skilled workers - requires higher level of skills/ qualification (more important in the CB JobFerry context as well as in general policy perspective in Estonia);

- future growth sector (see next chapter for more information) – national priorities, increasing labour demand (based on earlier studies, prognoses, information from interviews);

- sectors in which there is a potentially higher demand for foreign labour (earlier studies, information from interviews).

In sum, the analysis of the job search engines shows that the largest number of vacancies can be found in the following sectors:

- Sales/Retail
- Customer service work
- Hotel, catering and personal services staff
- Manufacturing / Production
- Construction, mining and quarrying work
- Transportation / Logistics
- Mechanics / Engineering
- Metal, machinery and electronic equipment work
- Health Care / Pharmacy
- Information Technology / E-commerce
- Finance, sales and administrative associate professionals
- Education / Science / Research
- Management / Administration

There is also a large number of vacancies in temporary and short-term jobs which are not at the focus of the current project.
A more detailed view of all three job search engines is presented in Annex 1 of the report.

**Current main fields of occupation for cross-border workers**

The main fields of occupation for cross-border workers - both in terms of Estonians working abroad as well as foreigners working in Estonia – are the following:

- Craft and related trade work\(^{92}\)
- Elementary occupations\(^ {93}\)
- Service work, shop and market sales work\(^{94}\)
- Plant and machine operations and assembly\(^ {95}\)
- Construction\(^ {96}\)
- Education sector\(^ {97}\)
- Housing sector (catering and accommodation companies/hotels)\(^ {98}\)
- Manufacturing (textile, meat and furniture industry)\(^ {99}\)
- Health care\(^ {100}\)
- Agriculture\(^ {101}\)
- Financial intermediation and business services\(^ {102}\)
- Transportation\(^ {103}\)

The above list is based predominantly on the MKW report and Krusell’s analysis about employment of Estonian residents abroad, which used data from years 2007 and 2008 (or earlier).

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\(^ {93}\) Ibid.


\(^ {95}\) Ibid.


\(^ {97}\) Estonian Academy of Security Sciences (2010). „Satisfying labour demand through migration in Estonia “, pp 44


\(^ {101}\) Ibid., pp 120, 137; Krusell, S. (2009), „Employment of Estonian residents abroad “, Quarterly bulletin of Statistics Estonia, 2/09, 55.


\(^ {103}\) Ibid., pp 120.
<table>
<thead>
<tr>
<th>Sectors/Categories</th>
<th>CV-online</th>
<th>No of vacancies + 4 most popular job listings</th>
<th>CV Keskus</th>
<th>No of vacancies + 4 most popular job listings</th>
<th>Unemployment Insurance Fund</th>
<th>No of vacancies + 4 most popular job listings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Classifieds and short-term jobs</td>
<td>1075</td>
<td>Sales / Retail</td>
<td>670</td>
<td>*cashier</td>
<td>Hotel, catering and personal services staff</td>
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<td></td>
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<td></td>
<td>*sales manager/representative</td>
<td>*cook</td>
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<td></td>
<td></td>
<td>*shop assistant (retail)</td>
<td>*hairdresser</td>
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<td></td>
<td></td>
<td>*customer service worker</td>
<td>*waiter/waitress/bartender</td>
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<td>*security guard</td>
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<tr>
<td>2</td>
<td>Tourism / hotels / catering</td>
<td>205</td>
<td>Customer Service</td>
<td>624</td>
<td>*customer service work</td>
<td>Sales staff and fashion work</td>
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<td></td>
<td>*cashier</td>
<td>*shop sales person/demonstrator</td>
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<td></td>
<td>*telemarketing worker</td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>Information technology</td>
<td>198</td>
<td>Manufacturing / Production</td>
<td>445</td>
<td>*welder</td>
<td>Construction, mining and quarrying workers</td>
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<td></td>
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<td></td>
<td></td>
<td>*electrical mechanic</td>
<td>*electrical mechanic</td>
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<td></td>
<td>*wood treater (CNC)</td>
<td>*carpenter</td>
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<td></td>
<td>*production/project/object manager</td>
<td>*metal-worker</td>
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<td></td>
<td></td>
<td>*builder (general)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Service industry</td>
<td>190</td>
<td>Construction / Real Estate</td>
<td>269</td>
<td>*project manager</td>
<td>Sales, services and cleaning elementary occupations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*builder (various)</td>
<td>*cleaner (various)</td>
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<td></td>
<td></td>
<td></td>
<td>*real estate broker/consultant</td>
<td>*cook</td>
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<td></td>
<td></td>
<td>*line worker</td>
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<td></td>
</tr>
<tr>
<td>5</td>
<td>Sales</td>
<td>163</td>
<td>Catering</td>
<td>262</td>
<td>*cook/chef</td>
<td>Drivers and mobile-plant operators</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>*waiter/waitress/</td>
<td>*heavy truck/lorry driver</td>
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<tr>
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<td>Category</td>
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<td>Number</td>
<td>Other Occupations</td>
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<tr>
<td></td>
<td></td>
<td>*customer service worker/seller</td>
<td></td>
<td>*sales consultant/specialist *team leader</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>**sales manager/sales manager</td>
<td></td>
<td>**mechanic/engineer, **manager/sales manager</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>**cashier, **cook/chef, **waiter/bartender</td>
<td></td>
<td><strong>cleaner/room maid</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>**technician (various) **mechanic (various)</td>
<td></td>
<td><strong>engineer (various)</strong></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td><strong>locksmith</strong></td>
<td></td>
<td><strong>product tester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Trade / purchase / supply</td>
<td>*customer service worker/cashier/seller</td>
<td>93</td>
<td>Tourism / Hotels</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>*sales manager/specialist, *manager (various)</td>
<td></td>
<td>*cook/chef, *waiter/bartender, *cleaner/room maid</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><em>product tester</em>*</td>
<td></td>
<td><strong>mechanic/engineer (various)</strong></td>
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<td></td>
</tr>
<tr>
<td>8</td>
<td>Technical engineering</td>
<td>*technician (various) **mechanic (various)</td>
<td>77</td>
<td>Transportation / Logistics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>**engineer (various) <strong>locksmith</strong></td>
<td></td>
<td>*warehouse operative **collector **driver</td>
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</tr>
<tr>
<td>9</td>
<td>Transport / logistics</td>
<td>*car mechanic, *driver, *locksmith</td>
<td>71</td>
<td>Temporary</td>
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<tr>
<td></td>
<td></td>
<td><em>manager (various)</em>*</td>
<td></td>
<td><strong>finance, sales and administrative associate professionals</strong></td>
<td></td>
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</tr>
<tr>
<td>10</td>
<td>Electronics / telecommunication</td>
<td>*software developer/programmer/system analyst, *engineer, *customer service worker/administrator, *team leader/manager</td>
<td>48</td>
<td>Health Care / Pharmacy</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>**nurse (general) <strong>care assistant</strong></td>
<td></td>
<td><strong>doctors (various but several offers for physiotherapists/occupational therapists)</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>machine operators and assemblers</strong></td>
<td></td>
<td><strong>machine operators and assemblers</strong></td>
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<tr>
<td></td>
<td></td>
<td>**sales agent/consultant, <strong>bookkeeper</strong></td>
<td></td>
<td>**baker/pastry cook, **fish processor, <strong>wood treaters (CNC)</strong></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>**cashier, **cook/chef, **waiter/bartender</td>
<td></td>
<td><strong>mechanic/engineer (various)</strong></td>
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<td><strong>mechanic (various)</strong></td>
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<td><strong>engineer (various)</strong></td>
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<td><strong>locksmith</strong></td>
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<td><strong>product tester</strong></td>
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<tr>
<td></td>
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<td>**technician (various) **mechanic (various)</td>
<td></td>
<td><strong>engineer (various)</strong></td>
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<td><strong>locksmith</strong></td>
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<td><strong>product tester</strong></td>
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<td>**technician (various) **mechanic (various)</td>
<td></td>
<td><strong>engineer (various)</strong></td>
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<td><strong>product tester</strong></td>
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<td>Category</td>
<td>Positions</td>
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<td>--------------------------</td>
<td>------------------------------------------------</td>
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</tr>
</tbody>
</table>
| **Education / science**  | - *teacher (eg. programming, physics)
- *research fellow
- *professor/assistant professor
- *youth worker** |
| **Information Technology / E-commerce** | - *software developer/programmer
- *system administrator/analyst
- *technical support specialist/customer service officer
- *software development team leader** |
| **Senior managers**      | - *sales manager/sales department manager
- *project/object manager (production and operation dept. managers)
- *general manager (educational inst.s, shops)** |
| **Healthcare / social care** | - *doctor
- *specialist (various, eg. child care, work environment)
- *dentist
- *sales manager** |
| **Assisting / Administration** | - *sales assistant
- *administrator/customer service worker
- *safety guard
- *secretary/personnel assistant** |
| **Computing, engineering and science professionals** | - *software developer/geodete** |
| **Management**           | - *project/object manager
- *production manager** |
| **Teaching professionals** | - *teacher-various fields (no common denominator)** |
| **Education / Science / Research** | - *teacher-various fields (no common denominator)** |
| **Healthcare and life science professionals** | - *dentist
- *medical doctor (general)
- *nurse (general)** |
| **Electronics / Telecommunication** | - *electronics engineers
- *electrical fitter
- *software tester
- *technician (various)** |
3. Cross-border mobility: future labour market needs

3.1 Forecast of the labour needs in Estonia for the next 10 years

The table below gives a general overview of estimated labour needs in Estonia for the next years, indicating mainly the future trends in different sectors and fields in which there will be more jobs. While this does not show an extensive need for foreign labour in a linear manner, the growth sectors potentially offer more opportunities for both domestic and cross-border workers.

<table>
<thead>
<tr>
<th>Economic activity</th>
<th>Future needs (year 2017, in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td></td>
</tr>
<tr>
<td>…Manufacturing of wood and wood products</td>
<td>30.1</td>
</tr>
<tr>
<td>…Production of electronics and electrical equipment</td>
<td>…4.9</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>14.2</td>
</tr>
<tr>
<td>Education</td>
<td>12.2</td>
</tr>
<tr>
<td>Construction</td>
<td>10.7</td>
</tr>
<tr>
<td>Transport and storage</td>
<td>10.5</td>
</tr>
<tr>
<td>Agriculture, forestry and fishery</td>
<td>7.5</td>
</tr>
<tr>
<td>Human health and social work activities</td>
<td></td>
</tr>
</tbody>
</table>
| *The number of employees in health sector in Estonia is about three times lower than in developed countries. In the context of raising standard of living and ageing population, this sector needs more workers in the future.*
| [104]                                                  | 6.5                                    |
| ICT                                                    | *a conservative estimation as the industry representatives see a need for ca 50 000 | 2.6                                    |

employees by 2020 (from 17 500 employees in 2012)\(^{105}\)

Source: Ministry of Economic Affairs and Communications (2010) „Forecast for labour force needs until 2017”.

While the table does not include information about changes between current and expected employment level across sectors, the analysis of future trends shows that the most important sectors in which employment will increase and new jobs are created are the service sector, ICT, social work and healthcare. On the other hand, employment opportunities in the construction sector are expected to decrease compared to the level of 2007-2009. As a general trend, the number of specialists is likely to increase and the number of workers in elementary occupations will fall.\(^{106}\)

A recent study carried out by Turu-uuringute AS in 2011\(^ {107}\) focused on the Estonian employers’ estimations related to current and future need for foreign labour. The following sectors and occupations were outlined as the most important by the employers:

- Business services – sales and export managers/specialists, financial specialists
- IT specialists
- Engineers
- Health workers (nurses, doctors)
- Construction workers
- Teachers\(^ {108}\), lecturers, senior research fellows
- Welders, metal workers
- Farm workers
- Shipping and fisheries workers
- Workers in cultural fields

Reflecting on the interviews carried out in the context of the case study, it was outlined by many stakeholders that most Estonian employers do not have a very long-term view related to estimated labour demand in the future. In the interviews, the ability to look forward was to a certain extent associated with the size of the organisation and internal capacity for analysis (existence of dedicated human resources specialists). There is no very specific understanding about what kind of skills are needed in a certain field in some specific point in time such as 3 or 5 years from now. In some fields like IT the development is so fast that it is almost impossible to make very long-term predictions about the skills needed – this poses challenges for the education system as well.


\(^{106}\) Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017“.

\(^{107}\) Turu-uuringute AS (2011) „Study on foreign labour demand“.

\(^{108}\) The demand for primary school teachers is also mentioned in Unesco Institute for Statistics report “The global demand for primary teachers – 2011 Update”. Accordingly, Estonia is a country with moderate teacher gap. The number of teaching staff needed in 2015 is 6 900.
From the employers’ side there is a level of interest (also expressed in the interviews carried out in the context of the study) in bringing in more cheap labour from other countries. Related to this, complaints were expressed about the existing regulatory framework (the quota system limiting the number of workers coming from outside EU, compulsory salary rate to be paid (1.24 of Estonian annual average), need for approval from the Police and Border Guard Board, etc. On the other hand, complete removal of such restrictions might not be a very good idea strategically. Firstly, this contradicts the general goal of moving towards a more knowledge-based society and economy. It is potentially more beneficial to invest in bringing in specialists and experts that can reinvigorate work in Estonian businesses with new knowledge and experiences that local people can learn from. Secondly, while the employers report that there is a growing reluctance in Estonians to do certain types of work, the self-esteem and high expectations are not always justified. In this case, there is a need to ensure more realistic attitudes (and to facilitate bringing the ambitions in balance with real skills).

3.2 Priority areas for economic growth in Estonia

The identification of employment sectors and positions for cross-border mobility for further analysis should also take into account the strategic goals of the partnering countries in terms of future economic and social development. The Estonian Research and Development and Innovation Strategy 2007-2013 “Knowledge-based Estonia” defines three main priority fields related to strategic key technologies for future:

- information and communication technologies;
- biotechnologies;
- material technologies.

The implementation of these key technologies is expected to have “a profound effect on productivity growth and it strongly influences all aspects of society’s functioning”\(^{110}\). While the share of these sectors in the whole economy may currently not be too large, it is important to take into account related labour needs as they are perceived to be the drivers of the future economic growth and restructuring of the economic structure for increased share of higher value-added activities.

Out of the three priority technology fields, ICT can be considered the most relevant in the perspective of cross-border labour markets. In case of the Estonian ICT sector, the limitations of the domestic pool of labour and the shortage of skilled labour are currently seen as the main problem areas.\(^{111}\) Figure 4 illustrates a conservative estimate of the Ministry of Economic Affairs and Communications from, showing the need for ca 4400 additional positions to be filled in the ICT sector by 2017. As mentioned above, the IT companies themselves see a considerably larger need for additional workforce and expect the sector to grow to 50 000 people by 2020\(^{112}\). The biggest demand in this field is for qualified specialists with higher education background.

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\(^{111}\) Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017.”

\(^{112}\) Arvutimaailm (2012), „Fookus“. Available at: [http://www.am.ee/node/2680](http://www.am.ee/node/2680), 8.11.2012.
3.3 Future needs and meeting the demand: interviews

In the context of the interviews carried out, the following areas were outlined unanimously as perspective growth sectors (in which there is already now an interest in recruitment of additional workforce and active search for ways to ensure sustainability in terms of preparing new generations of skilled specialists)

- **ICT** – the role of IT is constantly increasing in all spheres of life, its growth is very much linked to the development of other sectors in the context of which ICT is widely applied throughout various operations, products and services.
- **engineers** in various fields (concrete fields mentioned: electronics, ship-building)
- **health and medicine workers** – a growing field in the perspective of the current demographic processes and challenges related to the aging society.

**Gene technology** was mentioned by several interviewees as a sector of growing opportunities. It is also a general view that **construction** will remain an important field for mobility – partly because it seems to provide opportunities for both highly skilled specialists as well as for those that lack specific qualifications. The number of jobs in the **services sector** is also expected to grow. In general it was agreed that the **future growth will be dependent in higher value-added** jobs and this will provide more opportunities both for domestic and foreign workers.

Regarding potential growth sectors, it is also important to note that as Estonia is a very small country, it is very **heavily influenced by any large “single” movements** – if there would be a large factory set up in any sector, this would mean that a lot of people would be needed and employed there. This influences the “big picture” quite significantly, e.g. Ericsson plant opened in Estonia lately had a very visible effect on the national statistics (share of the electronics industry in the whole economy and export numbers grew significantly).
As decreasing sectors, the following areas were pointed out: elementary occupations (due to automatisation of production, less workers are needed), agriculture, some areas where there is currently overproduction in the education system (e.g. public and business administration, economics, social sciences; on the other hand, such “generalist” education means that although the graduates would be facing difficulties in finding jobs that would correspond to their qualification 100%, they are probably more adaptable and can be employed in various types of “office-work”). Highly labour-intensive sectors with low productivity levels such as textile industry are also expected to decrease in the future.

In the context of the interviews (following the joint template for research) we also addressed the issue of meeting the future demand and the question of which professions are most desired by the current and future workforce. It is rather difficult to draw any specific conclusions related to this topic. As one of the interviewees put it ‘people want to find employment in the field that is related to their studies/ qualification’. This emphasises the role of education system and the pool of available curricula in shaping the supply side of the labour market.

Some interviewees reported a growing trend of Estonians being increasingly less willing to accept low income jobs and elementary work positions. Among other issues, there is a problem that the society values university education as such, which means that even people that would probably find better work and self-realisation opportunities through vocational education are trying to get a university degree. This results in overproduction of university graduates with too high expectations – while efforts have been made to promote and strengthen vocational education, changing the mindset takes time.

In planning supporting activities and measures for the development of cross-border mobility, the interviewees saw young people as the main target group to deal with. Younger people are generally more open and adaptable, have better language skills/ability to learn languages, 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 the home country. The interviewees reflected on the general perception in the society that those that have received state-subsidised education in Estonia should use their knowledge and skills as well as pay taxes in contribution to the development of their home country. In sum, all this means that there is a need for a well-designed strategy to minimise the risks involved in cross-border working patterns and at the same time ensure maximum benefits both at the level of the individual, for the country of permanent residence and for the country of employment.

### 3.3 Key sectors and professions for further analysis

Based on the analysis carried out, preliminary suggestions were made about key sectors and related professions to be analysed in the next phases of the Centralbaltic Job Ferry project.

The following criteria were used as basis for determining relevance of a sector/profession for further research:
1- current main fields of occupation for cross-border workers
2- labour needs forecast in Estonia
3- priority areas for economic growth in Estonia
4- Estonian employers´ estimations about current and future need for foreign labour
5- current general high labour demand (high number of vacancies in job search engines)
6- conformation of relevance from qualitative research (interviews)

The listing broadly follows ISCO-08 categorisation. Most important professions (highly relevant based on several criteria) are outlined in bold.

<table>
<thead>
<tr>
<th>Key Sector/ professions</th>
<th>Why important (criteria listed in order of importance)</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Construction + craft and related trades workers (incl. metal, machinery)  
- carpenters and joiners  
- welders  
- electrical mechanics and fitters  
- CNC operators  
- building construction labourers  
- house builders  
- plumbers and pipe fitters  
- mechanics  
- machine repairers  
- car and truck mechanics  
- mechanical machinery assemblers  
- electrical and electronic equipment assemblers  
- various types of skilled work | 1- current main fields of occupation for cross-border workers  
4- Estonian employers´ estimations about current and future need for foreign labour  
5- current general high labour demand (high number of vacancies in job search engines)  
2- labour needs forecast in Estonia  
6- conformation of relevance from qualitative research (interviews) | |
| Health and Social Work  
- doctors with different specialisations (medical practitioners)  
- nurses with different specialisations (children, geriatric, emergency)  
- psychotherapists | 1- current main fields of occupation for cross-border workers  
2- labour needs forecast in Estonia  
4- Estonian employers´ estimations about current and future need for foreign labour  
5- current general high labour demand | There is a large number of Estonian doctors and nurses working in Finland (a growing trend). Apparently, there is a growing demand for (foreign) health and social workers in Estonia as well. Many hospitals have already used medical |

114 Turu-uuringute AS (2011) „Study on foreign labour demand”.
115 Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017.”  
117 Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017.”  
118 Turu-uuringute AS (2011) „Study on foreign labour demand”.
- midwives
- dentists
- veterinarians
- other care specialists (e.g. assisting work in care and medical examinations; personal assistants)

<table>
<thead>
<tr>
<th>Education</th>
<th>Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- current main fields of occupation for cross-border workers</td>
<td>5- current general high labour demand (high number of vacancies in job search engines)</td>
</tr>
<tr>
<td>4- Estonian employers` estimations about current and future need for foreign labour</td>
<td>4- Estonian employers` estimations about current and future need for foreign labour</td>
</tr>
<tr>
<td>2- labour needs forecast in Estonia</td>
<td>6- conformation of relevance from qualitative research (interviews)</td>
</tr>
<tr>
<td>No prioritisation of criteria in listing – all equally represented</td>
<td>1- current main fields of occupation for cross-border workers</td>
</tr>
</tbody>
</table>

specialists from foreign countries to mitigate this problem.\(^{120}\)

Somewhat surprisingly, foreign teachers and lecturers form a group that is very well represented in Estonia\(^{124}\) (probably also due to the structural funds grants aimed at internationalisation of higher and vocational education). While there is a (relatively high) need for various education specialists, it is not possible to outline a clear common denominator. Therefore, from Estonian perspective, no specific field can be seen as a priority in the Job Ferry activities. We have strong doubts about the contribution of the Job Ferry platform for finding highly specialised experts – describing highly specialist job profiles for 2-3 experts needed would probably not yield meaningful results.


\(^{122}\) Estonian Academy of Security Sciences (2010), „Satisfying labour demand through migration in Estonia “, pp 44

\(^{123}\) Turu-uuringute AS (2011) „Study on foreign labour demand“.

\(^{124}\) Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017.”

\(^{125}\) Turu-uuringute AS (2011) „Study on foreign labour demand“.

\(^{126}\) Turu-uuringute AS (2011) „Study on foreign labour demand“.
<table>
<thead>
<tr>
<th>ICT</th>
<th>2- labour needs forecast in Estonia(^{127})</th>
</tr>
</thead>
<tbody>
<tr>
<td>- System analysts</td>
<td>4- Estonian employers’ estimations about current and future need for foreign labour(^{128})</td>
</tr>
<tr>
<td>- Software developers</td>
<td>3-priority areas for economic growth in Estonia(^{129})</td>
</tr>
<tr>
<td>- ICT operations technicians</td>
<td>5- current general high labour demand (high number of vacancies in job search engines)</td>
</tr>
<tr>
<td>- ICT user support technicians</td>
<td>2- labour needs forecast in Estonia(^{130})</td>
</tr>
<tr>
<td>- Application programmers</td>
<td>6- conformation of relevance from qualitative research (interviews)</td>
</tr>
<tr>
<td>- Database designers and administrators</td>
<td></td>
</tr>
<tr>
<td>- Systems administrators</td>
<td></td>
</tr>
<tr>
<td>- Computer network and systems technicians</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business services</th>
<th>4- Estonian employers’ estimations about current and future need for foreign labour(^{131})</th>
</tr>
</thead>
<tbody>
<tr>
<td>- export and trade managers, consultants</td>
<td>5- current general high labour demand (high number of vacancies in job search engines)</td>
</tr>
<tr>
<td>- commercial sales managers/ representatives</td>
<td></td>
</tr>
<tr>
<td>- accountants</td>
<td></td>
</tr>
<tr>
<td>- financial specialists</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hotels and Restaurants</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- cooks and chefs</td>
<td>1- current main fields of occupation for cross-border workers</td>
</tr>
<tr>
<td>- waiters and waiters</td>
<td>5- current general high labour demand (high number of vacancies in job search engines)</td>
</tr>
<tr>
<td>- bakers, pastry-cooks and confectionery makers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other service and sales workers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- hairdressers</td>
<td></td>
</tr>
<tr>
<td>- sellers, sales representatives</td>
<td></td>
</tr>
<tr>
<td>- security guards</td>
<td></td>
</tr>
<tr>
<td>- heavy truck and lorry drivers</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elementary occupations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- garden and horticultural labourers</td>
<td></td>
</tr>
<tr>
<td>- building construction labourers</td>
<td></td>
</tr>
<tr>
<td>- hand packers</td>
<td></td>
</tr>
</tbody>
</table>

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\(^{127}\) Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017“.

\(^{128}\) Turu-uuringute AS (2011) „Study on foreign labour demand“.

\(^{129}\) Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017“, pp 54.

\(^{130}\) Ministry of Economic Affairs and Communications (2010), „Labour need forecast until 2017“.

\(^{131}\) Turu-uuringute AS (2011) „Study on foreign labour demand“.
4. Some development suggestions

In this short chapter some key points from qualitative research are revisited, pointing to issues that deserve special attention and responses from various stakeholders in order to facilitate cross-border working in a way to achieve maximum benefits for all parties involved. The solutions range from broad-level policy responses to some very concrete actions that can be implemented rather easily, without a risk of running against any broader agenda in the future.

Partly related to the issue of not having a clear understanding of the long-term effects of cross-border mobility, one of the most problematic aspects related to this topic in Estonia is the level of cautiousness and prejudice related to cross-border working patterns in the society at large. While most people acknowledge the potential of positive effects, many still remain cautious at the same time. In order to have well-developed and mutually advantageous cross-border labour markets, there is a need to first ensure a good understanding of the dangers and opportunities involved and to plan and take balancing action at national government level. Once the national government and municipalities have a better 'big picture' view, they can also plan incentives and corrective actions to minimise potential negative effects. This would also help employers and employees to become both more open to cross-border working as well as support the development of better awareness regarding the risks related to such working arrangements.

To reach this situation, there is also a clear need to improve means for gathering adequate data and statistical information related to cross-border working. Similarly to earlier analyses, it can be stated that there is a strong need for co-operation between different countries (in the Central Baltic region in particular but also on the EU level in general). This concerns better understanding of both labour demand and supply in the neighbouring countries (related to foreign labour), and improvement of systems for macro level workforce planning both in individual countries as well as within broader regions.

As a next step, there is a need for further simplification of administrative procedures and processes that exist related to foreign labour in Estonia. In the context of the current analysis, it was also brought out by some stakeholders that the current Estonian migration policy creates obstacles for cross-border labour market development. As the system of hiring foreigners remains (to be perceived as) complicated for employers, it understandably results in less motivation to hire foreign workers. Although it always makes sense to search for ways to simplify various procedures, sometimes better practical information as well as introducing existing success stories can be very helpful.

Proceeding with more concrete action points related to facilitating cross-border working, while there is a lot of information available through EURES already, there is still room for development in structuring the information and bringing together different parts co-ordinated by various stakeholders in user-friendly way (focused on the needs and interests of the employees and employers as the main end-users). Having in mind skilled workers/specialists, easy-to-use online services and tools should be considered to facilitate mobility and help overcoming the perception that the process is too complicated (the interactive roadmap for recruitment of foreign labour (http://egoprise.ibs.ee/) serves as one example of such tools).
To overcome language barriers, more easily accessible publicly funded Estonian language courses should be made available to foreign employees and job-seekers who are motivated to learn the language. In case of Estonian-Latvian border region, mobile workers and their employers would benefit from support related to creating better transportation linkages (e.g. special bus services in case of a bigger number of commuters).

Turning to the issue of qualifications, most interviewees emphasised that information about education systems and formal qualifications is not that relevant from the perspective of the employers – real skills are what matter the most (a comment from one of the interviewees sums up this view, validating also the general approach of the Centralbaltic Job Ferry project:

'skills are more important [than formal qualification], and knowing from where (which countries) to get workers for which fields.').

In the context of Centralbaltic Job Ferry, efforts have been made to address this issue in the information portal http://cbjobferry.eu that is one of the key results of the project.

At the core of the portal is a database of more than 50 professions in each of the four CB Job Ferry partner countries, identified as most important in terms of current and future labour demand or oversupply in the regions in focus. The portal offers an opportunity for users to select and compare detailed information on countries or regions and professions according to the user's requirements and interests, including qualification requirements, education level as well as practical skills that the successful candidate for the job is normally expected to have in the different countries. Following the recommendation above, information from different sources is brought together and presented in a practical manner (step-by-step).

While providing easy access to relevant information is important, it is clear that it is always not enough. To ensure better match of the skills of college/university graduates there is a need to enhance the practical, on-site activities inside the curriculums and provide more and better internship opportunities (in co-operation with employers from neighbouring countries). Regarding the skills of new foreign employees, strengthening the support in the form of special training courses could be considered.
Conclusion

Coming to conclusions from the analysis carried out, and reflecting on the new qualitative research input in particular, it can be said that, first and foremost, it is important to reach a better understanding of the dynamics of cross-border mobility in Estonia. This is a precondition for channelling the future developments in a favourable way on both national and regional levels as well as on international (cross-regional) level.

The Estonian labour market is inherently limited as is the economy at large. For growth, development and competitiveness we have to have an international outlook in terms of the topic of employment, both from the viewpoint of a sending and receiving country. Therefore we have to work towards ways to overcome the current ambivalent attitudes related to cross-border mobility and develop a strategic approach in the development of cross-border labour markets together with our neighbouring countries.

The current country-specific analysis was carried out as an input to the comprehensive study on the situation of cross-border labour market in Estonia, Finland, Latvia and Sweden. The synthesis report developed by Nordregio (Sweden) provides an integrated overview of the challenges and opportunities in all involved countries, in the light of further development of a common cross-border employment market.
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• Statistics Estonia statistical database, „TT4645: 15-74 year old employment status by county 2011 - employed”.

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- Estonian Employers’ Confederation webpage. Available at: http://www.tooandjad.ee/.
- Estonian Trade Union Confederation webpage. Available at: http://www.eakl.ee.
- Labour Inspectorate webpage. Available at: http://www.ti.ee/.
- Police and Border Guard Board webpage. Available at: http://www.politsei.ee/en/.
- Tallinn University of Technology webpage. Available at: http://www.ttu.ee/university.
- Tallinn University webpage. Available at: http://www.tlu.ee.
- University of Tartu webpage. Available at: http://www.ut.ee.
Annex 1. Vacancies in main job search engines

Annex 1 provides a more detailed view of the analysis of vacancy listings in the three main job search engines of Estonia that formed a part of the research process (please see a separate Excel file).

Annex 2. Literature: additional sources

In the initial stage of the research process, all partners compiled a list of relevant sources regarding the field of cross-border work and development of a joint labour market in the Central Baltic region. Each partner focused on their home country. The Estonian overview served as a) an input to further research in Estonia; b) as means to give partners in other countries an overview of how much and what kind of information is available (the idea was to list also the content in national language which is not so easy to reach for non-Estonians); c) the reference list can also be used by any interested stakeholder in case of a deeper interest in certain topics. An overview of the key sources identified is presented below.

1. Existing studies on mobility, education, surveys with employers etc.

<table>
<thead>
<tr>
<th>Title and author</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment of Estonian residents abroad (by Siim Krusell) (Eesti residentide töötamine välisriigis (Siim Krusell))</td>
<td><a href="http://www.stat.ee/dokumendid/42625">www.stat.ee/dokumendid/42625</a></td>
</tr>
<tr>
<td>Title</td>
<td>URL</td>
</tr>
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<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Estonian emigration potential of the working age population in 2010</td>
<td><a href="http://www.kutsekoda.ee/fwk/contenthelper/10373139/10380783">http://www.kutsekoda.ee/fwk/contenthelper/10373139/10380783</a></td>
</tr>
<tr>
<td>(by Brit Veidemann)</td>
<td></td>
</tr>
<tr>
<td>(by Kristi Anniste)</td>
<td></td>
</tr>
<tr>
<td>(Välistööjõu vajaduse uuring (Turu-uuringute AS))</td>
<td></td>
</tr>
<tr>
<td>If men are working far – cross-border commuters families in Estonia</td>
<td><a href="http://www.tlu.ee/files/arts/7224/BA_Ag514b1655198e3619326a98cc98a1ba0.pdf">http://www.tlu.ee/files/arts/7224/BA_Ag514b1655198e3619326a98cc98a1ba0.pdf</a></td>
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<td>(by Age Viira)</td>
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<td>Improving the capacity to anticipate EU-wide labour market and skills</td>
<td><a href="http://www.eu-employment-observatory.net/resources/reviews/NationalArticles/Estonia-AutumnReview2008.pdf">http://www.eu-employment-observatory.net/resources/reviews/NationalArticles/Estonia-AutumnReview2008.pdf</a></td>
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<td>requirements. Contributing to the EEO Review: Autumn 2008</td>
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<td>(by Reelika Leetmaa)</td>
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<td>(Tööturu ülevaade (Natalja Viilmann))</td>
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<td>Labour market in the second half of the economic crisis</td>
<td><a href="http://www.stat.ee/dokumendid/55318">www.stat.ee/dokumendid/55318</a></td>
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<td>(by Yngve Rosenblad)</td>
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<td>(by Jaanika Meriküll)</td>
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<td>(by Niebuhr &amp; Stiller)</td>
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<td>ethnic minorities in Europe (by CEDEFOP)</td>
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<td>(by Brit Veidemann)</td>
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<td>Commissioned by Estonian Ministry of Social Affairs</td>
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<td>(By Kerly Esenberg, Katrin Humal, Uku Varblane, Janika Alloja)</td>
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<td>Regional labour market: higher unemployment</td>
<td><a href="http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS">http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS</a></td>
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<td>Rates and increasing disparities in 2010</td>
<td>-SF-11-060/EN/KS-SF-11-060-EN.PDF</td>
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<td>Survey on domestic mobility (by The Centre for Applied Social Sciences (CASS) in the University of Tartu) (Tööjõu siseriikliku mobiilsuse uuring (Tartu Ülikooli Sotsiaalteaduslike rakendusuirungute keskus RAKE))</td>
<td><a href="http://www.ec.ut.ee/et/rakendusuirungud/teostadud-projektid">http://www.ec.ut.ee/et/rakendusuirungud/teostadud-projektid</a></td>
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<td>The global demand for primary teachers – 2011 Update (by Unesco Institute for Statistics)</td>
<td><a href="http://www.uis.unesco.org/FactSheets/Pages/Education.aspx">http://www.uis.unesco.org/FactSheets/Pages/Education.aspx</a></td>
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<td>Trends in the Labour Market of Crisis (by Mai Luuk) (Arengutrendid kriisijäa tööturul (Mai Luuk))</td>
<td><a href="www.stat.ee/dokumendid/37730">www.stat.ee/dokumendid/37730</a></td>
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2. Regulations and policy documents

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| (Tööjõuvajaduse prognoos aastani 2014  
(Majandus- ja Kommunikatsiooniministeerium)) | Forecast for labour force needs until 2018 (by Ministry of Economic Affairs and Communications)  
(Tööjõuvajaduse prognoos aastani 2018  
|-------------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| „Research on identification of labour force and training needs in order to move towards knowledge-based economy“  
(by R. Eamets, J. Meriküll, M. Kallavus, K. Kaarna, T. Kask)  
(Eesti Vabariigi Majandus- ja Kommunikatsiooniministeeriumi arendustöö nõustamisteenus “Teadmistepõhise majanduse suunas liikumiseks vajaliku tööjõu- ja koolitusvajaduse väljaselgitamise uuring”  
| The main challenges for the development of government policies (by State Chancellery)  
(Valitsuse politikate arendamise peamised väljakutsed (Riigikantselei)) | The main challenges for the development of government policies (by State Chancellery)  
(Valitsuse politikate arendamise peamised väljakutsed (Riigikantselei)) | http://www.valitsus.ee/et/riigikantselei/eesti2020/valjakutsete-raport |