



Partner countries' experience in referencing national qualifications frameworks and qualifications to the European Qualifications Framework for Lifelong Learning

NCP-VET-CO

Leonardo da Vinci partnership project

Czech Republic

Estonia

Finland

Latvia

Romania

2011

Contents

Executive summary.....	2
Introduction	4
Project partners.....	5
1 The role and tasks of NCP	7
2 Initial VET and professional qualifications	8
2.1 How qualifications are built up in partner countries?	8
Czech Republic.....	8
Estonia.....	8
Finland.....	9
Latvia	10
Romania	10
2.2 Quality assurance in VET	12
2.2.1 Best practices in quality assurance in VET	12
3 Awarding of qualifications.....	17
Czech Republic.....	17
Estonia.....	17
Finland.....	18
Latvia	19
Romania	20
4 Level descriptors.....	21
Czech Republic.....	21
Estonia.....	22
Finland.....	23
Latvia	23
Romania	23
4.1 What did partner countries learn from each other in terms of level descriptors?	24
5 Referencing process in partner countries	25
Czech Republic.....	25
Estonia.....	25
Finland.....	26
Latvia	27
Romania	28
Conclusions	29
ANNEX 1	31

Executive summary

The EU recommendation on the implementation of the European Qualifications Framework for Lifelong Learning (EQF) stipulates that the Member States should designate national coordination points (NCP) to promote the EQF implementation process. One of the major tasks of the NCP is, in conjunction with other relevant national authorities establish links between the national qualifications frameworks (NQFs) and the EQF, in order to promote the quality and transparency of qualifications.

In the referencing and recognition process there are good examples and experiences in higher education (HE). The recognition of HE qualifications has been developed through the Bologna Process, introducing and implementing the European Credit Accumulation and Transfer System (ECTS) and through ENIC¹/NARIC² networks. This has served as a bases for referencing HE qualifications to the EQF. Although the developments making vocational education and training (VET) qualifications more transparent and comparable started with the Copenhagen Process and has developed through the European Credit system for Vocational Education and Training (ECVET), there is a lack of good practices, mutual understanding and trust in this process. Therefore, the NCP-VET-CO project was initiated on one hand in order to develop an effective network of NCPs and build mutual trust between partner countries, and, on other hand, to help participating countries to develop their national qualifications frameworks or systems and link them to the EQF (with special focus on VET qualifications) through exchange of knowledge, expertise and experiences in this field.

Through the NCP-VET-CO project the NCPs of Czech Republic, Estonia, Finland, Latvia and Romania have created platform for dialogue and cooperation, for addressing common or conflicting challenges and – eventually – to build mutual trust. These are countries with similar background regarding their VET systems and developing their NQFs. Also the free movement of persons between these countries can be considered rather high.

The purpose of this paper is to reflect on and summarise national experiences of partner countries as regards design, development and implementation of NQFs having specific interest on VET qualifications. This has given a stronger basis for international co-operation, understanding and comparison. Topics covered in this document were discussed among project partners during 5 peer learning meetings. These meetings gave the opportunity to share best practices, find out each partner's strengths and use the knowledge in developing and implementing the NQF in their own country.

In practice a NQF is much more than a grid of qualifications' levels – a framework usually signals a political or strategic vision for the qualifications system and offers some means of

¹ ENIC: European Network of Information Centres in the European Region

² NARIC: National Academic Recognition Information Centres in the European Union

achieving that vision. The NQFs can be a key to understanding the types of learning that are recognised in a country, how learning experience is valued and how the qualifications system works to award these qualifications. The EQF is a tool for encouraging such understanding – by creating learning outcomes based levels the EQF acts as a translation device for international understanding. However it is increasingly clear that in addition to the EQF the national qualifications frameworks or systems need to have a clear and accepted basis in levels in order to reference the national qualifications to the EQF and allow translation to be built on good understanding. Partners were interested to know if the levels of qualifications achievements in the country are comparable to those in other countries, since the competitiveness of economies may depend on valid comparisons.

It came out that all the partner countries are somewhat different. This concerns the type of organisation, which has been appointed as the NCP, approach taken in developing the NQF, scope of qualifications included into the NQF, and time frame for referencing the NQF to the EQF. But now all the partners understand the reasons behind these differences and this is very important when building mutual trust – one of the main outcomes of the project.

Introduction

The main goal of the NCP-VET-CO project was to develop an effective network of NCPs and build mutual trust between partner countries. Exchange of knowledge, expertise and experiences in this field was also aimed at helping participating countries to develop their national qualifications frameworks (NQFs) or systems and linking their VET qualifications to NQFs and through these to the EQF. All the participating organizations are developing their national qualifications systems or frameworks and they all are actual or potential NCPs in their home country.

Five countries have been chosen to participate in this project due to two reasons:

- 1) high extent of workforce and students mobility between Estonia, Finland and Latvia;
- 2) Czech Republic, Estonia, Latvia and Romania share similar political background being the former soviet regime countries and being considered as the new EU Member States.

Those overlapping similarities and characteristics were the basis for a good cooperation and better understanding of each other's qualifications systems.

The purpose of this paper is to reflect on and summarise national experiences of partner countries as regards design, development and implementation of NQFs with specific focus on VET qualifications.

This paper is available for all the interested parties – the project partners as well as their partners inside the country or internationally. This might serve also the public interest, researchers and policy makers who are dealing with labour market or educational policies. The results of this project might be interesting also for employers as the qualifications framework or system is a basis for development, validation and recognition of workers' skills and competences.

Estonian Qualifications Authority as the leading partner created a homepage for the project (<http://www.kutsekoda.ee/en/kutsekoda/projektid/ncpvetcoprojekt>) in order to share our experiences and outcomes of the project.

Project partners

The partnership has been developed between the following organizations:

Czech Republic

- ✓ National Institute of Technical and Vocational Education of Czech Republic (www.nuov.cz)

National Institute of Technical and Vocational Education is subordinated to the Ministry of Education, Youth and Sports of the Czech Republic and its main areas of activity are: concept of VET; analyses, collection and provision of information; development of national VET curricula; methodological help to VET schools; implementation of national projects on the development of the national register of professional qualifications, on the recognition and validation of non-formal and informal learning, on the career guidance etc.; implementation of international projects and initiatives including LLP Leonardo da Vinci projects, the Europass and the EQF (NUOV is the National Europass Centre and the National Coordination Point).

Estonia

- ✓ Estonian Qualifications Authority (www.kutsekoda.ee)

Estonian Qualifications Authority is a support structure for the professional qualifications system in order to increase the competitiveness of Estonian employees and promote the development, assessment, recognition and comparison of their professional competence. The professional qualifications system is part of the qualifications system for recognition of learning outcomes. The professional qualifications system connects the educational system with the labour market. Estonian Qualifications Authority serves as National Europass Centre and EQF referencing point (NCP).

Finland

- ✓ Finnish National Board of Education (www.oph.fi)

Finnish National Board of Education is the national agency subordinated to the Ministry of Education and has a wide range of tasks related to the development of education all through pre-primary and basic education, general upper secondary education, vocational education and training, formal adult education and basic education in the arts. Finnish National Board of Education is responsible for drawing up the national core curricula for basic and general upper secondary education and vocational qualifications as well as the requirements for competence-based qualifications.

Latvia

- ✓ Academic Information Centre (www.aic.lv)

Academic Information Centre is a foundation which was established in 1994 by the Ministry of Education and Science and the Institute of Mathematics and Computer Science of the University of Latvia. The functions and work tasks of the centre are determined by the agreement with the ministry. Academic Information Centre is the Latvian representative to the European diploma recognition networks - ENIC/NARIC; information institution on recognition of professional qualifications in regulated professions; member in the Cedefop's vocational education information network ReferNet; the National Europass Centre; the EQF referencing point (NCP); and in cooperation with the ministry and other stakeholders deals with attracting higher education students from the third countries.

Romania

- ✓ Institute of Educational Sciences, Romania (www.ise.ro; www.euroguidance.ro)

The Institute of Educational Sciences in Romania is the national research authority having the status of an autonomous body, within the Ministry of Education and Research. Its activities are oriented toward implementing the provisos of the education law and other ministry regulations, by the means of research, teachers training, field enquiries and system evaluation. The studies conducted in the network of school units, school inspectorates, coordinating agencies result in justification documents and alternative proposals designed to improve the quality of the secondary education and to level with the communitarian undertakings in the field. The organization is open to partnership with training providers, market-oriented institutions, universities and research bodies, both national and transnational-wide. Presently, the Institute of Educational Sciences includes several structural units as National Council for Curriculum, Euroguidance Romania and E-twinning.

1 The role and tasks of NCP

In 2008 the European Parliament and Council adopted a recommendation for implementing the European Qualifications Framework for Lifelong Learning (EQF). This recommendation includes also proposal that each Member State sets up a National Coordination Point (NCP) for the EQF implementation. One of the main tasks of NCPs is referencing their NQF or qualifications to the EQF. The NCPs are the European Commission's first point of contact with the Member States on issues related to referencing the NQFs to the EQF.

The NCPs are expected to carry out the following tasks:

- ✓ reference levels of the NQF to the EQF levels;
- ✓ promote and apply the European principles for quality assurance when referencing the NQF or national qualifications to the EQF;
- ✓ ensure that the methodology used to reference national qualifications levels to the EQF is transparent and that the resulting decisions are published;
- ✓ provide guidance to stakeholders on how national qualifications relate to the EQF either directly or through the NQF;
- ✓ ensure the participation of all relevant national stakeholders in the referencing process.

In the referencing process the NCPs have or had to go through a series of processes:

- ✓ establishing a steering group of stakeholders and experts to advise on and oversee the process;
- ✓ commissioning independent consultant(s) to undertake the referencing;
- ✓ using multiple methods in the referencing to ensure reliable findings;
- ✓ involving international experts to provide externality to the process;
- ✓ arranging consultations with the stakeholders on the findings of the referencing the NQF to the EQF;
- ✓ reporting on how the criteria and procedures for referencing the NQF levels or national qualifications to the EQF have been met.

The partner countries have quite clear understanding about the role of a NCP in referencing initial VET and professional qualifications. Several issues have been raised concerning the impact of the NCP when placing qualifications on the levels of NQF, referencing the NQF to the EQF and assuring the quality of qualifications and referencing processes.

2 Initial VET and professional qualifications

2.1 How qualifications are built up in partner countries?

Czech Republic

Professional qualifications included in the new professional qualifications register are competence based. Each competency is described and coded. The database of competencies is being gradually supplemented. This database is common to the National System of Occupations and to the National Qualifications System (the qualifications register).

Qualification standard contains a structured list of all required competencies of a given partial or complete qualification. It shows an overview, what a candidate should know and be able to perform.

Assessment standard is a detailed description of learning outcomes of given partial qualification, i.e. its competencies. It contains a set of criteria and procedures for the verification of qualification requirements, i.e. it describes how knowledge, skills and competence should be assessed. It also contains technical conditions for the exam and other information.

The standards are created in sector councils, must be approved by the relevant ministries and the Ministry of Education, Youth and Sports. Then they are publicly accessible at www.narodni-kvalifikace.cz

Estonia

Qualification in Estonia is officially recognized competence as a result of validation. Competence is ability to perform successfully in a specific field together with relevant performance criteria (learning outcomes).

A professional qualification as determined in the Professions Act is based on the professional standard – a document which is the result of a functional analysis in the given field and describes professional activities and provides the competency requirements for professional qualifications and their levels. This all is regulated

Components of a competence based standard:

- ✓ description of profession – work areas and professional titles, aim of work, description of level, activities and duties, operating environment and its specialty, means of work, abilities and personal traits, professional education;
- ✓ competency requirements;
- ✓ general information.

Professional qualifications are recognised through the process of awarding of professional qualifications – the assessment of conformity of the professional competence of a person applying for a professional qualification with the requirements is specified in the professional standard.

The approved standards are included in the Register of Professional Standards, which comprised 721 standards in 367 different activity fields by July 2011 and which is available online at: <http://www.kutsekoda.ee/et/kutseregister/kutsestandardid>.

Obtaining vocational education is governed by the VET Institutions Act that establishes the types of initial VET, principles of formulating the Standard of initial VET and national curricula for initial VET, the bases for establishment, reorganisation and closure of VET institutions; the principles of school management, the bases for school budgeting and financing, the rights and obligations of school personnel, internal evaluation and state supervision over the activities of schools.

The Standard of initial VET laid down by the regulation of the Government of the Republic is a collection of uniform requirements for initial VET programmes. The standard describes the requirements for national and school curricula, determines the terms and conditions for recognition of prior learning, describes the objectives, expected learning outcomes, volumes of study and graduation requirements for different types of initial VET programmes, requirements for pedagogical professionals, and the curriculum groups in accordance with the ISCED 97 classification. It also assigns the Estonian NQF (EstQF) levels to the types of initial VET qualifications.

The national curricula for initial VET, entered into force by regulations of the Ministry of Education and Research. By the end of 2010, 53 national curricula for initial VET had been approved.

Learning outcomes based national curricula for initial VET serve as the qualification standards and are based on the corresponding professional standards. VET institutions use the national curricula for developing their study programmes for initial and continuing VET qualifications.

Finland

There are 53 vocational upper secondary qualifications. Vocational education and training in the school-based system means full-time studies for three years at a vocational institution. Studies include general studies, compulsory vocational studies, optional studies and free-choice studies. The scope of upper secondary level vocational qualifications taken after basic education is 3 years (120 credits). The duration of studies is up to 40 credits shorter for those who have completed the general upper secondary school syllabus, as some of their studies are accredited.

Qualifications are built of modules, which are quite large. The modular qualification structure increases flexibility and options and makes it easier for students to gain credit for previous studies. All qualifications include at least 20 credits (approx. six months) of instruction at the workplace (on-the-job learning). Skills demonstrations were launched in 2006 as proof of having reached the goals given to vocational studies.

Besides school-based vocational education Finland has had the system of competence-based qualifications since 1994. It is intended to enable working-age adults to gain qualifications without necessarily attending formal training. It is possible to take competence-based vocational qualifications (the same qualifications as those completed in school-based education), further vocational qualifications and specialist vocational qualifications. There are some 300 further vocational qualifications and specialist vocational qualifications on offer. In the competence-based qualification system competence acquired through various ways is recognised and validated. Knowledge, skills and competencies required in the profession are demonstrated in competence tests.

The requirements are outlined in the requirements for competence-based qualification defined by the Finnish National Board of Education. Qualifications are built of modules, some of

which are compulsory and some optional. It is possible to complete only one or more modules if the candidate is not aiming at completing the whole qualification.

Latvia

The system of standards determined in the Vocational Education Law (1999) ensures that the content of initial vocational education meets labour market requirements. There are two types of standards:

- ✓ vocational education standards;
- ✓ occupational standards.

The state vocational education standards stipulate the goals of educational programmes, compulsory educational contents, and the assessment principles and procedure. They are determined by the relevant Regulations of the Cabinet of Ministers: Regulations on the state vocational secondary education standard and the state vocational education standard (2000), Regulations on the first level professional higher education state standard (2001), and Regulations on the second level professional higher education state standard (2001).

The Regulations of the Cabinet of Ministers on the Procedure for developing occupational standards (2007) outline the procedure for developing occupational standards and lists the duties of the involved institutions. The standards are developed by representatives of educational institutions and social partners through working groups organized by the State Education Content Centre for the Latvian professional qualification levels 1-3 (the EQF levels 2-4) and the Ministry of Education and Science for levels 4-5 (the EQF levels 5-7). The occupational standards are confirmed accordingly by the National Tripartite Sub-Council for Cooperation in Vocational Education and Employment and by the minister of education and science. Standards usually are updated and reviewed as necessary but not often than every 5th year involving education providers, employers, students, government organisations, quality assurance agencies and external experts.

The occupational standards include:

- ✓ specific duties and tasks of occupation;
- ✓ necessary skills to perform basic tasks of professional activity;
- ✓ necessary knowledge to perform basic tasks of professional activity (indicating the level of concept, understanding or application);
- ✓ necessary professional competence (necessary skills, knowledge and responsibility in certain working situations) to perform basic tasks of professional activity;
- ✓ place of occupation in sectoral qualification system and employability description, in which summary of basic tasks in professional activity is provided.

The approved standards are included in the Register of Occupational Standards, which comprised 466 standards by July 2011 and which is available online at: http://visc.gov.lv/saturs/profizgl/stand_registrs.shtml.

Romania

In building qualifications for the initial VET system the instruments used are designed to follow a certain process. The first step in this process is the occupational analysis with the purpose of identifying the occupational area.

Secondly an occupational standard (a document which describes the competence units

related to one occupation) is developed, which is also used for the validation of prior learning and for qualification within formal continuous VET and apprenticeship.

The third step is defining the training standard (TS): a document which describes the learning outcomes related to a qualification linked with one or more occupations. It is specifically developed for initial VET, but it is also used within formal continuous VET.

2.2 Quality assurance in VET

Quality refers to the degree to which a set of inherent characteristics of an entity (product or service) fulfils customers' (or stakeholders') requirements and expectations (ISO 9000). Quality assurance refers to a programme for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met.

Different methods of internal and external quality assurance are used in the VET systems of the partner countries.

Internal quality assurance methods for VET providers can be:

- ✓ permanent quality enhancement and internal auditing;
- ✓ periodic compilation of self-assessment reports

External methods of quality assurance can usually be divided under two main activities:

- 1) external assessment by a Quality Agency – the Agency is usually established by the State or by some interest groups (for example Chamber of Commerce and Industry) wherein following assessment methods can be used:
 - periodic external assessment and/or auditing (including collecting and disseminating the data regarding accredited educational and training programmes);
 - site visits;
 - validation of self-evaluation reports;
- 2) periodic quality award contests where the participation is voluntary and the best VET providers will be acknowledged. These contests are based on agreed specific indicators and quality criteria.

2.2.1 Best practices in quality assurance in VET

Czech Republic

In the Czech Republic a Quality Project is being carried out from May 2009 until April 2012 which is supported by the European Social Fund (ESF) and state budget from the operational programme “Education for Competitiveness”. The leading partner of the project is the Ministry of Education, Youth and Sports with several partners:

- ✓ NUOV – National Institute of Technical and Vocational Education;
- ✓ NIDV – National Institute for Further Education of teachers;
- ✓ experts from faculties of education and educational institutes of Charles University (Prague), Masaryk University (Brno), Palacky University (Olomouc), University of Ostrava, University of Pardubice;
- ✓ VET providers and municipalities.

With Education Act, self-assessment has been mandatory for schools since 2005. Internal evaluation of schools focuses on:

- ✓ the school's goals;
- ✓ analysis of the way in which the school fulfils its goals;
- ✓ areas in which school achieves good results, and areas in which it is necessary to improve the quality of education, including proposals for appropriate measures to be taken;
- ✓ efficiency of the chosen measures.

No methodical support for schools was available and schools expressed their need of consultancy support, further training, methodology support, financial support, methodology guidelines of self-evaluation, self-evaluation tools, websites with good practice and information about foreign approaches of self-evaluation. The project Path to Quality tried to meet all these needs, except financial support.

The project should have following outcomes:

- ✓ research and analyses (A Review of used methods, techniques, processes and experiences of schools, a Review of stakeholders approaches for self-evaluation and external evaluation, Research of experience and attitude of target groups, questionnaires measuring added value of the project, Analytical reports on self-evaluation in the selected OECD and EU countries);
- ✓ development and validation (Databases of 30 valid evaluation methods, tools, techniques, instruments, Set of recommendations for schools and other stakeholders, how to provide an effective self-evaluation);
- ✓ supporting systems for schools and stakeholders (opportunity for schools to share their experience in workshops, in mutual visits);
- ✓ further training (Educational programs on school management and self-evaluation of school) for managers, self-evaluation coordinators and teachers).

In the Czech Republic following institutions are responsible for quality assurance:

- ✓ Czech School Inspectorate (CSI);
- ✓ school providers (municipalities, regional governments);
- ✓ schools and school councils.

Estonia

In quality assurance for higher education there were two periods and two models: a *posteriori* model 1995-2008 and an advanced *a priori* model since 2009.

The aim of the *a posteriori* model was to get rid of low standard study programmes. It foresaw that a programme could be accredited only after at least 2/3 of nominal study period. The model failed to meet expectations because it was expensive and non-efficient.

The advanced *a priori* model aims at developing sustainable quality assurance (QA) system combining internal QA at higher education institutions with regular external assessment by the Estonian Higher Education Quality Agency (EKKA). The model is called *a priori*, because the groups of study programmes (according to ISCED-97 classification) which successfully pass transitional assessment will receive the right to award the corresponding qualifications.

The internal quality assurance in VET institutions encompasses permanent internal auditing and periodic compilation of self-assessment reports (every 3 years). External advice is offered by the Examinations and Qualifications Centre and is based on self-assessment reports and site visits performed by external advisers. Quality awards are used to promote quality in

initial VET.

Until recently there has not been any explicit accreditation of VET institutions or their study programmes. Starting from 2011 the quality assurance model for VET being similar to higher education is in a piloting phase. For these purposes the functions of EKKA were extended.

In Estonia following institutions are responsible for quality assurance:

- ✓ Parliament (establishes legal framework for QAS);
- ✓ government (adopts necessary by-laws for QAS, Issues to HEIs the right to conduct studies in the relevant study program group and to issue corresponding academic degrees and diplomas);
- ✓ Ministry of Education and Research (co-ordinates development of QAS, supervises learning institutions);
- ✓ Examinations and Qualifications Centre (develops national curricula, arranges national examinations and tests, audits general education and VET institutions, certifies teachers);
- ✓ Estonian Higher Education Quality Agency (carries out quality assurance and accreditation procedures in HE institutions);
- ✓ Estonian Qualifications Authority (co-ordinates development of professional standards, co-ordinates certification of persons).

Finland

In the quality management the education provider is the main actor. QA is based on the decentralisation, and the normative regulations are decreasing. The provider decides on the method of quality management and the self-evaluation. The law obligates education providers to evaluate their VET provision and its effectiveness and to participate in external evaluation of their operations.

Examples of the national steering in the QA are the licensing of VET providers, the national core curricula for VET, Quality Management Recommendation and quality awards. Accreditation is carried out in the form of licensing. The national core curricula are put together by FNBE, and based on them the education provider designs the requirements and local curricula in cooperation with the students and representatives of the working life. The CQAF (the EQAVAT) has been the reference model for the Quality Management Recommendation and it is carried out on voluntary basis. There are quality awards for VET, for apprenticeship training and for civic colleges/open colleges.

Recently, the committee appointed by the Ministry of Education and Culture prepared a proposal for a quality strategy for VET, covering all sectors of the national quality assurance system and all forms of VET provision. According to it, quality management will be made systematic at all levels of operation and at all forms of VET. Also, the evaluation of prerequisites for providing VET will be given a clearer role in QA and in continuous quality improvement. And the system of VET financing will support the VET providers in achieving the aims set for the quality of operations and continuous quality improvement.

In Finland following institutions are responsible for quality assurance in VET:

- ✓ The Finnish Education Evaluation Council;
- ✓ The Finnish Higher Education Evaluation Council;
- ✓ in addition, evaluations and monitoring activities are performed by numerous other bodies, such as the Finnish National Board of Education, the State Provincial Offices,

the Academy of Finland and international bodies, and to some extent also the National Audit Office of Finland.

Latvia

National initial vocational education quality is ensured (since 2002) through the accreditation of vocational education programmes and institutions, which is outlined in the Cabinet Regulations *Procedure of accrediting general and vocational education programmes, education establishments and examination centres* (2010). The accreditation ensures that a programme meets the standards of initial vocational education and the underlying occupational standards. Education providers can offer only licensed and accredited study programmes, since only through graduating accredited programme a student may obtain state-recognized documents certifying their vocational qualifications.

The State Service for Education Quality (since June 2009) among other functions organises licensing and accreditation of initial vocational education programmes, as well as accreditation of vocational education institutions and examination centres. The accreditation process involves both self-assessment, in which an education establishment prepares its self-assessment report, and external assessment, in which an external expert commission including the representatives of social partners participate. Depending on the assessment initial vocational education providers may be accredited for an undetermined period, for 6 or 2 years; study programmes – for 6 or 2 years.

Since September 2010, there is a united accreditation system both for general and vocational education of the EQF levels 1-4, which helps in forming a comprehensive view on the education quality in Latvia.

On higher education level, the licensing and accreditation of institutions and programmes are implemented by the Higher Education Quality Evaluation Centre in line with the Higher Education Institutions Act (1995).

During the accreditation seven operational fields of education establishment or examination centre are assessed: education content, teaching and learning, students' achievements, support to students, environment at the establishment, resources of establishment, work organization of establishment, management and development planning. The assessment of these fields, dividing them more specifically, is based on 19 criteria for education establishments and 12 criteria for examination centres across four levels (insufficient, sufficient, good and very good).

Information on all accredited education institutions and programmes is available in the State Education Information System database (<https://www.viis.lv>).

In Latvia the following institutions are responsible for quality assurance:

- ✓ State Service for Education Quality (since July 2009) – basic and secondary level;
- ✓ Higher Education Quality Evaluation Centre (1994) – higher education level.

Romania

“CALIPT – Revision of methodologies, instruments and procedures for improving the quality of VET” (December 2009 - November 2011) was a project aiming at the improvement of methodologies and instruments for assuring the coherence and efficiency of initial VET, by analysing the results of the implementation of current methodologies, instruments, procedures

and identifying the necessary revisions to be implemented at this level. The project was financed with support from the European Social Fund (ESF).

An expected outcome is the improvement of the instruments employed in QA in initial VET, by analysing the current QA mechanisms and the development of self-assessment tools for the initial VET system. Another aim was the improvement of the methodologies for the development of qualifications and curricula in initial VET, for a better correlation to the needs of the labour market, through coordination meetings with stakeholders and the analysis of current services offered.

The project partnership comprised of: National Centre for the Development of VET (Romania), GEA Strategy & Consulting SA (Romania), Danish Technological Institute (Denmark), European Institute of Education and Social Policy (France).

The results of the project are: 9 studies regarding the methodology, instruments and procedures characteristic of VET system; 24 consultation meetings with social partners of the VET system; 16 thematic seminars; 9 thematic reports on the conclusions and recommendations for revising the methodology, instruments and procedures characteristic of VET system; 1 self-assessment tool for the quality of VET system; 1 final report on the results on the analysis of the methodology, instruments and procedures characteristic of VET system.

In Romania following institutions are responsible for quality assurance:

- ✓ Agency for Quality Assurance in Pre-university Education;
- ✓ The National Centre for the Development of VET.

National Group for QA (inter-institutional entity, comprised of: the Ministry of Education, Ministry of Labour, National Adult Training Board, ARACIP, CNDIPT, National Centre for Teacher Training) - began work at national level in 2006, in compliance with the recommendations of the European Network for Quality Assurance in VET (ENQA-VET).

3 Awarding of qualifications

In many countries there is possibility to award in addition to initial VET qualifications also professional qualifications. Next both possibilities will be described if they exist in partner countries.

Czech Republic

The principles of student assessment were laid down in the School Act in 2004. The School Act determines also basic requirements for graduation.

Assessment of initial VET is funded by the government. The employers are supposed to participate during the oral and practical parts of apprenticeship exams. There is cooperation between VET institutions and enterprises when continuous and final assessment is carried out. Enterprises offer material and technical assistance in organising practical training, final examinations at workplaces and space for practical training as well.

There are two types of final examinations for the students in secondary education:

- ✓ The new standardised Apprenticeship exam for students in three year vocational programmes, which consists of 3 parts – *written practical* and *oral* (the main emphasis is on the practical part); NUOV is responsible for coordination in the development of uniform questions/themes.
- ✓ The Maturita exam (leaving certification) for students in four year programmes (general and technical education) that gives access to higher education. This year this exam was centrally organised for the first time. It also consists of three parts – *written, multiple choice test* and *oral*. Students can choose either the basic difficulty level or the higher difficulty level of the multiple choice test. The Centre for Measurement of Education is a state organised establishment by the Ministry of Science and Education and its objective is to prepare and evaluate the MATURITA exam in 17 subjects.

Estonia

Awarding of professional qualifications

Pursuant to the Professions Act institutions awarding professional qualifications (IAPQ) are legal entities or authorities that have been granted the right to award professional qualification based on one or several professional standards. The granting of rights to an IAPQ is decided by the professional council of the respective area of professional activity.

In order to be granted the right to award professional qualifications an open competition shall be arranged by EQA. A legal entity or authority that has been declared a winner by a decision of a professional council in a public competition and that has the corresponding registration in the register of professions may act as an IAPQ. The IAPQ is granted the right to award professional qualifications for five years.

Upon registration, the names and levels of professional qualifications which the IAPQ shall be entitled to award will be determined. The procedure for the organisation of the competition and the list of documents certifying compliance with the conditions listed in the Professions Act has been established by a regulation of the Ministry of Education and Research.

To ensure impartiality in awarding professional qualifications, the IAPQ shall set up a professional qualifications committee that shall consist of the representatives of stakeholders in

the given field: specialists, employers, employees, trainers, representatives of professional associations and, if necessary, representatives of clients, as well as other interested parties.

The rules for the awarding of professional qualification describe general requirements for awarding professional qualifications and the procedure for the application and methods for assessing the applicants' competence is specified.

Awarding of initial VET qualifications

The initial VET qualifications in Estonia are:

- ✓ upper secondary VET certificate;
- ✓ VET without basic education requirement certificate;
- ✓ VET based on basic education certificate;
- ✓ VET based on upper secondary education certificate.

Initial VET qualification shall be deemed acquired after full completion of the study programme, including passing of a school leaving examination or a professional examination.

VET institutions in Estonia operate on the basis of licence that is issued by the Ministry of Education And Research. A licence gives a school the right to run respective study programme(s) and to issue nationally recognised graduation certificates, i.e., to act as a qualification awarding institution.

An initial VET programme is considered to be graduated if a student has completed the curriculum in the full extent, received positive results for tests, passed all the examinations, apprenticeship and final examination foreseen in the curriculum. The number and areas of examinations is determined by the school curriculum. The examinations are either oral, written, practical or combinations of all three, depending on the vocation and area of specialisation. Instead of a final examination, students can take a corresponding professional examination upon graduation, and receive initial professional qualification upon passing the examination.

Professions Act stipulates the possibility of integration of the graduation from an educational institution and granting the initial professional qualification starting from 01.01.11. This means providing an educational institution with the rights of an Institution Awarding of Professional Qualification on certain conditions. Pre-requisites are the following:

- ✓ there is a valid professional standard that is included in the EstQF or referenced to the EstQF;
- ✓ the Board of Chairpersons of Professional Councils has decided that this professional standard corresponds to an initial professional level;
- ✓ the educational institution has been granted the right to award professional qualifications of initial level from the Professional Council of the respective field of professional activity.

Finland

Ministry of Education gives out permissions for VET providers to award qualifications (to specific field or fields). Education and training providers must evaluate training they provide, impact of training and take part in external evaluations and publish the main results of evaluations.

All initial vocational qualifications will be attended by practical skills demonstrations:

- ✓ skills demonstrations are an integral part of teaching and the learning process;
- ✓ skills demonstrations are essential part of student assessment.

National evaluation will be integrated with local skills demonstrations.

Latvia

According to the Education Law (1998), basic assessment principles and procedures for graduation are regulated by the state education standards. The acquisition of professional qualifications is stipulated by the Vocational Education Law (1999) and the Law on Higher Education Institutions (1995). The latter regulates also the graduation from academic higher education institutions. At the end of the acquisition of education in accredited education programmes of all education levels there are state organised examinations.

Students' assessment is carried out in 10 point scale (10 – the highest, 1-3 – negative) according to such criteria:

- ✓ the volume and quality of obtained knowledge;
- ✓ obtained skills;
- ✓ attitude towards learning;
- ✓ dynamics of learning achievements.

If in a regular test it is not possible to assess achievements in the 10-point scale, teachers may use “pass” or “fail”.

Generally, there are two parts of students' performance assessment:

- ✓ class assessment (methods set by teacher);
- ✓ final exams (set by the national regulations).

At the end of vocational education programmes students have to pass final centralized qualification exam, which content is drafted in line with the relevant occupational standards and which are arranged by education providers. The total mark from the exam is gained from the total of the theoretical and practical part, and it must be not less than 5. In the qualification exam committee labour market representatives are included.

Both, general and vocational secondary education programmes conclude with four mandatory state centralized examinations in general study subjects; three of these (Latvian, math and foreign language) are set by the state and one may be selected by a student. Since 2006, the student enrolment contest for HE programmes is based on results of these state exams; thus, legally graduates of both types of education programmes have access to higher education.

Vocational education document (qualification) certifies the acquisition of a certain vocational education and professional qualification. Vocational education provider or examination centre may issue state recognised vocational education document to a student, who has acquired an accredited vocational education programme and has successfully passed the final professional qualification examinations and other final examinations stipulated by the state vocational education standards. In vocational education sector the following education documents are awarded:

- ✓ Certificate of vocational basic education (EQF level 3);
- ✓ Certificate of vocational education (EQF level 4);
- ✓ Diploma of vocational secondary education (EQF level 4).

Romania

The assessment Commission is composed of the following persons: a president; a vice-president; the representative designated by the County Commission for Assessment and Certification; assistants; a secretary; assessors.

There are different assessors for each level of qualification³:

- ✓ for the level 1 qualification the assessors are 2 teachers of that subject from another school;
- ✓ for level 2 qualification – 2 external assessors for each qualification and the tutor of the project⁴;
- ✓ for level 3 qualifications – the project tutor and 2 external assessors, who are representative of the company in which students were trained;
- ✓ for the level 3+ qualifications – 2 assessors for every 50 students, one being a tutor or practical training/project and the other a company representative or a teacher from another school unit that provides training in that qualification.

It is mandated by the assessment standards that the assessors must possess the following competences:

- ✓ recent experience in training for the specific qualification;
- ✓ knowledge of the requirements of the training standards;
- ✓ experience in assessing competences;
- ✓ experience in assessing the tests of the certification exam.

Certification exam for the levels 1, 2 and 3 qualification consists of two parts – practical and the oral test. For the level 3+ qualification, there are three parts – practical and written test, and a project that the student must present.

The assessment takes place in the County Commissions for Assessment and Certification, which assesses the way the exam is organized. The feedback for students consists of mainly on designating a student as having passed or failed the examination (depending on the obtained grade). Other types of feedback can be provided during the examination if the assessor feels it is in the interest of the student.

³ The qualification levels are the ones proposed by the International Labour Organisation;

⁴ Each student has to prepare a practical project in his field of study under the guidance of a tutor;

4 Level descriptors

The concept of learning outcomes has been taken from the definitions included in the EQF Recommendation; i.e. learning outcomes are statements of what is expected from a student/learner to know, understand and be able to perform/prove at the end of a learning experience (training/educational programme). It includes the following components: knowledge, abilities/skills and competences.

- ✓ **Knowledge** – is the result of information assimilation through learning and represents an assemble of facts, principles, theories and practices regarding a certain field of study/training.
- ✓ **Ability/skills** – is the capacity to apply and use knowledge in order to fulfil tasks and solve problems.
- ✓ **Competence** – is the proven capacity to select, combine and adequately use knowledge, abilities and other acquisitions (values and attitudes) in order to solve a certain category of work/learning situation and to develop on personal and professional level.

There are two types of learning outcomes:

- 1) key/transversal, which transcend a certain study/training programme, enabling the learner to communicate and interact socially;
- 2) professional, which are of two kinds: general, developed within the larger framework of the field of study/work and specific, developed in a more specific/narrow part of the field.

The level descriptors of NQF must give a good picture of what a person is able to do with his/her qualifications in labour market. Level descriptors must be designed for the users – it means they must be clear and understandable.

Each country has had different starting point for level descriptors. The EQF descriptors were a starting point for Finland, Estonia and Latvi, but the Czech Republic has started developing NQF already before the final version of the EQF descriptors were approved and their approach has not been influenced as much by the EQF descriptors. It was noted, though, that there are also links between the Czech descriptors and the EQF descriptors, because preliminary drafts of the EQF descriptors were available when Czech level descriptors for the new professional register were proposed.

Czech Republic

In Czech Republic the competence approach is in use in a way that the Competence Model is common to the National Qualification System (NQS) (the register), National System of Occupation (NSO) and other applications in employment services. There are three types of competences in the Competence Model:

- ✓ soft competences;
- ✓ general technical competences;
- ✓ technical competences.

The new professional qualifications register is based on a framework of eight levels with descriptors of competences. Based on these descriptors qualification and assessment standards (QS and AS) are described in terms of learning outcomes, i.e. there is a detailed description in AS of what a person must be able to know and be able to perform during the exam in order to be awarded with the professional qualification certificate. Because of this qualifications system validation of non-formal and informal learning is possible.

The learning objectives (requirements) defined in the national (core) curricula for primary, secondary vocational and secondary general education are described in terms of learning outcomes (key competences and professional competences). Based on these curricula each school creates its own curriculum.

The qualifications framework for higher education is being developed, the descriptors for HE levels are approved, but the self-referencing report (toward QF EHEA) was not written/submitted yet.

Nevertheless, the Czech Republic does not have a single comprehensive national qualifications framework yet, we do not have a one common set of descriptor for all sectors of education.

Estonia

The level descriptors of the EstQF determine the general requirements for the learning outcomes of the general education qualifications, initial VET qualifications, HE qualifications, and professional qualifications. There is a clear and demonstrable link between the types of qualification descriptions and the level descriptors of the EQF.

Initial VET level descriptors are defined in the Standard of Vocational Education. Professional qualifications specific level descriptions of this framework are compatible with the level descriptions of EstQF and are described through knowledge, skills (assessable performance criteria) and responsibility and independence.

Since the EstQF level descriptions are identical to the EQF level descriptions, the centre of gravity of the referencing process is shifting to referencing qualifications to the EstQF levels.

The Standard of initial VET describes the learning outcomes of qualification levels at the base level needed to complete a curriculum or a module (at the level of the grade "3"). In addition to the knowledge, skills and scope of autonomy and responsibility, the Standard of initial VET describes the following competences as the learning outcomes by level:

- ✓ learning competence;
- ✓ communication competence;
- ✓ personal competence;
- ✓ vocational competence.

The description of the levels of learning outcomes in the field of knowledge is based on B. Bloom's levels of cognitive domain:

- ✓ **knowledge** (recall): terminology, facts, basics of the vocation;
- ✓ **comprehension** – comprehending, understanding the material;
- ✓ **application** – using the previously learned knowledge in solving problems with a simple answer;
- ✓ **analysis** – examining the information in order to make conclusions and generalisations;
- ✓ **synthesis** – compiling information together in a different way by combining elements in a new pattern or proposing alternative solutions;

- ✓ **evaluation** – presenting and defending opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria.

EstQF is established with the Professions Act (01.09.2008).

Finland

In Finland the groups, involved in development of description for learning outcomes are:

- ✓ social partners (employers' and employees' organisations);
- ✓ VET providers;
- ✓ students;
- ✓ Finnish education evaluation council (since 2003);
- ✓ Education research centres of various universities.

The legislative process is on its way. The proposed result will be enacting an Act on the National Framework for Qualifications and Other Learning. The qualifications included in the Finnish national education and qualifications system will be classified into eight levels on the basis of their respective learning outcomes. Provisions on the descriptors of the requirements levels and placement of qualifications, syllabi and other competence modules at different levels will be laid down by Government Decree.

Latvia

While formulating the level descriptors in Latvia, experts to a great extent built on the Recommendation of the European Parliament and of the Council (2008) on the establishment of the EQF for lifelong learning, therefore, very direct link between the descriptors of the Latvian levels (2010) and the EQF levels (2008) may be observed. Experts elaborating descriptors also used national education and occupational standards, Bloom's taxonomy and for HE sector – Dublin's descriptors. The Latvian level descriptors are expressed in three dimensions:

- ✓ knowledge (knowledge and comprehension);
- ✓ skills (ability to apply knowledge, communication, general skills);
- ✓ competence (analysis, synthesis and assessment).

The level descriptors were included in the Cabinet of Ministers Regulations "Regulations on the classification of Latvian education" (2008) with the amendments in October 2010.

Romania

Romania is yet to decide on an approach to this subject. The experiences of other countries will be taken into account when deciding upon level descriptors.

4.1 What did partner countries learn from each other in terms of NQF level descriptions and referencing EQF?

- ✓ The EQF as a reference framework is a very useful tool, because comparing NQF level descriptions of different countries translated into English cannot be the best way for comparison.
- ✓ Key words (active verbs) used in the EQF level descriptors and NQF descriptions play central role in the referencing of NQF levels or national qualifications to the EQF.
- ✓ The quality and transparency of referencing NQF levels or national qualifications to the EQF is crucial for the success of the EQF implementation process. It is up to each country to show that the referencing process meets all the agreed criteria and procedures.
- ✓ In designing the NQF level descriptions it is important to consider the final users of the EQF and the NQF. Therefore it is important to analyse how the descriptions meet the needs of their users.
- ✓ In some countries the EQF is considered to be mainly targeted towards labour market (not for the educational sector). Thus the main user group should be employers, who want to understand different qualifications and compare them.
- ✓ To be able to judge and draw conclusions about the NQF and referencing to the EQF, it is necessary to have substantial background information about the qualifications system on the national level.
- ✓ The NQF level descriptors should not be too detailed; there room for more details in the descriptions of qualification types on the state and institutional (provider) level.
- ✓ There must be a balance between national needs and needs for transparency. Some people see the NQF level descriptions as being developed for the country itself. This doesn't mean that it is not necessary to be understandable for other countries.
- ✓ It is important that level descriptors are written in clear language understandable for the labour market and other stakeholders. This means that employers and other social partners have to be involved in the process of developing the NQF level descriptions.
- ✓ The development of the NQF level descriptions needs also good specialists in formulating learning outcomes.
- ✓ The foreign experts selected to analyse the referencing of the NQF or national qualifications to the EQF should be a very good specialists in education and qualification systems.

The NQF level descriptors of partner countries are available in Annex 1.

5 Referencing process in partner countries

The EQF recommendation advises every member state to establish a steering committee for the referencing process. The steering committee and NCP inform stakeholders about the development of the NQFs and the EQF referencing process, collecting and disseminating information about other countries' frameworks.

The referencing process has had its ups and downs. Some challenges differed by country, some were very similar. For example, Latvia had a discussion about which institution should be the leading one for the referencing process, whether the Ministry of Education and Science or some other institution. In Estonia, Finland and the Czech Republic it was clear that the leading body should be the Ministry of Education.

Czech Republic

In the Czech Republic the consultation process for the national referencing report is under development. The first draft report was prepared and presented at the national referencing conference in March 2011. Then a thorough consultation process involving many national stakeholders and several international experts followed. In July 2011, the final version of the report was approved by the Government of the Czech Republic. The final translated version of the report will be presented to the EQF Advisory Group in December 2011.

Estonia

In Estonia referencing of the Estonian Qualifications Framework (EstQF) to the EQF took place from December 2008 to December 2010. The summary and discussion paper about EstQF and referencing to EQF was presented to the stakeholders and social partners in December 2010. The final referencing report will be presented to the Advisory Group in September 2011.

The EstQF includes general education, vocational education and higher education qualifications and professional qualifications. The following table presents the results of referencing Estonian formal education qualifications to the EstQF levels:

Formal education qualifications	EQF and EstQF levels
a) Graduation certificate of curriculum for students with moderate and severe learning disabilities	1
a) Graduation certificate of simplified curriculum b) Basic education certificate c) VET without basic education requirement certificate	2
a) VET based on basic education certificate	3
a) Upper secondary general education certificate b) Upper secondary VET certificate c) VET based on upper secondary education certificate	4
	5
a) Diploma of Bachelor's degree, b) Diploma of professional higher education	6

a) Diploma of Master's degree	7
a) Diploma of Doctoral degree	8

Estonian professional qualifications are distributed on levels 2-8 of the EstQF. They amount to 7201 in number; therefore it is not possible to present them all in this table. Professional qualifications can be gained through formal education as well as through adult education and in-service retraining. Examples of professional qualifications placed on different levels of EstQF are:

- ✓ EstQF level 2: Cook assistant;
- ✓ EstQF level 3: Carpenter, ...;
- ✓ EstQF level 4: IT specialist, ...;
- ✓ EstQF level 5: Master carpenter, construction manager, ...;
- ✓ EstQF level 6: Engineer, ...;
- ✓ EstQF level 7: Diploma engineer, diploma architect, ...;
- ✓ EstQF level 8: Chartered engineer, chartered architect,

Finland

In Finland preparing the NQF has been relatively easy because of the clear structure of qualifications and predominantly learning outcomes approach already existed. The NQF has raised interest among stakeholders (and led to intensive discussion on education). A special Law on NQF has been drafted and is right now in the parliamentary process.

The following table presents the results of referencing Finnish qualifications to the NQF levels:

Qualifications	EQF and NQF levels
	1
	2
The administrative sector of the Ministry of Education and Culture: a) Basic Education Certificate	3
The administrative sector of the Ministry of Education and Culture: a) General Upper Secondary School Certificate b) Matriculation Examination Certificate c) Vocational qualifications ¹ d) Further vocational qualifications ² Other qualifications outside the Ministry of Education and Culture sector: e) Basic Qualification in Prison Services (Ministry of Justice) f) Qualification in Police Studies (Ministry of the Interior) g) Fire Fighter Qualification (Ministry of the Interior)	4
The administrative sector of the Ministry of Education and Culture: a) Specialist vocational qualifications ³ b) Vocational Qualification in Air Traffic Control c) Further Qualification in Construction Industry	5

Other qualifications outside the Ministry of Education and Culture sector: d) Finnish Police Sergeant's Qualification (Ministry of Interior) e) Sub-Officer Qualification (fire and rescue services, Ministry of Interior)	
The administrative sector of the Ministry of Education and Culture: a) University Bachelor's degrees b) Polytechnic Bachelor's degrees c) Specialist Qualification in Management d) Specialist Qualification in Business Management e) Specialist Qualification in Psychiatric Care f) Specialist Qualification for Construction Site Managers g) Specialist Qualification for Riding Instructors	6
The administrative sector of the Ministry of Education and Culture: a) University Master's degrees b) Polytechnic Master's degrees	7
The administrative sector of the Ministry of Education and Culture: 1) Universities' scientific and artistic postgraduate degrees: a) Licentiate degrees b) Doctorate degrees 2) Universities' professional postgraduate degrees: c) Specialist Degree in Medicine d) Specialist Degree in Dentistry e) Specialist Degree in Veterinary Medicine Other qualifications outside the Ministry of Education and Culture sector: f) General Staff Officer's Degree (Ministry of Defence)	8

Latvia

In Latvia the referencing process of national qualifications to the EQF started in 2009 with the establishment of the referencing working group by the Ministry of Education and Science. The working group, which included all major stakeholders, provided consulting and supervision for the development of level descriptors; it participated in the consultation process arranged by the Latvian NCP (Academic Information Centre), reviewing and approving the national Self-Assessment Report.

In the course of the consultation process, the decision was taken to organize the referencing in two phases as the national stakeholders recognized that this process requires more time and reforms of large scale. Two phases are:

1. Phase (2009-2011) – the referencing of the existing formal Latvian qualifications to the EQF and the Qualifications Framework of the European Higher Education Area (QF/EHEA). The first version of the Self-Assessment Report was presented to the EQF Advisory Group in June 2011; the final results of this phase will be presented to the Advisory Group in October 2011. The published Report represents the conclusion of the 1st phase.
2. Phase (2013-2015) – the review and update of the Self-Assessment Report, on the basis of the new Vocational Education Law, Higher Education Law and the results of several ongoing projects, e.g. ESF project "Development of sectoral qualifications

system and increasing the efficiency and quality of vocational education” (2010-2013). Since education system is subjected to continuous changes, the referencing exercise will be repeated in order to grasp larger scale of qualifications and new legal regulations. This means that during the 2nd phase qualifications, which at present are not referenced, will be placed in the framework (e.g. master of crafts, journeyman and informal/non-formal qualifications).

The Latvian formal education documents (qualifications) are linked with the relevant EQF or the Latvian Qualifications Framework (LQF) level as result of the 1st phase of referencing process (see table below).

Latvian education documents (qualifications)	LQF and EQF level
a) Certificate of general basic education, statement of records (for students in special educational programmes for students with severe mental development disorders or several severe development disorders)	1
a) Certificate of general basic education, statement of records (for students in special educational programmes for students with mental development disorders)	2
a) Certificate of general basic education, statement of records, certificate b) Certificate of vocational basic education, statement of records	3
a) Certificate of general secondary education, statement of records, certificate b) Certificate of vocational education, statement of records c) Diploma of vocational secondary education, statement of records	4
a) Diploma of first level professional higher education (1 st level professional higher (college) education. The length of full-time studies 2-3 years)	5
a) Bachelor's diploma b) Professional Bachelor's diploma c) Diploma of professional higher education, diploma of higher professional qualification (2 nd level professional higher education, the length of full-time studies – at least 4 years)	6
a) Master's diploma b) Professional Master's diploma c) Diploma of professional higher education, diploma of higher education, diploma of higher professional qualification (2 nd level professional higher education, the total length of full-time studies – at least 5 years)	7
a) Doctor's diploma	8

Romania

In Romania any formal process for referencing hasn't taken place yet and there still is no clear strategy to do that. The main goal of the Romanian partner has been learning from other countries that have been going through the referencing process.

Conclusions

The information gained throughout the project has brought insight to partner countries' NQF developments and has helped in understanding different processes on a more general level. The most important overall outcome of the project was strengthened mutual trust between the partners. The project helped in understanding different decisions made regarding the NQF development in partner countries and this again has given a stronger basis for international co-operation, understanding and comparison.

Each partner had their strengths and all the partners used/will use the best practices shared during the project in their political decision-making for their NQF development. Considering partners' different development stage, each country brought out the most important practical outcomes of this project.

Czech Republic

It was valuable to see that similar approaches, projects and methods are used in other countries with similar (communist) history. This can be interpreted as affirmation of appropriateness of our reform processes. For example, the Czech Republic and Estonia found many similarities and parallels in the development of their national professional qualifications systems. The project main goal was not to produce specific outcomes of the cooperation, but to provide the opportunity to discuss the processes that lead to the implementation of the European tools such as the EQF, ECVET, EQAVET and Europass at national level. This goal was fulfilled.

Estonia

EQA as the NCP for Estonia is especially grateful to all project partners for this mutual learning experience of starting NCPs. Although our national qualifications systems differ and there is no reason to copy the solutions adopted by other countries, it is always useful to learn and understand the logic behind developments in partner countries.

Finnish experience of assessment in VET is an example that could be considered in Estonia when developing assessment standards for professional qualifications. We found good solutions and ideas how to organise training for assessment committees in order to improve the assessment processes.

Finland

It has been interesting to see the work in progress in different countries. It has also become clear that we discuss similar issues in all countries and the problems are sometimes the same. On the other hand, we have also learned that the starting point, when it comes to co-operation and the qualifications system on the national level, is very important and influences the work on the national qualifications framework a lot.

Latvia

Latvia could use the way how Finland and Estonia have described their vocational qualifications in their NQF-s. The Czech Republic has good practice of the developed Competence Model. One of the issues was related to the organization of referencing process, i.e. practical matters, and to the content of self-assessment report describing national education context and how national qualifications are linked to the EQF. During the meetings and discussions partners shared experiences and learnt ways how other partners have approached these questions; later on the Latvian NCP could use this knowledge during their referencing process, e.g. when arranging national consultation process or composing self-assessment report. Latvia also gained some ideas for further NCP's activities, e.g. related to raising awareness on the added value of the EQF. Generally the project was very useful, as the project implementation period coincided with the initiation of the Latvian NCP activities.

Romania

Given the continuous process of reorganizing the institutions responsible with the referencing process which is going on in Romania, seeing the practices in countries more advanced in this area has provided invaluable help. Romania will integrate the knowledge attained in their research regarding lifelong learning and education policies.

ANNEX 1
Level descriptors of partner countries

Czech Republic

EQF NQS NSO	Description of Competences	Corresponding Levels of Education	Fields of Study
1	Identify work tools, equipment, raw materials, etc. Carry out tasks according to simple, unchanging instructions Identify problems which occur while following these instructions	Basic education for students with special needs (9 year study)	B
2	Be familiar with materials describing the work to be done Choose appropriate tools, materials etc. for use in each procedure or method, from among the various options Evaluate the quality of his or her products or services Identify problems which occur while following instructions Carry out instructions in standard situations with a minimum of changes	Basic education (9 year study)	C,
		Special upper secondary (1-2 year study)	C
		Upper secondary vocational education (two year study)	J, E
3	Be familiar with documentation, norms and standards in common use in the field Select appropriate procedures, methods, tools, raw materials etc. from various options, according to conditions and requirements. Evaluate the quality of his or her products or services, and those of others Carry out quality control, determine the causes of deficiencies and decide how to eliminate them Identify problems which occur while following the selected procedures, determine their causes and decide how to solve them Carry out selected procedures depending on conditions and requirements including taking into account social, economic, and ecological considerations Present his or her work, products or services Direct a small group carrying out simple or supporting activities	Upper secondary with Apprenticeship certificate (three year study)	E, H
4	Be familiar with documentation, norms, standards and regulations in common use in the field Select appropriate procedures, methods, tools, raw materials etc. from various options, according to conditions and requirements Evaluate the quality of his or her products or services, and those of others Carry out quality control, determine the causes of deficiencies and their consequences and decide how to eliminate them Identify problems which occur while following the selected procedures, determine their causes and implement the required changes to the procedure Identify social, economic and environmental aspects of any problems which arise Determine the causes of unusual behaviour from individuals and objects in the workplace	Upper secondary with "Maturita" exam (four year study)	K, L, M

EQF NQS NSO	Description of Competences	Corresponding Levels of Education	Fields of Study
	<p>Assess the relevance of technical information</p> <p>Evaluate the methods of others from the point of view of using them in his or her own work</p> <p>Carry out selected procedures, with modifications depending on conditions and requirements including taking into account social, economic, and ecological considerations</p> <p>Use technical information from a variety of sources in problem solving</p> <p>Make suggestions for improving results</p> <p>Design simpler analogues of existing procedures and products</p> <p>Further development of proposals for new products and procedures</p> <p>Present his or her work, products or services, discuss problems and find solutions and communicate effectively</p> <p>Direct a small group carrying out selected procedures depending on conditions and requirements</p>		
5	<p>Be familiar with documentation, norms, standards and regulations in use in the field to the extent that he or she can explain them to others in standard situations</p> <p>Select appropriate procedures, methods, tools, raw materials etc. from various options, according to conditions and requirements</p> <p>Evaluate the quality of his or her products or services, and those of others</p> <p>Carry out quality control, determine the causes of deficiencies and their consequences and decide how to eliminate them</p> <p>Identify problems which occur while following the selected procedures, determine their causes and implement the required changes to the procedure</p> <p>Identify social, economic and environmental aspects of any problems which arise</p> <p>Distinguish between usual and unusual behaviour from individuals and objects in the workplace, determine causes and context of unusual behaviour, and draw conclusions and formulate proposals</p> <p>Analyse moderately complex systems, phenomena and processes</p> <p>Evaluate the relevance of technical information to resolving standard problems</p> <p>Evaluate the methods of others from the point of view of using them in his or her own work</p> <p>Carry out selected procedures, with modifications depending on conditions and requirements including taking into account social, economic, and ecological considerations</p> <p>Independently carry out common technical tasks by standards methods</p> <p>Solve problems requiring abstraction and employ simple research methods</p> <p>Use technical information from a variety of sources in problem solving</p> <p>Integrate several components into complex solutions</p> <p>Formulate proposals for improvements including proposals for new processes</p> <p>Design moderately complex procedures and products</p> <p>Present his or her work, products or services, discuss problems and find solutions, communicate effectively and present convincing arguments</p>	<p><i>(Tertiary vocational education diploma/professional studies will be included in this level after the implementation of the reform of higher education)</i></p> <p><i>Educational programmes leading to professional qualifications at this level as described in the Act 179/2006 Coll.</i></p>	

EQF NQS NSO	Description of Competences	Corresponding Levels of Education	Fields of Study
	Direct a group carrying out moderately complex technical tasks depending on unforeseen conditions and requirements		
6	<p>Be familiar with documentation, norms, standards and regulations in use in the field to the extent that he or she can explain them to others in standard and non-standard situations</p> <p>Select appropriate procedures, methods, tools, raw materials etc. from various options, according to conditions and requirements</p> <p>Evaluate the quality of his or her products or services, and those of others</p> <p>Carry out quality control, determine the causes of deficiencies and their consequences and decide how to eliminate them</p> <p>Identify problems which occur while following the selected procedures, determine their causes and implement the required changes to the procedure</p> <p>Identify social, economic and environmental aspects of any problems which arise</p> <p>Analyse the causes and context of unusual behaviour from individuals and objects in the workplace, draw conclusions and formulate proposals</p> <p>Analyse moderately complex systems, phenomena and processes</p> <p>Assess the relevance of technical information</p> <p>Evaluate the methods of others from the point of view of using them in his or her own work</p> <p>Carry out selected procedures, with modifications depending on conditions and requirements including taking into account social, economic, and ecological considerations</p> <p>Carry out fairly complex tasks for which there are no available procedures and methods</p> <p>Solve problems requiring abstraction</p> <p>Use technical information from a variety of sources in problem solving</p> <p>Integrate several components into complex solutions</p> <p>Propose system improvements</p> <p>Design fairly complex procedures and products</p> <p>Solve problems requiring broad theoretical knowledge, use research methods and simple scientific principles</p> <p>Present his or her work, products or services and justify them in the face of criticism, discuss problems and find solutions, communicate effectively and present convincing arguments</p> <p>Direct a group carrying out complex technical activities in unforeseen conditions</p>	<p>Tertiary vocational education, Tertiary Bachelor's programmes</p> <p><i>Educational programmes leading to professional qualifications at this level as described in the Act 179/2006 Coll.</i></p>	<p>N, P, R</p>
7	<p>Be familiar with documentation, norms, standards and regulations in use in the field to the extent that he or she can explain them to others in standard and non-standard situations and evaluate whether there is a need for changes in these norms and documents</p> <p>Plan procedures, methods and the use of tools and materials etc. according to desired results</p> <p>Evaluate the quality of his or her products or services, and those of others</p> <p>Carry out quality control, determine the causes of deficiencies and their consequences and decide how to eliminate them</p>	<p>Tertiary Masters programmes</p> <p><i>Educational programmes leading to professional qualifications at this level as described in the Act 179/2006 Coll.</i></p>	<p>T</p>

EQF NQS NSO	Description of Competences	Corresponding Levels of Education	Fields of Study
	<p>Identify problems which occur while following the selected procedures, determine their causes and implement the required changes to the procedure</p> <p>Identify social, economic and environmental aspects of any problems which arise</p> <p>Analyse the causes and context of unusual behaviour from individuals and objects in the workplace, draw conclusions and formulate proposals</p> <p>Analyse complex systems, phenomena and processes</p> <p>Evaluate the relevance of technical information and findings from other scientific fields</p> <p>Evaluate the results of the works of others from the point of view of applying them in his or her own work</p> <p>Carry out selected procedures, with modifications depending on conditions and requirements including taking into account social, economic, and ecological considerations</p> <p>Design procedures and methods for the solution of complex problems and coordinate their implementation</p> <p>Solve problems requiring abstraction and generalisation</p> <p>Use technical information from a variety of sources and findings from various scientific fields in problem solving</p> <p>Integrate several components into complex solutions</p> <p>Propose fundamental systemic changes</p> <p>Plan and implement new, complex procedures and products</p> <p>Solve problems requiring broad and highly specialised theoretical knowledge, use research methods and simple scientific principles</p> <p>Present his or her work, products or services, design new procedures, justify them in the face of criticism, lead discussions of complicated problems and find solutions, communicate effectively and present convincing arguments</p> <p>Organise and plan complex processes carried out by multiple groups in unforeseen conditions, including strategic decision making</p>		
8	<p><u>NQF Qualification level 7, and</u></p> <p>Solve problems requiring innovations of importance to the whole field</p> <p>Contribute to the dissemination of the results of original research</p> <p>Develop theories and methods for the most demanding creative activities, including scientific research and development</p> <p>Present proposed procedures and research results and defend them in the face of criticism, and lead discussions on research and scientific problems</p> <p>Direct wide-ranging research and development activities</p>	Tertiary doctoral programmes	V

Estonia

Level descriptors for EstQF – identical to the level descriptor of EQF

EstQF level	Knowledge (described as theoretical and/or factual)	Skills (described as cognitive: involving the use of logical, intuitive and creative thinking, and practical: involving manual dexterity and the use of methods, materials, tools and instruments)	Scope of responsibility and autonomy
Level 1	basic general knowledge	basic skills required to carry out simple tasks	work or study under direct supervision in a structured content
Level 2	basic factual knowledge of a field of work or study	basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools.	work and study under supervision with some autonomy
Level 3	knowledge of facts, principles, processes and general concepts, in a field of work or study	a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems
Level 4	factual and theoretical knowledge in broad contexts within a field of work or study	a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
Level 5	specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	exercise management and supervision in contexts of work or study activities where there is unpredictable change; review and develop performance of self and others

EstQF level	Knowledge (described as theoretical and/or factual)	Skills (described as cognitive: involving the use of logical, intuitive and creative thinking, and practical: involving manual dexterity and the use of methods, materials, tools and instruments)	Scope of responsibility and autonomy
Level 6	advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups
Level 7	highly specialised knowledge; some of which is at the forefront of knowledge in the field of work or study, as the basis for original thinking and/or research critical awareness of knowledge issues in a field and at the interface between different fields	specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams
Level 8	knowledge at the most advanced frontier in the field of work or study and at the interface between fields	the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

Level descriptors (learning outcomes) for initial VET qualifications

Graduate of EstQF level 2 curriculum	Graduate of EstQF level 3 curriculum	Graduate of EstQF level 4 curriculum
knows and describes the main concepts and principles of the vocation; understands the main processes of work, knows vocabulary, materials, tools and the most common devices of	is familiar with the vocabulary of their vocation, the principles, technologies, processes, techniques, materials, tools and devices, and knows how to use and implement them; is able to independently perform different tasks of the vocation	is familiar with his or her vocation, knows and uses the principles, theories and technologies in normal and new working situations; is able to independently perform the complex and diverse tasks of the vocation that require novel

Graduate of EstQF level 2 curriculum	Graduate of EstQF level 3 curriculum	Graduate of EstQF level 4 curriculum
<p>the vocation;</p> <p>is able to perform ordinary, limited responsibility tasks on his or her vocation;</p> <p>needs supervision in working;</p> <p>works well in working situations that are generally stable;</p> <p>needs advice and supervision when learning;</p> <p>is able to adapt and manage in different social environments;</p> <p>knows how to communicate in accordance with the situation and conversation partners;</p> <p>is able to use given information materials to solve problems of the vocation;</p> <p>is able to evaluate the outcomes of his or her work</p>	<p>and takes responsibility for their performance;</p> <p>learns and complements his or her knowledge independently;</p> <p>is able to express himself or herself and to justify his or her opinions in different situations in both oral and written form;</p> <p>is able to solve problems of the vocation, using the common sources of information;</p> <p>is able to optimally solve problems of the vocation and adapt his or her behaviour accordingly;</p> <p>participates successfully in the work of different teams and is capable of performing different tasks in teams</p>	<p>solutions;</p> <p>takes responsibility for performance of his or her tasks;</p> <p>is able to make suggestions for improvement of working conditions and to guide co-workers;</p> <p>is able to take partial responsibility for the training of his or her co-workers;</p> <p>is able to analyse and evaluate the level of his or her knowledge;</p> <p>is capable of independent and self-managed learning;</p> <p>is able to argue and express his or her views in new situations;</p> <p>is able to use self-assessment to change his or her conduct, taking into consideration the social context, if applicable;</p> <p>is able to solve problems of the vocation, using the common sources of information;</p> <p>is able to evaluate the reliability and validity of the information used;</p> <p>participates in the work of different teams and is able to manage them, if necessary</p>

Level descriptors of professional qualifications in Estonia

EstQF level	Knowledge and understanding	Skills	Scope of independence and responsibility
Level 1	Owens basic work knowledge.	Performs <u>uncomplicated routine</u> tasks observing set procedures and detailed guidelines. Uses appropriate tools.	Works in a <u>limited</u> situation under a direct guidance. Is responsible for the performance of the duties.
Level 2	Owens basic work knowledge.	Performs <u>uncomplicated</u> tasks observing set procedures and guidelines. Selects and uses appropriate	Works in a <u>fixed</u> situation with a certain degree of independence. Is responsible for the

		tools and equipment.	performance of the duties.
Level 3	<p>Understands basic facts and principles regarding work.</p> <p>Knows basic work techniques.</p>	<p>Performs <u>basic</u> tasks.</p> <p>Selects and uses tools and methods.</p> <p>Acts according to plans, in a sparing and effective manner.</p>	<p>Works in a <u>generally fixed situation independently</u>.</p> <p>Organises his or her actions and adjusts it according to the situation.</p> <p>Participates in teamwork efficiently.</p> <p>Is responsible for the performance of the duties.</p>
Level 4	<p>Interprets and integrates extensive work-related knowledge and uses them in new situations.</p>	<p>Performs <u>basic</u> tasks.</p> <p>If necessary, initiates, prepares and adjusts appropriate changes.</p> <p>Acts and organises work according to plans, in a sparing and effective manner.</p> <p>Selects and uses tools and methods for performing common and novel tasks.</p>	<p>Works independently in <u>situations what can be usually foreseen but that can also change</u>.</p> <p>Supervises common work made by others and takes some responsibility for the development of others.</p>
Level 5	<p>Analyses information and approaches.</p> <p>Uses knowledge for creative solving of abstract tasks within limits of interconnected areas.</p>	<p>Performs <u>diverse</u> tasks, plans appropriate changes and organises application thereof.</p> <p>Selects and applies technologies, methods and tools for obtaining new solutions and adjusts his or her behaviour according to the situation.</p>	<p>Works independently in <u>unpredictable</u> situations.</p> <p>Takes responsibility for a small workgroup.</p>
Level 6	<p>Analyses and assesses facts, theories, principles and methods.</p> <p>Uses knowledge for creative solving of abstract tasks in interconnected areas.</p>	<p>Performs <u>complicated</u> tasks assuming novel approach and excellence.</p> <p>Intertwines activities and methods and assesses their potential results.</p> <p>Makes decisions on the basis of partial information.</p>	<p>Works independently in <u>complicated and unpredictable</u> situations.</p> <p>Takes responsibility for workgroups.</p>
Level 7	<p>Integrates novel knowledge in his or her work area based on original thinking.</p> <p>Creates new knowledge within the framework of fixed time and in the condition of limited time.</p> <p>Creates new</p>	<p>Solves <u>unpredictable and complicated</u> tasks</p> <p>In science, innovation and other areas creating new knowledge.</p> <p>Initiates and plans activities and methods and analyses their short-and long-term consequences.</p>	<p>Works independently in complicated and unpredictable situations requiring <u>innovative approach</u>.</p> <p>Is responsible for contributing to professional knowledge or professional activities.</p>

	methodologies, methods and technologies.		Is responsible for the strategic actions of teams.
Level 8	<p>Works independently in complicated and unpredictable situations requiring <u>innovative approach</u>.</p> <p>Is responsible for contributing to professional knowledge or professional activities.</p> <p>Is responsible for the strategic actions of teams.</p>	<p>Solves <u>unique</u> tasks in science, innovation and other areas creating new knowledge.</p> <p>Initiates, plans and implements strategic research and development activities that enlarge the realm of work or knowledge or that result in considerable changes.</p>	<p>Works independently in complicated, <u>undefined situations requiring new strategic approach</u> that require excellence.</p> <p>Is responsible for the planning and development of the work or knowledge area.</p> <p>Analyses and synthesises independently new and complicated professional ideas.</p> <p>Is responsible for the strategic performance of an organisation.</p>

Finland

Level/ component	Knowledge	Work method and application (skills)	Responsibility, management and entrepreneurship	Evaluation	Key skills for lifelong learning
Level 1	Possesses the basic knowledge and skills needed for studying and working in a clear operating environment under direct supervision.	Possesses the basic knowledge and skills needed for studying and working in a clear operating environment under direct supervision.			Takes responsibility for learning under supervision. Possesses the capability to communicate verbally and responds to simple written communication in his/her mother tongue.
Level 2	Possesses the basic knowledge and cognitive and practical basic skills in his/her field that are needed to be able to utilise this knowledge in performing duties and solving routine problems.	Possesses the basic knowledge and cognitive and practical basic skills in his/her field that are needed to be able to utilise this knowledge in performing duties and solving routine problems. Follows simple rules and uses normal equipment and tools in a supervised operating environment demanding some independent action.	Takes responsibility and shows incentive.		Takes responsibility for learning. Knows how to communicate verbally and produce normal text. Basic language skills in at least one official language and one foreign language.
Level 3	Possesses facts, principles, processes and general concepts which are needed for performing tasks and problem-solving.	Possesses certain and certain cognitive and practical skills which are needed for completing tasks and solving problems. Chooses and applies basic methods, tools, materials and information.	Takes responsibility for completing his/her duties and works safely within a work community. Possesses the ability to work in an entrepreneurial manner in someone else's service.	Evaluates his/her own competence and actions relating to work or studies.	Possesses the capability for continuous learning. Knows how to communicate diversely and interactively in various situations and to produce varied texts. Possesses the capability to

Level/ component	Knowledge	Work method and application (skills)	Responsibility, management and entrepreneurship	Evaluation	Key skills for lifelong learning
		Tailors his/her action to the circumstances and the operating environment when solving problems.			communicate at an international level and to interact in one official language and at least one foreign language.
Level 4	Possesses knowledge of the facts and theory in extensive contexts and is capable of utilising this knowledge and skills when solving special problems in his/her field.	Possesses certain cognitive and practical skills which are needed when solving special problems in his/her field Works independently in usually predictable but possibly changing operating environments.	Takes responsibility for completing his/her duties and works safely and responsibly within a work community. Possesses the capability for financial, productive and systematic activities and organising work. Possesses the capability to oversee routine tasks performed by others. Possesses the capability to work in an entrepreneurial manner in someone else's service or as an independent entrepreneur.	Evaluates his/her own competence and improves actions relating to work or studies. Develops him/herself and his/her work.	Possesses the capability for continuous learning. Knows how to communicate diversely and interactively in various situations and to produce varied, also field-specific texts. Can communicate at an international level and interact in one official language and at least one foreign language.
Level 5	Possesses comprehensive and/or specialised knowledge of the facts and theory and is capable of utilising this knowledge and skills in a creative manner when solving abstract problems. Understands the boundaries of knowledge in	Possesses comprehensive cognitive and practical skills which are needed when when solving abstract problems creatively Works independently in changing operating environments.	Possesses the capability to manage and oversee operating environments that change unpredictably. Possesses the capability to oversee tasks performed by others. Possesses the capability to work as an	Evaluates and develops his/her own as well as others' performance and work.	Possesses the capability for continuous learning. Knows how to communicate verbally and in writing both to audiences in the field and outside it. Possesses the capability to communicate at an international

Level/ component	Knowledge	Work method and application (skills)	Responsibility, management and entrepreneurship	Evaluation	Key skills for lifelong learning
	different fields.		independent entrepreneur in the field.		level and interact in his/her field in one official language and at least one foreign language.
Level 6	Possesses comprehensive and advanced knowledge of his/her field, including the critical understanding of theories, key concepts, methods and principles. Understands the extent and boundaries of professional duties and/or disciplines.	Possesses advanced skills, which demonstrate mastery of issues, the capability to apply knowledge and come up with creative solutions, which are required in a specialised professional, scientific or artistic field to solve complex or unpredictable problems.	Possesses the capability to manage complex professional work or projects and the capability to work independently in expert duties in the field. Possesses the capability to make decisions in unpredictable operating environments. Basic capability to work as an independent entrepreneur in the field.	In addition to the evaluation and development of his/her own competence, is able to take responsibility for the development of individuals and groups.	Possesses the capability for continuous learning. Knows how to communicate adequately verbally and in writing both to audiences in the field and outside it. Possesses the capability to communicate at an international level and interact in one official language and at least one foreign language.
Level 7	Understands comprehensive and highly specialised concepts, methods and knowledge corresponding to the special competence in his/her field, which are used as the basis for independent thought and/or research. Understands questions pertaining to the field and interfaces between various fields and evaluates them	Possesses the capability to solve demanding problems in research and innovation activities, where new methods and procedures are developed and knowledge from various fields is applied and combined.	Possesses the capability for independent work in demanding expert duties in the field or as an entrepreneur. Possesses the capability to manage and develop complex, unpredictable and new strategic approaches. Possesses the capability to manage work and/or people.	Possesses the capability to evaluate the activities of individuals or groups. Possesses the capability to accumulate knowledge and practices in his/her field and/or take responsibility for the development of others.	Possesses the capability for continuous learning. Knows how to communicate verbally and in writing both to audiences in the field and outside it. Possesses the capability to communicate at an advanced international level and to interact in one official language and at least one foreign language.

Level/ component	Knowledge	Work method and application (skills)	Responsibility, management and entrepreneurship	Evaluation	Key skills for lifelong learning
	and new knowledge critically.				
Level 8	Understands extensive knowledge areas and contexts. Possesses the most advanced and/or specialised and most profound knowledge, skills and/or theories, which are placed at the most advanced and/or specialised level of the field and interface between different fields. Possesses the capability to apply knowledge in a creative way. Possesses the capability for creating new knowledge in accordance with good scientific practise.	Possesses the capability for independent and reliable scientific and professional research. Possesses the capability to develop professional fields of activity and/or disciplines. Possesses the capability to develop and apply new ideas, theories, approaches or processes in the most demanding of operating of environments.	Possesses the capability to work independently in most demanding expert duties in the field or as an entrepreneur. Possesses the capability to manage work and/or people.	Possesses the capability to come up with syntheses and critical evaluations as needed for solving complex problems in research and/or innovation activities as well as for extending and redefining knowledge or professional practices. Possesses the capability to accumulate knowledge and practices in his/her field and/or take responsibility for developing others.	Possesses the capability for continuous learning. Knows how to communicate verbally and in writing well with both the scientific community and the general public on issues pertaining to his/her own research area or discipline and/or professional field. Possesses the capability to communicate at an advanced international level and to interact in one official language and at least one foreign language.

Latvia

The Latvian level descriptors based on learning outcomes⁵

LQF & EQF level	Knowledge	Skills	Competence
1	Able to demonstrate elementary knowledge, which manifests itself in recognition and recollection	Able to use elementary practical and cognitive skills, able to execute them under direct supervision using simple tools Able to perform simple tasks, which are repetitive as to their content and predictable	Able to perform tasks in a structured environment, to function in a limited context Is able to perform elementary tasks, following a model, able to master basic self-care skills
2	Able to demonstrate basic knowledge in concrete subject syllabi	Able to use basic cognitive and practical skills, which are necessary to solve everyday problems by using relevant information, perform tasks and using simple rules and means Able to understand the consequences of one's own actions with regard to self and others	Able to perform tasks individually or in a group under supervision or semi-independently Able to participate in setting some learning objectives and planning the course of actions
3	Able to demonstrate the knowledge of facts, principles, processes and general concepts and to use them in the field of studies and professional activities Able to understand various information about materials, technologies in the relevant field of studies or a concrete profession	Able to use various cognitive and practical skills, which are necessary to perform tasks and to solve simple problems, by selecting and using basic methods, means, materials, information and technologies	Able to be aware of and assume responsibility for performing work or study tasks in a permanent and stable environment under the supervision of a specialist in the sector When solving the tasks, is able to adjust one's actions to conditions and to be responsible for the result of work
4	Able to demonstrate comprehensive knowledge of facts, theories and causalities, which are needed for personal growth and development, civic participation, social integration and continuous education Able to comprehend in detail and demonstrate knowledge of diverse facts, principles, processes and	Able to plan and organise work, using various methods, technologies (including information and communication technologies), equipment, tools and materials for performing tasks Able to find, assess and creatively use information for performing study or professional work tasks and problem solving Able to communicate at least in two languages both in writing and orally in	Is motivated for further career development, continuous education, life-long learning in a knowledge-oriented democratic, multi-lingual and multi-cultural society in Europe and in the world Able to plan and perform study or work tasks in the profession individually, in a team or by managing the teamwork Able to assume responsibility for the quality and quantity of

⁵ Cabinet of Ministers Regulations (2.12.2008) No.990 "Regulations on the Classification of Latvian education", Appendix 1, Table 2 (with amendments 05.10.2010)

LQF & EQF level	Knowledge	Skills	Competence
	<p>concepts in a specific field of studies or professional activities in standard and non-standard situations</p> <p>Has good knowledge of technologies and methods for performing study or work tasks in the profession</p>	<p>a known and unknown context</p> <p>Able to work independently in the profession, to learn and to improve professional qualifications</p> <p>Able to cooperate</p>	<p>the outcomes of study or professional activities</p>
5	<p>Able to demonstrate comprehensive and specialised knowledge and understanding of facts, theories, causalities and technologies of the concrete professional field</p>	<p>Able, on the basis of analytical approach, to perform practical tasks in the concrete profession, demonstrate skills, allowing to find creative solutions to professional problems, to discuss and provide arguments regarding practical issues and solutions in the concrete profession with colleagues, clients and management, able to, with an appropriate degree of independence, to engage in further learning, improving one's competences</p> <p>Able to assess and improve one's own actions and those of other people, to work in co-operation with others, to plan and to organise work to perform concrete tasks in one's profession or to supervise such work activities, in which unpredictable changes are possible</p>	<p>Able to define, describe and analyse practical problems in one's profession, select the necessary information and use it for solving clearly defined problems, to participate in the development of the concrete professional field, demonstrate understanding of the place of the concrete profession in a broader social context</p>
6	<p>Able to demonstrate the basic and specialised knowledge typical of the concrete branch of science or profession and a critical understanding of this knowledge, moreover, a part of this knowledge complies with the highest level of achievement in this branch of science or profession</p> <p>Able to demonstrate understanding of the most important concepts and causalities of the concrete branch of science or professional field</p>	<p>Able, by using the mastered theoretical foundations and skills, perform professional, artistic, innovative or research activity, to define and describe analytically information, problems and solutions in one's own branch of science or profession, to explain them and to provide arguments when discussing these with both specialist and non-specialists</p> <p>Is able to structure independently one's own learning, to guide one's own and one's subordinates further learning and improvement of professional qualification, to demonstrate scientific approach to problem solving, to assume</p>	<p>Able to obtain, select and analyse information independently and to use it, to take decisions and solve problems in the concrete branch of science or profession, demonstrate understanding of professional ethics, assess the impact of one's professional activities on environment and society and participate in the development of the concrete professional field</p>

LQF & EQF level	Knowledge	Skills	Competence
		responsibility and take initiative when performing individual work, when working in a team or managing the work of other people, to take decisions and find creative solutions under changing or unclear conditions	
7	Able to demonstrate advanced or extensive knowledge and understanding, a part of which conforms with the most recent findings in the concrete branch of science or professional field and which provide the basis for creative thinking or research, inter alia, working in the interface of various fields	<p>Able to use independently theory, methods and problem solving skills to perform research or artistic activities, or highly qualified professional functions</p> <p>Able to provide arguments when explaining or discussing complex or systemic aspects of the concrete branch of science or professional field both to specialists and non-specialists</p> <p>Able to guide independently the improvement of one's own competences and specialisation, to assume responsibility for the results of staff and group work and analyse them, to perform business activities, innovations in the concrete branch of science or profession, to perform work, research or further learning under complex or unpredictable conditions, if necessary, change them, using new approaches</p>	<p>Able to define independently and critically analyse complex professional problems, substantiate decisions and, if necessary, carry out additional analysis</p> <p>Able to integrate knowledge of various fields, contribute to the creation of new knowledge, research or the development of new professional working methods, demonstrate understanding and ethical responsibility for the possible impact of the scientific results or professional activity on environment and society</p>
8	Able to demonstrate that has good knowledge of and understands most topical scientific theories and insights, has mastered research methodology and contemporary research methods in the concrete branch of science or professional field and in the interface of various fields	<p>Able to assess and select independently appropriate methods for scientific research, has contributed to the expansion of the limits of knowledge or given new understanding of the existing knowledge, by carrying out an original research of major scope, part of which is on the level of internationally cited publications</p> <p>Able to communicate both orally and in writing about one's own field of scientific activity (one's own branch) with wider research community and the general public</p> <p>Able to improve one's scientific qualification independently, by implementing scientific projects, attaining achievements meeting the international criteria of the branch of</p>	Able, by performing independent critical analysis, synthesis and assessment, to solve significant research or innovation tasks, to set independently research idea, to plan, structure and manage large-scale scientific projects, including projects in international context

LQF & EQF level	Knowledge	Skills	Competence
		science, to manage research or development tasks in companies, institutions and organisations, requiring extensive research knowledge and skills	