





# Increased exchange in the Building Sector

Recognition of professional qualifications in the  
Building Process

*Imants Matiss*

### **Increased exchange in the Building Sector**

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# Preface

This project is a continuation or the second stage of a similar survey under the title “Validation of competency requirements imposed on certain actors in the building process”. The subject of the project is to elaborate recommendations for a transparent and improved system for recognition of professions. On the one hand, a improved system should encourage to simplify procedures for recognition and to reduce bureaucracy in document processing. On the other hand, the recognition procedures have to be selective enough in order to separate and eliminate inadequate qualifications and thus to guarantee safety of construction works. In this regard it is apparently too early to eliminate completely regulated professions in the building sector. Obviously, obsession with simplification of procedures should not endanger safety of construction works. For that reason, finding balance between a sufficiently simple system and high level of safety should be a route leading to the solution, which meets expectations of all interested parties. The answer to the question to what degree the Working Group has succeeded in reaching that objective should be given by supervising authorities.

Descriptions of the system and the situation in the countries concerned in this project are examined in detail and are more concrete, focusing on different categories of professions (architects, civil engineers, technicians etc.) in comparison with the first report. More specific and scrutinised information are given regarding requirements on qualification and registration in the field of building. Special attention was paid to attain recommendations for procedures to be followed today, which would contribute to increased exchange within the construction sector in the region.

The application for the project was several times discussed in meetings of the Steering Group, starting with the meeting in Krakow in September 2006 while it was shaped in the present content and approved by the Steering Group in February 2007. The global objective of the project, as it is formulated in the project application is to promote increased transparency of recognition procedures, particularly making national systems easier to manage and more clear, quick and friendly to use, improving transparency of qualifications to ensure that customers can rely on a more comprehensive service.

Taking into account a limited budget for the project and wide geographical distribution of Working Group members, communications between them were carried out by inquires and conventional communication means. The work was organised in two steps or by means of two inquiries. Goals of the first inquiry (see Questionnaire 1 in Appendix A) were:

- To assess the results of the first stage in order to exploit it for the present project and, if necessary to update existing information
- To acquire the opinion of WG members for improvement of work in order to promote effectiveness and efficiency of communications, particularly by means of questionnaires (contents and structure)
- To clarify the position of WG members regarding presentation of information.

Answers received from WG members disclosed a lesson obtained from fulfilment of the first stage. So, several WG members expressed a view that information should be somehow standardised, as previous experience has shown that content and amount of data from different countries in the report of the first stage vary quite much. Recommendations were given also to avoid a situation that very detailed and long texts are alongside with very short wording containing mainly references to legal or other sources of information. Opinions also were expressed that summaries of the information gathered should be presented in a tabular format (Finland, Latvia, Sweden). This would facilitate comparisons between different countries and, at the same time, highlight the differences between the countries. These recommendations were observed by structuring Questionnaire 2 and by compiling the present report.

Therefore, the next inquiry (see Questionnaire 2 in Appendix A) was provided directly for fulfilment of tasks of the project and was based on recommendations obtained from WG as answers to Questionnaire 1. Structure of Questionnaire 2 is built up in such way that question formulations represent expected characteristics of the recognition system, which would describe a clear and improved scheme providing that answers will reflect questions sufficiently thorough and straightforward. However, additional interpretations and lengthy exchange of queries between WG members and the project management proved to be necessary during editing of received answers.

The report comprises description of national contributions in text and a tabular format. The text segment contains sections and each of it is devoted to full description of the corresponding national system. The description includes characterisation of the existing situation as a basis for improvement, as well as specific considerations for this purpose. Furthermore, the sections are divided in subsections corresponding to the questions of Questionnaire 2. Sections are arranged by countries in alphabetical order.

Full overview of the national systems concludes with summaries, incorporated into the tabular format. Conclusive part of the report comprises suggested models of the recognition system, prototype for alignment of qualifications obtained in different countries, as well as conclusions and recommendations.

The present report reflects results of cooperation and contributions of all active members of the Working Group.

The project was executed by the Working Group comprising representatives of seven out of nine countries (see Appendix B). Norway abstained at the very beginning of the work and Poland could not fulfil the obligation due to illness of the person responsible. This report is a result of joint actions of the all members of the Working Group.

The project management comprises a project leader, Professor Imants Matiss and a technical secretariat located at the Certification Centre of the Latvian Academy of Sciences. The project leader and the management have been approved by the Steering Group.

Riga in March, 2008

*Imants Matiss*  
Project leader



# Summary

The global objective of the project is to promote increased transparency of recognition procedures, particularly making national systems easier to manage and more clear, quick and friendly to use, improving transparency of qualifications to ensure that customers can rely on a more comprehensive service.

Results of the project are intended to provide sufficient information on rules for free movement of qualified labour force and to make them available in all participating countries. Under rules should be understood conditions of recognition formulated in a clear and concise way, which would be exploited twofold. First, applicants obtained qualification in their home country and seeking job abroad should be aware of provisions in the recipient country. Second, relevant administration of the recipient country should be at disposition and provided with procedures how to deal with applications of different job seekers with various confirmations about their qualification. Improvement of recognition systems consists in simplification of recognition procedures and reduction of bureaucracy in document processing, taking into account that these procedures are sufficiently selective in order to separate and eliminate inadequate qualifications and thus to guarantee safety of construction works.

Execution of the project was organised in two steps or by means of two inquiries, which have covered assessment results of the first stage in order to exploit it for the project, as well as acquisition of recommendations for the recognition system in compliance with direct objectives of this particular project. The questionnaires have a strict structure of description. Particularly the second questionnaire includes eight characteristics. These are:

- Role of the state in governing the recognition process;
- Role of non-governmental institutions related to the recognition problems;
- Considerations about regulated engineering and technician professions;
- Qualification indicators and acceptance criteria for regulated professions;
- Alignment of qualifications obtained in different countries;
- Types of official qualification confirmation;
- Approval procedures of qualifications to secure safety of construction works and
- Proposals for potential improved systems.

The recognition process in all responding countries is regulated by legislation and governed at least by one ministry. Professional non-governmental institutions and associations take part in the recognition process as well. However, the scale and level of activities of professional associations in participating countries differs significantly – as of recommendations for awarding engineer titles (Iceland), providing training and disseminating information (Finland), awarding professional qualifications (Estonia), assessment of professional knowledge and expressing opinions during qualification tests for national professionals (Lithuania) as far as accredited certification according to the European standard (Latvia).

Even greater variety is observed regarding regulated engineering professions: not regulated at all (Denmark), voluntary recognition of key qualifications (Finland), compulsory recognition of a few high responsibility qualifications (Iceland, Sweden), certified qualifications for almost all building profiles (24 titles in Lithuania and 29 titles in Latvia). Architect's profession should be regulated in all Member States according to requirements of the New Directive. However, not all countries gave notice to that obligation. Qualification indicators in all participating countries follow the so called Bologna principles in main points.

As it follows from results of the inquiry, all countries might be divided in two groups depending on the approach applied to guarantee safety of construction works. The first group exercises a liberal (soft) approach, based on mutual recognition of education and voluntary certification of engineering and technicians professions (Denmark, Finland, Iceland and Sweden). The second group apply strict (hard) approach requiring permit to the market only by an approval or certificate (Estonia, Latvia and Lithuania). The liberal system is the most attractive from the point of view of facilitating mobility of professionals, which is also the key objective of the project and of global importance in the scale of the European Community. Safety of construction works in this case is secured by entrusting responsibilities to supervision operators, building developers and building authorities.

The main argument of the hard-line defenders is necessity to guarantee safety of construction works by high qualified, reliable and approved operators in all crucial positions. Competence is assessed by the State authorised approval procedures. However, competence criteria introduced in these procedures have only local character, as there is no harmonisation of competence requirements achieved even at the regional (Baltic) level.

Recognition systems of two countries (Denmark and Finland) are proposed as models for the liberal system. The Finnish model has a more detailed description, whereas the attractive feature of the Danish model is availability of information on recognition issues in the Internet medium. As a model for hard line supporters, would be a combination of systems of all three Baltic countries, implementing the most appropriate elements of each

country, particularly introduction of profession standards (Estonian model), approval procedures in accordance with the European standards (Latvian model) and the legislative structure from the Lithuanian system. Assessing advantages of these approaches, it is impossible to give priority to one of them, as in both cases developers of the recognition system were guided by necessity to provide high level of security for construction. Only the means selected for reaching these goals are different.

Results of the project are expressed as coordinated (between countries of the Northern Dimension region) recommendations for correspondent authorities responsible for the building sector of each participating country in order to submit to the European Commission in compliance with requirements of the New Directive. The following target groups would be interested in results of the project:

- National institutions empowered for initiation of legislation;
- Authorised management bodies for administration of the recognition process and
- Professional associations and non-governmental institutions involved in development of competence criteria for different qualifications, compiling training programmes and recognition requirements.

Finally, results of the project would be of interest for authorised governmental institutions responsible for alignment of requirements of the New Directive (2005/36/EC) with national legislation. Free mobility of labour force is a crucial problem not only for the Nordic Dimension countries, but also for the whole European Community (one of the four basic principles of the EU) and the New Directive is an attempt to summarize experience of more than thirty years in this area (see more in detail in the report of the first stage – TemaNord 2007:502).

However, the New Directive in its present shape does not regulate engineering professions. The only regulated profession related to building area is architecture, which is attributed to so called professions of automatic recognition and conditions for automatic recognition for that profession are already set (see Article 46). It means that, if these conditions are met, recognition shall be granted without additional approval procedures and any bureaucracy. Further on, initiative of the Directive is to appeal to communities of critical professions (and civil engineering is one of them) to create similar system in order to simplify recognition procedures. In other words, the intention is to develop a clear and improved system of recognition in specific areas of economy. Nevertheless, the project is not intended for implementation of the New Directive. Results of the project (no matter how defined) will be a contribution to alignment of national legislation necessary to requirements of the Directive. Particularly, the project is related to one requirement (Article 15) of this docu-

ment and only for one specific profession (Building), however very important (citation from Article 15 follows):

For the purpose of this Article, 'common platforms' is defined as a set of criteria of professional qualifications which are suitable for compensating for substantial differences which have been identified between the training requirements existing in the various Member States for a given profession. These substantial differences shall be identified by comparison between the duration and contents of the training in at least two thirds of the Member States, including all Member States which regulate this profession.

# 1. Situation Analysis in Denmark and considerations for improvement

## 1.1 Role of the state in governing the recognition process

Ministry of Education is the main authority for recognition of professional qualifications in Denmark. Administration of this process is carried out by the Minister for Education on the basis of the following legislative act: Assessment of Foreign Education Qualifications etc. Act (Consolidation Act), no. 371 of 13 April 2007.

Subordinated documents are Orders of the Minister of Education:

- Assessment of Foreign Education Qualifications etc. Order No. 602 of 25 June 2003, amended by Order No. 448 of 10 May 2007;
- Qualifications Board Order No. 447 of 10 May 2007;
- Act on Access to practice certain professions in Denmark (Lov Om adgang til udøvelse af visse erhverv i Danmark), No. 334 of 20 March 2007;
- Announcement on the recognition of professional qualifications (Bekendtgørelse Om anerkendelse af erhvervsmæssige kvalifikationer), No. 1174 of 10 October 2007 (includes implementation of parts of the European Directive 2005/36/EC on the recognition of professional qualifications).

### *1.1.1 CIRIUS*

CIRIUS is an agency under the Danish Ministry of Science, Technology and Innovation responsible for co-ordinating the competent public authorities' activities and for ensuring that Directives, including the New Directive are implemented in a uniform manner in the vocational areas and professions in question.

**Table 1. Role of the government in Denmark**

Name of the institution (Ministry, Council, Board, etc.)	Responsibilities and authorizations (functions, tasks, authorities, etc.) for each institution	Reference to legislation acts, regulations (only titles and acceptance year)
1. Ministry of Education	Administration of the recognition process is carried out by orders of the Minister for Education.	Consolidation Act no. 334 of 20 March 2007 On the access to certain occupations in Denmark.  Consolidation Act, no. 371 of 13 April 2007 On assessment of Foreign Qualifications etc. Act.  Orders of the Minister for Education: - Order No. 602 of 25 June 2003, amended by: Order No. 448 of 10 May 2007 On assessment of Foreign Qualifications etc.  - Order no. 1174 of 10 October 2007 On the recognition of professional qualifications etc.  Qualifications Board Order, no. 447 of 10 May 2007.
2. CIRIUS, an agency of the Danish Ministry of Science, Technology and Innovation.	Coordinating the competent public authorities' activities and ensuring that the Directives, including the New Directive are implemented in a uniform manner in the vocational areas and professions in question.	See the List in Table 2.
3. Competent public authorities	Competence to make the actual decision on recognition of the right to practise a regulated profession.	See the List in Table 2.
4. The Qualifications Board	Appeals against decisions about the transfer of credit gained through foreign or Danish educational institutions to Danish educational programmes.  Decisions about pre-approval of the credit transfer.  Considers appeals against decisions regarding recognition of prior learning.	See the List in Table 2.

### *1.1.2 Competent public authorities*

When a profession is regulated, various statutory requirements concerning professional qualifications have to be met. If a person wants to work in Denmark on the basis of foreign qualifications, he or she must apply to get the qualifications recognised by a Danish authority. This authority is called the competent public authority and it has the competence to make a decision on whether foreign qualifications can be recognised. If the foreign qualifications are recognised, an authorisation is issued and you are free to practice your profession. If your profession is not regulated no official approval is required. The competent public authorities and the regulated professions in the construction sector are listed in Table 2.

Under the Assessment of Foreign Education Qualifications Etc. Act, the public authorities are to obtain an assessment from CIRIUS as a basis for their decisions. This has the effect that the competent public authorities are to follow the agency's assessment of applicants' qualifications obtained through education and then make a decision on the recognition of their overall qualifications (obtained through education, professional experience etc.). In practice, this means that applicants from EU and EEA member states in most cases should send their application to CIRIUS, who forwards the application to the relevant competent public authority. Citizens from non EU or EEA states should always send their application to CIRIUS.

The Assessment of Foreign Education Qualifications Etc. Act lays down certain exemptions from the duty to consult the agency. Public authorities may also be granted a full or partial exemption from the general duty to obtain the agency's assessment of the educational qualifications of an applicant who is applying for the right to practise a regulated profession. This applies where it has been substantiated that the competent authority's procedures, criteria and practice sufficiently ensure that holders of foreign qualifications will receive recognition of these qualifications.

The competent public authorities submit an account of their decisions to the CIRIUS at the end of each year.

### *1.1.3 The Qualifications Board*

The Qualifications Board is an appeals committee for decisions regarding credit transfer and recognition of prior learning in Danish Educational Programmes.

The Qualifications Board considers appeals against decisions about the transfer of credit gained through foreign or Danish educational institutions to Danish educational programmes, as well as decisions about pre-approval of such credit transfer. Moreover, the Qualifications Board considers appeals against decisions regarding recognition of prior learning. Foreigners as well as Danes can appeal decisions.

The Qualifications Board can handle an appeal against:

- A decision regarding the transfer of credit from a foreign educational program to a Danish educational programme as long as an applicant is enrolled or has applied to be enrolled on the Danish educational programme and this Danish educational programme belongs under one of the three ministries: The Ministry of Education, the Ministry of Culture or the Ministry of Science, Technology and Innovation.
- A decision regarding the transfer of credit from a Danish educational programme, to another Danish educational programme, as long as an applicant is enrolled or have applied to be enrolled on the Danish educational programme, which he/she wishes to be partly exempted from through the credit transfer, and this Danish educational

programme belongs under either the Ministry of Education or the Ministry of Culture.

- A decision regarding the pre-approval of credit transfer from a foreign or Danish educational programme to a Danish educational programme as long as an applicant is enrolled on the Danish educational programme, which he/she wishes to be partly exempted from through the credit transfer, and this Danish educational programme belongs under either the Ministry of Education or the Ministry of Culture.

## 1.2 Non-governmental institutions related to the recognition problems

General Workers' Union in Denmark, Environmental Department and Danish Contractors' Association.

## 1.3 Considerations about regulated engineering and technician professions

The profession of civil engineers and architects falls under special rules on automatic recognition in the EC directive from 2005. An applicant from a EU or EEA state, who is qualified to practice these professions in the home country will automatically get his or hers qualifications recognised.

The professions in the building sector that are regulated and needs formal recognition from a Danish authority are listed in Table 2.

In principle, an applicant is allowed to practice a profession that requires recognition in Denmark even though he/she has not gone through the Danish process of recognition. It does, however, require that the work executed will be subsequently approved by an authorised person. In practice the rule is not utilised as the requirement, concerning approval by an authorised person makes it difficult.

**Table 2. Regulated vocational professions (compulsory recognition – engineering and technician professions are not regulated)**

List of regulated professions	Competent authority granting recognition	Principles for inclusion in the regulated category	Reference to legislation acts, regulations (only titles and acceptance year)
Building Site Coordinator	Danish Working Environment Service	Are in the List of regulated professions	Consolidation Act no. 334 of 20 March 2007 On the access to certain occupations in Denmark. Order no. 1174 of 10 October 2007 On the recognition of professional qualifications etc.
Energy Consultant	Danish Energy Authority		
Certified Electrician, Gas, Plumbing and Sanitation Fitter, Sewerage Contractor, Asbestos removal	Danish Safety Technology Authority		
Crane Driver, Polyester casting, Welder – stainless steel welding, Work with asphalt materials, Work with epoxy and isocyanates, Work with styrene, Boiler Attendant, Cooling company, refrigeration engineer-/inspection of cooling systems, Lift inspection, Fork Stacker (certificate category A), Fork Lift Truck Driver (certificate category B)	Danish Working Environment Service		
Haulage Contractor	Road Safety and Transport Agency		
Well borer	Danish Environmental Protection Agency		

**Table 3. Non compulsory recognition of professions (granting a degree certificate)**

List of regulated professions (non compulsory recognition)	Authority granting recognition	Principles for inclusion in non regulated category	Reference to legislation acts prescribing empowerment
Civil engineer and architects professions from EU and EEA Member States.	No recognition necessary	Do not comply with requirements of regulated professions.	Consolidation Act, no. 371 of 13 April 2007 On assessment of Foreign Qualifications etc. Act. Order No. 602 of 25 June 2003, amended by: Order No. 448 of 10 May 2007 On assessment of Foreign Qualifications etc.
Professions from countries outside the EU and the European Economic Area (EEA).	CIRIUS	Applicants are from countries outside the EU and the European Economic Area (EEA).	Consolidation Act, no. 371 of 13 April 2007 On assessment of Foreign Qualifications etc. Act. Order No. 602 of 25 June 2003, amended by: Order No. 448 of 10 May 2007 On assessment of Foreign Qualifications etc.

## 1.4 Qualification indicators and acceptance criteria for regulated professions

Qualification indicators for regulated professions include requirements for admission, full time education and additional training programmes. The requirements for the regulated professions are very different (for more details see Appendix) and may vary from completed 9th grade for an certified electrician, to prior education within the respective sector for asbestos removal and Plumbing and Sanitation Fitter and addition of minimum of 2 year work experience for the later. A wide range of requirements involves additional training – from a 2 day training course for Epoxy training and isocyanides, up to 1 year and 60 ECTS for Gas, Plumbing and Sanitation Fitter. The examination can be taken at an Adult Vocational Training Centre (AMU), normally on completion of a course.

**Table 4. Qualification indicators for regulated vocational professions (not requiring levels at university)**

Professional title, engineer category	Full time education (at university - years, ECTS-credits)	Additional training within specific technical fields
Asbestos removal	4 days, examination by AMU <sup>1</sup>	Prior education within the construction sector
Building site coordinator	37 hrs. Course	
Crane driver	4 days, examination by AMU	
Certified Electrician	4-4,5 years for the full degree	
Gas, Plumbing and Sanitation Fitter	1 year – 60 ECTS	Prior education within plumbing (or similar educations) and minimum of 2 year work experience.
Sewerage contractor	Relevant experience or education	App. 17,5 weeks, examination by AMU
Epoxy training and isocyanates		2 days training course, examination by AMU
Fire safety/Inspector	Prior courses on fire safety	20 days course at Danish Emergency Management Agency

## 1.5 Alignment of qualifications obtained in different countries

Alignment of qualifications could be satisfactorily aligned through an assessment of content, length and scope of educations in different countries. Differences in qualifications can in some cases be compensated for by taking supplementary courses or aptitude tests.

### 1.5.1 Recognition of foreign qualifications for education and training

#### Admission

Each educational institution makes its own decision concerning admission of applicants with foreign qualifications. The institution must however, use the CIRIUS agency's assessments of foreign qualifications as basis when deciding whether foreign qualifications meet the general entry requirements. Foreign applicants with the same level of education and qualifications as Danish applicants must be treated on an equal footing according to this assessment.

CIRIUS lays down guidelines for the assessment of foreign qualifications for entry to higher education, including conversion of subject levels and grades. This is done in cooperation with the Ministry of Education's upper secondary school department and, to the widest possible extent, in cooperation with the institutions. The guidelines are published in the so called Eksamenshåndbog (in Danish).

<sup>1</sup>AMU - Adult Education and Continuing Training

#### Credit transfer

Each educational institution makes the decision whether foreign qualifications can replace parts of a Danish educational programme. The educational institution may use an assessment from CIRIUS as a guideline to its decision on credit transfer. Holders of foreign qualifications may complain about educational institutions' credit transfer decisions to the Qualifications Board (see page 16). A decision made by the Qualifications Board is the final and conclusive administrative decision.

#### Competence assessment

In connection to study periods and programmes in the field of vocational education and training and in adult vocational training courses, competence assessment procedures may be applied. Here, applicants can have their qualifications assessed and credited whether they have been acquired through training and educational programmes, work experience or in some other way.

#### Conferring of Danish qualifications

The individual educational institution decides whether foreign qualifications can be recognised as fully equivalent to a specific Danish qualification. In practice, however, this is not likely to be done without the applicant taking a Danish examination. Danish universities normally do not confer degrees unless a significant part of the educational programme has been taken at a Danish educational institution.

#### Other recognition of foreign qualifications for further education and training purposes

In accordance with the existing legislation (see p.15 Danish legislation), all holders of foreign qualifications are entitled to have their qualifications assessed by CIRIUS with a view to further education and training in Denmark. However, holders of foreign qualifications who have applied for a credit transfer cannot receive an assessment from CIRIUS for a decision on such an application. The assessments are made by CIRIUS. They can be used directionally as a guide, but the assessments are binding in certain cases as described above.

#### Translation of occupational titles

Most of the English terms listed are those used by the Danish competent authorities. Where an official translation was not available, an indicative translation is provided.

**Table 5. Alignment of qualifications (adequacy of education and experience)**

Professional title, engineer category	Criteria for alignment	Eligibility to public posts	Authority providing alignment
University titles	<p>Recognition of foreign qualifications for education and training purposes:</p> <p>1) Original diploma/certificate in original language;</p> <p>2) Transcript/mark sheets-/list of subjects passed in original language;</p> <p>3) Translation of diploma/certificate (unless the document is in Danish, Norwegian, Swedish, English, French or German);</p> <p>4) Translation of transcript/mark sheets/list of subjects passed (unless the document is in Danish, Norwegian, Swedish, English, French or German);</p> <p>5) Documentation of change of name, e.g. marriage certificate, if your name has changed since the documents were issued;</p> <p>6) Any previous assessment.</p>	<p>For governmental functions</p> <p>Danish nationality may be a requirement.</p> <p>These professions are not covered by any European, Nordic or bilateral agreements on professional recognition.</p>	<p>Educational institution makes decision:</p> <p>– On admission of applicants with foreign qualifications;</p> <p>– On credit transfer of foreign qualifications to replace parts of a Danish educational programme</p> <p>CIRIUS agency – assessment of foreign qualifications guide-lines</p> <p>The Qualifications Board – appeals against decisions: About the transfer of credit and Regarding recognition of prior learning.</p>

## 1.6 Types of official qualification confirmation

### 1.6.1 Qualification frameworks

A qualification framework is a systematic description of qualification levels and types within a given education system, mainly based on a description of learning outcomes. In higher education, there is a Danish as well as a European qualification framework, and preparations are being made to extend the descriptions to all of the education system.

Qualifications frameworks increase the transparency and comparability of qualifications and may thereby:

- Facilitate credit transfer and mobility on a national and international scale;
- Facilitate recognition of foreign qualifications;
- Make the degree structures more transparent;
- Improve the basis for educational planning and evaluation.

### 1.6.2 Certificate Supplement

The Certificate Supplement is to help holders of vocational qualifications who wish to apply for a job or education course abroad and foreign employers who consider employing the holder of a Danish vocational qualification. The Certificate Supplements follow a European template developed in a joint effort to promote transparency and mobility.

**Table 6. Official confirmation of qualification**

Scope of professional activities	Criteria for confirmation	Parties involved in confirmation
All professions listed in Table 3, EU and EFTA countries.	Criteria under EU rules: Completed five years of higher education; Three of which were spent in an EU or EFTA country; Profession is regulated in that country; Completed professional education, or most of it, in one or more EU/EFTA countries; Fully qualified in the home country to practise the same profession. EU rules do not apply, if only two years of an applicant's education is spent in an EU or EFTA country.	CIRIUS
All professions listed in Table 3, countries outside EU and EFTA.	Applications not covered by EU rules: Documents supporting an applicant's qualifications; Document requirements are listed in the context of the individual professions.	CIRIUS
Regulated professions listed in Table 2.	Documents confirming education, professional experience etc.	Competent public authorities: Decision on recognition of the right to practise a regulated profession.  CIRIUS assessment of a basis for decisions.

Certificates Supplement to Danish vocational education and training, particularly in building area covers such professions as *civil construction workers, pavers, painters and decorators, concreters*, different types of *electricians*, metalworkers, *plumbers, etc.* Any person completing a Danish vocational training programme can obtain a Certificate Supplement in Danish, English, German or French. The educational institution or trade committee (representing the social partners) provides the supplement together with the examination certificate or certificate of apprenticeship.

For each programme, the Certificate Supplement gives a short, up-to-date summary.

## 1.7 Approval procedures of qualifications to secure safety of construction works

### 1.7.1 Professional/occupational recognition

Recognition of qualifications in regulated professions

Within so-called regulated professions, authorisation or other formal approval is required for a person to be able to practise the profession in question based on foreign professional qualifications. A profession is a regulated profession if it is stipulated either directly or indirectly in statutory or administrative provisions that a certificate or diploma is required for a person to practise the profession in question (see Table 2 List of regulated professions):

- Competent public authorities (see Table 2) decide whether the terms and conditions for practising the profession have been met. However, the public authorities are to obtain an assessment from CIRIUS as a basis for their decisions and are to follow the agency's assessment of applicants' qualifications obtained through education and then make a decision on the recognition of their overall qualifications (obtained through education, professional experience etc.).
- Citizens from countries outside the EU and the European Economic Area (EEA) are to apply to CIRIUS.
- Regarding citizens from the EU and EEA Member States, the right to practise most of the regulated professions is covered by the European Directive 2005/36/EC.

The co-ordinating function for the implementation of the European Directive is handled by CIRIUS. For most professions, EU, EEA and Swiss citizens therefore send their applications to CIRIUS, which forwards the applications to the correct public authority. For access to certain professions, however, the applications must be sent directly to the competent public authority: in the building area only for architects. For these professions, the Directive stipulates a principle of automatic recognition on the basis of coordination of minimum training conditions.

### *1.7.2 Recognition of foreign qualifications for general employment purposes*

In accordance with the existing legislation, all persons with foreign qualifications are entitled to have their foreign qualifications assessed by CIRIUS with a view to employment in Denmark. This applies to qualifications at all levels.

In addition, CIRIUS's assessments are binding in certain labour market contexts. The agency's assessments of the qualifications of holders of foreign qualifications are to form the basis for:

- Membership of unemployment funds
- Public authorities' decisions on employment.

Unemployment funds and public authorities must follow the agency's assessments in these situations. This means that they are to consider applica-

tions for membership of an unemployment fund and job applications on an equal footing with applications from persons with Danish qualifications at the same level of education as that stated by CIRIUS in its assessment.

Furthermore, in connection with employment in the public sector in accordance with the AC collective agreement (AC: the Danish Confederation of Professional Associations), the level at which a specific foreign qualification belongs is to be assessed by CIRIUS before the employer can make a final decision on the pay grading of the employee in question.

### *1.7.3 Procedure for access to regulated professions*

The applicant is entitled to have his/her application dealt with under EU rules if three conditions are met:

- The applicant is a citizen of an EU or an EFTA country.  
This applies, for example, if the applicant has completed five years of higher education, three of which were spent in an EU or EFTA country, and the applicant's profession is regulated in that country. If, on the other hand, only two years of your education were spent in an EU or EFTA country, EU rules do not apply.
- The applicant has completed his/her professional education, or most of it, in one or more EU/EFTA countries.
- The applicant is fully qualified in his/her home country to practise the same profession as you now wish to practise in Denmark.

An applicant's should check if the profession is on the List of regulated professions in Denmark. Applications for recognition in a regulated profession under EU rules in the case of certain professions should be sent directly to the competent authority. In the case of all other regulated professions, not covered by EU rules the application should be sent to CIRIUS.

### *1.7.4 Application and recognition processing*

The application procedure is common for all applications:

- Application shall be filled in a special form obtained from the competent authority or on the Internet.
- Documentation supporting the applicant's qualifications should be submitted in two copies. More in details, requirements for document are listed in the context of the individual professions.
- Administration fee is not charged at the stage of application, but some authorities charge a fee for issuing an authorisation. In this case the authority will tell the applicant how much and how to pay.
- The competent authority must reach a decision on the application within four months of receipt of the application itself and any supporting documentation required.

- Assessment of Applicant's qualifications having foreign qualifications may be assessed and recognised in Denmark by several ways. Appropriate procedure depends on how the applicant plans to use his/her qualifications, particularly:
  - Continuing education
  - Seeking employment
  - Seeking admission to an unemployment fund
  - Being pay graded as a graduate in the Danish public sector.
- If the applicant wants recognition of Danish qualifications, the procedure using Danish qualifications abroad should be applied.

Application of recognition requires that the following documents are submitted (certified copies):

- Original diploma/certificate in original language,
- Transcript/mark sheets/list of subjects passed in original language. If no such transcript etc. is available, a list of the subjects studied and passed,
- Translation of transcript/mark sheets/list of subjects passed (unless the document is in Danish, Norwegian, Swedish, English, French or German),
- Documentation of change of name, e.g. marriage certificate, if your name has changed since the documents were issued,
- Any previous assessment.

## 1.8 Proposals for potential improved systems and presenting results of the survey

- Approach used for exchange of information (selection of experts, communication means, questionnaire, discussion, etc.) has been a weak link to gather information from so many different stakeholders.
- Regarding the structure of the communication means (Questionnaire) the quality of information seems to be fine – though, there seems to be some differences in how detailed the country descriptions are.
- No opinion on the quality of information gathered on all Nordic Dimension countries or on the quality of information on the situation in the respondent's country.
- No opinion on recommended model for recognition.
- The report seems to be very well structured and can also work as a basis of reference. However, it is not clear to the reader if the report gives all the information needed in a given case, as the country descriptions are not equally detailed.

The survey seems most fitted to be presented descriptively. The respondents ask for both descriptive and normative information and the survey is more an extensive inquiry which can be difficult to depict through tables etc., though it might be quite illustrative. Furthermore, the purpose of the project is to come up with recommendations, which seems most fitted to be presented descriptively.

### 1.9 Contact points for acquiring information

- CIRIUS, Fiolstræde 44, DK-1171 København K. Phone: +45 33 95 70 00. Email: [cirius@ciriusmail.dk](mailto:cirius@ciriusmail.dk); [www.ciriusonline.dk](http://www.ciriusonline.dk).
- Arbejdstilsynet (Danish Working Environment Service), Landskronagade 33, DK-2100 København Ø. Phone +4539152000. Email: [arbejdstilsynet@arbejdstilsynet.dk](mailto:arbejdstilsynet@arbejdstilsynet.dk); [www.arbejdstilsynet.dk](http://www.arbejdstilsynet.dk).

## 2. Estonia

### 2.1 Role of the state in governing the recognition process

Professions in the building area comply with the general procedures for recognition of professions and it is administered by the Ministry of Education and Research.

The umbrella document is the Professions Act, entered into force 19 January 2000, last updated 1 January 2004. The Professions Act provides the bases for the development of the requirements for professional qualifications and the conditions and procedure for the attestation and award of professional qualifications. “Professional qualification” means the level of competence required in a given profession which is recognised on the basis of regulated requirements which have developed historically or internationally.

The qualification levels of each specific vocation, including the requirements for education if necessary, shall be determined by the Professional Council.

For the purposes of the Professions Act, “professional standard” means a document, which contains the requirements for the knowledge, skills, experience, values and personal characteristics arising from professional qualifications.

The procedure for the preparation, amendment, structure and recording of professional standards shall be established by the Minister of Education and Research.

A professional council is a body of co-operation consisting of the representatives of employees, employers and professional associations of the corresponding area of activity and the representatives of the state.

The names of the members of a professional council are submitted to the Government of the Republic for approval by the Minister of Education and Research.

The Minister of Education and Research establishes the composition of a Professional Council based on the proposals of the representatives of employees, employers and professional associations operating in the corresponding area of activity and the representatives of the state.

The objective of the activities of professional councils is the development of professional standards necessary for meeting the needs of labour market and the implementation and updating of the system of professional qualifications.

**Table 7. Role of the government in Estonia**

Name of the institution (Ministry, Council, Board, etc.)	Responsibilities and authorizations (functions, tasks, authorities, etc.) for each institution	Reference to legislation acts, regulations (only titles and acceptance year)
Ministry of Education and Research	Administration of recognition of professions. Elaboration of the procedure for the preparation, amendment, structure and recording of professional standards. Approval of the Professional Council.	Professions act, entered into force 19 January 2000, last updated 01 January 2004.  Act on Recognition of Foreign Professional Qualifications, entered into force on 1 January 2001.
Professional Council	Determination of the qualification levels of each specific vocation, including the requirements for education, including: 1) The approval of professional standards and other requirements established; 2) The issue of activity licences to bodies, which award professional qualifications and exercise of supervision over such bodies; 3) The approval of requirements for the methods of attestation; 4) The settlement of disputes.	Professions act, entered into force 19 January 2000, last updated 1 January 2004. Act on Recognition of Foreign Professional Qualifications, entered into force on 1 January 2001.
The Certification Commission		Professions act, entered into force 19 January 2000, last updated 1 January 2004. Act on Recognition of Foreign Professional Qualifications, entered into force on 1 January 2001.
Professional qualifications committees	Award of professional qualifications	

The functions of the Professional Council are:

- The approval of professional standards and other requirements established in a given profession and submission thereof for entry in the register of professions
- The issue of activity licences to bodies which award professional qualifications and exercise of supervision over such bodies
- The approval of requirements for the methods of attestation specified in subsection 8 (2) of this Act
- The settlement of disputes.

As of January 2005, professional councils have approved 447 professional qualifications as professional standards. Professional standard are only the first step towards the goal of the qualification system. Professional qualifications committees award professional qualifications.

## 2.2 Role of non-governmental institutions related to the recognition problems

Estonian Association of Civil Engineers plays a role in granting titles. Particularly, membership in this Association secures application for granting title of the Chartered Civil Engineer. The applicant shall be a member of this Association for at least two years.

## 2.3 Considerations about regulated engineering and technician professions

Engineer is a technical and/or technology specialist with higher education in different fields of engineering activity. There are the following categories of civil engineers' professions:

- Civil Engineer
- Diploma Civil Engineer
- Chartered Civil Engineer

Civil Engineer is a specialist, in the capacity of middle or top manager or specialist in engineering activity, dealing with operations involving the planning and erection of buildings and structures, as well as renovation, demolition and restoration works and related operations, which has passed training required for the award of the professional qualification and has work experience.

Distribution of Civil Engineers by specialities:

- Planning and supervision of buildings and building products
- Construction site management
- Production of building materials
- Transport of building materials
- Planning, building, maintenance and supervision of water supply and sewerage systems
- Planning, building, maintenance and supervision of heating and ventilation systems
- Planning, building, maintenance and supervision of land improvement structures
- Organisation of building, building economics, real estate maintenance, evaluation and supervision of buildings and projects

**Table 8. Regulated engineering and technician professions (compulsory recognition)**

List of regulated professions	Authority granting recognition	Principles for inclusion in the regulated category	Reference to legislation acts, regulations (only titles and acceptance year)
Categories of civil engineers' professions: - Civil Engineer - Diploma Civil Engineer - Chartered Civil Engineer	Professional qualifications committees formed of the representatives of employees, employers and professional Associations.		
Distribution of Civil Engineers by specialities: - Planning and supervision of buildings and building products; - Construction site Management; - Production of building materials; - Transport building; - Planning, building, maintenance and supervision of water supply and sewerage systems; - Planning, building, maintenance and supervision of heating and ventilation systems; - Planning, building, maintenance and supervision of land improvement structures; - Organisation of building, building economics, real estate maintenance, evaluation and supervision of buildings and projects.	Professional qualifications committees formed of the representatives of employees, employers and professional associations.	General skills and knowledge, Main skills and knowledge, Special skills and knowledge, Additional requirements on the speciality of supervision and Personal characteristics and abilities.	Procedure for certification and award of professional qualifications of engineers in construction activities.

**Table 9. Non compulsory recognition of professions (granting a degree certificate)**

List of regulated professions (non compulsory recognition)	Authority granting recognition	Principles for inclusion in non regulated category	Reference to legislation acts prescribing empowerment
All professions, which do not claim working in the regulated area (see Table 8)	No recognition required for access to the market.  Applicants may appeal to receive a Certificate of Competence of the designer or contractor of a non-exceptional significance construction works.	Areas of building activities, which do not require certified professionals	Certification procedures for granting the Certificate of Competence.

## 2.4 Qualification indicators and acceptance criteria for regulated professions

The professional qualification of Civil Engineer is attributed to the Professional qualification level IV and it is based on the knowledge of the theoretical foundations of engineering knowledge in the speciality and on the skills of implementing it.

The prerequisites to application for the professional qualification of Civil Engineer are at least three years of higher education in the speciality and at least one year of work experience in engineering in the corresponding speciality gained immediately before application. The possible ways of application are stated in EPS.

The professional qualification of Diploma Civil Engineer is attributed to the Professional qualification level V and it is based on in-depth knowledge of the theoretical foundations of engineering knowledge in the speciality and on the skills of implementing it and of creatively resolving technical problems.

The prerequisites to application for the professional qualification of Diploma Civil Engineer are at least 5 years of higher education in the speciality or the professional qualification level IV together with professional development and at least 2 years of work experience in engineering or scientific research in the corresponding speciality gained immediately before application. The possible ways of application are stated in EPS. The qualification of Diploma Civil Engineer is awarded without a term to Engineer working in his/her speciality.

Table 10. Qualification indicators

Professional title, engineer category	Full time education at university (years, ECTS-credits);	Post graduate experience (years)	Additional training within specific technical fields
Civil Engineer	Professional qualification level IV: <ul style="list-style-type: none"> <li>- Knowledge of the theoretical foundations of engineering;</li> <li>- Knowledge in the speciality and on the skills</li> <li>- At least three years of higher education in the speciality</li> </ul>	At least one year of work experience in engineering in the corresponding speciality gained immediately before application.	
Diploma Civil Engineer	Professional qualification level V: <ul style="list-style-type: none"> <li>- In-depth knowledge of the theoretical foundations of engineering knowledge in the speciality;</li> <li>- Skills of implementing it and of creatively resolving technical problems;</li> <li>- At least 5 years of higher education in the speciality or the professional; qualification level IV together with professional development.</li> </ul>	At least 2 years of work experience in engineering or scientific research in the corresponding speciality gained immediately before application.	
Chartered Civil Engineer	Diploma Civil Engineer qualification level V: <ul style="list-style-type: none"> <li>- At least two years of experience in independent engineering work or research and development in the same speciality;</li> <li>- Professional development in the five years;</li> <li>- The knowledge and skills in the speciality shall be continuously developed.</li> </ul>	Requirements for Diploma Civil Engineer qualification level V	The applicant shall have been a member of the Estonian Association of Civil Engineers for at least two years. A Chartered Civil Engineer may apply for the title of European Engineer (Eur Eng).

The prerequisites to application for the professional title of Chartered Civil Engineer are the Diploma Civil Engineer qualification level V, at least two years of experience in independent engineering work or research and development in the same speciality gained immediately before application and professional development in the five years immediately preceding application. The knowledge and skills in the speciality shall be continuously developed. The applicant shall have been a member of the Estonian Association of Civil Engineers for at least two years. A Chartered Civil Engineer may apply for the title of European Engineer (Eur Eng). The possible ways of application are stated in EPS. The qualification of Chartered Engineer is effective for five years.

The titles of the professional qualifications of civil engineers by speciality and occupation and the requirements and conditions of application will be specified in the "Procedure for Certification and Award of Professional Qualifications of Engineers in Construction Activities". The main

points of these requirements include the following categories of qualification indicators (more in details about each category) in the Procedure:

- General skills and knowledge,
- Main skills and knowledge,
- Special skills and knowledge,
- Additional requirements on the speciality of supervision and
- Personal characteristics and abilities.

## 2.5 Alignment of qualifications obtained in different countries

Alignment of qualifications of civil engineering profiles complies with general rules for recognition of foreign qualifications. Procedure for recognition of professional titles obtained in foreign countries is described in details in the Recognition of Foreign Professional Qualifications. The Act entered into force on 1 January 2001 in order to promote the free movement of people and to guarantee that professional education and work experience obtained abroad is recognised in Estonia.

The Ministry of Education acts as the coordinator in the field of mutual recognition of professional qualifications. The primary duty of the coordinating body is to give information on which professions or professional activities are regulated in Estonia.

The Estonian ENIC/NARIC, as the central information centre, also provides information on the recognition of professional qualifications. Other ministries and public authorities as competent authorities (Ministry of Justice, Ministry of Environment, Ministry of Economic Affairs and Communications, Technical Inspectorate, Financial Supervision Authority, Bar Association and the State Chancellery) need to deal with recognition applications and to provide information on professional recognition issues to applicants.

The evaluation will take place at the Estonian ENIC/NARIC. If needed, the ENIC/NARIC or institutions of other countries will be consulted. The recommendations of the Estonian Ministry of Education, higher education institutions, boards and organisations may be used, forming working groups of experts.

Inter-ministerial Recognition of Foreign Professional Qualifications Committee has been functioning since 2001, with representatives from all ministries or public authorities, which have regulated professions under their jurisdiction.

**Table 11. Alignment of qualifications (adequacy of education and experience)**

Criteria for alignment	Eligibility to public posts	Authority providing alignment
Criteria in Estonian Classification of Economic Activities	No specific requirements	Coordinator – The Ministry of Education; Evaluation and information on recognition of professional qualifications – The Estonian ENIC/NARIC; Recognition applications and provision of information – Ministry of Justice, Ministry of Environment, Ministry of Economic Affairs and Communications, Technical Inspectorate, Financial Supervision Authority, Bar Association and the State Chancellery; Recognition of Foreign Professional Qualifications Committee – Inter-ministerial institution.

## 2.6 Types of official qualification confirmation

Civil Engineering complies with general rules for confirmation of professional qualification. This process is carried out in accordance with the Estonian Classification of Economic Activities is a localised version of the Statistical classification of economic activities in the European Community (NACE). The work of Civil Engineer in this Classification is listed under the label Construction, code 45.

Classification of Occupations is a localised version of International Standard Classification of Occupations (ISCO-88) and Civil Engineer is listed under the major group no. 2 “Top-Level Specialists”, code 2142.

Professional qualifications are divided into five levels where level I is the lowest and level V is the highest as follows:

- Level I – An employee performs his or her duties in similar situations, has acquired the professional knowledge and skills mainly in the course of professional training, may need guidance during work, is responsible for the performance of his or her duties.
- Level II – An employee performs his or her duties in different situations, in addition to the knowledge and skills acquired mainly in the course of professional training has experience, works independently and is responsible for the performance of his or her duties.

**Table 12. Official confirmation of qualification**

Scope of professional activities	Criteria for confirmation	Basis for confirmation	Parties involved in confirmation
Level I Performs duties in similar situations.	Professional knowledge and skills mainly in the course of professional training, may need guidance during work.	Act on Recognition of Foreign Professional Qualifications, entered into force on 1 January 2001.	Professional qualifications committees formed of the representatives of employees, employers and professional associations.
Level II Performs duties in different situations.	Knowledge and skills acquired mainly in the course of professional training has experience, works independently.		
Level III Performs his or her duties in different and changing situations.	Knowledge and skills acquired mainly in the course of professional training is masterly, ready to pass on his or her professional skills and knowledge, organises the distribution of funds and the work of others.		
Level IV Performs duties requiring analysis and decision-making in changing situations.	Professional knowledge and skills; organises the distribution of funds and the work of others.		
Level V Performs duties requiring the expansion of knowledge, resolution of problems, application of scientific theories and definitions, analysis, systematisation and improvement of the existing knowledge and teaching in changing.	Extensive professional knowledge and skills, abilities to organise distribution of funds and work of others.		

Level III – An employee performs his or her duties in different and changing situations, in addition to the knowledge and skills acquired mainly in the course of professional training is masterly, ready to pass on his or her professional skills and knowledge, organises the distribution of funds and the work of others and is responsible therefore.

Level IV – An employee performs duties requiring analysis and decision-making in changing situations, has professional knowledge and skills; organises the distribution of funds and the work of others and is responsible therefore.

Level V – An employee performs duties requiring the expansion of knowledge, resolution of problems, application of scientific theories and definitions, analysis, systematisation and improvement of the existing knowledge and teaching in changing situations, has extensive profes-

sional knowledge and skills, organises the distribution of funds and the work of others and is responsible therefore.

The qualification levels of each specific vocation, including the requirements for education if necessary, shall be determined by the Professional Council.

## 2.7 Approval procedures of qualifications to secure safety of construction works

The award of professional qualifications is a process in the course of which a person attests the level of his or her professional competence and a body which awards professional qualifications assesses the correspondence thereof to the professional qualifications applied for and issues a professional certificate.

Methods of attestation of professional qualifications are:

- Written or oral examination,
- Test assignment,
- Attestation on the basis of documents,
- A combination of methods specified.

### Bodies which award professional qualifications

Legal persons in private law or public law or agencies whose activities include the development of the corresponding professional activity or corresponding vocational, professional and occupational training may apply for an activity licence for the grant of professional qualifications.

Professional qualifications committees are formed of the representatives of employees, employers and professional associations at the bodies for the award of professional qualifications.

When an activity licence for the award of professional qualifications is issued to a body, the body shall be entered in the register of professions.

Bodies which award professional qualifications develop and establish the procedure for the attestation and award of professional qualifications.

Professional certificate is a document certifying professional qualifications.

Professional certificates are registered by the issuer and entered in the Register of Professions pursuant to the procedure provided for in the statutes of the register of professions.

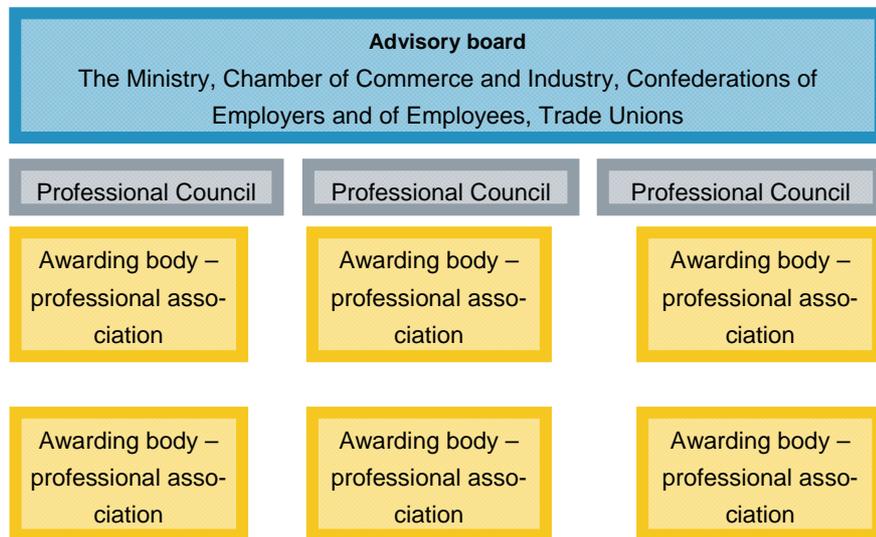
The register of professions is a state register which contains information on professional councils and professional standards and other requirements established in professions, professional titles, professional qualifications and the levels thereof, professional certificates and the conditions of and procedure for the attestation and award of professional qualifications and bodies which award professional qualifications.

The chief processor of the register of professions is the Ministry of Education and Research.

The Ministry of Education and Research shall exercise state supervision over the activities of professional councils.

## 2.8 Proposals for potential improved systems and presenting results of the survey

**Figure 1. Organisational chart for building up a qualification recognition system in Estonia**



## 2.9 Contact points for acquiring information

- This area is coordinated by The Ministry of Social Affairs, Gonsiori 29, 15027 Tallin. Email: info@sm.ee.
- Respondent: Katrin Koitla, Building Division, Ministry of Economic Affairs and Communication. Email: katrin.koitla@mkm.ee



## 3. Finland

### 3.1 Introduction

The answers presented here to the second questionnaire of the Action Plan are based on interviews of Finnish industry representatives. The government, association and university representatives were interviewed (eight persons in total) in order to gather a broader overview of the Finnish system and potential suggestions for the model of the whole region of Nordic dimension countries. While the interviewees found it easy to describe the current situation in Finland, it was considered very complicated to draw up a model for the Northern Dimension countries.

Thus, the answers provided here present a description of the existing situation in Finland. Some opinions about how the recognition of qualifications could be improved and made more transparent are also presented. However, the report does not provide recommendations for the model of the whole region of Northern Dimension countries as such. Despite of this, according to some interviewees, two models could be applied as a basis for structuring the recognition criteria for the Northern Dimension countries: Norway in recognition of supervisors/foremen and Finland in recognition of designers.

Overall, the area of recognition of qualifications in construction sector is very broad and covers many different types of qualifications which make it very difficult to provide any recommendation for the model of the whole region. This type of work would probably require multinational, profession specific task groups (architectural design, structural engineering, HVAC-engineering, project management, work supervision, etc.), were representatives of the government, certification granting organisations and industry would discuss and determine the criteria on Nordic countries level for the different qualifications of the specific profession (if the recognition of qualifications is considered necessary). Namely, one should remember that it is not necessarily just a recognition of qualification for structural engineers, but potentially four different qualifications for different complexity level engineering tasks, as is today in Finland.

### 3.2 Role of the state in governing the recognition process

Today the role of the Finnish government is mainly restricted to legislation, appointment of responsibilities and prescribing the basic acceptance criteria. In these lines, the Ministry of Education (i.e. the Government)

determines the basic requirements and scope of education (i.e. number of ECTS-credits, length of education) for the qualifications in higher education (MSc, BSc). The Ministry also approves institutes/universities that are allowed to provide this type of education. The authorized universities and polytechnics are directly subordinate to the Ministry, and autonomous in determining exact contents of education. The Higher Education Evaluation Council assists the Ministry in evaluation of institutions of higher education in order to ensure consistent quality of education.

The adult education and training and vocational education are governed by the Finnish National Board of Education. For example, education provided for construction workers, plumbers, etc. is under the general competence of the Board. The Board determines not only the requirements of qualifications but also basic contents of this type of education.

The government does not necessarily do assessment of qualifications. The main principle behind the recognition of degree certificates in Finland is that if an EU citizen has completed a major part of his or her education in one EU country the degree is recognised in all EU countries. This principle of recognition also applies to EEA countries, (Liechtenstein, Iceland and Norway) and Switzerland. However, the Finnish education is ranked relatively high and not all foreign degrees are considered to provide the same level of qualification despite of the recognition principle.

In Finland, the qualification criteria are determined on three levels: Basic competency requirements on actors in the construction industry are determined by the Land Use and Building Act (132/1999). This is supplemented by the Land Use and Building Decree. The competency requirements are then further concretised by The Ministry of the Environment in the National Building Code of Finland. The National Building Code A1 – The Ministry of the Environment Decree on construction supervision and technical inspection determines the qualifications of construction foremen in projects of different complexity level. The National Building Code A2 – The Ministry of the Environment Decree on building designers and plans specifies the competency requirements on certain types of construction by dividing building projects to different complexity classes.

In Finland, also qualification requirements for a land division engineer are determined in the Law on Municipal Real Estate Engineer 557/1995. Similarly, the requirement on recognition of qualifications for provision of energy certificates is determined in the Law on Energy Certificates of Buildings 765/2007. In provision of energy certificates, education or work experience alone does not automatically provide qualification. Rather the qualification is based on capability demonstrated in an exam which is administered by an accredited certifying organisation.

**Table 13. Role of the government in Finland**

Name of the institution (Ministry, Council, Board, etc.)	Responsibilities and authorizations (functions, tasks, authorities, etc.) for each institution	Reference to legislation acts, regulations (only titles and acceptance year)
Ministry of Education	Legislation on education and recognition of degrees, appointment of responsibilities, pre-scribing qualification criteria and acceptance criteria, determination of the scope of education (MSc, BSc), approval of institutes/ universities.	Decree on the Implementation of the General System of Re-cognition of Professional Qualifications of EC Citizens (05/30/1997, 520/1997). Decree on Competence for Civil Service Posts Conferred by Higher Education Studies Taken Abroad (05/30/1997, 519/1997). Act on recognition of degrees of EU citizens (12/30/1992, 1597/1992). Municipal civil servant act (04/11/2003, 304/2003). Act on Competence for Civil Service Posts Conferred by Higher Education Studies Taken Abroad (07/11/1986, 531/1986).
Higher Education Evaluation Council	Evaluation of institutions of higher education	
National Board of Education	Governing of adult education & training and vocational education, determination of requirements of qualifications and basic contents of education, advisory statements on foreign vocational qualifications, recognition of qualifications	
Ministry of the Environment	Determination of competency requirements, legislation on land use and building	Land Use and Building Act (132/1999). Land Use and Building Decree. The National Building Code A1 – Ministry of the Environment Decree on construction supervision and technical inspection. The National Building Code A2 – Ministry of the Environment Decree on building designers and plans. The Law on Municipal Real Estate Engineer 557/1995. The Law on Energy Certificates of Buildings 765/2007.

The requirements set by the National Building Code A1 and A2 are of the main interest here and should be compared with the competency requirements of the other countries in order to structure a proposal for unification of the requirements between the participating countries.

Since Finnish universities and polytechnics are autonomous in setting their curricula, some interviewees expressed their willingness to see a bit more of governmental involvement in determining the basic education requirements to further unify the level of education between the different institutes. In construction, for example, requirements could be set on the extent of basic studies (number of ETCS-credits) in mathematics, physics, statics, and mechanics, etc. This would also ensure better construction quality.

### 3.3 Role of non-governmental institutions related to the recognition problems

In Finland, organisations like FISE and VTT Technical Research Centre of Finland administer voluntary recognition of qualifications for construction. This type of recognition pursues to facilitate the assessment made by building developers and employers in selecting competent persons to their project teams.

**Table 14. Non-governmental institutions**

Name (association, research centre, society, etc.)	Area of activity	Reference to legislation acts prescribing empowerment
The Ass. of Finnish Construction Engineers and Architects (RIA), Master builders and civil engineers (RKL), The Building Control Ass. (RTY), Education Centre of Construction industry (RATEKO), Concrete Ass. of Finland, Finnish Geotechnical Society, The Finnish Ass. of HVAC Societies, Finnish Ass. of Civil Engineers (RIL), Finnish Constructional Steelwork Ass., Finnish Forest Industries Federation, The Union of Professional Engineers in Finland, Finnish Facade Ass., The Finnish Ass. of Consulting Firms SKOL, Finnish Tunnelling Ass., VVS Föreningen i Finland rf, The Finnish Ass. of Architects (SAFA), The Confederation of Finnish Construction Industries (RT)	Improvement of capabilities of members/construction industry by providing training and disseminating information. Influencing education contents through different announcements/declarations. Acting as owners of FISE and ensuring this way the credibility of FISE-certification. Proposals for unification of the qualification requirements (between educational institutions)	
FISE	Recognition (voluntary) of qualifications (project managers, supervisors, principal designers, architects, inspectors, structural engineers, building physics engineers, HVAC engineers, renovation engineers, project/site managers, site technicians and foremen)	The laws listed in Table 13, especially the National Building Code A2
VTT The Technical Research Centre of Finland	Administration and maintaining of a so called person certificate register (sanitary cabin waterproofing, measurement of structural humidity, installation of roofing, expert on building health)	

FISE recognises qualifications based on the requirements set by the law and the National Building Code A2. The recognition of qualifications is granted for instance to project managers, supervisors, principal designers, architects, inspectors, structural engineers, building physics engineers, HVAC engineers, renovation engineers, project/site managers, site technicians and foremen. Additionally different market oriented, voluntary construction and facility management expertises/competencies are qualified. The recognition is based on the applicant's education, potential additional training and work experience. The certificate is granted for 7

years, after which it may be renewed. The renewal requires evidence of an adequate amount of work experience and training during the 7 years in order to maintain the required capabilities.

VTT administers and maintains a so called person certificate register based on voluntary applications as well. The person certification pursues to ensure that the individual is capable of doing what he proclaims to be (sanitary cabin waterproofing, measurement of structural humidity, installation of roofing, expert on building health). The applicant must participate in the training organised by an approved/certified institution and pass a test and demonstration. The certificate is granted for 5 years.

While VTT is a government owned, accredited research and certification organisation, FISE is an organisation having an extensive owner basis.

FISE is established by:

- The Association of Finnish Construction Engineers and Architects (RIA)
- Master builders and civil engineers (RKL) (RAKENNUSMESTARIT JA -INSINÖÖRIT AMK RKL ry)
- The Building Control Association (Rakennustarkastusyhdistys RTY ry)
- Rakennusteollisuuden koulutuskeskus (RATEKO)
- Concrete Association of Finland
- Finnish Geotechnical Society
- The Finnish Association of HVAC Societies
- Finnish Association of Civil Engineers (RIL)
- Finnish Constructional Steelwork Association
- Finnish Forest Industries Federation
- The Union of Professional Engineers in Finland
- Finnish Facade Association (Julkisivuyhdistys ry)
- The Finnish Association of Consulting Firms SKOL
- Finnish Tunnelling Association
- VVS Föreningen i Finland rf
- The Finnish Association of Architects (SAFA)

The credibility of FISE-certification is attained through the participation of all important construction related associations.

Lately, according to the interviewees, a need has also been experienced to ensure the quality and coherence of different qualifications gained through demonstrations (e.g. master builder, foreman), as these demonstrated qualifications are not governed by the government. As the result, the common view on the field seems to be that these qualifications could be governed by non-governmental institutions/associations in order to ensure consistent quality of this type of education, as well.

The non-governmental, professional organisations in Finland (like the ones named above as owners of FISE) pursue to improve capabilities of their members by providing training and disseminating information. While the non-governmental institutions cannot legally affect the contents of education, they can and do, in fact, pursue to affect the contents through different announcements/declarations. Generally, the universities and polytechnics take into consideration the declarations since these reflect the needs of the industry and demonstrate the experienced educational gaps. However, in the end, Ministry of Education decides whether it is necessary or not to do any amendments to basic ruling concerning the education.

### 3.4 Considerations about regulated engineering and technician professions

Today in Finland, it is not compulsory to obtain recognition of qualification for any profession in construction. Since the construction related professions are not regulated, there is no authority, either, that would be responsible for recognition. Instead, construction employers, building developers and authorities have the responsibility to assess the capabilities of professionals in order to ensure the quality and safety of the building projects. This responsibility is determined by the Land Use and Building Act, section 119 which states that:

“A party engaging in a building project shall ensure that the building is designed and constructed in accordance with building provisions and regulations and the permit granted. The party shall have the necessary competence to implement the project, as required by its difficulty, and access to qualified personnel.”

Also the Land Use and Building Act, section 123 states that:

“The person drawing up a building or a special design or supervising the construction works must have the training and expertise required by the type of building project concerned and the demands of the duties involved.”

Generally, the building supervision authority ascertains the degree of difficulty of the design task in relation to the characteristics of the building project. On this basis, the authority assesses the demands of the task in relation to the proficiency of the designer, which includes examinations passed by the designer and other training/education undertaken by him plus experience and evidence of it in the relevant design field. These requirements cover also relevant work experience. The National Building Code A2 provides competency requirements for architects, structural engineers and HVAC engineers in the following types of projects based on the complexity of the design task:

- AA Special demands
- A Basic demands
- B Smallish building/technical system or conventional technical properties
- C Minor

These requirements are presented in the next chapter.

Also, according to the National Building Code A1, construction foremen need to have adequate qualifications for supervising the construction work in terms of project complexity. Especially qualifications of foremen supervising construction of bearing structures and HVAC-systems which affect the indoor air-quality, were considered important by the interviewees.

It must be remembered that requirement for qualifications does not involve only high ranked positions in construction. Also, for example, a crane-man has to have an appropriate training which may not be identical in different countries. This means that a foreign crane-man may need to take a course when coming to Finland unless he is able to demonstrate that he has the required capabilities according to decision made by the Council of State which regulates procurement, safe use and inspections of machinery and equipment used on the job (856/1998).

According to all interviewees, the assessment of qualifications is significantly facilitated if the main parties of a construction project have acquired (voluntary) recognitions of qualifications. However, the views on whether the recognition should be compulsory or voluntary differed. If the qualification of recognition would become compulsory, a status of FISE and VTT (or a similar organisation) should be enacted in a law, and the organisation(s) should be audited and accredited. There should be a way to ask for adjustment if an applicant was unsatisfied with the decisions received. (This is already possible for FISE certification.) In this case, the authorities responsible for recognition of qualifications and structuring of appropriate systems would be the Ministry of Education and the National board of education.

Those who prefer the current system, which is based on voluntary recognition of qualifications, consider that the today's system has more flexibility, and, yet, the market acts self-steering in favour of the qualification certification. Even in this system, some critique was presented against the requirements set by the National Building Code A2, as it was considered to be somewhat open to interpretations, especially in terms of adequate work experience, which should be determined in more detail.<sup>2</sup>

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<sup>2</sup> Architects' profession complies with provisions of the Chapter III of the New Directive (2005/36/EC) and therefore should be considered as regulated in any case.

**Table 15. Regulated engineering and technician professions (compulsory recognition)**

List of regulated professions	Authority granting recognition	Principles for inclusion in the regulated category	Reference to legislation acts, regulations (only titles and acceptance year)
Provision of energy certificates	FISE	Principal designer or house manager. Appropriate education and passing a test.	The Law on Energy Certificates of Buildings 765/2007

**Table 16. Non compulsory recognition (granting a degree certificate)**

List of regulated professions (non compulsory recognition)	Authority granting recognition	Principles for inclusion in regulated category	Reference to legislation acts prescribing empowerment
Architects	FISE	<p>Building supervision authority ascertains the degree of difficulty of the design task in relation to the characteristics of the building project. On this basis, there are 4 competency classes (AA, A, B, C):</p> <p>AA. University degree, 5 years experience of A-project design, participation in AA-project</p> <p>A. University degree or polytechnic degree, 3 years experience of A-project design</p> <p>B. Building technician, sufficient design experience</p> <p>C. Sufficient experience</p>	The National Building Code A2
Structural engineers	FISE	<p>AA. University degree in building or machine construction, 14 credits in structural mechanics &amp; 7 credits in concrete/timber/steel construction and design, 4 years experience of AA-project design</p> <p>A. Polytechnic degree in building or machine construction, 10 credits in structural mechanics &amp; 5 credits in concrete/timber/steel construction and design, 2 years experience of A-project design</p>	The National Building Code A2
HVAC engineers	FISE	<p>AA. University or polytechnic degree in mechanical services, 6 years experience of MEP A &amp; AA-project design</p> <p>A. University or polytechnic degree in mechanical services, 4 years experience of MEP A-project design</p> <p>B. Mechanical services technician, 3 years experience of MEP B-project design</p>	The National Building Code A2
Construction foremen	FISE	Qualification requirements are determined based on project complexity	The National Building Code A1
Craneman		Appropriate training required	The decision made by the Council of State on procurement, safe use and inspections of machinery and equipment (856/1998)

### 3.5 Qualification indicators and acceptance criteria for regulated professions

#### *University*

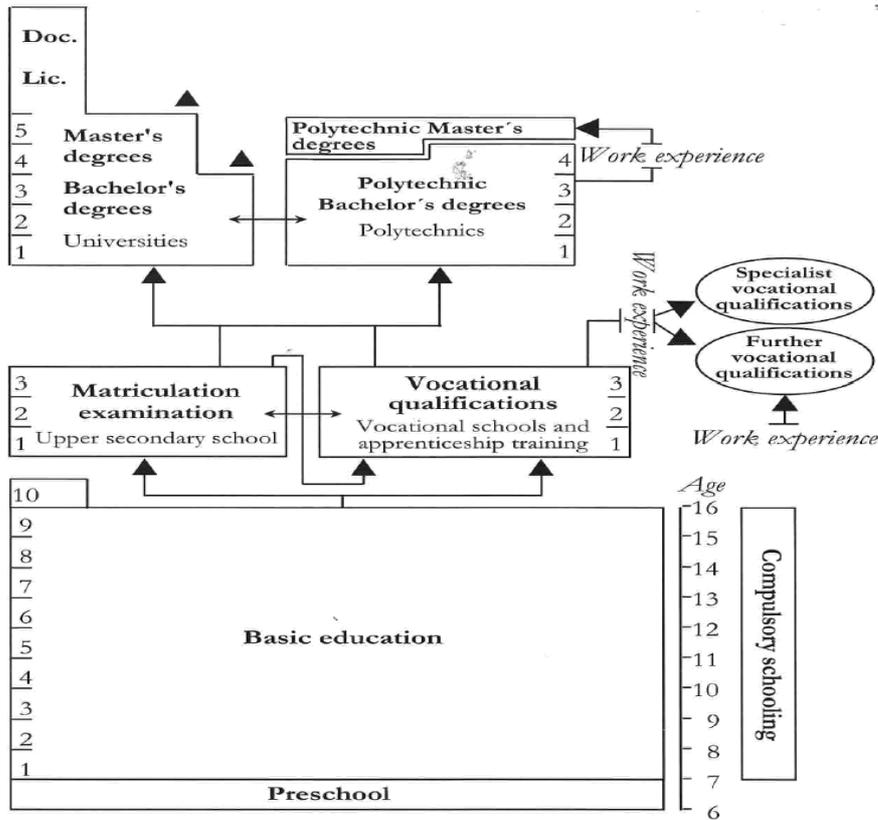
- Architect or structural/HVAC engineer (BSc)  
Entrance requirements: Matriculation examination + entrance examination  
Full time education at university: 3 years, 180 ECTS-credits
- Architect (MSc) = BSc +  
Not possibly to take as a separate degree. Have to be taken straight after  
BSc in architecture  
Full time education at university: 2 years, 120 ECTS-credits
- Structural/HVAC engineer (MSc) = BSc +  
Entrance requirements: Matriculation examination or appropriate BSc-Degree + entrance examination  
Full time education at university: 2 years, 120 ECTS-credits

#### *Polytechnics* (for more information see [www.amkhaku.fi](http://www.amkhaku.fi))

- Structural/HVAC engineer (BSc)  
Entrance requirements: Matriculation examination or an appropriate Vocational degree + entrance examination + work experience  
Full time education at polytechnics: 4 years, 240 ECTS-credits
- Structural/HVAC engineer (MSc) = BSc +  
Entrance requirements: Matriculation examination + BSc-Degree + Entrance examination + Minimum of 3 years' work experience  
Full time education at polytechnics: 1 year, 60 ECTS-credits

Some concerns were expressed on the level of autonomy of the Finnish universities and polytechnics in setting their curricula, as these results in differences in the knowledge-level of graduates. A few interviewees stated that they would like to see a national exam in the universities and polytechnics, similar to the matriculation examination, which would ensure a more unified level of knowledge among graduates. If this type of process would be implemented in all EU-countries, it would also facilitate comparison of different degrees on multi-national level.

An example of the way in which this problem is handled on the European level, is an EU-project concerning the European Engineer Professional Card (Engcard). The project is coordinated by FEANI and EURO-CADRES. In the project a possibility to implement an Engcard in Europe is evaluated. A microchip in an Engcard would contain information about the person's degree certificate and the level of the education, curriculum, work experience and language skills, etc. To enable this type of card-system, the educational institutes must assess the level of education they provide.



More in detail please see also Appendix FI1.

If a person does not have the capabilities required in the National Building Code, he/she can still work alongside with a person who has the required qualifications.

### 3.6 Alignment of qualifications obtained in different countries

First, it is important to note that all interviewees agreed that the degree certificate alone does not ascertain adequate qualification. Thus, in the previous tables, the qualifications are determined in terms of education and work experience. The education is determined based on the scope of Finnish curricula. When evaluating the adequacy of education, the Ministry of Education has determined the main criteria to be assessed as:

- The duration of the education
- Number of ECTS-credits
- The institute providing the educations.

At least these criteria should be at the same level with the Finnish degree certificates. The interviewees also suggested that it might be beneficial to

assess the extent and level of basic education (mathematics, physics, statics and mechanics).

For a post in the public sector, for which the eligibility requirement is a higher education degree, a decision of recognition may be required from foreigners. The citizens of Nordic countries do not need a recognition for eligibility to public posts if their qualification has been taken in a Nordic country and the main content of the qualification can be shown to be comparable with that of a corresponding Finnish qualification (law 651/1998).

Outside the public sector, the professional competence achieved in an EU/EEA country qualifies for the same job in Finland. If the post-graduate experience of a person does not match with the requirements and a building authority/employee needs to be convinced of the capability, the person may apply for a FISE certification and, if necessary, take an exam which may be used as a proof. Such exams may be taken for example in design of steel, wooden or concrete structures. (For example, to demonstrate capabilities in engineering of demanding concrete structures, a person could take an exam on mechanics.) In case of lower level education, also a demonstration might be used as a proof (e.g. a foreman). However, if the education level of the person does not match with the requirements, generally the only way to fulfil the gap is to take missing courses.

Today, voluntary recognition of qualifications has become relatively common, especially, in larger cities in Finland, as it facilitates the work of the building authorities and accelerates the processing of building permit applications. However, in smaller cities/municipalities, where people largely know each others, recognitions of qualifications are often not considered necessary.

In order to improve the recognition of qualifications, some interviewees suggested that there should be a more automatic system for renewal of qualification certification. It was also suggested that it might be beneficial, to include a requirement about (continuous) post-graduate training which would ensure better maintenance and enhancement of capabilities. If a person had not worked or studied for the past #xx years, he would be required to update his/her know-how through a course or test before getting the certificate renewed.

Additionally, it was debated whether, in the future, it is important in the Nordic Region countries to ascertain that construction professionals operating in the region understand and appreciate specific design aspects that northern climate poses on construction. This is an important issue which also construction professionals from southern countries should recognise. In order to obtain and demonstrate this capability, a person could be required to participate in a course and/or pass an exam.

**Table 18. Alignment of qualifications (adequacy of education and experience)**

Professional title, engineer category	Criteria for alignment	Eligibility to public posts	Authority providing alignment
Architect, Structural/HVAC engineer (MSc)	<p>Adequacy of education: Degrees of education of the recipient country, duration and level of education, number of ECTS-credits, institute providing education.</p> <p>Experience: proof of experience of different complexity level design tasks.</p> <p>Compensation measures: Additional exams, training courses, aptitude tests, etc.</p>	<p>For public posts with eligibility requirement of a higher education degree, a decision of recognition may be required from foreigners. The citizens of Nordic countries do not need a recognition for eligibility. Outside the public sector, the professional competence achieved in an EU/EEA country qualifies for the same job in Finland.</p>	<p>For public posts: National Board of Education.</p> <p>Voluntary recognition: FISE.</p> <p>Overall qualification: Building authorities when providing building permit.</p>

### 3.7 Types of official qualification confirmation

A degree certificate/diploma granted by an accredited institute of education is always an acceptable and adequate form of official qualification for young people who have just graduated. When a person has also post-graduate experience, a certificate granted by an accredited, qualifications administering organisation should naturally be an acceptable form of proof, too. A prerequisite for this is that the countries involved can unify the recognition criteria and educational degrees in a way that they are willing to acknowledge the qualification granted in another country. Also, the necessity is that there are only a limited number of qualifications administering organisations in each country and these organisations are accredited and listed nationally.

Today, in Finland this type of certification/recognition of qualifications is not compulsory, but rather the qualifications (relevant work experience, etc.) is assessed by the building developers and authorities based on the information provided by the party involved. The type and form of information required varies. The FISE-qualifications are always acknowledged and foreign professionals may apply for the qualification. So far, not many foreigners are granted the certificate, though, as many of the applicants have had inadequate levels of education.

### 3.8 Approval procedures of qualifications to secure safety of construction works

In Finland, the National Building Code sets the competency requirements in pursuance of ensuring safety of buildings and construction works. When employing building professionals, building developers have to

assess whether the proponents have the required capabilities. The final assessment is done by the building authorities, who assess the capabilities of the project team, and based on this (and acceptable building documentation) either grant the building permit or not. This assessment is largely facilitated by getting a FISE-certificate. Today the process of acquiring FISE-certificate is presented in the Figure below.

Today, the Finnish competency requirements are based on Finnish degrees and contents of education. If a foreign degree is very different from the Finnish degree, even though the degree is accepted, the person may not be assessed as qualified for the job. This is why, as mentioned in the previous chapter, many of the foreign applicants of FISE certificate have been declined the certificate. The Finnish education is ranked relatively high and not all foreign degrees are considered to provide the same level of capability/proficiency. Often the only way to fill the knowledge gap is to take additional courses.

Also, some of the interviewees suggested that an aptitude test might be used as a tool for demonstrating the required capabilities.

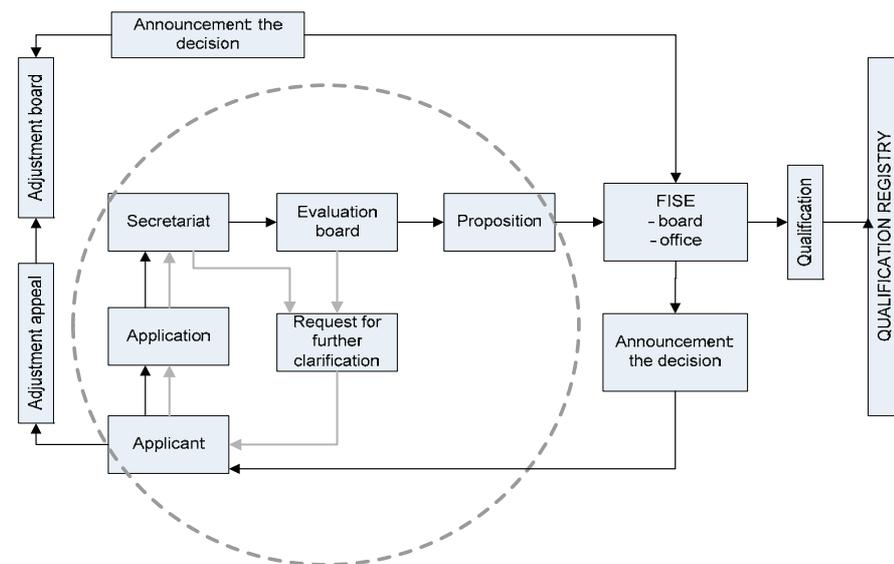


Figure 3. FISE Qualification system

When talking about the safety of construction, it must be remembered that it is a sum of many factors. Education and qualifications can clearly improve the design phase and, as the result, safety of buildings. However, even though the capability of persons working on a construction site may be demonstrated, it does not necessarily have a direct effect on improving safety of construction. There are many reasons for accidents, and education is only one part. Many accidents happen due to hurry in projects. This cannot be affected through education. However, naturally people

having more safety training may make more educated decision and be more alert to safety risks even when working in a hurry.

### 3.9 Proposals for potential improved systems and presenting results of the survey

Overall, the area of recognition of qualifications in construction sector is very broad and covers many different types of qualifications which make it very difficult to provide any recommendation for the model of the whole region. This type of work would probably require multi-national, profession-specific task groups (architectural design, structural engineering, HVAC-engineering, project management, work supervision, etc.), where representatives of the government, certification granting organisations and industry would discuss and determine the criteria on Nordic countries-level for the different qualifications of the specific profession (if the recognition of qualifications is considered necessary). Namely, one should remember that it is not necessarily just a recognition of qualification for structural engineers, but potentially four different qualifications for different complexity-level engineering tasks, as is today in Finland. However, two models could be applied as a basis for structuring the recognition criteria for the Northern Dimension countries: Norway in recognition of supervisors/foremen and Finland in recognition of designers.

An example of the way in which the recognition problem is handled on the European level, is an EU-project concerning the European Engineer Professional Card (Engcard). The project is coordinated by FEANI and EUROCADRES. In the project a possibility to implement an Engcard in Europe is evaluated. A microchip in an Engcard would contain information about the person's degree certificate and the level of the education, curriculum, work experience and language skills, etc. To enable this type of card-system, the educational institutes must assess the level of education they provide.

Regarding presentation of survey results, this type of information is very difficult to present in any easily comparable format. The national reports should be included in appendices. However, it would be beneficial, if any common titles were found in different countries. Their requirements could then be presented in tabular format side by side.

It would also assist the evaluation of the situation, if the report was presented in profession-specific format rather than in country-specific format. This would provide a list of qualifications (i.e. table of contents of the report) and then each chapter would present country-specific examples of how these qualifications are determined today.

### 3.10 Summary of interviews with branch experts (extracts from the main report)

Considerations of problems and possibilities for improvement were discussed by interviews with branch experts. The main conclusions on situation in the recognition area in general and in Finland particularly are as follows:

- Since Finnish universities and polytechnics are autonomous in setting their curricula, some interviewees expressed their willingness to see a bit more of governmental involvement in determining the basic education requirements to unify further the level of education between the different institutes. In construction, for example, requirements could be set on the extent of basic studies (number of ETCS-credits) in mathematics, physics, static's, and mechanics, etc. This would also ensure better construction quality.
- Lately, according to the interviewees, a need has also been experienced to ensure the quality and coherence of different qualifications gained through demonstrations (e.g. master builder, foreman), as these demonstrated qualifications are not governed by the government. As the result, the common view on the field seems to be that these qualifications could be governed by non-governmental institutions/associations in order to ensure consistent quality of this type of education, as well.

According to all interviewees, the assessment of qualifications is significantly facilitated if the main parties of a construction project have acquired (voluntary) recognitions of qualifications. However, the views on whether the recognition should be compulsory or voluntary differed. If the qualification of recognition would become compulsory, a status of FISE and VTT (or a similar organisation) should be enacted in a law, and the organisation(s) should be audited and accredited. There should be a way to ask for adjustment if an applicant was unsatisfied with the decisions received. (This is already possible for FISE certification.) In this case, the authorities responsible for recognition of qualifications and structuring of appropriate systems would be the Ministry of Education and the National Board of Education.

- Those who prefer the current system, which is based on voluntary recognition of qualifications, consider that the today's system has more flexibility, and, yet, the market acts self-steering in favour of the qualification certification. Even in this system, some critique was presented against the requirements set by the National Building Code A2, as it was considered somewhat open to interpretations, especially in terms of adequate work experience, which should be determined in more detail.

- Some concerns were expressed on the level of autonomy of the Finnish universities and polytechnics in setting their curricula, as these results in differences in the knowledge-level of graduates. A few interviewees stated that they would like to see a national exam in the universities and polytechnics, similar to the matriculation examination, which would ensure a more unified level of knowledge among graduates. If this type of process would be implemented in all EU-countries, it would also facilitate comparison of different degrees on multi-national level.

An example of the way in which this problem is handled on the European level, is an EU-project concerning the European Engineer Professional Card (Engcard). The project is coordinated by FEANI and EUROCADRES. In the project a possibility to implement an Engcard in Europe is evaluated. A microchip in an Engcard would contain information about the person's degree certificate and the level of the education, curriculum, work experience and language skills, etc. To enable this type of card-system, the educational institutes must assess the level of education they provide.

- First, it is important to note that all interviewees agreed that the degree certificate alone does not ascertain adequate qualification. Thus, in the previous tables, the qualifications are determined in terms of education and work experience. The education is determined based on the scope of Finnish curricula. When evaluating the adequacy of education, the Ministry of Education has determined the main criteria to be assessed as:
  - The duration of the education
  - Number of ECTS-credits
  - The institute providing the educations.

At least these criteria should be at the same level with the Finnish degree certificates. The interviewees also suggested that it might be beneficial to assess the extent and level of basic education (mathematics, physics, statistics and mechanics).

In order to improve the recognition of qualifications, some interviewees suggested that there should be a more automatic system for renewal of qualification certification. It was also suggested that it might be beneficial, to include a requirement about (continuous) post-graduate training which would ensure better maintenance and enhancement of capabilities. If a person had not worked or studied for the past #xx years, he would be required to update his/her know-how through a course or test before getting the certificate renewed.

- Additionally, it was debated whether, in the future, it is important in the Nordic Region countries to ascertain that construction professionals operating in the region understand and appreciate

specific design aspects that northern climate poses on construction. This is an important issue, which also construction professionals from southern countries should recognise. In order to obtain and demonstrate this capability, a person could be required to participate in a course and/or pass an exam.

- Also, some of the interviewees suggested that an aptitude test might be used as a tool for demonstrating the required capabilities.

When talking about the safety of construction, it must be remembered that it is a sum of many factors. Education and qualifications can clearly improve the design phase and, as the result, safety of buildings. However, even though the capability of persons working on a construction site may be demonstrated, it does not necessarily have a direct effect on improving safety of construction. There are many reasons for accidents, and education is only one part. Many accidents happen due to hurry in projects. This cannot be affected through education. However, naturally people having more safety training may make more educated decision and be more alert to safety risks even when working in a hurry.

- It would also assist the evaluation of the situation, if the report was presented in profession-specific format rather than in country-specific format. This would provide a list of qualifications (i.e. table of contents of the report) and then each chapter would present country-specific examples of how these qualifications are determined today.

### 3.11 Contact points for acquiring information

Potential contact points for acquiring information on all issues connected with free movement of professionals are following:

- On issues concerning free movement of labour:  
Ministry of Labour, P.O.Box 34, FIN-00023 Government.  
Phone +358 10 604 001; [www.mol.fi/](http://www.mol.fi/).
- On issues concerning mobility of youth/students:  
CIMO, Centre for International Mobility, PO Box 343, FIN-00531 Helsinki. Phone +358 9 7747 7033; [www.cimo.fi/](http://www.cimo.fi/).
- On issues concerning the approval of foreign professional titles-/qualifications: Finnish National Board of Education, P.O.Box 380, FIN-00531 Helsinki. Phone +358 9 774 775. Email: [kirjaamo@oph.fi](mailto:kirjaamo@oph.fi), [opetushallitus@oph.fi](mailto:opetushallitus@oph.fi); [www.oph.fi/](http://www.oph.fi/).

Compiled by Tiina Koppinen, VTT Technical Research Centre of Finland.



# 4. Iceland

## 4.1 Role of the state in governing the recognition process

The Ministry of Environment (Umhverfisstofnun, [www.umhverfisstofnun.is](http://www.umhverfisstofnun.is)), is responsible for the building law, regulations and specifications for the building authorities in different communities. The Ministry of Industry (Iðnaðarráðuneyti, [www.idnarraduneyti.is](http://www.idnarraduneyti.is)), has responsibility for certain issues such as giving permission for a person using some of the academic titles e.g. the title engineer.

Iceland being a part of the market though does not mean that a person (foreign or not) can work without restrictions in all fields. New constructions and renovation of old buildings are regulated by the Construction Law and Building Regulation. The Law clearly states that all main actors must be registered and with appropriate approval of education and training.

**Table 19. Role of the government in Iceland**

Name of the institution (Ministry, Council, Board, etc.)	Responsibilities and authorizations (functions, tasks, authorities, etc.) for each institution	Reference to legislation acts, regulations (only titles and acceptance year)
Ministry of Industry	Legislation, appointment of responsibilities, prescribing qualification criteria and basic contents of education based. Recognition of qualifications, on recommendations from the education committee of the Association of Chartered Engineers in Iceland	Law nr. 8/1996: On the certification of a number of professional titles in the technical field.
Ministry of Industry	Legislation, appointment of responsibilities, prescribing qualification criteria and basic contents of education based. Recognition of qualifications, on re-recommendations from the education committee of the Icelandic Society of Engineers.	Law nr. 8/1996: On the certification of a number of professional titles in the technical field.

The Building Law and Building Regulation are in the hands of the Ministry of Environment.

Specific competency requirements are set to the most academic works (e.g. engineering and architecture) and also for individual sectors of workmanship in industry.

On 1<sup>st</sup> of May 2006 a new law was accepted by the Icelandic Althingi. From this day Iceland has become a part of the integrated EU labour market. It means that an EU inhabitant, who has got an offer for a work in Iceland, may ask a permit for this. The permit will be granted according to the existing procedures.

Certification procedures are based on Law nr. 8/1996: On the certification of a number of professional titles in the technical field.

The Ministry of Industry keeps updated databases over those who have qualified to be granted the fitting Engineering title.

## 4.2 Role of non-governmental institution related to the recognition problems

**Table 20. Non-governmental institutions**

Name (association, research centre, society, etc.)	Area of activity	Reference to legislation acts prescribing empowerment
Association of Chartered Engineers in Iceland	Recommendation to the ministry of industry on whether to award the title of chartered engineer to an applicant or not based on evaluation of the engineering education of each applicant	Law nr. 8/1996: On the certification of a number of professional titles in the technical field.
Icelandic Society of Engineers	Recommendation to the ministry of industry on whether to award the title of engineer to an applicant or not based on evaluation of the engineering education of each applicant	Law nr. 8/1996: On the certification of a number of professional titles in the technical field.

There are the following associations in Iceland, which are involved in different activities of building character:

- Association of Chartered Engineers (Verkfræðingafélag Íslands, [www.vfi.is](http://www.vfi.is)) – Engineers with a M.Sc. degree;
- Icelandic Society of Engineers (Tæknifræðingafélag Íslands, [www.tfi.is](http://www.tfi.is)) – Engineers with a B.Sc. degree;
- Association of Icelandic Architects (Arkitektafélag Íslands, [www.ai.is](http://www.ai.is));
- Federation of Icelandic Industries (Samtök iðnaðarins, [www.si.is](http://www.si.is));
- Association for Building Education (Menntafélag byggingariðnaðarins, [www.mfb.is](http://www.mfb.is)).

These professional associations through committees of education carry out assessment of applications for granting professional titles of building profile.

## 4.3 Considerations about regulated engineering and technical professions

Civil engineering professions (as many professions in the construction sector) are regulated in Iceland, and any consulting engineering company must have its key persons with registered rights for work in Iceland. There are 3 different engineering certifications in Iceland which are:

- Certified Structural Engineer;
- Certified HVAC Engineer;
- Certified Electrical Engineer.

By having these titles the holders have the eligibility to approve designs in their respective fields. Each of them requires either a M.Sc. degree (Chartered Engineer) or a B.Sc.-degree (Engineer) and 3 years working experience and is awarded by either the Association of Chartered Engineers or Icelandic Society of Engineers.

The following is a list of regulations and laws where requirements are made to professions (most of them are not yet translated in English):

- Skipulags- og byggingarlög (Planning and Building Act): Planning- and Building Act no. 73/1997, sbr. 135/1997, 58/1999, 117/1999, 170/2000 and 74/2001. Valid from 1. Jan 1998.
- Regulation no.621/1997 about adjudication committee according to clause no. 8 of Planning and Building Act no. 73/1997.
- Regulation no. 747/1997 about the work of censor committee for Building Designers, sbr. 354/2004.
- Planning regulation no. 400/1998, sbr. no. 47/2001 og sbr no. 420/2002.
- Building regulation no. 441/1998, sbr. no. 563/2000 og sbr. no 425/2002.
- Regulation no. 168/2000 about requirements to be called Master Craftsman according to item number 10 in provisory law no. 73/1997, with later changes
- Regulation no. 730/2000 about certification of Technicians, sbr. 188/2001.

**Table 21. Regulated engineering and technician professions (compulsory recognition)**

List of regulated professions	Authority granting recognition	Principles for inclusion in the regulated category	Reference to legislation acts, regulations (only titles and acceptance year)
Chartered engineer	Ministry of Industry	Educational qualification: 5 years of study (MSc)	Law nr. 8/1996: On the certification of a number of professional titles in the technical field.
Engineer	Ministry of Industry	Educational qualification: 3,5 years of study (BSc)	Law nr. 8/1996: On the certification of a number of professional titles in the technical field.

#### 4.4 Qualification indicators and acceptance criteria for regulated professions

To become a Chartered Engineer, 5 year education resulting in Master of Science in Engineering is required. To become an Engineer, 3.5 year education leading to a Bachelor Science in Engineering is required.

Requirements on academic studies in engineering area were worked out some 30 years ago by the University of Iceland and the Association of Chartered Engineers, on behalf of the appropriate ministries, mainly of the Ministry of Industry and Trade.

These requirements make specific demands regarding depth of knowledge in mathematics, physics and chemistry. Historically this is because most of Icelandic engineers by tradition have studied the first 3-4 years in Iceland and then are going abroad for further studies. Therefore, students being prepared in such way are able to seek studies at any school they were interested in.

There are two main kinds of engineering education in Iceland:

- Academic engineering education at the University of Iceland (HI) and the University of Reykjavík (UR) – this education is according to the requirements discussed above, and comparable to engineering education in the Nordic countries. The education, “verkfræðingur”, has been compared to, and ranked according to rules in the USA engineering education system. The studies are 3 year BSc, + 2 years MSc and finally + 3 years PhD (according to the Bologna regulation).
- Technical/practical education, formerly done in one technical school, but now this education is part of a rather new university – the University of Reykjavík” (UR). The education in Icelandic is called “tækni-fræðingur” and in English “BSc engineer”, which does not fulfil fully the requirements mentioned above (academic engineering education).

**Table 22. Qualification indicators**

Professional title, engineer category	Full time education at university (years, ECTS-credits);
Chartered Engineer	5 year education resulting in Master of Science in Engineering
Engineer	3,5 year education resulting leading to a Bachelor Science in Engineering

#### 4.5 Alignment of qualifications obtained in different countries

There are two different types of engineering titles. The first one is Chartered Engineer, which is awarded if the applicant has studied for 5 years (M.Sc.). The second is Engineer which is awarded if the applicant has studied for 3,5 years (B.Sc.)

Craftsmen and master craftsmen must be registered according to the Construction Law and therefore they have to apply for the rights to call them (master-) craftsmen. The application must be submitted to the Ministry of Environment, which asks an education committee at the Association for Building Education (Menntafélag byggingariðnaðarins) about their opinion regarding education and training. Each new application for an education, not contemplated before, is handled individually. Requirements (as number of academic points in different subjects, each point taken as 1 weeks work) are formally described. The evaluation is carried out by a Committee of Education at each professional association.

If a master craftsman wishes the right to be responsible party for his profession in a capital construction (new buildings), he must ask for a special registration, and an opinion of the Federation of Icelandic Industries, which is responsible for granting the right. Such master craftsmen are required by the Law for each kind of the fields, for example wood, electricity, floorings, mortar, etc.

**Table 23. Alignment of qualifications (adequacy of education and experience)**

Professional title, engineer category	Criteria for alignment	Eligibility to public posts	Authority providing alignment
Certified Structural Engineer	MSc and BSc, 3 years working experience	Eligibility to approve design	Approval from certification committee in either the Association of Chartered Engineers or Icelandic Society of Engineers
Certified HVAC Engineer	MSc and BSc, 3 years working experience	Eligibility to approve design	Approval from certification committee in either the Association of Chartered Engineers or Icelandic Society of Engineers
Certified Electrical Engineer	MSc and BSc, 3 years working experience	Eligibility to approve design	Approval from certification committee in either the Association of Chartered Engineers or Icelandic Society of Engineers

## 4.6 Types of official qualification confirmation

The Ministry of Industry keeps updated databases over those who have qualified to be granted the fitting Engineering title.

**Table 24. Official confirmation of qualification**

Scope of professional activities	Criteria for confirmation	Parties involved in confirmation
Chartered Engineers	Recommendation to the Ministry of Industry on whether to award the title of Chartered Engineer to an applicant or not based on evaluation of the engineering education of each applicant.	Ministry of Industry keeps an updated database over those who qualify
Engineers	Recommendation to the Ministry of Industry on whether to award the title of Engineer to an applicant or not based on evaluation of the engineering education of each applicant.	Ministry of Industry keeps an updated database over those who qualify

## 4.7 Approval procedures of qualifications to secure safety of construction works

When an applicant applies for an Engineering title the Ministry of Industry receives the application and is responsible for granting the engineering title. The ministry always consults the Association of Chartered Engineers in Iceland that runs a special education committee that evaluates the applications according to advertised educational standards. It works by Law nr. 8/1996: On the certification of a number of professional titles in the technical field.

If the applicant meets the requirements the committee it recommends to the Ministry of Industry that the applicant gets the title. The Ministry of Industry then sends the applicant a letter that he has been granted the engineering title.

When validating an applicant the specified educational groups ask the applicant to submit the necessary papers about his education so that can be confirmed that he has the required education to get the title.

A person after fulfilling the requirements to academic study may apply to the Ministry of Industry for the right to call himself a Chartered engineer (“Verkfræðingur”), for example, civil-, electrical-, chemical-, industrial-, etc. engineer. The individual fulfilling the requirements of BSc according (b) may similarly apply for the right to call himself an Engineer “Tæknifræðingur” (in Icelandic there is a clear difference between these two types of engineers, but in English the word “engineer” has been used in both instances). There are two associations for these different “kinds” of engineers, but the working areas for both kinds overlap very much and difference in salaries may be small.

To get full freedom to work in the specific area a prescribed training period must be finished, for example, architectural and structural drawings of buildings that according to the Building Regulation must be done and then accepted by building authorities. However, such work may be done by a person even lacking formal rights for a corresponding work title on condition that a firm has a person with full rights for this work (Certified Engineer) and the firm (and its key person in question) signs all working documents and thus undertakes obligations to ensure the quality of the work done.

In order to get rights to the title “structural engineer” the applicant after finishing academic engineer studies must undergo three years training period under supervision of an experienced structural engineer. In addition, a specific course in Icelandic regulations and an examination is required.

An individual with studies abroad and wishing for a title (“verkfræðingur” or “tæknifræðingur”) in Iceland asks for the title at the Ministry of Industry and Trade. Depending on the title he seeks, the Ministry asks one of the two different associations to evaluate the quality of the applicant’s education (for architects it will be their association). The ap-

plicant is required to give a description of his education together with necessary diplomas etc. The problem here is to make the comparison between different schools, and this is usually done on an individual basis at the first time a new education is contemplated.

Engineering education in Iceland may be obtained in the following Universities:

- The University of Iceland (Háskóli Íslands – HÍ, [www.hi.is](http://www.hi.is));
- Reykjavik University (Háskólinn í Reykjavík – HR, [www.ru.is](http://www.ru.is)).

#### 4.8 Contact points for acquiring information

No information is distributed amongst a number of official and unofficial actors. The best way will be to contact the association of interest, and ask them for specific information. A valuable contact also should be the Trade Council of Iceland (Útflutningsráð, [www.icetrade.is](http://www.icetrade.is)).

Respondent: Mr. Kristján V. Rúriksson, Iceland Fire Authority. Email: [kristjan@brunamal.is](mailto:kristjan@brunamal.is)



# 5. Latvia

## 5.1 Role of the state in governing the recognition process

The Ministry of Economics has overall responsibility for all matters connected with building sector, including recognition of qualification. Access to the building market is permitted only to companies, which have certified personnel (the full list of qualifications see in p.6) in the profile applied. Certification bodies authorised by Ministry of Economics issue certificates for these qualifications, as well as grant extension of validity and withdrawal of certificates. List of certification bodies, which are authorised for the certification market, is published in the central governmental periodical "Latvijas Vestnesis". Competence of certification bodies is assessed according to the Latvian Law on Conformity Assessment and National standard (adapted from the identical European and International standard) LVS EN ISO/IEC 17024:2003, Conformity assessment – General requirements for bodies operating certification of persons. Certification procedures comprise general requirements covered by the standard mentioned above and specific criteria elaborated by each certification body in accordance with the profile applied for accreditation.

Latvian National Accreditation Bureau (LATAK) is responsible for assessment of competence all certification bodies applying for operation in the certification market.

The Ministry of Education and Science is responsible for education, including recognition of titles obtained in foreign countries.

Main legislation acts regulating recognition of qualification in building area are:

- Latvian Law on Construction;
- Latvian Law on Regulated Professions and Recognition of Qualifications in the Building Area;
- Regulations of Cabinet of Ministers N0 453 of 28 June 2005 on Registration of Building Companies.

These legislation acts are harmonised with General Systems Directives (89/48/EEC, 92/51/EEC and 99/42/EC) but not yet harmonised with the New Directive (2005/36/EC).

**Table 25. Role of the government in Latvia**

Name of the institution (Ministry, Council, Board, etc.)	Responsibilities and authorizations (functions, tasks, authorities, etc.) for each institutions	Reference to legislation acts, regulations (only titles and acceptance year)
Ministry of Education and Science	<p>The functions of Ministry: development of educational policy, organization and coordination of policy implementation.</p> <p>In order to ensure performance of functions the Ministry:</p> <ol style="list-style-type: none"> <li>1. elaborates state educational standards,</li> <li>2. accredits educational bodies as well as issues licences and accreditation programs,</li> <li>3. coordinates development and evaluation of professional standards,</li> <li>4. coordinates activities of bodies providing professional education and professional qualifications,</li> <li>5. coordinates recognition of professional qualification in mandatory area.</li> </ol>	Statute of Ministry of Education and Science MK <sup>3</sup> 2003. nr. 528
Academic Information Centre	<ol style="list-style-type: none"> <li>1. Latvian representative to the European diploma recognition networks – ENIC/NARIC.</li> <li>2. Information institution on recognition of Professional qualifications in regulated professions.</li> </ol>	Education Law, 1998. Law on regulated professions and recognition of professional qualifications, 2001

## 5.2 Role of non-governmental institutions related to the recognition problems

The following certification bodies are authorised for certification of professional in building sector as of 1 May 2006:

- Certification Body of Latvian Association of Civil Engineers;
- Certification Body of the Latvian Association of Heat, Gas and Water Technologies Engineers;
- Certification Body of the Latvian Marine Association;
- Certification Body of Latvian Melioration Association;
- Certification Body of the Latvian Railwayman Association;
- Certification Body of the Latvian Association of Energy Construction;
- Certification Body of the Latvian Association of Electric Power;
- Certification Body of the Latvia's Electrician`s Brotherhood.

<sup>3</sup>MK - Regulations of Cabinet of Ministers

**Table 26. Non-governmental institutions**

Name (association, research centre, society, etc.)	Area of activity	Reference to legislation acts prescribing empowerment
LATAK	Accreditation of certification bodies	Law 1999 On Conformity Assessment
Certification Body of Latvian Association of Civil Engineers	Certification of building (civil engineers) specialists	Construction Law, 1995. On issuing, registration and withdrawing certificates of building (civil engineers) specialists and architects, MK 2003, Nr. 383
Certification Body of The Latvian Association of Heat, Gas and Water Technologies Engineers	The same	The same
Certification Body of The Latvian Marine Association	The same	The same
Certification Body of Latvian Melioration Association	The same	The same
Certification Body of The Latvian Railwayman Association	The same	The same
Certification Body of The Latvian Association of Energy Construction	The same	The same
Certification Body of The Latvian Association of Electric Power	The same	The same
Certification Body of The Latvia's Electricians' Brotherhood	The same	The same
Latvian Association of Architects	Certification of architects	The same

### 5.3 Considerations about regulated engineering and technician professions

Natural persons applying for permission to practice as an engineer or technician have to go through a procedure of certification.

**Table 27. Regulated engineering and technician professions (compulsory recognition)**

List of regulated professions	Authority granting recognition	Principles for inclusion in the regulated category	Reference to legislation acts, regulations (only titles and acceptance year)
Architect's practice	Latvian Association of Architects	Reliability of design	Construction Law, 1995. General Construction Regulations, 1997
Engineering research – geotechnical research	Not determined	Reliability of engineering research	The same
Design and management of buildings, construction works, roads, bridges	Certification Body of Latvian Association of Civil Engineers	Reliability of design	The same
Design of water supply, ventilation, freezing, sewerage, gas and oil systems	Certification Body of The Latvian Association of Heat, Gas and Water Technologies Engineers	Reliability of design	The same
Design and management of electrical installation	Certification Bodies of The Latvian Associations of Energy Construction, Electric Power and Electricians' Brotherhood	Reliability of design	The same
Design and management of construction works of rail-ways and telecommunication systems	Certification Body of The Latvian Railwayman Association	Reliability of design	The same
Design and management of construction works of melioration systems and river hydro technical buildings	Certification Body of Latvian Melioration Association	Reliability of design	The same
Design and management of construction of marine hydro technical buildings	Certification Body of The Latvian Marine Association	Reliability of design	The same

Certification procedures are available for the following professions:

1. Architect's practice
2. Builder's practice:
  - 2.1 Engineering research – geotechnical research
  - 2.2.1 Design of building construction
  - 2.2.2 Design of water supply and sewerage systems
  - 2.2.3 Design of heat supply and ventilation systems
  - 2.2.4 Design of freezing systems
  - 2.2.5 Design of local gas systems
  - 2.2.6 Design of long distance gas and oil pipelines
  - 2.2.7 Design of electrical installation
  - 2.2.8 Design of telecommunication systems
  - 2.2.9 Design of melioration systems
  - 2.2.10 Design of marine hydro technical buildings
  - 2.2.11 Design of river hydro technical buildings
  - 2.2.12 Design of railways

- 2.3.1 Design, management of construction works and supervision of roads
- 2.3.2 Design, management of construction works and supervision of bridges
- 2.4.1 Management of construction works and supervision of buildings
- 2.4.2 Management of construction works and supervision for reconstruction
- 2.4.3 Management of construction works and supervision of water supply and sewerage systems
- 2.4.4 Management of construction works and supervision of heat supply and ventilation systems
- 2.4.5 Management of construction works and supervision of freezing systems
- 2.4.6 Management of construction works and supervision of local gas systems
- 2.4.7 Management of construction works and supervision of long distance gas and oil pipelines
- 2.4.8 Management of construction works and supervision of electrical installation
- 2.4.9 Management of construction works and supervision of telecommunication systems
- 2.4.10 Management of construction works and supervision of melioration systems
- 2.4.11 Management of construction works and supervision of marine hydro technical buildings
- 2.4.12 Management of construction works and supervision of river hydro technical buildings
- 2.4.13 Management of construction works and supervision of railways

## 5.4 Qualification indicators and acceptance criteria for regulated professions

**Table 28. Qualification indicators**

Professional title, engineer category	Full time education at university (years, ECTS-credits)	Post graduate experience (years)
Architect's practice	H24	3
Engineering research – geo technical research	H2	3
	H15, S6	5
Design of buildings, water and heat supply, ventilation, freezing, local gas, telecommunication, rail-ways melioration, sewerage, river and marine hydro technical systems, construction works and supervision of roads and bridges	The same	The same
Design of long distance gas and oil pipelines	H2	3
	H1	5
Design of electrical installation	H2	2
	H1	3
	S	5
Management of construction works and supervision of buildings and reconstruction works, management of construction works and supervision of freezing, local gas, telecommunication, melioration, water supply and sewerage systems, railways, river and marine hydro technical buildings	H2, H1	3
	S	5
Management of construction works and supervision of long distance gas and oil pipelines	H2, H1	3
Management of construction works and supervision of electrical installation	H2	2
	H1	3
	S	5

Outline of the educational system regarding civil engineering professions comprises the following levels and extent of education:

<sup>4</sup> H2 – adequate 2<sup>nd</sup> level higher professional education (4-6 years, 160-240 credit points)

<sup>5</sup> H1 – adequate 1st level higher professional education (2-3 years, 80-120 credit points) or 2nd level higher education of another kind of technical speciality

<sup>6</sup> S – adequate secondary professional education (4 years)

- Primary education – 9 years;
- Secondary education – 3 years, secondary professional education (technician) – 4 years;
- University professional education of the first level (bachelor) – 4 years;
- University professional education of the second level (civil engineer) 1–2 years;
- Extent of education for application of certification is for architects and civil engineers 3 years and for civil technicians 5 years.

Qualification requirements for applicants claiming confirmation by a certificate are listed.

## 5.5 Alignment of qualifications obtained in different countries

In accordance with the Latvian Law on Construction (Clause 10) and Regulations of Cabinet of Ministers No 453 of 28 June 2005, on Registration of Building Companies legal persons applying for permanent building practice shall have personnel with architects and/or builder's practice certificates of one or several specific qualifications. Applicants from foreign countries have to submit certification procedures in accordance with defined requirements.

**Table 29. Alignment of qualifications (adequacy of education and experience)**

Professional title, engineer category	Criteria for alignment	Eligibility to public posts	Authority providing alignment
Professions mentioned in table 28	The same requirements as for persons which have achieved professional qualification in Latvia	Is not defined	Bodies mentioned in table 27

## 5.6 Types of official qualification confirmation

All engineering qualifications enlisted should be confirmed by certificates issued according to accredited certification procedures (LVS EN ISO/IEC 17024:2003, Conformity assessment – General requirements for bodies operating certification of persons).

## 5.7 Approval procedures of qualifications to secure safety of construction works

The main requirements for certification application are:

- Architect or civil engineering educational background of specific profile;
- Experience in the qualification applied of duration 3 – 5years.

As exclusion in some cases 3 years experience is sufficient, if the applicant has master degree of 3 year's programme or secondary professional education of 5 year's programme.

Certificates of architect or civil engineering profession are issued for 5 years period. Prolongation of validity of certificates shall be carried out after each 5 years in accordance with the full certification programme.

## 5.8 Considerations about problems and improvement potential

The main objective of the state is to assure that recognition of qualification is as simple as possible as well as not to create any formal barriers. At the same time, the state should provide that EU political and normative documents are considered at the national level.

**Table 30. Proposals for improved model of recognition**

Level of coordinated activities	Reference to certain country's model	Scope and depth, instruments	Expected result
European level professional associations or organisations	Directive 2005/36/EC www.eurocadres.org, www.feai-ni.org	The introduction, at European level, of professional cards (European Engineering Professional Card) in accordance with Directive 2005/36/EC on the recognition of professional qualifications	Facilitate the mobility of professionals.
Governmental institutions, professional associations or organisations		Harmonisation of requirements of educational programs as well as for qualification in the building area (EU and regional level)	Facilitate the mobility of professionals.
Governmental institutions		Harmonisation of legislation on construction authority level	Facilitate providing of professional services, enhancement of competition
Governmental executive body		Information page on the internet	Available information for building companies and enhancement of competition

Non-governmental organisations are operating regarding the interests of their members. Therefore, the opinion of NGO related to recognition process of qualifications should be evaluated. Professional organisations are interested to operate within the limited competition which is opposite to interests of the state and society. NGO should have advisory role related to the recognition system of professional competence.

In general, building is private business and, therefore, liability should be shared between all market players. Within the competitive market, the profession is not the one that should be regulated, but the most important target is to provide liability through the whole building process.

The criteria of qualification are education and professional experience which should be expressed in the time period (years). Taking into account the diversity of the building market (difference in complexity and financial requirements), it is not useful to define the unified requirements to the whole building market, but they should be defined by the market players according to the current situation.

The builder must run the whole liability. In case when the building company is interested to recruit the personnel from other country, it should be liable that personnel should have qualification and training appropriate to local requirements.

Good solution could be introduction of professional cards which provide information about education (years, level, degree), professional experience (years), actual certificates. The card should be uniformed and would be recognised in different countries like driving licences. Some professional non- governmental organisations (FEANI and EUROCADRES) support the idea of professional cards on EU level. The implementation of such card could facilitate mobility of employees.

The process of recognition should be simple based on recognition of appropriate documents without additional procedures.

## 5.9 Contact points for acquiring information

Contact point for acquiring information on all issues connected with free movement of professionals including the building sector is: Academic Information Centre, Valnuiela 2, LV-1050 Riga, Latvia. Tel. +371 722 5155. Email: [diplomi@aic.lv](mailto:diplomi@aic.lv)

Respondent: Dzintars Grasmanis, Head of Building and Housing Department, Ministry of Economics. Email: [Dintars.Grasmanis@em.gov.lv](mailto:Dintars.Grasmanis@em.gov.lv).

# 6. Lithuania

## 6.1 Role of the state in governing the recognition process

The Ministry of Environment of the Republic of Lithuania (hereafter referred to as the Ministry) is the executive body which performs its functions of construction sector's state management authorized by laws and other legal acts as well as coordinates the implementation of country's state policy in this field. The website address of the Ministry is [www.am.lt](http://www.am.lt).

The Ministry has been authorized by the Government of the Republic of Lithuania to set the rules and requirements mandatory to those who seek to serve as heads in the main areas of technical construction activities in the Republic of Lithuania – see item No 4 in Structure of legislation. This also includes the rules for recognition of competence for specialists, who have obtained their qualification in other countries. The abovementioned rules and requirements are set by the Technical Construction Regulation STR 1.02.06:2007 (hereafter referred to as the Regulation) – item No 5 in Structure of legislation.

The recognition of competence for specialists, who have obtained their qualification in other countries is performed by the Commission for the certification of heads in the main areas of technical construction activities and territorial planning specialists (hereafter referred to as the Certification Commission) which is appointed by the Minister of Environment [item No 17 in Structure of legislation], who also approves its rules of procedure by an order – item No 18 in Structure of legislation. The chairperson of the Certification Commission is representative of the Ministry.

Technical work related to the procedures of recognition of documents is performed by the State enterprise Certification Centre of Construction Products (Statybos produkcijos sertifikavimo centras), Linkmenų g. 28, LT-08217 Vilnius (hereinafter referred to as SPSC). SPSC is an independent State enterprise established in 1996. The founder of the enterprise is the Ministry of Construction and Urban Development (currently the Ministry of Environment).

The representative of this State enterprise is a member of the Certification Commission for attestation of heads in the main areas of technical construction activities and territorial planning specialists. The website address of SPSC is [www.spsc.lt](http://www.spsc.lt).

**Table 31. Role of the government**

Name of the institution (Ministry, Council, Board, etc.)	Responsibilities and authorizations (functions, tasks, authorities, etc.) for each institutions	Reference to legislation acts, regulations (only titles and acceptance year)	Comments
Ministry of Environment	Foundation of the Certification Centre of Building Products; Orders for issue of Technical regulations; Appointment of the Certification Commission; Approval of certification rules	1. The Law on Construction of the Republic of Lithuania; 2. Technical Construction Regulation STR 1.02.06:2005 "The Description of the Procedure to Qualify for the Right to Serve as a Head in the Main Areas of Technical Construction Activities. The Rules of Recognition of Foreign Civil Engineering Diplomas in the Republic of Lithuania." 3. Technical construction regulation STR 1.02.07:2004. The description of the procedure to qualify for the right of the designer of a construction works, contractor of construction, manager of design or construction and contractor of expert examination of design documentation or construction works	Not all legislation acts are provided. The whole list will be seen in the Overall report.
Certification Centre of Building Products (SPSC)	Technical work related to the procedures of recognition of documents	Approved by the order of the Minister of Environment	
The Certification Commission		Appointed by the order of the Minister of Environment	

## 6.2 Structure of legislation

Legislation acts regulating recognition of qualification in building area are:

1. The Law on Construction of the Republic of Lithuania (Valstybės žinios (Official Gazette) No 32-788, 1996; No 101-3597, 2001);
2. The Law on Territorial Planning of the Republic of Lithuania (Valstybės žinios No 107-2391, 1995; No 21-617, 2004);
3. The Law on Protection of Immovable Cultural Properties of the Republic of Lithuania (Valstybės žinios No 3-37, 1995; No 153-5571, 2004);
4. Resolution No 280 of the Government of the Republic of Lithuania of 26 February 2002 on the Implementation of the Law on Construction of the Republic of Lithuania (Valstybės žinios No 22-819, 2002; No 30-983, No 103-3787, 2004);

5. Technical Construction Regulation STR<sup>7</sup> 1.02.06:2007 “The description of the procedure to qualify for the right to serve as a head in the main areas of technical construction activities and attestation of territorial planning specialists” (Valstybės žinios No 120-4945, 2007 – the official translation of the last but one edition of this Technical Construction Regulation is available on the official website of the Ministry of the Environment of the Republic of Lithuania, <http://www.am.lt/VI/en/VI/index.php#a/102>);
6. Resolution No 103 of the Government of the Republic of Lithuania of 27 January 1998 on the Approval of the Regulations of Licensing of Activities in the Nuclear Energy Sector” (Valstybės žinios No 12-274, 1998);
7. Order No 754 of the Minister of Education and Science of the Republic of Lithuania of 26 April 2002 on the Acknowledgement of Studies Completed in a Single-level Higher Education System as Equal to Sequential Studies of the Respective Levels (Valstybės žinios No 50-1925, 2002);
8. Order No IV-146 of the Minister of Culture of the Republic of Lithuania of 14 April 2005 on the Rules of the Certification of Specialists who Perform Applied Scientific Research on the Dismantling of Immovable Cultural Heritage, Prepare Design Documentation for Maintenance Operations of Heritage Protection, Perform Maintenance Operations of Heritage Protection and Manage such Operations and Perform (Special) Expert Examination of Heritage Protection, and on the Approval of the Procedure for the Certification of Specialists of the Protection of Immovable Cultural Heritage (Valstybės žinios No 60-2157);
9. Technical Construction Regulation STR 1.01.09:2003 “Classification of Buildings According to the Purpose of Their Use” (Valstybės žinios No 58-2611, 2003);
10. Technical Construction Regulation STR 1.05.06:2005 “Design of a Construction Works” (Valstybės žinios No 4-80, 2005);
11. Technical Construction Regulation STR 1.08.02:2002 “Construction Work” (Valstybės žinios No 54-2150, 2002);
12. Convention Abolishing the Requirement of Legalization for Foreign Public Documents (Valstybės žinios No 68-1699, 1997);
13. Resolution No. 1079 of the Government of the Republic of Lithuania of 30 October 2006 on the Adoption of the Description of the Procedure for Document Legalisation and Authentication by a Certificate (Apostille) (Valstybės žinios No 118-4477, 2006);
14. Resolution No 60 of the Government of the Republic of Lithuania of 21 January 2005 on the Approval of the Regulations of the Assessment and Academic Recognition of Qualifications Obtained Abroad

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<sup>7</sup> Technical Construction Regulations STRs are adopted by the Order of the Minister of Environment.

- which Give Access to Higher Education and of Higher Education Qualifications (Valstybės žinios No 12-369, 2005);
15. Technical Construction Regulation STR 1.02.07:2004. “The description of the procedure to qualify for the right of the designer of a construction works, contractor of construction, manager of design or construction and contractor of expert examination of design documentation or construction works The rules of recognising in the Republic of Lithuania the documents issued in a foreign state submitted by natural persons, legal persons or other foreign organisations confirming the right to work in the main areas of technical construction activities in the country of origin” (Valstybės žinios No 157-5739, 2004);
  16. Technical Construction Regulation STR 1.01.06:2002 “Construction works of an exceptional significance”, adopted on April 16, 2002 by the Order No 184 of the Minister of Environment of the Republic of Lithuania (Valstybės žinios No 43-1639, 2002 – the translation of the title of this legal act is unofficial);
  17. The Order No D1-630 of the Minister of Environment of the Republic of Lithuania of November 27, 2007 on the composition of the Commission for the certification of heads in the main areas of technical construction activities and territorial planning specialists (Valstybės žinios No 125-5126, 2007 – the translation of the title of this legal act is unofficial);
  18. The Order No D1-385 of the Minister of Environment of the Republic of Lithuania of August 1, 2005 on the adoption of rules of procedure of the Commission for certification of heads in the main areas of technical construction activities (Valstybės žinios No 95-3533, 2005 – the translation of the title of this legal act is unofficial);
  19. The Order No D1-223 of the Minister of Environment of the Republic of Lithuania of May 16, 2006 on the verification and evaluation of the professional knowledge of civil engineers who seek to serve as heads in the main areas of technical construction activities (Valstybės žinios No 57-2040, 2006 – the translation of the title of this legal act is unofficial).

### 6.3 Role of non-governmental institutions related to the recognition problems

Non-governmental institutions play an important role in the building sector. They are being recognized as social partners in the process of certification of competence for specialists. The following non-governmental organizations are directly involved in the process of recognition of competence in Lithuania by having their representatives in the Certification Commission appointed by the Minister of Environment – item No 17 in Structure of legislation:

- Lithuanian Architects Association,
- Vilnius Gediminas Technical University,
- Construction Industry Association,
- Association of Lithuanian Design Companies,
- Union of Lithuanian Civil Engineers,
- Association of Design and Construction Works Expert Examination Companies.

The following widely recognized professional societies, unions, associations, other public organisations registered in accordance with the procedure established by laws have rights empowered by an Order of the Minister of the Environment (item No 19 in Structure of legislation) to act in the field of teaching process, to check and assess the professional knowledge and express their opinion during qualification tests for national professionals:

- Lithuanian Roads Association,
- Union of Lithuanian Civil Engineers,
- Lithuanian Water Suppliers Association,
- Union of Lithuanian Hydro technical and Planning Engineers,
- Association of Lithuanian Thermo technical Engineers,
- Lithuanian Society of Informatics, Communication and Electronics,
- Association of Lithuanian Protection Technology Engineers,
- Public entity Centre of Training for Energy Specialists.

The above mentioned organizations themselves should satisfy certain qualification requirements listed in the Article 38 of the Regulation. The list of Organisations testing the professional knowledge of Applicants is published on the website of SPSC ([www.spsc.lt](http://www.spsc.lt)).

**Table 32. Non-governmental institutions**

Name (association, research centre, society, etc.)	Area of activity	Reference to legislation acts prescribing empowerment
Builders Association, Architects Associations, Construction Industry Association, Association of Lithuanian Design Companies, Union of Lithuanian Civil Engineers, Association of Construction Companies for Telecommunications.	Rights to act in the field of teaching process, to check and assess the professional knowledge and express their opinion during qualification tests for national professionals.	Building Technical Regulation STR 1.02.06:2005 "The description of the procedure to qualify for the right to serve as a head in the main areas of technical construction activities". Registered in accordance with the procedure established by laws regarding the field of teaching process.

## 6.4 Considerations about regulated engineering and technician professions

Article No 1 of the Regulation establishes the requirements mandatory to those who seek to serve as heads in the following main areas of technical construction activities in the Republic of Lithuania (the definitions of a non-exceptional significance construction works and of an exceptional significance construction works could be found in the Regulation and Construction Technical Regulation STR 1.01.06:2002 – item No 16 in Structure of legislation):

- Head of design of a non-exceptional significance construction works;
- Head of a part of design of a non-exceptional significance construction works;
- Head of supervision of the implementation of the design documentation of a non-exceptional significance construction works;
- Head of supervision of the implementation of a part of design documentation of a non-exceptional significance construction works;
- Head of the construction of a non-exceptional significance construction works;
- Head of special construction operations of a non-exceptional significance construction works;
- Head of technical supervision of construction of a non-exceptional significance construction works;
- Head of technical supervision of special construction operations of a non-exceptional significance construction works;
- Head of expert examination of the design documentation of a non-exceptional significance construction works;
- Head of expert examination of a part of the design documentation of a non-exceptional significance construction works;
- Head of expert examination of a non-exceptional significance construction works;
- Head of expert examination of a part of a non-exceptional significance construction works;
- Head of design of an exceptional significance construction works;
- Head of a part of design of an exceptional significance construction works;
- Head of supervision of the implementation of the design documentation of an exceptional significance construction works;
- Head of supervision of the implementation of a part of the design documentation of an exceptional significance construction works;
- Head of construction of an exceptional significance construction works;
- Head of special construction operations of an exceptional significance construction works;

- Head of technical supervision of construction of an exceptional significance construction works;
- Head of technical supervision of special construction operations of an exceptional significance construction works;
- Head of expert examination of the design documentation of an exceptional significance construction works;
- Head of expert examination of a part of the design documentation of an exceptional significance construction works;
- Head of expert examination of an exceptional significance construction works;
- Head of expert examination of a part of an exceptional significance construction works.

**Table 33. Regulated engineering and technician professions (compulsory recognition)**

List of regulated professions	Authority granting recognition	Principles for inclusion in the regulated category	Reference to legislation acts, regulations (only titles and acceptance year)
1) Designer of a non-exceptional significance construction works; 2) Designer of an exceptional significance construction works; 3) Contractor of construction of a non-exceptional significance construction works; 4) Contractor of construction of an exceptional significance construction works; 5) Manager of design of a construction works; 6) Manager of construction of a construction works; 7) Contractor of expert examination of the design documentation of a construction works or contractor of expert examination of a construction works.	Certificates are in the respective areas are approved by the Undersecretary of the Ministry of Environment following decision of the Certification Commission.	Applicants seeking access to the labour market or recognising the competence.  Two types of certificates: - Right Recognition Certificate confirming access of the Applicant in the labour market; - Certificate of Competence confirming competence of the Applicant in certain areas specified in the Regulation.	Technical construction regulation STR 1.02.07:2004. The description of the procedure to qualify for the right of the designer of a construction works, contractor of construction, manager of design or construction and contractor of expert examination of design documentation or construction works.

**Table 34. Non compulsory recognition of professions (granting a degree certificate)**

List of regulated professions (non compulsory recognition)	Authority granting recognition	Principles for inclusion in non regulated category	Reference to legislation acts prescribing empowerment
All professions, which do not claim working in the regulated area (see Table 33).	No recognition required for access to the market. Applicants may appeal to receive a Certificate of Competence of the designer or contractor of construction of a nonexceptional significance construction works.	Areas of building activities, which do not required certified professionals.	Certification procedures for granting the Certificate of Competence.

## 6.5 Qualification indicators and acceptance criteria for regulated professions

The duration of professional education for civil engineering professions in order to obtain bachelor degree in Lithuania is 4 years of University studies, to obtain master degree – additional 2 years of University studies. No special training after graduation is required, but qualification requirements to obtain permission to practice as an engineer should be met. Qualification requirements are listed in Annex 1 and Annex 2 of the Regulation.

The list of titles of civil engineering and technicians, which are possible to obtain in Lithuanian universities and colleges, changes every year according to the market demand. The full list of titles is under responsibility of Universities.

### 6.5.1 Qualification requirements for certification

Applicants meeting the following minimum requirements specified in Appendix 1 and Appendix 2 of the Regulation may be certified and have an open access to the labour market of Lithuania:

- An Applicant seeking to serve as head in the main areas of technical construction activities in a group of a non-exceptional significance construction works must have higher education diploma and work experience from 2 to 3 years depending on the area of technical construction activity.
- An Applicant seeking to serve as head in the main areas of technical construction activities in a group of an exceptional significance construction works must have higher education diploma and work experience from 3 to 5 years depending on the area of technical construction activity.

**Table 35. Qualification indicators**

Professional title, engineer category	Full time education at university (years, ECTS-credits);	Post graduate experience (years)	Additional training within specific technical fields
All professionals listed in Table 33.	Professional education for civil engineering professions in order to obtain bachelor degree in Lithuania is 4 years of University studies, to obtain master degree – additional 2 years of University studies.  The full list of titles is under responsibility of Universities.	Evidence confirming Applicant's rights to perform respective activities in the country of origin is sufficient.	No special training after graduation required, but qualification requirements to obtain permission to practice as an engineer should be met.

## 6.6 Alignment of qualifications obtained in different countries

**Table 36. Alignment of qualifications (adequacy of education and experience)**

Professional title, engineer category	Criteria for alignment	Eligibility to public posts	Authority providing alignment
Three levels: Legal and natural persons of the Republic of Lithuania; Legal persons, other organisations and natural persons of Member States; Legal persons, other organisations and natural persons of another country.	Recognition of documents of an Applicant, which are required to legalize the respective activities or to perform those activities; Confirmation of rights to work in the applied activity in the country of origin.  Documents shall be in accordance with the current legislation of the country in which the Applicant is established or of which he is a citizen. An Applicant has to prove rights to perform those activities in the country of origin and has to go through established certification procedures.	Not specific requirements.	Managed by the Certification Centre of Building Products.

In the cases specified in Chapters V and VI of the Regulation, the Right shall be granted by recognition of the Documents of an Applicant in the Republic of Lithuania which are required to legalize the respective activities or to perform those activities according to the current legislation of the country in which the Applicant is established or of which he is a citizen and which prove a right of the Applicant to perform those activities in the country of origin.

There are three cases of obtaining rights to be the head in the main areas of technical construction activities in the Republic of Lithuania (listed under point No 3):

- By civil engineers of the Republic of Lithuania (The Regulation, Chapter IV);
- By civil engineers of Member States (The Regulation, Chapter V);

- By civil engineers of another country, this means foreign country except Member States (The Regulation, Chapter VI).

## 6.7 Types of official qualification confirmation

There are two types of certificates in area of regulated professions in Lithuania:

- Qualification Certificate of the respective activities. This type of Certificate is issued after completion of the certification procedures specified in Chapter VIII of the Regulation and is applied Lithuanian professionals and in cases when the Documents on the Right (documents confirming a Right held by an Applicant in the country of origin. It is a single document confirming the right granted by a competent institution of the country of origin appointed in accordance with the legislation of that country or a set of such documents: certificate, diploma, attestation, reference, etc) are not submitted or do not exist.
- Right Recognition Certificate (hereinafter referred to RRC). The rules of the recognition of Documents on the Right and Recognition of the Right are specified in Chapter VII of the Regulation.

In both cases, the Certification Commission is responsible for making decision, justification and objectiveness of its decisions.

The Qualification Certificate shall include:

- Reference number of the Qualification Certificate;
- The name and surname of the head;
- The position for which a right is granted to the Applicant in the Republic of Lithuania. If the Qualification Certificate grants a right to serve in the positions specified in paragraphs 1.19, 1.20, 1.23 or 1.24 of the Regulation, the right to serve in these positions in a cultural heritage construction works shall be specified additionally;
- The group(s) of construction works;
- The area(s) of work;
- The expiry date of the Qualification Certificate;
- The date and the reference number of the Minutes of the Commission;
- The positions, surnames and signatures of the persons signing the Qualification Certificate.

**Table 37. Official confirmation of qualification**

Scope of professional activities	Criteria for confirmation	Basis for confirmation	Parties involved in confirmation
All regulated professionals listed in Table 33.	<p>An Applicant must:</p> <ol style="list-style-type: none"> <li>1. Be established according to the set procedure;</li> <li>2. Hold financial condition, capacity and possibility adequate to perform work, particularly: <ul style="list-style-type: none"> <li>– Permanent administrative technical personal available;</li> <li>– No bankruptcy cases or bankruptcy proceedings have been instituted</li> <li>– Paid taxes or other contributions to the state (municipal) budget</li> </ul> </li> <li>3. Own adequate qualification of specialists in areas of technical construction activities. The work must be directed by specialists working under an employment agreement. The mandatory number of such specialists is specified depending on types of activities.</li> </ol>	Certification procedures for granting the Right Recognition Certificate and the Certificate of Competence.	<p>The Certification Commission;</p> <p>Management by the Certification Centre of Building Products;</p> <p>Approval by the Undersecretary of the Ministry of Economy</p>

## 6.8 Approval procedures of qualifications to secure safety of construction works

The rules of recognition in the Republic of Lithuania of the documents issued in a foreign state that are submitted by natural persons, and that confirm the right to work in the main areas of technical construction activities in the country of origin are described in Chapters V, VI, and VII of the Regulation. The main activities of the recognition procedure in general could be described as follows.

An Applicant seeking an RRC shall file an application of prescribed content (together with Documents on the Right, copy of ID document, a notarised copy of a Diploma together with its translation into the state language, a document confirming the payment of the expenses of the RRC issuing) for an RRC with SPSC addressed to the Ministry of Environment.

Having examined and, in case of compliance with the set requirements, registered an Applicant's application, SPSC pass the application and the documents to the Certification Commission appointed by the Minister of Environment – item No 17 in Structure of legislation. Having analysed the submitted documents, the Certification Commission makes decision or to recognise submitted documents and to issue a certificate, or to refuse recognition of documents and therefore to decline issue of a certificate. The Certification Commission is responsible for justification and objectiveness of its decisions.

It should be noted that the Regulation foresees several cases when a civil engineer of a Member State shall acquire a right to serve in the positions specified in Article 1 of the Regulation. These are:

- When the Ministry of Environment recognises the submitted Documents on the Right and grants a Right Recognition Certificate. The guidelines for recognition of Documents on the Right and the Right are specified in Chapter VII of the Regulation;
- If the Documents on the Right are not submitted or do not exist, after completion of the certification procedures specified in Chapter VIII of the Regulation and after granting a Qualification Certificate of the respective activities.  
<http://www.spssc.lt/>

**Table 38. Improved model for ensuring safety of buildings and construction works**

Level of coordinated activities	Reference to certain country's model	Scope and depth, instruments	Expected result
Scope of the State	No opinion	Member State is responsible for set up of the levels of safety in their legal acts.	Guaranteed safety of construction works. No equal criteria within the region, mobility of professionals within MS would be disturbed.
Scope of the State	No opinion	Responsible state institutions should specify the mandatory requirements to qualify rights to perform the activities as a civil engineer.	No equal criteria within the region, mobility of professionals within MS would be disturbed.
Possibly scope of the Region	No opinion	The main areas of technical construction activities may be managed only by professionals, who have undergone certification or recognition procedures.	Possibly equal criteria within the region, if agreement among MS will be reached.

The Certificate is signed by the Undersecretary of the Ministry of Environment who supervises the certification of specialists and construction companies working in the main areas of construction and the Chairperson of the Certification Commission. The Certificate is valid up to 5 years.

SPSC manages the register of the Certificates of the Recognition of a Right to serve in the position of a head in the main areas of technical construction activities and the register of Qualification Certificates of the heads of the main areas of technical construction activities. Information about RRCs and Qualification Certificates is published on SPSC's website, [www.spssc.lt](http://www.spssc.lt).

## 6.9 Proposals for potential improved systems and presenting results of the survey

The role of the state in governing the recognition process is crucial as every Member State is responsible for set up of the levels of safety in their legal acts. Responsible state institutions should specify the mandatory requirements to qualify rights to perform the activities as a civil engineer. Only professionals, who have undergone certain certification or recognition procedures, may manage the main areas of technical construction activities.

Non-governmental institutions should be accepted as major social partners in the process of recognition of competence for specialists. However, as it is stated above, the state institutions carry the responsibility for the set up of safety level, which should guarantee adequate qualification of the professionals working in construction sector.

When recognizing the qualifications obtained in educational institutions of equivalent level, but different contents of tuition the principle of mutual recognition should be applicable. If there are substantial differences between the education acquired by the person and the contents of the education required in the host Member State the application of compensation measures could be carried out. Adaptation periods or an aptitude test of the certain level depending on the extent of aforementioned differences could be taken as those compensation measures.

## 6.10 Contact points for acquiring information

Contact points in Lithuania for acquiring information on all issues connected with free movement of professionals will be covered under requirements of the Directive of Services, which is not yet adapted in the national legislation. Governmental institutions are responsible for acquiring information under their competency, in the building sector particularly the Ministry of Environment.

Respondent: Dainius Cergelis, Chief Specialist of the Construction Products and Process Standardisation Division, Housing Construction Department, Ministry of Environment, A. Jaksto 4/9, LT-01105 Vilnius, Lithuania. Email: d.cergelis@am.lt.



# 7. Sweden

## 7.1 Role of the state in governing the recognition process

Academic titles are not protected in Sweden. However, there are a number of authorities stating different demands, through legislation, or other kinds of regulations such as:

- The Ministry of Sustainable Development,
- The National Board of Housing, Building and Planning,
- Swedish Road Administration,
- The Swedish Work Environment Authority and
- The Swedish National Electrical Safety Board.

The Planning and Building Act, administrated by the National Board of Housing, Building and Planning at the national level, prescribes that for works requiring a building notification the commissioner of a building shall appoint a person responsible for quality matters or a quality assurance supervisor.

## 7.2 Role of non-governmental institutions related to the recognition problems

There are no non-governmental institutions involved in recognition within the academic field in Sweden. However, a number of employers'- and trade union organizations and associations have interest for these professions.

The professions for skilled workers are, on the other hand, defined by collective agreements (but not formally regulated by law) between the parties of the labour market. A profession is defined by the collective agreement but different training boards define the objectives and the examination. The collective agreements regulate which level of salary the employee belongs to, but there is, for most professions, no formal demand towards a worker from another country that obstruct the latter to act in Sweden as a construction worker.

**Table 39. Role of the government**

Name of the institution (Ministry, Council, Board, etc.)	Responsibilities and authorizations (functions, tasks, authorities, etc.) for each institution	Reference to legislation acts, regulations (only titles and acceptance year)
Education: Ministry of Education and Research	Legislation, Determination of the scope of education (MSc, BSc), Approval of institutes-/universities.	
The Swedish Agency for Advanced Vocational Education (KY-myndigheten), <a href="http://www.ky.se/eng-elskainfo">www.ky.se/eng-elskainfo</a> .	Evaluation of educations at technicians' level.	
The Swedish National Agency for Higher Education (Högskoleverket) <a href="http://www.english.hsv.se/">www.english.hsv.se/</a> .	Evaluation of institutions, Recognition (voluntary, compulsory) of qualifications from higher educations in other countries	
Each seat of learning	Determination of the contents of education.	
Building and Planning Issues: Ministry of the Environment	Legislation	The Planning and Building Act and Decree (1987); The Act (and Decree) on Technical requirements for construction works (1994)
The National Board of Housing, Building and Planning (Boverket), <a href="http://www.boverket.se">www.boverket.se</a> .	Prescribing qualification criteria within the system for quality assurance supervisors (see also table 3.1) and for advanced concrete works.	The Building Sector Regulations (BBR) and the Design Regulations (BKR)
	Prescribing qualification demands for technicians managing advanced concrete works <sup>8</sup> .	Concrete Regulations (BBK)
Road and Railway Issues: Ministry of Enterprise, Energy and Communications	Legislation	
The Swedish National Electrical Safety Board (Elsäkerhetsverket), <a href="http://www.elsakerhets-verket.se">www.elsakerhets-verket.se</a>	Prescribing qualification criteria.	Regulations for Electrical Installations (Starkströmsföreskrifterna)

### 7.2.1 Non-governmental training boards for skilled workers

Most workers educates within the upper secondary school (Swe: “gymnasieskolan”), whose descriptions for the programmes/subjects/courses mainly follows the definitions made by the non-governmental training boards.

The Swedish Construction Federation (Sveriges Byggindustrier), the Association of Swedish Earth Moving Contractors (ME), the Swedish Building Workers Union (Byggnads) and The Union of Service and Communication Employees (SEKO) form together the Swedish Construction Industry Training Board (Byggnadsindustrins yrkesnämnd, BYN, [www.byn.se](http://www.byn.se)).

Professions defined by the parties:

<sup>8</sup> Criterias are defined by the Swedish Concrete Association

- Carpentry and Woodworking,
- Concrete work,
- Bricklaying,
- Machine Operating,
- Construction and road building,
- Floor-laying,
- Tile-laying,
- Surface-laying (Asphalt),
- Rock blasting,
- Concrete sawing and Drilling,
- Stone-masonry,
- Scaffolding,
- Roofing,
- Ceiling construction,
- Construction Diving.

The trade and employers' association of the Swedish Painting Contractors and the Swedish Painters Union form together The Painting Trade Training Board (Måleribranschens yrkesnämnd, [www.malare.nu](http://www.malare.nu)). Profession: Housepainter.

The Sheet-metal Trade employers' organization (PLR) and the Swedish Building Workers Union (Byggnads) form together the Training board for Sheet-metal work and Ventilation (PVF, Plåt & Vent Yrkesnämnden, [www.pvf.se](http://www.pvf.se)). Profession: Sheet-metal worker

The employers' organization for sanitation, heating and ventilation (VVS-Installatörerna) and the Swedish Building Workers Union (Byggnads) form together the Training Board for the Sanitation-, Heating- and Ventilation Trade (VVS-Branschens Yrkesnämnd, [www.vvsyn.se](http://www.vvsyn.se)). Profession: Plumber, Insulation worker

The employers' organization for electrical installation (EIO) and The Swedish Electricians Union (Elektrikerförbundet) form together the Central Committee of the Electrical Trade for Vocational Training ([www.ecy.com](http://www.ecy.com)).

Profession: Electrician.

### 7.3 Considerations about regulated engineering and technician professions

The National Board of Housing, Building and Planning (Boverket, [www.boverket.se](http://www.boverket.se)), is the central government authority for planning, management of land and water resources, urban development, building and housing under the Ministry of Sustainable Development.

The Planning and Building Act, administrated by the National Board of Housing, Building and Planning at the national level, prescribes that

for works requiring a building notification the client or commissioner of a building shall appoint a person responsible for quality matters or Quality assurance Supervisor. This person has to be approved either locally or nationwide and there are different demands depending on the difficulty of the building/structure. The task is to ensure that the essential demands from the society (legislation and regulations) are fulfilled. The person shall have necessary education and experience and have an aptitude for the task. Normally it's preferable to appoint a person that is not involved in the works at site. The Building Committee of local municipalities supervises the approval of Quality assurance Supervisors at the local level. To obtain a nationwide coverage the demands are higher and the person is certified for a limited time-period. There are three different classes for the nationwide coverage; E, N, and K. Both educational knowledge and experience are demanded and there is also a demand for documented knowledge about the Swedish act on Technical requirements for construction works and the Planning and Building act (see following table).

For some competencies, such as fire issues, accessibility and other specialities, a special expert can be certified if he can prove his competence of the issue in question. To be able to inspect the ventilation according to the regulations on mandatory ventilation control, the inspector must be certified by an accredited body or authorized by the local building committee for the individual body.

There are at present three accredited companies that have the right to decide about quality assurance supervisors with nationwide coverage. These certification bodies cooperate with different providers of education:

- SWEDCERT, Campus Gräsvik 1, S-371 75 Karlskrona, Sweden.  
Phone: + 46 455 30 56 00. Email: office@swedcert.se;  
www.swedcert.se.
- DNV Certification AB, Box 30234, S-104 25 Stockholm, Sweden.  
Phone: + 46 8 587 940 00. Email: info.sweden@dnv.com;  
www.detnorskeveritas.se.
- SITAC AB, Box 553, S-371 23 Karlskrona, Sweden.  
Phone: +46 455 33 63 00. Email: info@sitac.se; www.sitac.se.

**Table 40. Regulated engineering and technician professions (compulsory recognition)**

List of regulated professions	Authority granting recognition	Principles for inclusion in the regulated category	Reference to legislation acts, regulations (only titles and acceptance year)
The professions within the building sector in Sweden are generally not regulated.			
Quality Assurance Supervisor according to the Planning and Building act (kvalitetssansvarig).	SWEDCERT www.swedcert.se. DNV Certification AB www.detnorskeveritas.se.	E-simple, "smaller houses"; N-normal, "up to 4 storeys" K-complicated, "larger school-buildings, hospitals etc."	The Planning and Building Act and Decree (1987), The Building Sector Regulations (BBR)
Note: This role can be engaged as a consultant.	SITAC AB www.sitac.se		
Authorisation as electrical contractor	Elsäkerhetsverket (The Swedish National Electrical Safety Board) www.elsakerhetsverket.se Authorisation applications are to be submitted to the Swedish National Electrical Safety Board. Application forms are available from the Board.	Authorisation as electrical contractor may be conferred for those who have performed electrical installation work in an EEA country other than Sweden.	Regulations for Electrical Installations (Starkströmsföreskrifterna)

The Swedish Road Administration (Vägverket; [www.vv.se](http://www.vv.se)) has, as a major buyer of road works, a number of smaller courses that each employee at a site has to get through. The courses focus mainly at security and environmental aspects.

The Swedish Work Environment Authority (Arbetsmiljöverket; [www.av.se](http://www.av.se)) is the administrative authority for questions relating to the working environment.

In the Statute Book (AFS), translated to English ([www.av.se/inenglish/lawandjustice/provisions/](http://www.av.se/inenglish/lawandjustice/provisions/)), the authority defines a number of compulsory medical controls concerning:

- Lead,
- Quartz,
- Asbestos,
- Thermosetting plastics,
- Mast and pole work,
- Diving,
- Night-work and
- Work in nuclear plants.

There are also some regulations that require medical control at need:

- Vibrations,
- Noise,

- Risk for infection and
- Vision.

The Swedish National Electrical Safety Board (Elsäkerhetsverket, Box 1371, S-111 93 Stockholm. Phone: +46 8 508 905 00. Email: [elsakerhetsverket@elsa-kerhetsverket.se](mailto:elsakerhetsverket@elsa-kerhetsverket.se)) regulates the authorisation for electricians who want to work as professional electrical contractors and also for consultant engineers within this area.

## 7.4. Qualification indicators and acceptance criteria for regulated professions

### 7.4.1 Post-secondary education

Academic titles are not protected in Sweden. Therefore, it is not necessary to have a permit to use a title. The following educations are not regulated but yet described here to give a picture of the Swedish education system for technicians and engineers.

At higher level two different authorities have the responsibility:

- The Swedish Agency for Advanced Vocational Education (KY-myndigheten; [www.ky.se/engelskainfo](http://www.ky.se/engelskainfo))
- The Swedish National Agency for Higher Education ([www.hsv.se/english](http://www.hsv.se/english))

KY is a form of post-secondary education designed and carried out in close co-operation with workplaces. One third of the education time is spent in the advanced application of theoretical knowledge at a workplace – LIA. In contrast to the traditional traineeship period, LIA is an active workplace learning and problem-solving in an overall educational context.

The responsibilities of the Agency for Advanced Vocational Education are to draw up guidelines and contribute to development, approve applications, to make grants and to supervise and follow up the courses. Each education defines their educational objective.

The Swedish National Agency for Higher Education issues regulations to supplement and clarify the provisions of the Higher Education Act and the Higher Education Ordinance.

Each seat of learning defines their own educational objective starting from the general objectives in the Higher Education Ordinance.

#### 7.4.2 Technicians

Within the KY-education the typical length of the education is from 1–2 years. The objective is defined in close collaboration with the trade and varies between different providers of education.

Beside the KY-system there are three different kinds of examination for technicians at university college/university:

- Yrkeshögskoleexamen 80 p (120 ECTS)<sup>9</sup>
- Yrkesteknisk examen 60 p (90 ECTS)
- Högskoleexamen 80 p (120 ECTS)

#### 7.4.3 Engineers (BSc and MSc) and Architects

Occurring academic degrees for engineers at bachelor and master level and architects are:

- Högskoleingenjörsexamen 120 p (180 ECTS)
- Civilingenjörsexamen 180 p (270 ECTS)
- Arkitektexamen 180 p (270 ECTS)

There are also possibilities to obtain a General degree:

- Kandidatexamen (Bachelor of...) 120 p (180 ECTS)
- Magisterexamen (Master of...) 160 p (240 ECTS)

**Table 41. Qualification indicators**

Professional title, engineer category	Full time education at university (years, ECTS-credits);	Post graduate experience (years)
Building engineer or Civil engineer (BSc) (Swe: Högskoleingenjör)	3 years, 180 ECTS-credits	No demands in Sweden
Civil engineer (MSc) (Swe: Civilingenjör, Väg- och vatten eller Samhällsbyggnad)	4,5 years, 270 ECTS-credits	No demands in Sweden
Architect	4.5 years, 270 ECTS-credits	No demands in Sweden

There are generally no demands claiming practice during the studies or after the exam.

#### 7.4.4 Vocational training

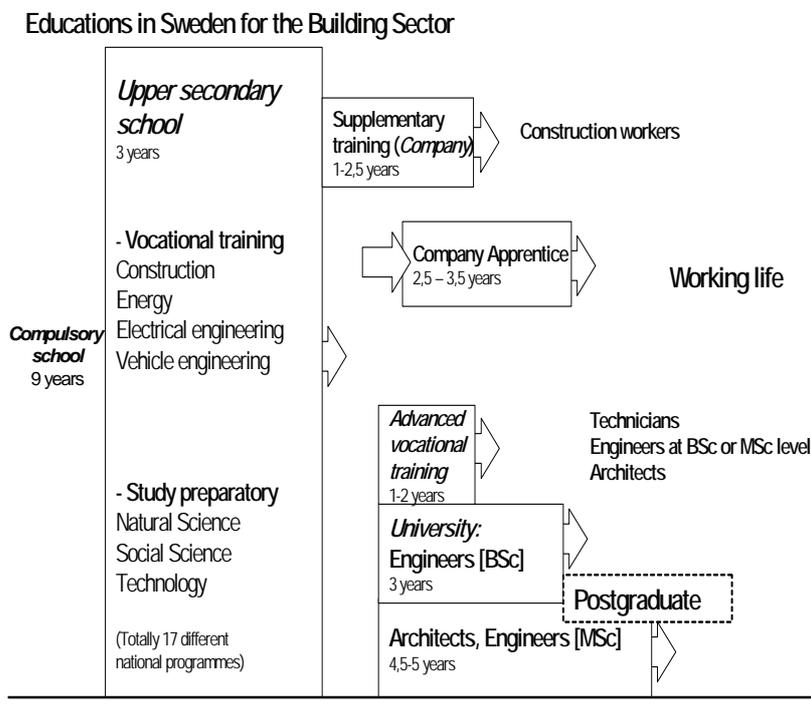
The vocational training in Sweden starts for the majority of the skilled workers with three years within the upper secondary school. After this,

<sup>9</sup>The Swedish higher education system is upgrading to the ECTS-system from an earlier 40p/year-system.

there is a period of supplementary training as apprentice at a company. This period varies from 1 to 2,5 years depending on occupational group. Another opportunity is to take all the training within a company as apprentice.

See also the earlier part “Role of non-governmental institutions related to the recognition problems”.

Figure 4. Education in Sweden for the Building Sector



### 7.5. Alignment of qualifications obtained in different countries

Qualifications from higher education in another country can be validated. The applicant receives a document that states which Swedish education the qualification corresponds to. The Swedish National Agency for Higher Education handles the applications.

### 7.6. Types of official qualification confirmation

Higher education: Statement from the Swedish National Agency for Higher Education that compares a foreign education with a Swedish similar education.

**Table 42. Official confirmation of qualification**

Scope of professional activities	Criteria for confirmation	Parties involved in confirmation
Foreign professionals with higher education	Diploma/certificate from foreign higher education	Swedish National Agency for Higher Education (Högskoleverket), Box 7851, S-103 99 Stockholm, Sweden. Phone: +46-8-563 085 00. E-mail: hsv@hsv.se, www.hsv.se.

### 7.7. Approval procedures of qualifications to secure safety of construction works

There is no permission necessary to practice as a building company, but the actual projects need permissions, and the responsibility belongs to the buyer or “commissioner” of the building.

In general anyone who on his own account carries out or commissions anyone else to carry out construction, demolition or site improvement work (the builder), shall ensure that the work is carried out in compliance with the provisions of the legislation:

- The landowner (building owner) must send a building notice to the local building committee (at least three weeks before the start of the works);
- The committee calls for a consultative meeting with the building owner, the quality assurance supervisor and other important persons in the construction project;
- Examination is made of the design and planning of the works and all the measures taken for inspection, supervision and other controls (detailed development plan) at the consultative meeting;
- The building owner makes the inspection schedule and the building committee takes a decision;
- The committee approves a quality assurance supervisor to handle the inspection plan;
- The committee issues a building permit and completion certificate after construction works have finished and accepted.

### 7.8 Considerations about problems and possible improvement

The different governments could present existing regulations and demands in a common structure that facilitates comparison. A website could give the necessary tools. The governments have to take this role in order to fulfil demands from the European directives. Within this structure,

contact-ways has to be given. A need for labour within a certain field in a country seems to make things easier.

If there are NGO-related certifications or other provisions in the country, these have to be made clear and the way to obtain this certification has to be presented. If not this obstacle should be considered to be removed or declared as invalid.

Even though Sweden has very few regulated professions, there are some areas that may be an obstacle for a foreign engineer or technician, for example; the earlier described quality insurance supervisor and also within electrical installation and more complicated concrete and masonry works.

The ongoing "Bologna"-process will help in this case. But consideration has also to be taken to older titles and kinds of educations.

The law-regulated responsibility for work environment and security issues concerning a construction-site is delegated within the companies. The company has to make sure that the on-site management has relevant education. There are also safety representatives, employees with a special education and statutory power to break off the work.

## 7.9 Contact points for acquiring information

The Swedish National Agency for Higher Education (Högskoleverket), Box 7851, S-103 99 Stockholm, Sweden. Phone: +46-8-563 085 00. Email: hsv@hsv.se, www.hsv.se.

The Programme Office deals with the different programmes for enhanced mobility within the school system and also with the Leonardo da Vinci-programme.

The International Programme Office for Education and Training (Internationella programkontoret), Box 22007, S-104 22 Stockholm, Sweden. Phone +46 8 453 72 00. Email: [registrator@programkontoret.se](mailto:registrator@programkontoret.se), [www.programkontoret.se](http://www.programkontoret.se)

Respondent: Mr Lars Tullstedt, The Swedish Construction Federation, Head of Recruitment and Training Issues. Email: [lars.tullstedt@bygg.org](mailto:lars.tullstedt@bygg.org). Phone +46 8 698 58 22, cell +46 733 900 970. Sveriges Byggindustrier, Box 7835, S-103 98 Stockholm, Sweden.

## 8. Comparative indicators on main recognition issues

### 8.1 Way of presentation

According to the global objective of the project, national recognition systems should be easier to manage and more clear, quick and friendly to use by improving transparency of qualifications. Obviously, awareness of the existing situation, clearly presented as much as possible should provide a starting point to reach this objective. However, previous communications with representatives of the countries experienced a problem. Content and amount of data from different sources of information vary quite much. Alongside with very short wordings and references to legal acts, very lengthy descriptions took place.

Exchange of opinions about the best way of presenting the gathered data (Questionnaire 1) suggested that information should be in some way standardised and presented in well-structured format. Accordingly, the tabular format was proposed in order to compress the lengthy entries in addition to the each country's full contribution. It turned out, that despite strict structure of the Questionnaire and instructions accompanied request for the tabular format, information presented in the tables is still extensive. It needs to be summarised once again in order to compare recognition systems of different countries in a joint format, i.e. preferable in a separate table for each characteristic.

In general tables may be structured twofold – by the country dimension (a table or set of tables for each country) or by characteristic dimension (a separate table for each recognition characteristic). Both approaches have been utilised in this report. Just this chapter covers the last configuration. The tables according to the first dimension are attached to the corresponding country's chapter.

### 8.2 Role of the state

Role of the state in regulation of recognition problems (Table 43) in all countries expresses itself as overall responsibility at the ministry level. Recognition process in all countries is determined by legislation acts, as well as authorisation or foundation of respective institutions. However, distribution of responsibilities, scope and depth of involvement of the state in recognition process is different; to begin with no participation (Denmark, Finland), involvement for few critical professions (Sweden,

Iceland) and approval of responsibilities for all key engineering positions (Estonia, Lithuania, and Latvia).

**Table 43. Role of the government**

Activities	DK	EE	FI	IS	LV	LT	SE
Legislation on education and recognition of degrees	A <sup>10</sup>	A	A	A	A	A	A
Prescribing qualification requirements	A	A	A	A	A	A	A
Coordinating the competent public authorities' activities	A		A				
Legislation on recognition issues and assessment procedures		A			A	A	
Appointment of certification/approval institutions		A				A	

### 8.3 Role of non-governmental institutions

**Table 44. Role of non-governmental institutions**

Activities	DK	EE	FI	IS	LV	LT	SE
Provision of training and dissemination of information	NA <sup>11</sup>	NA	A				
Participation in teaching and assessment of professional knowledge			A			A	A
Review applications for granting professional titles				A			
Certification and approval of non regulated professions			A	A			
Certification and approval of regulated professions					A		

Regarding the role of non-governmental institutions (Table 44) there is a large scale of variety among the countries. Distinctive tasks are observed, particularly providing training and disseminating information (all countries, except Iceland and Latvia), voluntary recognition of qualifications and certificate registers (Finland), granting titles of engineer and chartered engineer (Estonia, Iceland) and accredited certification (Latvia, Lithuania).

### 8.4 Regulated engineering and technician professions

Different approaches are also observed concerning regulated engineering professions – one of the main recognition attribute (Table 45): not regulated at all (Finland, Denmark – only vocational professions); some critical professions as quality assurance supervisors, chartered engineers and

<sup>10</sup> A – Available

<sup>11</sup> NA – No information available

engineers (Sweden, Iceland) and all essential engineering professions (Estonia, Latvia and Lithuania).

**Table 45. Regulated engineering and technician professions**

Activities	DK	EE	FI	IS	LV	LT	SE
Engineering professions not regulated	A		A				A
Only for critical professions (architecture, energy, supervision, etc.)			A	A			A
Regulated professions of vocational character	A		A	A			A
All main engineering and technician professions		A			A	A	

## 8.5 Qualification indicators

**Table 46. Qualification indicators**

Activities	DK	EE	FI	IS	LV	LT	SE
Length of education and ECTS-credits obtained in EU and EFTA countries	A		A	A			A
Length of education, ECTS-credits and professional experience		A			A	A	A
Length of education, ECTS-credits and additional national criteria (certification)		A			A	A	

Table 46 demonstrates qualification indicators for engineering professions. All countries are quite unified for this characteristic and in main points follow so called Bologna principles expressed by duration of the education (years and number of ECTS-credits).

## 8.6 Alignment of engineering qualifications obtained abroad

Alignment of qualifications obtained abroad is another attribute, which play significant role in the recognition process (Table 47). Two principles are observed in the alignment process, depending whether the profession is obtained in one of EU countries or outside this region. Thus, free access is offered for EU and EEA applicants but alignment of degrees for non EU applicants, who are required the same level of education as nationals (Denmark, Finland, Iceland, and Sweden). Additional training, evidence of experience and certification are required in Estonia, Latvia and Lithuania.

**Table 47. Alignment of engineering qualifications obtained abroad**

Activities	DK	EE	FI	IS	LV	LT	SE
Approved qualification obtained in EU and EFTA countries	A		A	NA			NA
Additional assessment for applicants outside of EU and EFTA	A		A				
Assessment of all applicants		A			A	A	

## 8.7 Securing safety of buildings and construction works

Approach to securing safety of buildings and construction works (Table 48) divide countries in two groups. The first group exercises a liberal system, based on mutual recognition of education and voluntary certification of engineering and technicians professions (Denmark, Finland, Iceland and Sweden). Safety of construction works in this case is secured by entrusting responsibilities to supervision operators, building developers and building authorities. The second group apply a strict (hard) approach requiring permit to the market only by an approval or a certificate (Estonia, Latvia and Lithuania). The main argument of the hard liners is necessity to guarantee safety of construction work by high qualification operators in all crucial positions. Competence is assessed by the State authorised approval procedures.

**Table 48. Securing safety of buildings and construction works**

Activities	DK	EE	FI	IS	LV	LT	SE
Competency requirements defined in legislation	A		A				
Responsibility of building developers to assess competence of operators			A				
Responsibility of building authorities to assess documentation and to issue a permit			A				
Responsibility of a quality assurance supervisor and notification of a commissioner				A			A
Execution of works only by approved engineering staff		A			A	A	

## 8.8 Proposals for an improved model of recognition

Regarding harmonisation of recognition provisions, opinion of necessity to harmonise qualification requirements at EU level predominates. One vote in favour to harmonisation at the regional level is granted by Latvia and one vote for the national level – by Lithuania.

**Table 49. Proposals for an improved model of recognition**

Activities	DK	EE	FI	IS	LV	LT	SE
Harmonisation of qualification requirements at EU level	A	NO <sup>12</sup>	A	NO	A		NO
Harmonisation of qualification requirements at regional level					A		
Mandatory qualification requirements at the national level						A	

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<sup>12</sup> NO – No opinion



# 9. Considerations about a common approach to recognition problems

## 9.1 Recognition system of Finland as a model for reproduction

Recognition system of Finland may provide a model for reproduction or at least a basis for elaboration of such a model for liberal recognition systems. The main benefit – this model may facilitate mobility of professionals, which is the key objective of the present project. Illustration of this example and interpretation of reasons more in details are as follows.

### *9.1.1 Legislation and provisions*

There is a good balance of responsibilities between administrative methods (governmental) and professional assessment (non-governmental) of competence of actors at the construction site.

The role of governmental institutions is restricted by legislation on education and recognition of degrees, appointment of responsibilities, prescribing qualification criteria and acceptance criteria – on general issues by the Ministry of Education and on specific requirements in the building sector by the Ministry of the Environment.

### *9.1.2 Regulated professions*

Construction related professions are not regulated and there is no compulsory recognition of qualification for any profession in construction. Instead, construction employers, building developers and authorities have the responsibility to assess the capabilities of professionals in order to ensure the quality and safety of the building projects.

### *9.1.3 Safety of buildings and construction works*

The safety of buildings is secured by the following hierarchy of requirements:

- The legislation (the National Building Code) sets the competency requirements in pursuance of ensuring safety of buildings and construction works.

- Building developers have to assess whether the proponents have the required capabilities when employing building professionals.
- The buildings authorities carry out the final assessment, i.e. assess the capabilities of the project team, and based on this (and acceptable building documentation) take decision on granting the building permit.

#### *9.1.4 The role of non-governmental organisations*

Professional non-governmental organisations – FISE and VTT Technical Research Centre of Finland – administer voluntary recognition of qualifications for construction. This type of recognition pursues to facilitate the assessment made by building developers and employers in selecting competent persons to their project teams.

FISE is established by a number of professional associations recognising qualifications based on the requirements set by the legislation. Non compulsory recognition of qualifications is granted to project managers, supervisors, principal designers, architects, inspectors, structural engineers, building physics engineers, HVAC engineers, renovation engineers, project/site managers, site technicians and foremen.

VTT is a government owned accredited research and certification organisation, administers and maintains person certificate register based on voluntary applications as well. The person certification pursues to ensure that the individual is capable of doing what he proclaims to be (sanitary cabin waterproofing, measurement of structural humidity, installation of roofing, expert on building health). The applicant must participate in the training organised by an approved/certified institution.

#### *9.1.5 Building supervision authorities*

The key person is the building supervision authority, who ascertains the degree of difficulty of the design task in relation to the characteristics of the building project. On this basis, the authority assesses the demands of the task in relation to the proficiency of the designer, which includes examinations passed by the designer and other training/education undertaken by him plus experience and evidence of it in the relevant design field. These requirements cover also relevant work experience. There are four types (special, basic, smallish, minor demands) of projects based on the complexity of the design task.

A construction foreman is responsible to select adequate qualifications for supervising the construction work in terms of project complexity. Especially qualifications requirements are of foremen supervising construction of bearing structures and HVAC-systems, which affect the indoor air-quality.

Finally, requirements for qualifications do not involve only high ranked positions in construction, but extend also to vocational professions.

#### *9.1.6 Qualification indicators*

Qualification indicators and contents of education for professionals in general follows the so called Bologna principles, comprising entrance requirements, full time education at university and obtaining relevant ECTS-credits. Responsible for evaluation of the adequacy of education is the Ministry of Education and the main criteria of assessment are:

- Duration of the education;
- Number of ECTS-credits;
- The institute providing the educations.

At least these criteria should be at the same level with the Finnish degree certificates.

Qualification indicators of building character, particularly for designers in projects of different levels of complexity are determined by the National Building Code of Finland.

#### *9.1.7 Alignment of qualifications obtained in foreign countries*

The main principle behind the recognition of degree certificates in Finland is that if an EU citizen has completed a major part of his or her education in one EU country the degree is recognised in all EU countries. This principle of recognition also applies to EEA countries. If a foreign degree is very different from the Finnish degree, even though the degree is accepted, the person may not be assessed as qualified for the job. This is a reason why many of the foreign applicants have been declined granting the FISE certificate. However, qualification indicators of building character, particularly for designers in projects of different levels of complexity are determined by the National Building Code of Finland.

#### *9.1.8 Eligibility to public posts*

Citizens of Nordic countries do not need recognition for eligibility to public posts if their qualification has been taken in a Nordic country and the main content of the qualification can be shown to be comparable with that of a corresponding Finnish qualification. Applicants to the public sector from other countries may be required higher education degree and decision of recognition. Outside the public sector, the professional competence achieved in an EU/EEA country qualifies for the same job in Finland.

## 9.2 Recognition system of Denmark as a model for reproduction

Recognition system of Denmark may provide a model for reproduction or at least a basis for elaboration of such model for liberal recognition systems. The main features of this model are similar to the Finnish model. Differences are in responsible actors and distribution of their responsibilities. The key distinctive characteristic – the recognition system is presented in internet media in English and therefore, available to wide audience.

The main benefit – this model may facilitate mobility of professionals, which is the key objective of the present project. Illustration of this example and interpretation of reasons more in details are as follows.

### *9.2.1 Legislation and provisions*

There is a good balance of responsibilities between administrative methods (governmental) and professional assessment (non-governmental) of competence of actors at the construction site:

- Administration of the recognition process is carried out by orders of the Minister – Ministry of Education.
- Coordinating the competent public authorities' activities and ensuring that the Directives, including the New Directive are implemented in a uniform manner in the vocational areas and professions in question – CIRIUS, an agency of the Danish Ministry of Science, Technology and Innovation.
- Competence to make the actual decision on recognition of the right to practise a regulated profession – Competent public authorities.
- Appeals against decisions about the transfer of credit gained through foreign or Danish educational institutions to Danish educational programmes – The Qualifications Board.

Last three institutions are represented by professionals, however in the status of public authorities.

### *9.2.2 Procedure of recognition of regulated professions*

The professions of engineer and of architect are not regulated in Denmark, so an applicant may practise it without a diploma. Therefore, there is no need to apply for recognition of a foreign diploma and applicants are free to practice.

Other professions related to the building process are regulated through Danish and EU legislation. Within the so-called regulated professions, authorisation or other formal approval is required for a person to be able to practise the profession in question based on foreign professional quali-

fications. A profession is a regulated profession if it is stipulated either directly or indirectly in statutory or administrative provisions that a certificate or diploma is required for a person to practise the profession in question. These professions mainly are of vocational character. Procedure of recognition of regulated professions is carried out under the legislation act Assessment of Foreign Qualifications Etc. Act:

- Citizens from EU and EEA Member States have the right to practise most of the regulated professions which are covered by the European Directive 2005/36/EC.
- Citizens from countries outside the EU and the European Economic Area (EEA) have to apply to CIRIUS.

Competence to make decision on recognition of the right to practise a regulated profession lies on the competent public authorities, who evaluate applicants' overall qualifications obtained through education, professional experience etc. However, "justification for authorities" decisions is assessment of applicants' education by CIRIUS. Distribution of responsibilities between competent public authorities is based on professional branch.

### *9.2.3 Qualification indicators*

Qualification indicators and contents of education for building professionals in general follows the so called Bologna principles, comprising entrance requirements, full time education at university and obtaining relevant ECTS-credits. Qualification indicators for vocational professions are defined by the correspondent competent public authority.

### *9.2.4 Alignment of qualifications obtained in a foreign country*

The individual educational institution makes a decision on admission of applicants with foreign qualifications. The educational institution must however, use the CIRIUS agency's assessments of foreign qualifications as a basis when deciding whether the foreign qualification satisfies the general entry requirements.

Alignment of qualifications is carried out through assessment of applicants' content, length and scope of educations obtained in their home country. Differences in qualifications are compensated through supplementary courses or through aptitude tests.

### *9.2.5 Types of official qualification confirmation*

A qualifications framework is a systematic description of qualification levels and types within a given education system, mainly based on a de-

scription of learning outcomes. In higher education, there is Danish, as well as a European qualifications framework, and preparations are being made to extend the descriptions to all of the education system.

The Certificate Supplement is to help holders of vocational qualifications who wish to apply for a job or education course abroad and foreign employers who consider employing the holder of a Danish vocational qualification. Certificate Supplement to Danish vocational education and training, particularly in building area covers such professions as civil construction workers, pavers, painters and decorators, concreters, different types of electrician, metalworkers, plumbers, etc.

### 9.3 Prototype for alignment of engineering qualifications

As the basis of a prototype for such alignment should be used the so called system of automatic recognition of qualifications for certain professions according to the New Directive (2005/36/EC, Article 46). First, the New Directive had to be introduced in all Member States until 20 October 2007. Second, the architects' profession complies with provisions of this Article and should be considered as regulated. Third, the architects' profession of importance may be compared with some of engineering professions and therefore procedures might be equalized.

Regarding qualification criteria, the following conditions are set for architect professions (Article 46):

- Admission to a course of training as an architect, which shall be contingent upon possession of a diploma or certificate.
- Training shall comprise a total of at least four years of full-time study or six years of study, at least three years of which on a full-time basis, at a university or comparable teaching institution.
- The training must lead to successful completion of a university-level examination.
- That training must be of university level and of which architecture is the principal component.
- The training must maintain a balance between theoretical and practical aspects of architectural training and guarantee the acquisition of certain knowledge and skills (a list of specific qualification items follows).

The Directive provides a minimum programme of subjects to follow, which leaves room for the Member States to draw up more detailed study programmes. These lists of subjects, which appear in Annex V, can be amended by a recognition regulation (Comitology procedure) to the extent required to adapt them to scientific and technical progress.

Acquired rights specific to architects and for architect professions re-sented in this Article it declares that each Member State shall accept evidence of formal qualifications as an architect listed in Annex VI, awarded by the other Member States, and attesting a course of training specified by this Annex even if they do not satisfy the minimum qualification requirements (Article 46).

These qualification criteria for architect professions should be adapted by Member States anyway. In other words, if to follow obligations of the Member States, the recognition criteria for architect professions should be in place already today. Therefore, if decision is taken by the Member State to include some of engineering professions in the regulated area, analogue criteria might be shaped for these professions too.

In addition to qualification criteria, also procedure for the mutual recognition of professional qualifications may be extended to engineering professions. The essence of this procedure comprises the following activities.

An individual application must be submitted to the competent authority in the host Member State, accompanied by certain documents and certificates as listed in the Directive (see Annex VII). According to the proposal, the competent authorities will in future have one month to acknowledge receipt of an application and to draw attention to any missing documents. A decision will have to be taken within three months of the date on which the application was received in full. Reasons will have to be given for any rejection and it will be possible for a rejection, or a failure to take a decision by the deadline, to be contested in the national courts.

Member State nationals shall be able to use the title conferred on them, and possibly an abbreviated form thereof, as well as the professional title of the corresponding host Member State.

If a profession is regulated in the host Member State by an association or organisation (listed in Annex I), Member State nationals must be able to become members of that organisation or association in order to be able to use the title.



# 10. Conclusions and recommendations

The subject of the Project relates to outstanding problem of all participating countries, because increasing exchange of labour force is unavoidable and problems have started already. Enlarged Europe and emerged court cases connected with opening the building market is sufficient evidence confirming the problem. Hence, inclusion of the Project in the overall Programme of Nordic Council of Ministers may be considered as a far-seeing decision.

Public benefit of improved systems of recognition is indisputable and consists in possibility to increase competitiveness and decrease of expenses by selecting the optimal workforce and tailoring it to specific needs. In this regard should be taken into account not only economic but also cultural, geographical and hereditary factors as well. In addition, formal EU requirements for free movement of service, adaptation of the New Directive also may be regarded as driving forces for such type of research.

## 10.1 Working mode

Exchange of opinions among Working Group members, who were nominated as experts representing interests of their residential country demonstrated that the subject of the Project is still actual in their countries too, despite information gathered in the framework of the first stage of research.

Active participation in execution of the Project exercised seven countries of nine. Norway abstained at very start of the Project; Poland permanently expressed a wish to participate. However, for different reasons, particularly for the illness of the responsible person Poland's intention did not come true.

Commencing the Project, inquiry (see Questionnaire 1) of the Working Group members was launched in order to learn the most effective working mode, which includes communications means, data presentation and productive use of already obtained results. In other words, experience gained during the first stage of research has been taken into account organising the teamwork for the present project.

Unanimous consent was received from all WG members regarding questionnaires as the most appropriate form of communications. In some answers (Finland, Latvia, Sweden) a view was expressed about the necessity to increase readability and understanding results by more illustrative

way of presentation, for example tabular format. This proposal was accepted and corresponding inquiries in tabular format were implemented. Results of the tabular survey are included in the final report as one of comparative source of information.

Main attention in the planning process was paid to interpretation of the meanings “clear” and “improved” system of recognition conveying the main goal of the Project (see the title). Transformation of these concepts into working mode, particularly “question – answer” form was put into practice by corresponding questions of the Questionnaire 2 and by detailed interpretation during editing of received answers.

## 10.2 Results

Results of the survey are summarised in the overall report, which comprises the following parts:

- Full national contributions in the text format;
- Extracts from the national report into the tabular format;
- Comparative indicators on main recognition issues in the tabular format;
- Considerations about the common approach (model) to recognition problems;
- Conclusions and recommendations;
- Appendices to the Report.

Summing up results acquired, all countries would be divided in two groups depending on the approach applied to guarantee safety of construction works. The system of the first group exercises a liberal (soft) system, based on mutual recognition of education and voluntary certification of engineering and technicians professions (Denmark, Finland, Iceland and Sweden). The second group apply strict (hard) approach requiring permit to the market only by an approval or certificate (Estonia, Latvia and Lithuania).

The liberal system is the most attractive from the point of view of facilitating mobility of professionals, which is also the key objective of the present project and of global importance in the scale of European Community. Safety of construction works in this case is secured by entrusting responsibilities to supervision operators, building developers and building authorities.

The main argument of the hard liners is necessity to guarantee safety of construction work by high qualification operators in all crucial positions. Competence is assessed by the State authorised approval procedures. However, competence criteria introduced in these procedures have only local character, as there is no co-ordination of competence require-

ments achieved even at the regional (Baltic) level. Reference to European standard as a basis for impartiality of certification procedures is not appropriate for the region, as specific (building) requirements are not harmonised between all actors of the region. For this reason, the subject of the Project would present extremely high interest just for the hard position defenders, as a possibility to learn an approach and means to converge recognition requirements.

Recognition systems of two countries (Denmark and Finland) are chosen as models for the liberal system. These considerations were developed by the Project management on basis of the information presented for the Project. The Finnish model has more detailed description whereas attractive feature of the Danish model is availability of information on recognition issues in the internet medium. However, decision made on selecting only two model countries does not mean that systems of other countries of liberal position are far behind these models. Merely information available about these two prototype countries was more exhaustive.

As a model for hard line supporters, would be combination of systems of all three countries. In other words, the best element of each country should be selected and combined with others. Thus, the idea about introduction of profession standards would be overtaken from the Estonian model, certification procedures in accordance with the European standard from the Latvian model and the legislative structure – from Lithuania.

Assessing advantages of these approaches, it is impossible to give priority to one of them, as in both cases developers of the recognition system were guided by necessity to provide high level of security for construction in both cases. Only means selected for reaching these goals are different.

Actually, profession standards (Estonia) are a good initiative and may be considered as a step toward harmonisation requirements at the regional level. In such a way it could present interest as contribution for development of so called “common platforms” – harmonised requirements accepted at the European level (see 2005/36/EC, Article 15, Waiving of compensation measures on the basis of Common platforms).

Proposal (Finland, Latvia) to take advantage of experience of the European Federation of National Engineering Associations (FEANI) regarding introduction of the European Engineer Card (ENGCARD) attracts attention. First, the qualification indicators used for ENGCARD has been incorporated already in the Questionnaire 2 (p.4). Second, concept of FEANI is similar to the goals set in this Project and actually these qualification indicators are applied in participating countries of the first group (see p. 9). Only its combination is not wrapped up in one concise and convenient form of document as it is done in ENGCARD. Third, answers to this question did not reflect high enthusiasm from WG members to exploit the proposed set of competence indicators for further improvement activities.

The Questionnaire as main working mode for reaching objectives of the Project turned out as justified and sufficiently effective. Despite lessons obtained during the first stage and more careful preparation work (detailed instructions for compiling answers, examples of filling in tables), some of received responses still are of different length, missing straightforward answers and comprise general observations.

Finally, results of the survey may be considered as a contribution towards an increased exchange in the building sector between countries in the Baltic Sea region in order to stimulate competition and to reduce costs so that weak groups in society can afford new housing. First, we learn much more about each other and put it in the document. Second, proposals for improvement would find further development in a more global scale. In particular, information obtained would serve as a starting point for work out of a common platform at least for the region of the participating countries. Third, results would be of interest also for experts, who are or will be nominated in the Comitology (Recognition) Committee in accordance with obligations of the New Directive.

### 10.3 Future developments

Continuation of subject on recognition problems may be carried out, if such accept will be made by the corresponding decision making bodies (more in details see the next section). The goal of extending the research would be formulated as development of prerequisites (approach, structure, technological task) for the data base on recognition of professional qualifications in the building area. Work on this project has proved urgent necessity for the information source in electronic media (internet, downloadable data base, etc.). First, experience has shown, that every participating country has a contact point for obtaining information. However, information retrieval is rather complicated due to different approach to systematize data. Second, experience of Denmark has demonstrated a possibility to collect and store information on the subject, which is easy available by internet. The Working Group expresses opinion that continuation of study on recognition problems particularly in this direction is highly recommended.

The next suggestion for future developments is related to a completely different problem. Practice of teamwork obtained would be exploited for fulfilment of tasks set by NCM in prospect programmes, if such intention will take place. In this regard, attention should be paid to current problems of building character specific for Northern Dimension countries. For example, the problem of gathering information about testing facilities of building materials and coordination of improvement activities would be subject of common interests. The situation in the testing area is similar to the recognition problems. Testing facilities also are specific to certain

region depending on geographical, cultural and hereditary factors. Some tests are extremely expensive and there is no use to install it in all countries. This problem is especially pronounced in small countries (actually in most of the region), where investments give no return.

It is possible to build up a regional recognition system in civil engineering in different ways, for, example, to lay brick by brick (each country separate) or by heated discussion of a teamwork, i.e., to build a piece of a wall for the EU building (partly the Project's objectives). Obviously, the second approach would be most effective, as resulting an outcome of a teamwork including all advantages of this approach. The essence of the Project actually is close to this goal – to find out common principles for harmonisation of recognition procedures at least in the Northern Dimension region. Recognition systems of this region are substantially different, as of quite liberal requirements (Scandinavian approach) down to approval procedures by state authorised certification bodies (Baltic approach). Therefore, to find harmonisation of these procedures would be considered as a great challenge.

In any case, the objectives of the Project are not to force governments immediately to change the recognition system, but to give benchmark on the background of the experience of the whole region with common geographic and cultural characters. The first prerequisite of success is to understand the importance of problems hindering free mobility of labour force. In some extent, results of the Project would contribute to reach such understanding and to initiate finding solutions. For that reason, considerations should be made by responsible authorities of each participating country of the region through its representative in the Steering Group. The following scenarios may take place:

1. The participating country decides not to regulate professions of building profile (including vocational professions) and no common platform is necessary in this case, as well as no need to participate in future activities. As a consequence, any applicant from the rest 26 Member States, possessing qualification document issued at his home country may claim rights to practice in the selected professions in the recipient country despite different contents and requirements for education and practice. However, countries represented in this Project are not submitted to this category, as a limited number of professions is submitted to regulation in any of them (vocational professions in Denmark, professions of supervision character in Finland, Iceland and Sweden, a great number of engineering professions in the Baltic countries). As a consequence, this model is not appropriate for the present situation.
2. Only engineering professions are not regulated leaving some vocational professions of building character under ruling (the present Danish model). Conditions of mobility for engineering professionals

should be similar to these described in p.1. Regarding vocational professions necessity to participate in actions at the EU level should be carefully followed up. Because, if two thirds of MS (Clause 15 of 2005/36/EC) will set up a committee on the recognition at the European Commission, participation in this committee should be secured anyway.

3. The participating country decides to elaborate its own set of criteria, which would be presented as required in accordance with the procedure of the New Directive (model of Baltic countries). Obviously, in this case the country should participate in future activities in the framework of coordinated actions at the EU level, particularly, to be represented in the Committee on the recognition of professional qualifications at the European Commission (Comitology Committee), which is requirement of the Directive (Clause 58). The MS representative in this case should defend his standpoint alone against consolidated versions of other MS. As a consequence, the country should comply with rules (the Common platform) established by the Comitology Committee, if defence of its standpoint will be unsuccessful. No participation in subsequent activities in the framework of NCM programmes is required in this case.
4. Group of MS, for example countries in the Northern Dimension region join together in order to elaborate a draft common platform in order to defend a consolidated standpoint of the region (in best case – nine countries) against agreed versions of other MS. Continuation of teamwork in this case would be useful.

# Sammanfattning

Det övergripande målet för projektet är att bidra till ökad öppenhet i arbetet med att erkänna yrkeskvalifikationer i byggprocessen inhämtade i andra länder, särskilt när det gäller att göra nationella system lättare att hantera samt tydligare, snabbare och mer användarvänliga. Tydligheten i kvalifikationer skall förbättras så att kunder kan lita på att de får en mer omfattande service.

Projektet avser att presentera information om reglerna för fri rörlighet för kvalificerad arbetskraft i olika länder och att göra den informationen tillgänglig i alla deltagande länder. Med dessa regler avses villkoren för att erkänna yrkeskvalifikationer formulerade på ett klart och kortfattat sätt, vilket kan utnyttjas tvåfalt. För det första kan individer som söker arbete utomlands med kvalifikationer från hemlandet bli införstådda med de bestämmelser som gäller i mottagarlandet. För det andra skall relevant administration finnas tillgänglig i mottagarlandet och vara försedd med procedurer för att hantera ansökningar från olika arbetssökanden med varierande bekräftelser på sina kvalifikationer. Förbättringen av systemen för att erkänna yrkeskvalifikationer består av att förenkla procedurer och minska byråkratin i dokumenthanteringen med hänsyn tagen till att dessa procedurer skall vara tillräckligt effektiva för att eliminera personer med bristande kvalifikationer i syfte att garantera säkerheten vid byggnadsarbete.

Genomförandet av projektet har organiserats i två steg eller med hjälp av två enkäter som utnyttjade de sammanställda resultaten från den första etappen av projektet. Enkäterna omfattade även de rekommendationer för systemet med erkännande av yrkeskvalifikationer som överensstämmer med målen för projektet. Beskrivningsstrukturen i enkäterna och då särskilt i den andra enkäten hade följande åtta teman:

- Statens roll när det gäller att leda och styra erkännandeprocessen,
- Rollen för icke-statliga institutioner relaterad till problem i samband med att erkänna yrkeskvalifikationer,
- Överväganden om reglerade ingenjörs- och teknikeryrken,
- Kvalifikationsindikatorer och kriterier för att godta reglerade yrkeskategorier,
- Gruppering av kvalifikationer som införskaffats i olika länder,
- Typer av officiell bekräftelse på kvalifikationer,
- Procedurer för att godkänna kvalifikationer i syfte att säkerställa säkerheten vid byggnadsarbete,
- Förslag till förbättringar i systemen för att erkänna yrkeskvalifikationer.

Erkännandeprocessen är reglerad i lagstiftning i alla länder och leds av minst ett ministerium i varje land. Professionella icke-statliga institutioner och organisationer deltar också i erkännandeprocessen. Omfattningen av och nivån på aktiviteterna i yrkesföreningar varierar emellertid signifikant i de olika länderna, som att erkänna ingenjörstitlar (Island), att erbjuda utbildning och information (Finland), att erkänna professionella kvalifikationer (Estland), att bedöma professionell kunskap och uttrycka uppfattningar vid kvalifikationstest av nationella yrkesmän (Litauen) liksom vid ackrediterad certifiering enligt Europeisk standard (Lettland).

Ännu större variationer kan observeras när det gäller reglerade ingenjörstrycken: inga regleringar alls (Danmark), frivilligt erkännande av vissa nyckelkvalifikationer (Finland), obligatoriskt erkännande av ett fåtal nyckelkvalifikationer (Island, Sverige) samt certifierade kvalifikationer för nästan alla yrkeskategorier som arbetar i byggandet (24 titlar i Litauen och 29 titlar i Lettland). Arkitekturkyrket skall vara reglerat i alla medlemsländer i EU enligt kraven i det Nya Direktivet (205/36/EC). Alla länder har emellertid inte brytt sig om den skyldigheten. Kvalifikationsindikatorerna i alla deltagande länder följer i huvudsak de s.k. Bologna-principerna.

Som framgår av resultaten kan länderna delas in i två grupper när det gäller hur säkerheten i byggnadsarbetet skall garanteras. Den ena gruppen har en liberal inställning som baseras på ett ömsesidigt erkännande av utbildning och frivillig certifiering av ingenjör- och teknikeryrken (Danmark, Finland, Island och Sverige). Den andra gruppen har en mer strikt tillämpning, som kräver tillstånd för att få tillgång till marknaden genom godkännande eller certifikat (Estland, Lettland och Litauen). Det liberala systemet är det mest fördelaktiga när det gäller att underlätta rörligheten bland yrkesutbildade, vilket är det huvudsakliga målet för projektet och av övergripande betydelse för EU. Säkerheten i byggnadsarbetet säkerställs genom att överlämna ansvar till tillsynsansvariga i byggföretag och myndigheter.

Det främsta argumentet för en mer strikt tillämpning är att det är nödvändigt att garantera säkerheten i byggnadsarbete genom högt kvalificerade, pålitliga och godkända, yrkesutbildade personer på alla väsentliga positioner. Kompetensen bedöms genom procedurer som godkänns av staten. Kompetenskriterier som används i dessa procedurer har emellertid en lokal prägel, eftersom det inte förekommer någon harmonisering av kompetenskraven på regional (baltisk) nivå.

Systemen i två länder (Danmark och Finland) för ömsesidigt erkännande av yrkeskvalifikationer föreslås som modell för den liberala tillämpningen. Den finska modellen är mer detaljerat beskriven medan den tydligaste fördelen med den danska modellen är tillgången till information i erkännandefrågor via Internet. Som modell för en mer strikt tillämpning bör en kombination av systemen i de tre baltiska länderna användas, där de mest passande delarna från varje land genomförs, särskilt introduktion av yrkesstandarder (Estland), godkännandeprocesser i linje

med europeiska standarder (Lettland) och lagstiftningsstrukturen från det litauiska systemet. För att uppnå fördelarna med dessa lösningar är det inte möjligt att prioritera någon av dem eftersom de som utvecklats systemen har styrts av målet att tillgodose krav på hög säkerhet i byggnadsarbetet i samtliga fall. Endast medlen för att uppnå målen skiljer sig åt.

Resultaten av projektet uttrycks som samordnade (mellan länderna i den nordliga dimensionen) rekommendationer för de myndigheter som är ansvariga för byggfrågor i varje medverkande land i syfte att rekommendationerna skall kunna föreläggas för EU-kommissionen i enlighet med de krav som anges i det Nya Direktivet. Följande målgrupper bör ha intresse av projektets resultat:

- Nationella institutioner med ansvar för att ta initiativ till lagstiftning,
- Auktoriserade ledningsorgan för administration av erkännandeprocessen,
- Yrkesorganisationer och andra icke-statliga institutioner som är inblandade i utveckling av kompetenskriterier för olika kvalifikationer och som sammanställer utbildningsprogram och de krav som skall erkännas.

Resultaten av projektet bör även vara intressanta för de regeringsorgan som är ansvariga för att ställa upp de krav i nationell lagstiftning som anges i det Nya Direktivet. Bristen på fri rörlighet för arbetskraft är ett avgörande problem inte bara för länder i den Nordliga Dimensionen utan för hela EU (en av de fyra grundprinciperna) och det Nya Direktivet är ett försök att summera mer än 30 års erfarenheter på detta område (se vidare i detalj rapporten från den första etappen av projektet – TemaNord 2007:502).

Det Nya Direktivet i sin nuvarande form reglerar emellertid inte ingenjörsyrken. Det enda reglerade yrket på byggnadsområdet är arkitektyrket, som anges som ett yrke med automatiskt erkännande och villkoren för detta yrke är redan angivna (Artikel 46). Det betyder att ömsesidigt erkännande skall lämnas utan ytterligare prövning eller byråkratiska procedurer, om villkoren är tillgodosedda. Vidare skall initiativ enligt direktivet tas av organisationer för vissa kritiska yrken (civilingenjörsyrket är ett av dessa) för att skapa liknande system i syfte att förenkla erkännandeprocesser. Med andra ord är avsikten att skapa ett tydligt och förbättrat system för ömsesidigt erkännande inom specifika områden av ekonomin. Projektet syftar dock inte till att implementera det Nya Direktivet. Resultaten av projektet (oavsett hur det definieras) bidrar till att klarlägga vilken lagstiftning som är nödvändig för att tillgodose kraven i Direktivet.

Projektet har särskilt nära samband med ett av kraven i dokumentet (Artikel 15) och enbart för en specifik yrkeskategori (byggande), om än mycket viktig (citat från Artikel 15 följer<sup>13</sup>):

För ändamålen i denna Artikel definieras 'gemensamma plattformar (common platforms)' som en uppsättning kriterier för personliga kvalifikationer som är anpassade för att kompensera för påtagliga skillnader som har identifierats i utbildningskrav som finns i olika medlemsländer för ett givet yrke. Dessa påtagliga skillnader skall identifieras genom jämförelse av utbildningens längd och innehåll i minst två tredjedelar av medlemsländerna, omfattande alla medlemsländer som reglerar detta yrke.

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<sup>13</sup> Ej auktoriserad översättning från engelsk originaltext

# Appendix A

## Questionnaire 1

### *Introduction*

This questionnaire is the first step towards execution of the Project and it is intended to review information already obtained in the framework of the Project's first stage (see the Report "Validation of competency requirements imposed on certain actors in the building process"). The goal of this review is to exploit the information collected during the first stage study as much as possible. Presumably, results of the review would disclose deficiencies or insufficiency of information, lack of perceptibility. But even such result would be considered as assistance – a lesson how to improve performance at the next stage. Therefore, members of the Working Group are invited to update information in accordance with the current situation and latest developments, where appropriate. Exchange of information for this particular project is also proposed by means of an inquiry and the whole range of interests is divided in several constituents forming the questionnaire.

Expressing opinion about stated questions below, members of the Working Group are requested to observe that under qualifications should be understood engineering and technicians specialities in the building sector only. Attention should be paid to the reality that there are still significant differences in participating countries almost in all components forming the system of recognition. Thus, your opinion on the most acceptable approach how to orientate in this variety of situations will be highly appreciated. If not possible to state solution suitable for all participating countries (greatly recommended), explanation of the status in your country would be acceptable.

Certainly, you are welcome to suggest your considerations how to improve organisational and implementation qualities, which are outside the scope of the present Questionnaire.

Please, respond to this Questionnaire not later than July 1, 2007 and do not hesitate to contact the Project Management, if you have any questions.

### *Questionnaire form*

1. Please, express your opinion about the approach (selection of experts, communication means, questionnaire, discussion, etc.) used at the first stage for exchange of information. How effective and efficient is

- this approach from the point of view of time and volume spent?  
What was the weakest link in whole series of communications?
2. What is your opinion about the structure of the Questionnaire (12 points) used at the first stage? How does it reflect all aspects of recognition problems? Have you disclosed any deficiencies, not sufficiently describing all features for recognition, or on the opposite – Are there any redundant questions bothering perception of real meaning?
  3. What are your considerations about quality of information gathered in all Northern Dimension countries? Completeness, correctness and abundance of description should be observed.
  4. What are your considerations about quality of information representing the situation in your country? Completeness, correctness and abundance of description should be observed.
  5. Do you have disclosed a model for recognition, which would be acceptable for all participating countries? If yes, please describe more in details attractive features of this model and motivation for other countries to take over this experience.
  6. What is your opinion about the way of presenting information of the first stage study and the format of the report? Is it convenient for easily acquiring necessary information?
  7. Do you have any information about intentions to introduce changes
  8. in the existing national recognition system due to results obtained at the first stage study? If yes, please describe more briefly specific attributes of these changes.
  9. Do you have any facts that the report of the first stage has presented interest, particularly demanded by building society of your country? If yes, please describe more in details what type of specialists has expressed attention.

You are kindly encouraged to express your opinion about other aspects of the first stage, which are not covered by questions of this Questionnaire.

Compiled by:  
Imants Matiss  
Leader of the Project  
15 May 2007

## Questionnaire 2

### *Introduction*

The second questionnaire is a continuation of the Action Plan, but more oriented to the direct goals of the Project – inquiry of possibilities to

come to a common understanding on transparent and improved systems of recognition. Two basic characteristics of this system claim special attention. First, how to make the recognition system more transparent in terms of clear definition of rules and prompt availability of information in all participating countries in order to promote free movement of qualified labour within the region. Second, the improved system should secure recognition procedures, which are sufficiently selective to eliminate inadequate qualifications and thus to guarantee safety of construction works. At the same time, description of the system should be clear and concise, friendly for users.

Therefore, the structure of the Questionnaire is outlined in such a way that the desirable solution should reflect main points of interest. Forming answers to the questions, you are invited to respond twofold – presenting a description of the existing situation in your country and, if possible, offering recommendations for a model of the whole region of Northern Dimension countries. Certainly, members of the Working Group are encouraged to put forward their own opinion how to improve the inquiry, if considerations emerge that Questionnaire inadequately covers objectives laid down in the Action Plan.

Please, respond to this Questionnaire not later than September 15, 2007 and do not hesitate to contact the Project Management earlier, if you have any questions.

#### *Questionnaire form*

1. Please, express your opinion on the role of the state in governing the recognition process and the level at which involvement of the state would be most favourable (e.g., legislation, appointment of responsibilities, prescribing acceptance criteria, assessment of qualification, etc.).
2. Please, suggest similar considerations regarding the role of non-governmental institutions and associations related to the regulation problems. What is your opinion on optimal distribution of responsibilities between governmental and non-governmental institutions (optimal model) for administering the system of recognition including all operators?
3. What is your opinion on qualifications of engineering and technician professions, which require regulation unconditionally (no cancellation of regulation acceptable)? List of specific professions or qualification indices with corresponding titles will be highly appreciated.
4. Please, describe qualification indicators and contents of education for each category of professions (at least for professions listed in p.3), for example expressed in terms of:

- Entrance requirements (secondary education, years) as basis to enter university or an institution of higher education;
- Full time education at university (years, ECTS-credits);
- Training programmes within technical fields (years, ECTS-credits);
- Post graduate experience (years), eligibility for independent practice and development of professional experience (e.g., practice as an engineer);
- Experience in responsible charge of significant engineering work (years);
- Evidence of relevant continuing professional development at satisfactory level.

A prototype of such a qualification model for architect professions is given in the New Directive (2005/36/EC), Article 46:

5. Please, express your considerations how to align qualifications obtained in educational institutions of equivalent level but different contents of tuition and post graduate experience. What are the decisive factors below which bringing into line such professions are impossible? Suggestions for compensation measures (aptitude tests, adaptation period) in quantitative terms will be highly appreciated.
6. Acceptable forms of official qualification confirmation, for example diploma, certificates, academic qualification equivalent to an accredited degree? A basic principle of equalization of titles granted in different countries is supposed as an answer to this question. A typical situation where an appeal for recognition is submitted in the recipient country but applicant's qualification is obtained in the home country and formulation of titles in both countries is different.
7. What type of approval procedures (additional to p.5) for applicants should be introduced in order to secure safety of construction works at least for qualifications mentioned in p.3 (e.g., attestation, approval by professional associations, accredited third party certification, etc.)?
8. What would be the most comprehensible and demonstrative way of presenting results of this survey (e.g., descriptive, table, graphic, formula)?

You are kindly requested to express your opinion about other aspects of this inquiry, which are not covered by questions of this Questionnaire.

Compiled by:

Imants Matiss

Leader of the Project

# Appendix B

## Members of the Working Group

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