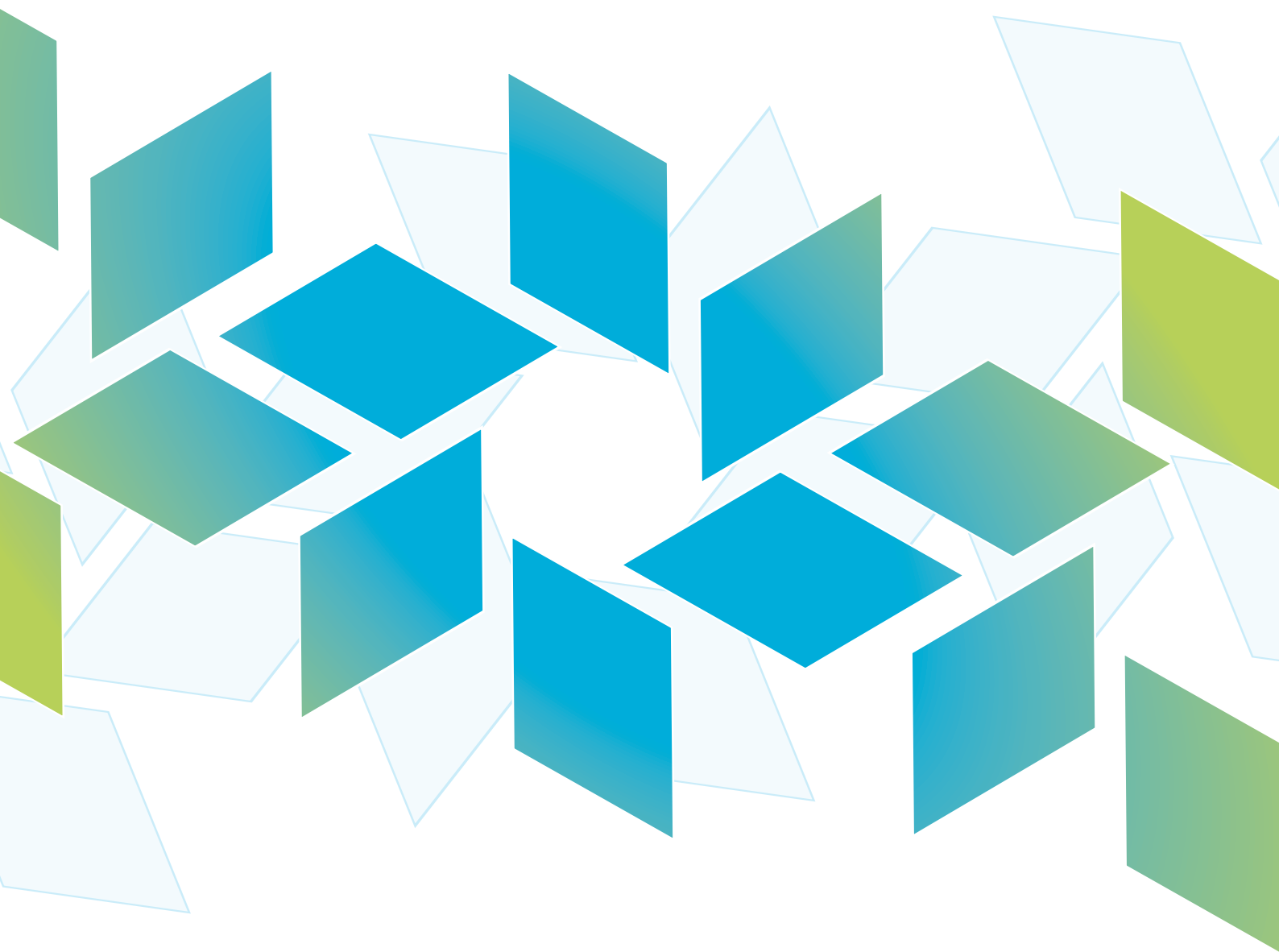


Referencing the Lithuanian Qualifications Framework to
the European Qualifications Framework for Lifelong Learning and
the Qualifications Framework for the European Higher Education Area

NATIONAL REPORT 2012



Prepared by the Qualifications and VET Development Centre executing functions of the National Coordination Point in the Republic of Lithuania, based on materials of the project No. EAC-2011-0514 *“Activities of EQF National Coordination Points with a view to implementing the EQF at national level”* in cooperation with the Ministry of Education and Science and the Centre for Quality Assurance in Higher Education.

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Abbreviations

- CPC** – Central professional committee
- CQAHE** – Centre for Quality Assessment in Higher Education (*Studijų kokybės vertinimo centras*)
- ECTS** – European Credit Transfer and Accumulation System
- ECVET** –European Credit system for Vocational Education and Training
- EQAVET** – European Quality Assurance in Vocational Education and Training
- EQF** – European Qualifications Framework
- ISCED** – International Standard Classification of Education
- LE** – Law on Education
- LSS** – Law on Science and Studies
- LTQF** – Lithuanian Qualifications Framework
- LVET** –Law on Vocational Education and Training
- NASE** – National Agency of School Evaluation (*Nacionalinė mokyklų vertinimo agentūra*)
- NCP** – National Coordination Point
- QF-EHEA** – Qualifications Framework of the European Higher Education Area
- QVETDC** – Qualifications and VET Development Centre (*Kvalifikacijų ir profesinio mokymo plėtros centras*)

Summary

This report presents the process and results of referencing the Lithuanian Qualifications Framework (LTQF) to the European Qualifications Framework for Lifelong Learning (EQF) and the Qualifications Framework of the European Higher Education Area (QF-EHEA). It is prepared in response to the recommendation to member states to relate their national qualification systems to the EQF by 2010. The report has been endorsed by the Central Professional Committee, the advisory body that has been established to coordinate strategic issues, pertaining to the development of the qualifications system.

Response to each of the criteria and procedures developed and agreed by the EQF Advisory Group is contained in Chapter 4, and response to those of the Bologna Process is in Chapter 5. Based on these responses, it is concluded, that, firstly, clear and demonstrable link exists between the qualifications levels in the Lithuanian Qualifications Framework and the level descriptors of the EQF. The relationship is as follows:

LTQF	EQF
8 level	8 level
7 level	7 level
6 level	6 level
5 level	5 level
4 level	4 level
3 level	3 level
2 level	2 level
1 level	1 level

Secondly, the top LTQF levels 6, 7 and 8 relate to the first, second and third cycles of QF-EHEA, correspondingly.

The referencing process has also shown that:

- the majority of programmes provided in the formal education system are either already based on learning outcomes or, in cases where it is not yet implemented, the new arrangements are underway;
- political preconditions for the assessment and recognition of non-formal and informal learning have been created, but little progress has been made in the implementation thereof;
- even before the LTQF was approved, a system of classifying education and training programmes into levels had already existed in Lithuania, and clear and transparent procedures for the identification of the level of awarded qualifications had been set;
- quality assurance in all sectors of education system comply with the majority of Common Principles for Quality Assurance in Higher Education and Vocational Education and Training in the context of the European Qualifications Framework (European Parliament and the Council Recommendation 2008/C 111/01/EC).

The report reflects situation of Lithuanian qualifications system until October 2011. In order to meet economic and social needs, the qualifications system is constantly changing. Now when the Lithuanian Qualifications Framework is introduced, changes are especially quick. Therefore, the referencing report requires constant updating. This is planned to be done in 2013.

Introduction

On 23 April 2008 the European Parliament and the Council endorsed the *Recommendation on the establishment of the European Qualifications Framework (EQF) for lifelong learning 2008/C 111/01/EC* (hereinafter referred to as “the Recommendation”). One of the key goals of the Recommendation is to establish mechanisms using the EQF as a common reference tool, which would facilitate issuance and international recognition of all qualification levels, including general education, vocational education and training and higher education, thus promoting territorial and professional mobility of individuals. One of the first steps on this road is reliably relating qualifications issued within the national qualifications systems of all the states to the EQF levels. In order to achieve that, the document mentioned above, recommends the member states:

- to relate their national qualifications systems to the European Qualifications Framework by 2010, in particular by referencing, in a transparent manner, their qualification levels to the levels set out in Annex II, and, where appropriate, by developing national qualifications frameworks in accordance with national legislation and practice.

The next step in the Recommendation deals with the practice of issuing qualifications by relating all qualifications of the member states with the EQF:

- to adopt measures, as appropriate, so that by 2012 all new qualification certificates, diplomas and Europass documents issued by competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.

The full text of the Recommendation in English and other European languages is available at http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm.

If a member state decides to consider the above-mentioned recommendations, it should prepare a referencing report, in which it would be demonstrated to other member states that the member state has esta-

blished provisions for referencing every qualification or qualification degree certificate awarded in the country to a certain level of the EQF the qualification or qualification degree relates to.

The European Commission also proposed that each member state designate National Coordination Points (NCP) in order to support and, in conjunction with other relevant national authorities, guide the relationship between national qualifications systems and the European Qualifications Framework with a view to promote the quality and transparency of that relationship. The NCP is an institution that the European Commission primarily addresses regarding all issues in connection with the referencing process. In Lithuania, it is the Qualifications and VET Development Centre which the Ministry of Education and Science commissioned to perform NCP functions.

The purpose of this report is to demonstrate people of Lithuania and other European countries how the Lithuanian Qualifications Framework (LTQF), approved by the Government of the Republic of Lithuania is to be referenced to the European Qualifications Framework, as well as to prepare the basis for qualification documents issued in Lithuania to contain a clear reference to the appropriate European Qualifications Framework level. The report consists of six chapters:

- Chapter 1 briefly introduces the EQF and the main tools of European level for the achievement of the EQF purposes;
- Chapter 2 introduces Lithuanian education system and qualifications awarded in it;
- Chapter 3 describes the process of development of the LTQF, its structure, and the principles of describing qualification levels and, by giving examples of specific qualifications, it demonstrates how the LTQF is related to the qualifications system currently existing in Lithuania;
- Chapter 4 describes the EQF and LTQF referencing process and demonstrates how the Lithuanian Qualifications Framework satisfies 10 referencing crite-

ria and procedures formulated by the EQF advisor group, paying most attention to establishing the conformity of the EQF and the LTQF levels;

- Chapter 5 demonstrates how the descriptions of the LTQF levels from 6 to 8 correspond to the descriptions of study cycles from 1 to 3 of the Framework of Qualifications for the European Higher Education Area, and how Lithuanian higher education complies to the criteria and procedures for

verification, established by a Bologna Process working group;

- Chapter 6 introduces the results of consultations with stakeholders, conducted in the course of performing referencing the LTQF to the EQF,
- Chapter 7 introduces Lithuanian education system's modern developments that were encouraged by the LTQF creation and implementation as well as referencing the LTQF to the EQF.

1. European Qualifications Framework (EQF) for lifelong learning

The development of the European Qualifications Framework started in 2004, in response to requests from Member States, social partners, and other stakeholders for a common reference to increase the transparency of qualifications. The Commission, with the support of the EQF Expert Group, produced a project of the EQF and published it for consultation across Europe during the second half of 2005. After taking into account the offered suggestions, the amended EQF project was then adopted by the Commission as a proposal on 6 September 2006. The European Parliament and Council successfully negotiated the proposal during 2007, leading to the EQF's formal adoption in February, 2008.

The EQF is a common European system of descriptors of qualification levels that helps to reference qualifications systems of different countries. It is like a means of communication that makes it possible to better understand qualifications awarded in other states. The EQF has two main aims:

- to promote mobility of people among countries;
- to facilitate lifelong learning.

The EQF divides the entire range of qualifications into 8 levels. The levels cover the full scale of qualifications, from basic (they, for example, are evidenced by certificates of completion of general education or vocational education and training programmes) to the most advanced ones (level 8, to which, for example, the doctoral degree is attributable). As the EQF seeks to promote lifelong learning, it covers all education sectors – general education, vocational education and training, and higher education. Besides, qualifications acquired both, in the formal and continuing learning system, are included in the framework.

The eight levels of the EQF are described by learning outcomes, which are defined as the entirety of what the learner knows, understands and is able to do upon completion of the learning process. Therefore, the EQF defines the learning outcomes, but not the used efforts, such as the duration of learning. The learning outcomes are divided into three groups: knowledge, skills and

competence. It means that the qualifications in different combinations cover various learning outcomes. The descriptions of the EQF levels are given in Appendix 1.

A number of instruments have been developed in Europe for the implementation of the EQF. One of them is referencing national qualifications systems to the EQF, which is described in this report. Among other instruments, the following are to be mentioned first:

- general principles for assessment and recognition of non-formal and informal learning (2004) that help to develop high-quality reliable methods and systems of determining and recognition of non-formal and informal learning;
- Europass (2004), a set of documents that helps to present information on one's qualifications, competences and skills in a standard form understandable to European employers and facilitating professional and geographical mobility;
- European Credit Transfer and Accumulation System (ECTS, 2005), which helps higher education institutions to create, describe, implement study programmes and award higher education qualifications;
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG, 2005) that help to ensure high quality of higher education in the entire European higher education area;
- European Quality Assurance in Vocational Education and Training (EQAVET, 2009), which helps states to develop, improve, manage, and assess the quality of their vocational education and training systems, and implement quality management processes;
- European Credit System for Vocational Education and Training (ECVET, 2009), which helps those seeking to acquire qualification to have recognition of skills and knowledge acquired in another country or through learning in various ways, including experiential;
- European Skills, Competences and Occupations taxonomy (ESCO) is currently being developed; it should help improve the relations between education and employment systems.

2. Lithuanian education system and qualifications awarded in it

The main law regulating education in Lithuania is the Law on Education of the Republic of Lithuania (hereinafter referred to as “the Law on Education” or “LE”), new edition of which was approved by the Seimas on 17 March 2011. It distinguishes three education sectors where state-recognized certificates or diplomas are issued:

- general education that covers primary, basic, and secondary education;
- vocational education and training;
- higher education.

Education of a child, according to the primary education programme, usually starts when s/he turns 7 in that calendar year and, according to the Constitution of the Republic of Lithuania, education is compulsory until the age of 16.

A diagram of the formal education system is given in Figure 1. A number of years spent in the formal education system is indicated on the left. More detailed information on general education, vocational education and training, and higher education is provided in sections 2.1.1, 2.1.2 and 2.1.3, correspondingly.

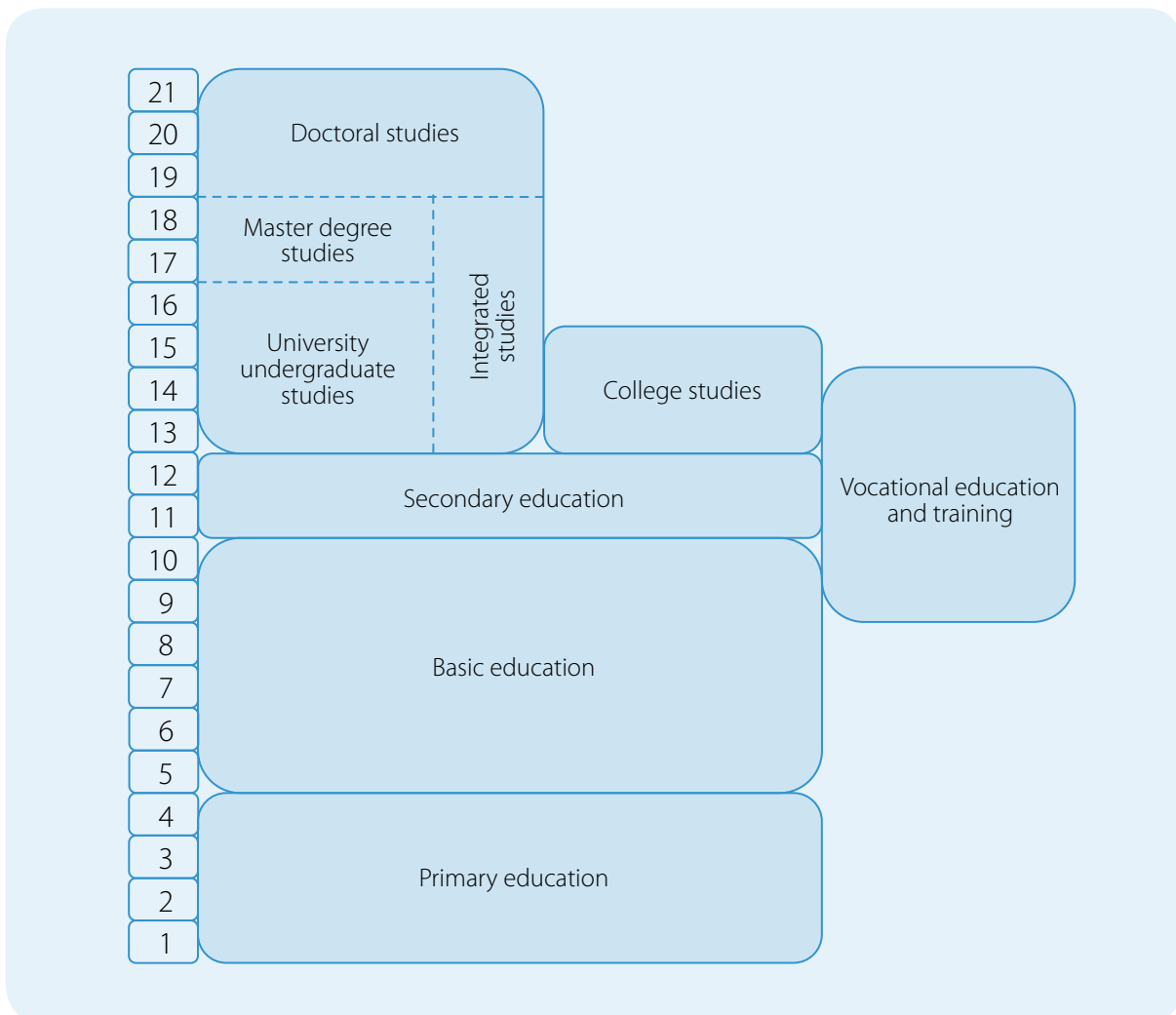


Fig. 1. Diagram of the Lithuanian formal education system

There is no education system intended specially for adults. Any provider of education, subject to obtaining a relevant licence from the Ministry of Education and Science, can provide formal education programmes for adults. Requirements for learning outcomes in both cases are the same. In fact, there are institutions that specialise in adult education and training in the sectors of general education, vocational education and training.

2.1. Management and administration of the education system

The laws of the Republic of Lithuania delegate the responsibility for the implementation of the education policy as well as for management and administration of the education system, to the **Ministry of Education and Science**. For the fulfilment of this task, it involves a number of institutions on national level. The main of them are as follows:

- **Education Development Centre.** The purpose of its activities is to participate in the formation and implementation of the state policy in the area of general education and non-formal education of children and adults, and one of its main objectives is to form the general education content that is in line with the needs of society.
- **National School Assessment Agency.** The purpose of its activities is to assess the quality of schools' activities providing general education; to monitor the state of education, to analyse, assess and forecast it; to give methodological assistance and recommendations to schools and their founders concerning the improvement of the quality of school activities; to model political decisions and give recommendations to education managers of all levels, and politicians.
- **National Examinations Centre.** The purpose of its activities is to assess persons' general education achievements. The objectives of the Centre are to organise and carry out examinations, credit tests, checking of education achievements or literacy, testing and checking knowledge and skills during and after the completion of the education process; to summarise and analyse results of examinations, tests and education.
- **Qualifications and Vocational Education and Training Development Centre.** The purpose of its activities is to ensure the development of the Lithuanian qualifications system that would be in line with the needs of the economy as well as with national and international initiatives. The main objectives are to manage the Lithuanian qualifications system; to improve the quality of vocational education and training; to increase attractiveness of vocational education and training; to reinforce cooperation among vocational education and training actors.
- **Research and Higher Education Monitoring and Analysis Centre.** The purpose of its activities is to monitor the research and higher education system, analyse the state of the research and higher education system, prepare and present recommendations for cohesive development of this system, taking into account the needs of the society as well as national and international tendencies.
- **Centre for Quality Assessment in Higher Education.** The purpose of its activities is to contribute to compatibility of the Lithuanian higher education system with the provisions of the European Higher Education Area. The main objectives are to promote the quality of activities of higher education institutions through external evaluation and accreditation of institutions and study programmes; to create favourable conditions for free movement of persons by organising and carrying out evaluation and/or recognitions of higher education-related qualifications, awarded by foreign institutions in the Republic of Lithuania.
- **Centre of Information Technologies in Education.** The purpose of its activities is to organise design, implementation and application of information and communication technologies in education system. The objectives of its activities are to organise and coordinate the in-service training of teachers and educational organisations emplo-

yees in the area of ICT application, to organise the development of strategy and programme for ICT implementation in education to coordinate further related activities; to collect, store and structure information on Lithuanian education and science system, and to analyse the data on ICT in education; to implement, develop and manage the educational data bases, registers and information systems, and to coordinate their usage.

- **National Centre for Special Needs Education and Psychology.** The purpose of its activities is to develop the system of provision of special needs education, special, psychological and social pedagogical support in the country, to perform its monitoring and give methodological support for the municipal Pedagogical-Psychological Services.

The Law of the Republic of Lithuania on Vocational Education and Training (hereinafter referred to as “The Law on VET” or “the LVET”) gives special powers in the development of human resources to the **Ministry of Economy**, commissioning to participate in the creation and implementation of the human resources development policy, to participate in the creation and implementation of the vocational education and training policy, as well as to organise research of the future skill needs and to disseminate its results in the course of the vocational guidance. For the implementation of these objectives, the Ministry has established the **Human Resources Division**.

Other ministries also have a possibility to participate in development and implementation of the education and training policy by submitting proposals for passing legal acts on education and training, and participating in workgroups that draft the legal acts. Some of the ministries (e.g. the Ministry of Finance, the Ministry of Social Security and Labour, the Ministry of Health, the Ministry of the Interior, the Ministry of Agriculture) actively participate in developing and implementing initial as well as continuing education and training programmes.

Advisory institutions also play an important role in the formation and implementation of the education and qualifications system’s development policy. The most important advisory institutions are as follows:

- **Central Professional Committee (CPC)** – is a collegial, cooperation-based advisory body that coordinates strategic issues pertaining to the development of the qualifications system. The CPC has been established under the Law on Vocational Education and Training (Article 10, Paragraph 3). The main functions of CPC are to initiate the development of draft legislation, necessary for the development and maintenance of qualifications system; to initiate the renewal of LTOF; to establish priority sectors for the formation of qualifications system; to discuss and suggest decisions regarding the controversial qualifications system’s formation issues; to advise the Qualifications Management Institution, the functions of which are performed by the QVETDC on assuring correspondence of the qualifications and the economy needs; on accreditation of competence assessment institutions; on linking national qualifications with the EQF and other issues. CPC consists of 18 members. Ministries of Education and Science, Economy and Agriculture, Association of Local Authorities in Lithuania; QVETDC and CQAHE has delegated one representative each; 3 members are delegated by national education self-management institutions (namely, Lithuanian Universities Rectors’ Conference, Lithuanian Colleges Directors’ Conference and Lithuanian VET schools Association); 9 members are delegated by social partners (4 members who represent employers’ organisations; 2 - business self-management institutions and 3 - trade unions).
- **Lithuanian Education Council** (hereinafter referred to as “the LEC”) is an institution that performs expert evaluations and advises on strategic education development issues. The LEC performs the following functions: assesses draft laws and regulations of the Republic of Lithuania prepared by the Ministry of Education and Science, other documents regulating education activities; advises the Seimas of the Republic of Lithuania, the Government of the Republic of Lithuania, the Ministry of Education and Science, municipal institutions, providers of education, research and higher education institutions

on national education policy issues; submits proposals to the Seimas of the Republic of Lithuania, the Government of the Republic of Lithuania, the Ministry of Education and Science, municipal institutions, providers of education, research and higher education institutions regarding the directions of education development, implementation of the national education development programmes and priorities for financing education. LEC represents a very wide range of interested parties. The Education, Science and Culture Committee of the Seimas of the Republic of Lithuania, the Conference of Rectors of Lithuanian Universities, the Research Council of Lithuania, the Conference of Directors of Lithuanian Colleges, the Lithuanian Association of Adult Education, the Association of Local Authorities in Lithuania, the Association of Heads of Education Units in Local Authorities in Lithuania, the Association of Gymnasiums of Lithuania, the Association of Heads of General Education Schools of Lithuania, the Association of Basic Schools of Lithuania, the Association of Primary Education Teachers of Lithuania, the Association of Heads of Pre-school Education Institutions of Lithuania, the Council of National Communities, the Union of Lithuanian Pupils, the Lithuanian National Union of Students and the Association of Directors of Vocational Education and Training Schools in Lithuania delegate one member to the LEC each. Minister of Education and Science delegates seven Council members from education experts and representatives of social partners.

- **General Education Council** (hereinafter referred to as “the GEC”) is an advisory collegial group of specialists within the Ministry of Education and Science, performing expert evaluation of decisions related to the general education strategy and tactics, acting as expert and initiating innovations in the general education content and process, coordinating the work of expert commissions. The GEC consists of experienced education practitioners, experts of education policy, and scientists.
- **Vocational Education and Training Council of Lithuania** (hereinafter referred to as “the VETCL”) is a

collegial institution that advises national education authorities on solving strategic issues of vocational education and training. The VETCL in equal parts consists of representatives of state governance and municipal institutions, associated institutions of business self-governance and employers, and organisations representing employees’ interests.

- **Higher Education Council** (hereinafter referred to as “the HEC”) is an institution, which advises the Ministry of Education and Science on strategic higher education development issues. The HEC has 15 members. The Chairman and the Deputy Chairman are appointed by Minister of Education and Science. Other members are selected by a specially formed commission from the list of candidates, who are nominated by associations, organisations, enterprises, individual persons by presenting a detailed curriculum vitae of the candidate.

2.2. Qualifications awarded in the Lithuanian education system and their certification

This section introduces qualifications currently awarded in various sectors of the Lithuanian education system. A brief description of the existing qualification levels is given, it is also described how learning outcomes are regulated on the national level, how study programmes are prepared and how learning outcomes are evaluated and legalised.

2.2.1. General education

The goals of the general education (primary, basic and secondary) are determined by the Law on Education. According to this law, primary and basic obligatory education programmes are compulsory for children till 16 years of age.

The provisions of the National Education Strategy for 2003–2012 approved by Resolution No. IX-1700 of the Seimas of the Republic of Lithuania on 4 July 2003, set out the goals for the development of the Lithuanian

education and means for their implementation, and also define main quantitative and qualitative outcomes, on which the development of the Lithuanian education in 2003-2012 is based. Referring to this strategy, the Strategy for Formation, Assessment, Updating and Introduction of Educational Content of General Education was prepared and approved by Order No. ISAK-970 of Minister of Education and Science of the Republic of Lithuania on 23 May 2007, the purpose of which is to define the goals and principles for formation, implementation, assessment and updating educational content, functions and responsibilities of the education sectors in this process, to provide priorities and means of educational content process till 2012 and their implementation indicators. Referring to this strategy, the general programmes (*bendrosios programos*) of primary, basic and secondary education, i.e. the documents regulating the content of general education, were updated in order to achieve harmony, accessibility and quality of education for the entire national education system. The main direction of updating general programmes was to orient the educational content towards the development of general competences and essential subject competences, paying particular attention to learning to learn, and further individualise education, taking into account different needs of pupils. The general programmes of primary and basic education were updated in 2008; secondary education programmes were updated in 2011. The general programmes are prepared by a group of education experts led by methodology specialists from the Education Development Centre, involving also the best teachers in the country. Draft general programmes endorsed by teacher communities and the GEC are further approved by Minister of Education and Science.

The General Programmes define the educational content by describing expected learning outcomes of pupils, presenting recommended education guidelines, indicating the scope (volume) of the subject programmes and characterising pupil achievement levels. Pupils' learning outcomes are described in the General Programmes using competences terminology, especially highlighting the fundamentals of general competences and essential subject competences acquired by

pupils. A competence is understood as the entirety of knowledge, abilities and attitudes.

The General Programmes define the educational content on the national level. Schools and teachers, referring to the general programmes, form the school level and class level educational content according to needs of individual classes and pupils, so that pupils, with regard to their capabilities, reach the best possible results.

Primary education

The goal of the primary education is to educate an active and creative child, who has acquired the fundamentals of elementary literacy, social, cognitive, informational, activity abilities and common values, and is ready to further learning according to basic education programmes. The duration of the primary education programme is 4 years. Education of a child according to the primary education programme usually starts when child turns 7 in that calendar year. If the parents wish, primary education can be started a year earlier if the child is mature enough for such education.

The primary education programme consists of the following subject area:

Moral education (religion, ethics). Its purpose is to help a pupil acquire a positive relationship with oneself, other people and the world based on common moral values.

Language education (Lithuanian as the native language, other native languages: Belarusian, Polish, Russian and German), Lithuanian as the state language, first foreign language (English, French, German), the Lithuanian sign language, Lithuanian for the deaf and children with poor hearing). Its purpose is to help a pupil acquire the fundamentals of elementary literacy, elementary text creation and perception abilities, create preconditions for acquiring and developing one's intellectual powers, emotional, moral, social, cultural experience.

Mathematic education (mathematics). Its purpose is to develop pupils' abilities to calculate, think logically and formalize by training their visual, spatial and probabilistic thinking.

Social and natural sciences education (world cognition). Its purpose is to make children familiar with the

closest social and natural environment; to help them understand the relationship between people and the nature, between the past, the present and the future, and acquire abilities needed in order to know the world, to explore it and to solve problems; to educate values and attitudes: be tolerant to others and to different people, be respectful to life, commitment and responsibility for one's own and other people's life and health, for everything that is happening around us.

Artistic education (art and technologies, music; dance, theatre). Its purpose is to help a pupil acquire initial artistic, aesthetic, cultural competences, to allow pupils' creativity in the field of arts revealing oneself; to use art in order to involve a pupil into active social activity, communication and learning.

Physical culture. Its purpose is to develop healthy living habits and the joy of movement, to create conditions to express one's individuality by physical activity that is close to the nature of the child, to encourage creativity, to develop communication and cooperation skills, to cherish the Olympic spirit of sports.

The implementation of the primary education programme (hours allocated to individual subjects, holiday time, etc.) is regulated by the general primary education plans approved by Minister of Education and Science.

A pupil's achievements and progress in the primary education stage are assessed according to the principle of individual progress (idiographic principle); summative and formative assessment is applied. The characteristics of achievement levels of pupils' learning (satisfactory, basic, higher) are described in the general programmes of the primary education in order to give guidelines for evaluation of pupils' achievements according to certain criteria. At the end of an education period, (term, half-year, year) pupils' achievements are summarised, referring to the evaluation information accumulated during the education period (tasks, diagnostic work, monitoring material, creative works, etc.). The summative evaluation information helps the teacher to foresee the growth prospects of education achievements of both, the class and of every child, and to adjust education goals. If a pupil fails to achieve the satisfactory level of achievements, the reasons for learning

failures are established, special purpose, pedagogical, special or psychological assistance, which would help to better learning achievements, is provided / planned to be provided.

A pupil, whose achievements in all subjects of the primary education programme are not lower than the satisfactory level, is considered to have completed the primary education programme and acquires primary education. Certificate of primary education and a description of evaluation of the primary education programme outcomes and progress is given to a pupil.

Basic education

The goal of the basic education is to develop spiritual, intellectual and physical powers of a person, to educate an active, creative, responsible citizen, who acquires competences necessary for successful social integration and lifelong learning. Upon completion of the basic education programme, a pupil acquires the fundamentals of essential subject competences and general competences necessary for life, further learning and work. The duration of the basic education programme is 6 years. It is divided into two parts: the first part – grades 5 to 8, and the second part – grades 9 to 10.

The basic education is provided to pupils who have already acquired the primary education.

The content of the basic education programme is determined by the general programmes of the basic education, whereas its implementation (lessons on individual subjects, etc.) is regulated by the general plans for the basic education approved by Minister of Education and Science.

The general programmes of the basic education are divided into ten education areas:

Moral education (ethics, religion). Its purpose is to help pupils develop the understanding of morals and religion, thinking, conscience and create a positive relationship with oneself, with other people and the world, based on common moral values.

Languages (Lithuanian as the native language, other native languages: Belarusian, Polish, Russian and German), Lithuanian sign language, Lithuanian as the state

language, Lithuanian for the deaf and people with poor hearing, first foreign language, second foreign language, foreign language (English) for the deaf and people with poor hearing). Its purpose is to help pupils acquire the basics of communication and cultural competences, develop their civic and national self-awareness. It is sought that pupils consciously develop themselves, improve their linguistic abilities, perception, interpretation and critical evaluation of texts of various character, abilities to create spoken and written texts of various character, their interest in cultural life and participation in it, critical evaluation of various forms of cultural life, respect for cultural their country's and nation's traditions, values of the contemporary world, and being open to the cultural variety.

Mathematics. It is sought that each pupil graduating from a basic school have a good understanding of main mathematical concepts and procedures, s/he is able to recognise situations and questions that can be answered or have been already answered by mathematics, learns how to formulate mathematical assumptions and hypotheses, and is aware of information searching methods. Teaching mathematics is aimed not only at the mathematics as a teaching subject, but also at the general education goals, especially metacognitive thinking, communication and cooperation abilities in education area.

Natural sciences education. Its purpose is to create a possibility for all pupils to acquire the fundamentals in natural sciences. It is sought that pupils take over essential notions and conceptions of natural sciences, acquire abilities that would help them to know the world and to develop values and attitudes. The pupils are educated and matured for their further life as equal citizens who are able to live healthy life and solve sustainable development problems.

Social education (history, geography, citizenship education, economics and entrepreneurship, psychology). It is sought that pupils acquire the understanding about the life of people in the democratic society, the nature of the democratic society and the state, principles and norms of its existence, the historic development of Lithuania, Europe and the world, the historic and cultural heritage of the humanity and the Lithuanian nation, the

nature processes, their influence on the activities and lifestyle of people, the regional differences in the natural environment and conditions of human life, the interrelations between the nature and people. It is also sought that they develop abilities to critically evaluate political, social, economic, cultural and natural phenomena and processes, ongoing in the contemporary world, to actively participate in the public life, to communicate and cooperate, to seek implementation of goals that are important for them and for the society, and that they also develop national and civic self-awareness based on democratic and cultural values of the nation.

Artistic education (art, music, dance, theatre, contemporary arts). Its purpose is to educate spiritual, creative and physical powers of pupils, to help them acquire the general artistic competence that is necessary for independent and active participation in the artistic creation and modern cultural life.

Information technologies. It is sought that pupils were able to safely, purposefully and legally use and apply proper hardware and software of information and communication technology, to efficiently use information technologies for learning various subjects, be able to explain essential notions and conceptions of computing, information and communications technologies, to think in a consistent, structural, algorithmic manner.

Technologies. It is sought to create preconditions for pupils to develop the fundamentals of technological literacy, i.e. to cherish values, attitudes and general technological abilities necessary for each person in constantly changing socio-cultural environment, to be able to use simple technologies, to experience creative joy, to know how to solve problems, to develop positive attitude towards constant change of technologies.

Physical education. Its purpose is to develop physical activity, attitude and abilities as well as systematic habits of physical activity that strengthen pupils' health. Pupils are taught the fundamentals of health preservation and strengthening, techniques and tactics of various sports; furthermore, team and group cooperation and communication attitudes are developed.

Pupils' progress and achievements in the education process are evaluated taking into account the general

programmes of basic education, which describe features of satisfactory, basic and higher learning achievement levels, referring to the Pupils' Progress and Achievements Evaluation Conception, approved by Order No. ISAK-256 of Minister of Education and Science of the Republic of Lithuania, on 25 February 2004. In order to evaluate pupils' progress and achievements, the formative, diagnostic and summative evaluation method is used.

The basic education is acquired upon completion of the basic education programme and testing learning achievements of pupils. The programme is deemed to be completed when a pupil has achieved at least satisfactory level of learning achievements for all subjects. Upon completion of the basic education programme, testing pupils' achievements in Lithuanian as the native language, Lithuanian as the state language, mathematics and native languages (Belarusian, Polish, Russian, German) is organised in schools. Tasks for achievements testing are prepared in a centralised manner. Achievements testing is organised and carried out by the school, the pupils' works are evaluated by the school teachers. Until 2011, testing of the basic education achievements was not compulsory. The Law of the Republic of Lithuania on Education, adopted in 2011, introduced the compulsory testing of learning achievements upon completion of the basic education programme.

After acquiring basic education, a pupil can further study according to the secondary education programme, the VET programme or the VET programme combined with the secondary education programme.

Secondary education

The goal of the secondary education is to mature spiritual, intellectual and physical powers of a person, to educate an active, creative, responsible citizen, who acquires general competences and subject competences necessary for successful social integration, professional activity and lifelong learning. Upon completion of the secondary education programme, a pupil will have been acquired the essential subject competences and general competences necessary for life, further learning and work.

The secondary education is provided for pupils, who have already acquired the basic education.

The duration of the secondary education programme is 2 years. It consists of compulsory and optional subjects of general education and possible VET programme modules. Compulsory subjects of general education make at least 60 percent of all the lessons a pupil will be taking. Whereas the secondary education programme is carried out alongside with the vocational education and training programme, or the secondary education programme is carried out alongside with the artistic, musical, art and sports education, compulsory subjects of the general education make at least 50 percent of all the lessons a pupil will be taking. The general programmes of secondary education subjects provide optional subject courses and modules of different complexity. Two different course programmes of the same subject are available: the general course and the extended course. The general course programme of a subject helps a pupil to further develop general competences and subject competences acquired according to the basic education programme, which are aimed at general literacy. The scope of the subject general course content is formed of widely used subject notions, main patterns, most important ideas, their context and practical application, values and attitudes. The extended course programme of a subject helps a pupil to develop general competences and subject competences acquired according to the basic education programme, which are necessary for further studies and future professional activities. The foreign languages programme is presented in courses oriented towards language levels A1 and A2, B1 and B2 as proposed by the Council of Europe.

The content of the secondary education programme is determined by the general programmes of the secondary education. In case vocational education and training programme modules are involved, they are determined by certain VET programme. The general programmes of the secondary education are divided into education areas.

Moral education (ethics, religion). Its purpose is to develop the pupil's ability and disposition to be and act in the world guided by deeply realised moral attitudes, to create positive, tolerant, democratic, responsible relations with others; to look for one's way in life and

answers to the questions about the meaning of life, to realize one's mission and family life by interpreting philosophical and religious attitudes to develop one's thinking and ethic, philosophical, religious, cultural consciousness in preparing oneself for further studies and professional activities. Pupils must choose one subject from the area of moral education.

Languages (the Lithuanian language and literature, other native languages (Belarusian, Polish, Russian and German), Lithuanian sign language, Lithuanian for the deaf and people with poor hearing, foreign languages, foreign language for the deaf and people with poor hearing). The purpose of linguistic education within the secondary education programme is to create conditions for pupils to develop their personal relationship with language and literature, culture, to develop their artistic taste, to expand their, as readers', aesthetic experience. The fundamentals of communication and cultural competence developed/acquired according to the basic education programme are further improved and developed. In the secondary education programme, much attention is paid to public speaking (dialogue and monologue), because in the democratic age of intensive changes, speaking is one of the most important success factors in various fields of a person's activities. Therefore, pupils learn to recognise and evaluate the reliability of information, ideas, arguments, different points of view, to defend their truth in an ethical way by presenting arguments and become conscious citizens of the country. Learning Lithuanian language and literature as well as one foreign language is compulsory for pupils, but they can also learn several foreign languages. Pupils, who are taught in a national minority language, are taught their native language as a compulsory subject.

Mathematics. It is sought to create a possibility for pupils to develop their mathematical competence, i.e. abilities and attitudes, ability to know the world, describe it using mathematic models, apply mathematic methods in solving practical and theoretical problems in various fields of science. This subject is compulsory.

Natural sciences education (biology, physics, chemistry, integrated course of natural sciences). It is sought to develop pupils' natural science competence in

the selected field more thoroughly. It is sought not so much as to expand the content of the natural sciences subject, but to develop the pupils' abilities to critically and creatively use ideas, laws and methods of natural sciences, interpreting scientific facts, solving theoretical and practical problems, forming an integral view of the world, showing close relationship between the nature and people. The abilities to plan and carry out experiments, to analyse, present and summarise results, as well as values and attitudes, leading towards assuming personal responsibility for protection of the environment, preserving one's own and other people's health, are further developed. Pupils must choose one subject from the area of natural sciences education.

Social education (history, geography, integrated course of history and geography, law, philosophy, study of religion, psychology, economics and entrepreneurship). The purpose of the social education area is to provide for pupil the fundamentals of civic and social culture that embody values and principles of humanism and democracy and respond to the changing needs in the life of a person and the society. After learning according to the secondary education programme, pupils deepen their understanding about the life of people in the democratic society, the historical and cultural heritage of the humanity and the Lithuanian nation, the interrelations between nature and people, and the abilities to actively participate in public life, to communicate and cooperate, to implement goals that are important for them and for the society. Pupils must choose one subject from the area of social education.

Information technologies. It is sought to create conditions for pupils who have chosen subject of information technologies (they can choose not to take this subject) to continue the development of the information communication competence. The general course of information technologies covers the layout of text documents, processing digital information with spreadsheets, preparation of presentations, safe and legal use of information and the internet. When pupils take an expanded course, they choose one of these modules: programming, creation and management of databases, or electronic publishing. Expanded courses are taught after the completion of the general course.

Technologies. It is sought to create conditions for pupils to develop their technological competence, i.e. to cherish values and attitudes of technological abilities that are necessary for each person in changing social and cultural environment, to develop positive attitude towards the constant development of advanced technologies. The technologies programme consists of 6 optional fields of technology. Upon making a choice (the pupils choose one subject from the fields of technology or artistic education), pupils get familiar with the chosen field of technology (development of an industry, professions, materials, mechanisms and technologies used).

Artistic education (the fine arts, music, dance, theatre, graphic design, filmmaking, photography, computer-based music technologies). The purpose of the artistic education is to develop artistic competences and general competences for young people that they have already acquired in the basic school. The range of subjects enables a possibility for pupils with various artistic achievements, interests, inclinations and needs to choose an artistic education programme they find attractive. Pupils must choose one subject from the area of either artistic education, or technologies.

Physical education. Its purpose is to create conditions for pupils' physical, social and emotional self-development, for expression of their physical and social activity, for a person's social integration and improving one's health potential. The programme gives more choice for self-development in physical education. In addition to the general physical education programme, pupils can choose a physical education module, taking into account their inclinations, needs and powers. The programme offers the following physical education modules: national defence, healthy living and non-Olympic sports, organisation of contests and refereeing, arm bending, other (to be offered by the school, taking into account pupils' taste, needs and possibilities). Physical education lessons are compulsory.

The progress and achievement of pupils in the education process are evaluated using the general programmes of the secondary education, where characteristics of satisfactory, basic and higher learning achievement levels are described. For evaluation of pupils'

progress and achievements, the formative, diagnostic and summative evaluation is used.

The secondary education is acquired upon completion of the secondary education programme and passing of *Matura* examinations under the procedure set by Minister of Education and Science.

The secondary education programme is considered to be completed when a pupil has reached a satisfactory learning achievement level on all the subjects included in his or her individual education plan. In order to acquire the secondary education, two *Matura* examinations must be passed: the Lithuanian language and an optional examination. Pupils taught in a national minority language must take the Lithuanian (state) language examination.

A pupil can choose to take no more than 5 *Matura* examinations.

The purpose of *Matura* examinations is to evaluate pupil's secondary education achievements and their conformity to the requirements of general programmes as well as to provide information for improvement of the secondary education quality. As the secondary education programme contains two different course programmes of the same subject (the general course and the expanded course), accordingly, there are two types of *Matura* examinations: a school examination and a state examination. A school *Matura* examination is oriented to the general course programme of a subject, the evaluation of school *Matura* examination papers is based on criteria. A state *Matura* examination is oriented to the expanded course programme of a subject; the evaluation is normative and is intended to compare pupils' achievements in relation to each others on the national scale. The information on examinations is used by higher education institutions.

A pupil can choose the type of examination in one's own discretion, with regard to his or her future plans.

Both, state examinations and school examinations, are organised in the Lithuanian language (as the native language and as the state language). Meanwhile, starting from the academic year 2009 – 2010, only state *Matura* examinations in foreign languages (English, German, French, Russian), history, biology, chemistry, physics, mathematics, information technologies and

only school *Matura* examinations of native languages (Belarusian, Polish, Russian, German), art, music, musicology, technologies and geography are organised. Starting from 2012, the examination in geography will become a state *Matura* examination, starting from 2013 the same *Matura* examination (both, school examination, and state examination) in the Lithuanian language and literature will be organised for everyone (pupils are taught both, in the Lithuanian language, and in the language of a national minority).

The programmes of *Matura* examinations are prepared referring to the general programmes of individual subjects, they are prepared by a group of education experts led by methodology specialists from the Education Development Centre. Draft programmes of *Matura* examinations are coordinated with associations of relevant subject teachers. The programmes of *Matura* examinations are approved and announced 2 years before the beginning of organisation of *Matura* examinations. Programmes, tests of both, school *Matura* examinations, and state *Matura* examinations, and instructions for their evaluation are prepared in a centralised manner.

Matura examinations are performed in examination centres, i.e. appointed schools to which pupils of several nearby schools come to take examinations. The papers of school *Matura* examinations are evaluated in evaluation centres established by municipal executive authorities, the papers of state *Matura* examinations are evaluated in evaluation centres established by the National Examinations Centre. The papers of state *Matura* examinations are evaluated in a centralised manner by an evaluation commission approved by Minister of Education and Science. The examination results in the scale of one hundred points (the first positive evaluation of a passed state *Matura* examination starts from one), according to the normative evaluation system are linked to the percentage degree of the person that passed the examination. The papers of school *Matura* examinations are evaluated locally by the examination papers evaluation commission formed by the education unit of the municipality, according to the approved evaluation criteria. School *Matura* examinations are evaluated giving marks, according to a ten-point system.

Documents confirming acquired education

- *Primary education certificate* (on completion of primary education programme)
- *Basic education certificate* (on completion of basic education programme and testing learning outcomes)
- *Maturity certificate* (on completion of the secondary education programme and passing *Matura* examinations under the procedure set by Minister of Education and Science).

2.2.2. Vocational education and training

Vocational education and training in Lithuania is regulated by the Law on VET. It was adopted in 1997. The qualification levels have not been defined in the LVET, but it indicates that qualification is awarded on completion of a vocational education and training programme, which complies with “*the requirements set for vocational education and training programmes included in the Register of Study and Education Programmes*”. When the Register was compiled, Minister of Education and Science endorsed Order No. 1383, 1997 “*On the Approval of VET Attainment Levels*”, in which four VET attainment levels were introduced. After the start of reforming post-secondary vocational schools (*aukštesnioji mokykla*), which at that time were providing three-year post-secondary non-tertiary vocational education and training programmes, into higher education colleges (*kolegija*) (hereinafter referred to as “colleges”), the descriptors of Lithuanian VET attainment levels were corrected in 2001, without cardinal changes in the descriptors of the first four levels, yet with an introduction of the fifth VET attainment level, which should be related to learning outcomes at colleges, since colleges were classified as schools of higher education, according to the Law on Higher Education of the Republic of Lithuania. Thus, vocational education and training, which does not lead to higher education, is represented by four qualification levels in the present Lithuanian qualifications system (Table 1). Before the approval of the LTQF, they were followed when forming qualifications.

Table 1. Lithuanian VET attainment levels

Level of vocational education	Description of VET attainment levels	Minimal level of general education achieved*
Level 1	Competence to carry out simple, routine work operations.	–
Level 2	Competence to perform specialised work not requiring important autonomous decisions.	Primary/basic
Level 3	Competence to perform complicated work in areas requiring fairly responsible and independent decisions. Team building skills are developed.	Upper-secondary
Level 4	Competence to perform complicated work in areas requiring responsibility, independence, deep knowledge and specific skills. Organisation and administration skills for team management are acquired.	Upper-secondary

* General education, which is necessary for the achievement of a certain VET attainment level, can be acquired before or during the vocational education and training (i.e. integrated into the vocational education programme).

The Law on VET (1997, new edition adopted in 2007) defines a provider of vocational education and training as a vocational education and training institution, a freelance teacher or another provider of vocational education (a school of general education, organisation, enterprise, the main activity of which is not vocational education), which, in accordance to procedures established by the law, are authorised to perform programmes of vocational education and training. A provider of vocational education and training can admit individuals and start providing programmes of formal vocational education and training only after receiving a license issued by the Ministry of Education and Science.

Initial vocational education and training (IVET)

Initial vocational education and training curriculum is built on the basis of competences and training objectives, as defined in the VET standard. Competences are defined as the entirety of acquired knowledge, skills, abilities and values that are necessary for performing a certain activity, and training objectives define the knowledge and skills that are required for acquiring a specific competence. Registration of a new qualification, first of all, requires drafting a relevant VET standard.

VET standards are prepared in a centralised manner with the process coordinated by the Qualifications and VET Development Centre (hereinafter referred to as “the QVETDC”). The standards that have to be drafted are specified by Industrial Lead Bodies, which equally represent employers, trade unions and institutions of vocational education and training. They also approve pre-

pared standards before they are submitted for approval to the Minister of Education and Science. A standard is drafted by a task force consisting of vocational teachers and professionals of a relevant field. The task force analyses legal documents related to relevant qualification and carries out qualification researches in companies. The information is then used for the standard content.

VET standards were prepared for qualifications that met requirements of VET attainment level 3 (see Table 1). Please see Appendix 2 for an example of a standard.

Training programmes of initial vocational education and training are prepared by VET providers. A training programme comprises two parts: the *standardised* part, common to the entire country, which defines the areas of professional activity, competences, training objectives and provisions for the assessment of competences (the standardised part of the programme is automatically transferred from the relevant VET standard); and the *school level* part, covering teaching methods, subject programmes, training facilities, etc.

A newly drafted VET programme is subject to approval by a competent employer organisation (e.g. the Chamber of Commerce, Industry and Crafts). Then experts (vocational teachers, employers) evaluate the quality of the programme, and, in the case of positive assessment, the programme is registered in the *Register of Study and Training Programmes and Qualifications*. A license to carry out a registered programme is issued, if an expert group set up by the Qualifications and VET Development Centre establishes that the material and methodological resources available to the VET provider are sufficient for

implementing a registered training programme, and vocational teachers meet the requirements prescribed in vocational training programmes and laws.

Main requirements for the programmes of initial VET are as follows:

- practical training comprises 60-70% of the total time allocated to teaching vocational subjects, including 8-15 weeks of practical training in a company or a school-based workshop simulating working conditions;
- specialisation subjects comprise 10-15% of the total time allocated to teaching vocational subjects;
- programmes contain basics of economics and entrepreneurship as well as aesthetics and civil security subjects. Schools may initiate inclusion of subjects that would provide students with basic command of foreign language for a given profession;
- information technologies are either taught as a separate subject or integrated into the vocational subjects;
- environmental education is integrated into the vocational subjects.

Initial vocational education and training awards qualifications that correspond to VET attainment levels 2 and 3 (see Table 1).

Applicants who are 14 years of age and older, who have not acquired general lower secondary (basic) education are admitted to programmes that are designed for acquiring VET attainment level 2. There are no restrictions for the maximum age for students. On parallel with vocational subjects, trainees may also study according to the general education programme and acquire basic education. This is compulsory for students at the age of 16 and younger. The duration of programmes may be two years if the student wants to complete vocational education and training only, and three years if one aims also to complete basic education or if the programme is targeted at students with special needs. The programmes are drafted based on standards designed for VET attainment level 3; however, schools are allowed to give up certain competences if the level of knowledge, needed to acquire the competences, is higher than established for basic education.

Persons, who have completed at least basic education, can seek qualification that corresponds to VET

attainment level 3. Trainees with basic education have two options – seeking vocational qualification only or acquiring secondary education along with the vocational qualification. On the first option, the duration of training is two years. On the second one, the programme duration is three years. This level of VET programmes is also offered to those with secondary education. Depending on the complexity of the qualification, the programme duration may vary between 1, 1.5 and 2 years. Some of the programmes (e.g., environmental protection worker, day-care provider, laboratory assistant in chemical analysis) are offered only to applicants with completed secondary education. The requirement is specified in the relevant VET standard.

Interim assessment of student achievements is carried out by the school. Social partners (the Chamber of Commerce, Industry and Crafts and the Chamber of Agriculture) are responsible for the final assessment of students' competences. The social partners delegate representatives of employers to the qualification exam commission and are also involved in preparing both theoretical and practical tests. Exam commissions consist of at least three members, equally representing employers, trade unions and the VET provider.

The qualification exam is split into two parts, theoretical and practical. Qualification is awarded to an individual who has acquired all competences that are necessary for qualification, as stipulated in a relevant programme of vocational education and training. Students' performance is to be assessed at least "satisfactorily" for the competence to be considered acquired.

Certificates are awarded to individuals who have completed programmes of initial vocational education and training

VET attainment level 2

- *Qualification certificate*, witnessing acquisition of qualifications that correspond to VET attainment level 2.

VET attainment level 3

- *Vocational education and training diploma*, witnessing acquisition of qualifications that correspond to VET attainment level 3.

Formal continuing vocational education and training (CVET)

Adopted in 1997, the Law on VET stipulated that management of initial VET on the national scale is performed by the Ministry of Education and Science, while continuing VET is managed by the Ministry of Social Security and Labour. Consequently, there were two subsystems of VET in Lithuania. The new edition of the Law on VET was adopted in 2007, legitimating bridging of the two subsystems, although principles of forming qualifications in IVET and CVET have not undergone factual changes so far. In the first case, the objective is to provide young people with qualifications of a rather broad profile, in order to guarantee higher demand on the labour market. Meanwhile, adults need qualifications, which they can acquire rapidly along with the qualifications they already have, in order to enter specific jobs. The methods of establishing requirements for the learning outcomes are also different. In the case of IVET, the requirements are set by way of approval of VET standards, while CVET requirements are prepared by drafting programmes on the national level that can be subjected to minor adjustments by VET providers. Nevertheless, an agreement has always been in effect that levels of qualifications are established in accordance to the definitions of VET attainment levels that have been approved by Minister of Education and Science (see Table 1).

Just like in initial VET, the curriculum in continuing vocational education and training is shaped on the basis of competences and training objectives. When there is need, drafting of a programme is initiated by the QVETDC. A group of at least three people is set up to prepare the programme, which is evaluated in accordance with the procedures prescribed by legal acts and, in the case of positive assessment, the programme is proposed to the Ministry of Education and Science for registering in the *Register of Study and Training Programmes and Qualifications*.

Programme's duration can vary from 1 to 10 months, depending on the target group and complexity of qualifications. Practical training comprises 60-80% of the total duration of training. The recommendation is

that half of the time, intended for practical training, be practical training in real-life working environment.

Upon completion of training, a qualification examination is taken to check theoretical and practical knowledge and skills. Exams are usually organized by VET providers with representatives of employers, included in the exam commission.

Certificates issued to individuals upon completion of continuing vocational education and training programmes

VET attainment level 1

- *Qualification certificate*, witnessing acquisition of qualifications corresponding to VET attainment level 1.

VET attainment level 2

- *Qualification certificate*, witnessing acquisition of qualifications corresponding to VET attainment level 2.

Non-formal continuing vocational education and training

Non-formal adult education can be provided by all education providers. There are no special requirements; however, in some cases, the institutions that aim to provide teaching to some groups (e.g., public servants) have to participate in an evaluation procedure and prove the suitability of their resources and staff. The LVET (1997, new edition adopted in 2007) stipulates that requirements for non-formal VET programmes and implementation of the programmes can be prescribed by the institution which orders the training. Objectives of training, admission criteria and duration depend on the target group.

For the qualification acquired in the CVET system to be recognised on the national level, the relevant VET programme must be included in the *Register of Study and Training Programmes and Qualifications*.

2.2.3. Higher education

Higher education studies in Lithuania are regulated by the Law on Science and Studies of the Republic of Lithuania (2009) (hereinafter referred to as "the LSS").

According to the law, studies in higher schools of Lithuania are delivered through degree study programmes and non-degree study programmes.

Two types of study programmes are available: university and college programmes.

Studies can be delivered in two forms: full-time and part-time. Completion of different forms of study programmes results in acquisition of equivalent qualification.

Studies are delivered in three cycles:

- 1) first cycle – professional bachelor and bachelor degree studies;
- 2) second cycle – master degree studies;
- 3) third cycle – doctoral degree studies.

Universities can provide integrated study programmes that cover the first and the second study cycles.

The first cycle of professional bachelor programmes can be delivered by colleges, while the first cycle bachelor programmes are delivered by universities. Programmes of the second cycle degree studies and integrated studies can be provided by universities. Doctoral studies can be delivered by universities or universities in cooperation with research institutes.

The LSS has also established that two or more higher education schools can provide joint study programmes. A student can also combine study in two study fields. In that case, s/he can be awarded with a double qualification degree if the learning outcomes meet not only requirements of the main study field but also minimum requirements of the other one.

Universities and colleges can also deliver programmes designed for the re-qualifying and non-degree study programmes.

Volumes of study programmes, modules and separate subjects of the first and the second study cycles are expressed in credits and they have to be the same, regardless of the form of studies (full-time or part-time). ECTS credits have been introduced in Lithuania since the 1st of September, 2011 (one study year equals 60 credits). Studies of every subject or module end in an examination or evaluation of individual work (project) carried out by a student.

Studies in higher schools are delivered in six areas: biomedical sciences, physical sciences, technological

sciences, social sciences, humanities and arts. The study areas are divided into groups of fields, which are further divided into smaller fields. Branches of study fields can be found within some fields.

First cycle (bachelor and professional bachelor degree) study programmes

Study programmes of the first cycle are intended to raise the level of education, transfer of basic theory of the specific study field and shaping professional skills that are needed for independent work. University study programmes are more focused on the universal, general education, theoretical background and top-level professional skills, while college programmes are intended to prepare individuals for professional activities. Individuals with at least secondary education are admitted to the first cycle of studies in higher education institutions.

The study programmes must meet general and special requirements stipulated in descriptions of the study field (group of fields, study area), which are approved by Minister of Education and Science, or just the general requirements if no special requirements have been approved.

The volume of the first cycle *university* programme, completion of which is awarded with a bachelor's degree in the certain field (branch), is no less than 210 credits and no more than 240 credits, including:

- at least 165 credits from the study field subjects;
- at least 15 credits from general university study subjects;
- no more than 60 credits from subjects established by the university and chosen by the student.

The total volume of practical training must comprise at least 15 credits.

The volume of the *college* programme, completion of which is awarded with a professional bachelor's degree of the field (branch), is usually no less than 180 credits and no more than 210 credits, including:

- at least 135 credits from the study field subjects;
- at least 15 credits from general college study subjects;
- 30 to 60 credits may comprise of subjects established by the college and chosen by the student.

Practical training and other practices must comprise at least a third of the volume of the study programme.

Interim assessment of academic achievements of students is carried out in accordance with procedures stipulated in the provisions (regulations) of the higher school. The study programme ends with assessment of graduate's competences: defending the final thesis (project) and/or final examinations (when stipulated in legal acts).

Second cycle (master degree) study programmes

The second cycle study programmes, aimed at preparing oneself for independent scientific/artistic work or other work that requires scientific knowledge and analytical skills. Applicants to master's studies are required to have completed first level of university education and to have met the requirements set by the university. People with a professional bachelor's degree are eligible for the second cycle study programmes if they have completed supplementary studies or have practical experience of the character and duration set by the university, the duration of the experience being at least one year.

The volume of programmes is no less than 90 but no more than 120 credits, including:

- at least 60 credits from the study field subjects, which, from the viewpoint of content, must be of considerably higher level than the appropriate subjects of the first study cycle;
- no more than 30 credits from subjects prescribed by the university and chosen by the student;
- at least 30 credits are intended for preparation and defence of the final work or the final work and the final examination.

Studies of every subject or module end with an examination or assessment of a work (project) performed individually by the student. The final work must be based on scientific or applied research, application of knowledge or prepared project that would reveal the skills, which correspond to the programme objectives.

The assessment commission of the final work (project) and its defence must be set up from competent specialists of the relevant study field (branch) – scien-

tists (artists), professional practitioners and representatives of social partners. At least one of the commission members (the commission chairman would be the best option) must be from the other university.

Integrated study programmes

Higher education schools of Lithuania can also deliver integrated study programmes covering the first and second study cycles. Such programmes can only be organized if this is stipulated in the regulatory legal acts. Integrated studies are usually organised in cases, when it is not possible to prepare a specialist during the first study cycle, therefore dividing longer studies into two phases would not be a purposeful decision.

The volume of integrated studies is between 300 and 360 credits. The total volume of practices should not be less than 18 credits. The study programme is ended with assessment of the graduate's competences by the defence of a final work (project) and final examinations (when stipulated in regulatory legal acts). At least 15 credits are to be allocated for a student in order to prepare for a final assessment.

Non-degree study programmes

Non-degree study programmes are delivered in higher education schools and are intended to acquire qualifications or prepare for independent practical activities in the following cases:

- for persons seeking to acquire the qualification of a therapist or family physician (*medical residency*);
- for persons seeking to acquire the qualification of a dentist (*dentistry residency*);
- for persons seeking to acquire the qualification of a veterinarian of the veterinarian medicine practice (*veterinarian medical residency*);
- for persons with qualifications of higher education and seeking to acquire qualification of a pedagogue (*non-degree pedagogical studies*).

Duration of residency studies is from 2 to 6 years and a volume of non-degree pedagogical studies is from 60 to 120 credits.

Eligible applicants for non-degree study programmes are persons with qualifications of higher education.

Third cycle study programmes (doctoral studies)

Third-cycle studies are delivered in doctoral studies of science and arts. The purpose of scientific doctoral studies is to prepare scientists who are capable to independently address scientific problems and carry out research and experimental (social, cultural) development. The purpose of artistic doctoral studies is to prepare artists able to create, interpret and develop researches based on arts practice. Universities and universities in cooperation with research institutes are awarded with the right to deliver doctoral studies by the Ministry of Education and Science. Applicants to doctoral studies are required to possess a master's degree or an equivalent degree of higher education.

The degree of doctor of science can be awarded upon successful completion of the full-time doctoral studies (up to 4 years) or the part-time doctoral studies (up to 6 years), to a person who prepared and defended a dissertation. The total volume of scientific doctoral studies is at least 30 credits.

The degree of doctor of arts can be awarded upon successful completion of doctoral studies (usually 4 years), preparation and defending of an art project. The degree of doctor of arts can also be awarded to an individual who has passed established doctoral examinations and defended an art project. The volume of artistic doctoral studies is 240 credits, including at least 40 received from studying doctoral subjects.

Certificates issued upon completion of higher education programmes

- *Doctoral diploma*, which witnesses acquisition of a qualification degree of doctor of science (arts);
- *Master's diploma*, which witnesses acquisition of a master's qualification degree;
- *Bachelor's diploma*, which witnesses acquisition of a bachelor's degree;
- *Diploma of professional bachelor*, which witnesses acquisition of a degree of professional bachelor;
- *Residency certificate*, which witnesses completion of residency studies and readiness for relevant professional activities;
- *Certificate of studies*, which witnesses acquisition of qualification stipulated in the study programme or the right to perform practical activities.

2.3. Quality assurance

In the second phase of Lithuanian education reform that was started in 1999, improvement of the quality of education was approved as one of the priorities. PHARE higher education and VET reform programmes facilitated transfer of quality assurance experience from other European countries to Lithuania. Recommendations were drafted on launching internal quality assurance systems in educational institutions, and the first skills were acquired by performing an external assessment of programme implementation and an institution's performance. The Law on Education in 1991 did not directly refer to education quality, while the new edition adopted in 1993 contained an article on the quality of education.

Based on the experience and the provisions of the National Education Strategy for 2003-2012, which refers to quality assurance as one of the main objectives of education development, Minister of Education and Science issued Order No. ISAK-3219 on 24 November 2008 to approve the Concept of Formal Education Quality Assurance System. The purpose of the system is to provide a conceptual basis for agreements between politicians and the society on the concept of education quality and ways and instruments for assuring quality of formal education, as well as to create preconditions for harmonisation of education quality assurance policies.

In the current version of the Law on Education adopted by the Seimas of the Republic of Lithuania on 17 March 2011, the article on education quality (LE, Article 37), among other things, stipulates as follows:

- the quality of education is the responsibility of the education provider and the institution, exercising the rights and duties of the owner (meeting of shareholders);
- the state ensures the quality of formal education and partly the quality of non-formal education, including the quality of teaching, which supplements the formal education;
- in order to improve education quality, education monitoring, research, self-evaluation and external evaluation of activities in schools, performance re-

view of school principals and teachers, evaluation of learning achievements must be carried out;

- fields of self-evaluation of activities in a school (except for higher education institutions) and the method of carrying-out of the self-evaluation are chosen by the school council. It analyses self-evaluation results and takes decisions, regarding the improvement of activities;
- external evaluation of a school (except for higher education institutions) is carried out periodically. Minister of Education and Science lays down the procedure for organising and carrying out external evaluation of activities in schools, implementing general education programmes and formal vocational education and training programmes;
- evaluation of activities of a higher education institution is carried out in accordance with the procedure laid down by the Law on Science and Studies.

Below, there is a brief description of what has been done in every sector of education in the implementation of the quality assurance provisions envisaged in the Law on Education.

General education

By Order No. ISAK-2683 of 30 December 2005, Minister of Education and Science founded the National Agency of School Evaluation (hereinafter referred to as "the NSAA"), which aims to assess quality of activities in schools that provide general education, to provide methodical support and recommendations to schools and founders of schools in relation to improvement of school activities' quality. Planned assessment of performance quality of general education schools has been practiced in Lithuania ever since.

The latest recommendations on self-assessment of schools of general education have been laid down by Order No. ISAK-607 issued by Minister of Education and Science on 30 March 2009. According to the recommendations, schools of general education assess the quality of their activities by selected methods, forms and instruments of assessment. Self-assessment is a planned activity of school. Data is collected in search for answers to questions, related to the quality of

students' progress and achievements, school activities and separate aspects of the activities as well as success of programmes and projects underway at the school. By taking part in the self-assessment process, the school community gains unique experience of continuous learning and knowledge building.

External audit of activities of general education schools is carried out periodically, in accordance with the Description of Procedures of the Internal Audit of the Quality of General Education Schools Activities, approved by Order No. ISAK-587 of Minister of Education and Science on 2 April 2007, which defines the concept of external audit of general education schools, establishes organization and implementation of external audit. External audit of activities' quality of general education schools is organised and carried out in the following phases: preparatory work; initial school visits from leading auditor; school audit; audit summary; preparation and harmonisation of report; actions of the founder, municipal division for education, external audit team and the NVMA after the report of external audit is presented.

External auditors spend at least 75 percent of the time of their work in schools on observing the educational process, meetings with the schools' teachers and other staff, parents and students, representatives of municipal institutions and other individuals concerned. The remaining time is used for analysis and summary of the process and results of the internal audit, other school documents and other information that has been collected.

Vocational education and training

Quality assurance is one of the functions of the Qualifications and VET Development Centre (QVETDC). QVETDC (formerly known as the Methodological Centre for Vocational Education and Training) was established by Order No. 214 of Minister of Education and Science on 29 February 1996.

The first steps in quality assurance were made back in 2000 when the Guide to Quality Assurance in Vocational Schools was published, with support from PHARE Vocational Education and Training Reform Programme.

Later a *Concept of Vocational Education and Training Quality Assurance System* was worked out within the framework of the ESF project 'Development and Implementation of the Common Quality Assurance System in Vocational Education and Training' (2005-2008). The concept is intended for initial and continuing (including non-formal) education and training. The concept takes into consideration the *Common Quality Assurance Framework (CQAF) for VET in Europe*. The goal of the Lithuanian VET quality assurance system is to ensure the ongoing VET quality improvement by reconciling the needs of the world of work, an individual and the society. The project also facilitated preparation of instruments and training of human resources for development of the quality assurance system of vocational education and training. Continuity of the project is envisaged through the measures of the Practical VET Resources Development Programme (2007). Projects for launching internal systems of quality assurance in vocational education institutions have been started, with external assessment of implementation of VET programmes, scheduled to start in 2012.

Until a quality assurance system based on self-assessment and external assessment is in place, the following measures will be applied to assure VET quality on the state level:

- *Preparation and approval of standards.* VET standards are the basis of VET programmes and assessment of student achievements. An example of VET standard is provided in Appendix 2. After approval of new VET standards or updating existing ones, teaching programmes are revised, accordingly.
- *Preparation and registration of training programmes, issuing of licenses.* A newly-prepared programme is harmonized with a relevant institution representing the employers (e.g., the Chamber of Industry, Commerce and Crafts), then experts (vocational teachers and employers) evaluate the quality of the programme and, in the case of positive assessment, the programme is entered on the Register of Study and Training Programmes and Qualifications. A license to carry out a registered programme is issued to a VET provider, if its resources are sufficient for

implementing the registered training programme, and vocational teachers or candidates for vocational teachers, meet the requirements prescribed in VET programmes and laws.

- *Supervision of programme implementation.* Relevant divisions of the Ministry of Education and Science carry out supervision of the teaching process and activities, and audit of activities, while the State Audit Office performs random checks of educational institutions, during which the rationale of school activities is also analysed.
- *Independent assessment of qualification.* Since 2003, the final assessment of qualifications has been performed by social partners. They appoint representatives of employers to the qualification examination commission, participate in the preparation of theoretical and practical tasks for examinations. The commission of qualification examination comprises at least three members, equally representing employers, trade unions and VET providers.

Higher education

The Law on Science and Studies stipulates that higher education institutions are responsible for the quality of research and studies (LSS, Article 40, Paragraph 1), that they are required to have an internal quality assurance system based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area and on the strategy of quality improvement approved by the higher education institution itself (LSS, Article 41), that external evaluation and accreditation of study programmes (LSS, Article 42), and activities of higher education institutions (LSS, Article 43), is to be carried out. According to the law, procedures of external evaluation and accreditation of study programmes are to be approved by Minister of Education and Science, while procedures of external evaluation of activities of higher education institutions are to be approved by the Government. The Centre for Quality Assessment in Higher Education (CQAHE) (LSS, Article 17) is empowered by the Minister of Education and Science to organise the external evaluation. Furthermore, the law envisages that a higher education institution, wanting to carry out external

evaluation of its programmes can apply to CQAHE or any other agency for quality assessment in higher education, which is included in the Register of the European Association for Quality Assurance in Higher Education.

CQAHE was founded in 1995. Its activities started with assessment of the study programmes' quality. Objectives of the assessment are as follows: assessment of compliance of a study programme to relevant requirements; advising higher education institution on improvement of the study programme implementation; provision of information to the society about the quality of provided study programmes. Following the evaluation, a decision is made about accreditation of a study programme. External evaluation of existing study programmes for the purpose of accreditation was started in 1999. Currently (since 2009), the Law on Science and Studies stipulates that higher schools can only deliver accredited study programmes and the study programmes are to be accredited at least once every 6 years. Programme accreditation is carried out in accordance with *the Description of Procedures of External Evaluation and Accreditation of Study Programmes*, which has been approved by Minister of Education and Science. The last version of the document was approved by Order No. V-1487 on 29 July 2011. The description refers to two cases of accreditation – accreditation of (new) programme which is to be delivered, and accreditation of an already existing programme.

External evaluation of a study programme is performed in the following phases:

- self-assessment of the study programme;
- a visit by a team of experts to the higher school who deliver the study programme or is planning to deliver the study programme;
- preparation and publication of conclusions of external evaluation;
- follow-up activities aimed at evaluating the measures undertaken by the higher school to meet the recommendations of the external evaluation.

As of 2011, intended study programmes are accredited without evaluation in cases stipulated in *the Description of Procedures of External Evaluation and Accreditation of Study Programmes*.

CQAHE started external quality evaluation of higher education schools activities in 2004. Currently, the evaluation is carried out in accordance to *the Methodology of Evaluation of Activities of Higher Education Schools* approved by the order of the centre's director as of October 25 2010. The evaluation is based on the results of actual resources assessment which is available at the higher education school, also based on results of targeted assessment, self-assessment summary, other documents of the higher school, data collected during a visit to the higher school, conclusions and recommendations of previous evaluation and data about the course of implementation and results of the recommendation, as well as other information about activities of the higher school. The following areas of activities are assessed: strategic management; studies and lifelong learning; scientific and/or artistic activities; effects upon regional and national development. A higher school is responsible for performing self-assessment and preparing a self-assessment summary. External evaluation of a higher school is carried out by a group of experts set up by the CQAHE.

Final evaluation conclusions are publicized by the CQAHE. Higher schools are also obliged to publicise the conclusions. They are given a deadline for correcting the shortcomings noticed by the experts.

2.4. Open Information, Counselling and Guidance System

The Open Information, Counselling and Guidance System (*Atvira informavimo, konsultavimo, orientavimo sistema (AIKOS)*, <http://www.aikos.smm.lt/aikos/lang.do?language=en>) intended to present learning opportunities in Lithuania has been in operation since 2004. The website offers broad opportunities to search for information that could be necessary when selecting qualifications, learning and studies one wants to acquire, and planning a personal professional career. It also provides information about professions, qualifications, study and learning programmes, education and training institutions and rules of admission, training licen-

ses, Europass certificate supplements, learning and job statistics, etc. A total of 14 AIKOS user groups exist, including students of 1-4, 5-8 and 9-12 grades, dropouts from the system of general education, parents, entrants to vocational and higher education schools, persons changing or improving their qualifications, counsellors, politicians, employers, disabled persons, immigrants, prisoners and users of PLOTEUS Portal on Learning Opportunities throughout the European Space. AIKOS website is updated on a daily basis with data from other registers of education and research. Data on available jobs and the unemployed provided by the Lithuanian Labour Exchange is updated on AIKOS every month, the information about numbers of students and pedagogues is updated twice a year and the data from the Statistics Lithuania system is updated once a year.

AIKOS users can review information available on databases and registers (Registers of Training and Stu-

dy Programmes and Qualifications, Licenses and Forms of Education Certificates, Europass Certificate Supplements, Education Institutions), numbers of available jobs and unemployed, information and tools for vocational guidance (e.g. tests of professional suitability). AIKOS is linked with the PLOTEUS – Portal on Learning Opportunities throughout the European Space (<http://ec.europa.eu/ploteus/>).

AIKOS users can select information according to their status (students; persons, who are searching for further learning opportunities; employees, who intend to improve or change their qualifications) and receive relevant information about professions, descriptions of professions, rules of admission; search for vocational education and training /higher education study programmes that enrol students that year, educational institutions delivering the programmes, etc. An AIKOS version for the disabled is also available.

3. The Lithuanian Qualifications Framework (LTQF)

3.1. Preconditions and process of creation

On July 4 2003, the Seimas of the Republic of Lithuania approved the provisions of the National Education Strategy for 2003-2012. This document formulates one of the measures for achieving the targets as follows: *development of the flexible and open structure of education, uniting the general education, vocational education and training, studies, as well as formal, non-formal and informal education into the single area of education*. Referring to this provision and taking into account the European initiatives, it was decided to revise and improve the national qualifications system already as far back as when the priorities for use of the ESF aid in 2004-2006 for Lithuania were planned. This resulted in preparation and financing of the project "Creation of the Lithuanian Qualifications System" that was carried out in 2005-2008. The project was aimed at creation of the qualifications system that would satisfy the needs of the economy and ensure favourable conditions for lifelong learning. The concept (2007) and the model (2008) of the national qualifications system, where central element is the national qualifications framework, covering all the education sectors (general education, vocational education and training, and higher education), were prepared. The first draft of the national qualifications framework was announced in 2007. Thus, the national qualifications framework in Lithuania was being prepared alongside with the European qualifications framework.

The selection of the national qualifications framework structure was determined by several factors. First, it was decided that the framework must cover all sectors of the education system – general education, vocational education and training, and higher education. Second, the framework had to consider the system of dividing learning outcomes into levels, which already existed in the Lithuanian education system and which have been described in the previous chapter of the report: three education levels in the general education sector, four VET attainment levels in the VET sector and three studies

cycles in higher education. Third, it was also taken into account that the definition of qualification that was then valid in Lithuania was: *qualification is the ability and right to engage in a certain professional activity recognised under the procedure established by laws, legal acts adopted by the Government or an institution authorised by it*, i.e. it was admitted that the level of qualification reflects the level of readiness for a specific professional activity. The understanding of qualification in the labour world was the same.

With regard to the indicated factors, the draft of the national qualifications framework of Lithuania provided for 8 qualification levels:

- Level 1, which is acquired in the general education sector and corresponds to general readiness for activities, not lower than that which is provided in the general programmes of the basic education, without special vocational training;
- Levels 2 to 4, which require special vocational training in VET institutions;
- Level 5, which is an interim level between vocational and higher education qualifications and which is acquired according to the programmes of post-secondary education in VET institutions or according to short cycle study programmes in colleges;
- Level 6 to 8, which include qualifications attributed to the higher education system.

After discussions over the prepared draft of the national qualifications framework with all stakeholders and its adjustment according to presented comments, the Government of the Republic of Lithuania approved the *Lithuanian Qualifications Framework* (hereinafter referred to as "the LTQF") by its Resolution No. 535 on 4 May 2010.

After the start of the process of referencing the Lithuanian Qualifications Framework to the European qualifications framework, a detailed comparison of qualification levels descriptors within the LTQF and the EQF was performed and it was determined that a different understanding of qualification (in Lithuania a qualification denotes a level of a person's readiness for a *certain professional activity*, whereas according to the EQF – a level of readi-

ness to work or to learn) reduces possibilities of using the LTQF for referencing qualifications awarded in Lithuania and other countries. First, it was ascertained that, in spite of the same number of levels, the conformity between the LTQF and the EQF levels was not a trivial one – the descriptor of level 1 within the LTQF best corresponds to the descriptor of level 2 within the EQF, whereas the descriptor of level 2 within the LTQF – to the descriptor of level 1 within the EQF (see Fig. 2). Second, *Matura* attestation (school leaving certificate), confirming successful completion of the secondary education programme and giving the right to continue studies in the higher education system, had no place in the LTQF at all.

Furthermore, accentuation of professional activity, hindering inclusion of learning outcomes achieved in the general education sector into the LTQF, considerably reduces possibilities for the LTQF to become an efficient instrument for promoting lifelong learning, which is one of the main aims in the case of the EQF. Therefore, practically everyone who took part in the referencing process and got familiar with the conclusions recommended changing the definition of qualification by drawing it closer to the notion used in the EQF and to adjust the LTQF accordingly. And this was done.

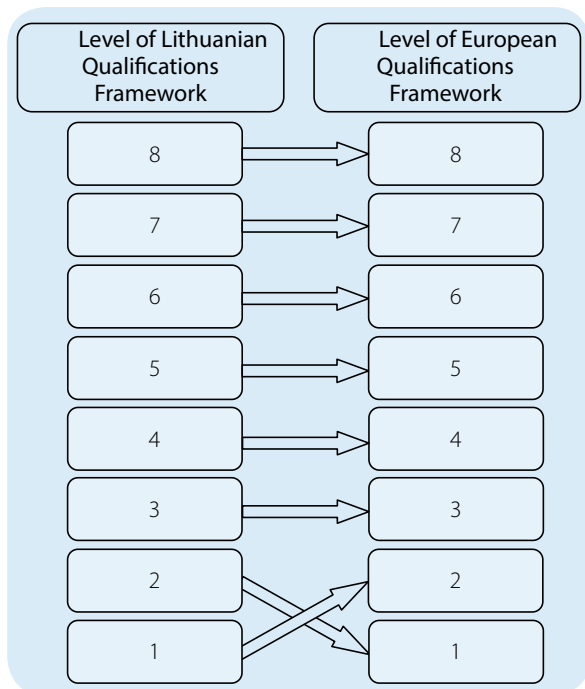


Fig. 2. Conformity of the LTQF, approved on 4 May 2010, to the EQF

First of all, in the new version of the Law on Education, adopted by the Seimas of the Republic of Lithuania on 17 March 2011, qualification is defined as follows: *qualification is the entirety of a person's competences or professional experience and competences necessary for a certain activity, recognised in accordance with the procedure laid down by legal acts of the Republic of Lithuania* (LE, Article 2, paragraph 6). This definition, on the one hand, no longer obliges to have orientation to readiness for a specific professional activity when determining the place of qualification in the qualifications framework. On the other hand, when relating qualification to one's competences, this defines much more clearly the importance of learning outcomes, especially having in mind the definition of competence given in the Law on Education: *competence is ability to perform a certain activity on the basis of the entirety of acquired knowledge, abilities, skills and values* (LE, Article 2, paragraph 5).

On 24 August 2011, the second step was taken – the Government of the Republic of Lithuania by its Resolution No. 986 approved amendments to the LTQF, upon introduction of which it is possible to base the referencing of the Lithuanian qualifications system to the EQF (as it will be demonstrated in Chapter 4 of the report) on the parallel between the LTQF and the EQF. Further in this report, the new Description of the LTQF will be referred to. For those who are interested in detailed information on what and why LTQF was amended, we suggest getting familiar with the research report "Referencing Lithuanian Qualifications System to the European Qualifications Framework for Lifelong Learning" prepared by Ligija Kaminskienė, which is available at http://www.kpmc.lt/LTKS_EKS/LKA-research.pdf.

3.2. Structure of the LTQF and descriptors of qualification levels

The Description of the Lithuanian Qualifications Framework approved by the Government indicates that the LTQF sets out the system of qualification levels established in the Republic of Lithuania on the basis of

competences required for personal activities and was drafted with the aims of:

- establishing the conditions for adapting qualifications to the needs of the national economy and to coordinate the national economic, social and employment policies;
- ensuring the clarity and accessibility of the processes of definition, acquisition, evaluation and recognition of qualifications;
- informing persons on the content, acquisition, development and/or change of qualifications necessary for various professional activities;
- enabling the facilitation of workforce mobility on the national and international scale;
- encouraging lifelong learning through the application of all forms and methods of formal, non-formal and informal learning with the purpose of moving from one qualification level to another.

Like the EQF, the Lithuanian Qualifications Framework has 8 qualification levels, but their descriptions are different. The main reason is differences between the criteria used for the description of levels. In case of the EQF, *knowledge, skills and competence* were used as criteria

for describing levels of learning outcomes. Meanwhile, in case of the LTQF, taking into account that the definition of qualification accentuates readiness for a certain activity, the following criteria characterising professional activities were chosen for describing qualification levels:

- *complexity of activities* – a qualification criterion used to describe the character of activities, the variety and complexity of tasks and the level of knowledge necessary for performance of activities;
- *autonomy of activities* – a qualification criterion used to describe changes in the activity organisation and nature of subordination, as well as the degree of responsibility;
- *variability of activities* – a qualification criterion used to describe activities in terms of changing technological and organisational environment.

Descriptors of the LTQF qualifications levels approved by the Government decree Nr. 986 on 24 August 2011 are given in Table 2. The first paragraph of each level descriptor characterises the complexity of the activity for which a person who acquired qualification of the relevant level is ready, the second paragraph reflects the autonomy of such activity and the third paragraph – its variability.

Table 2. Description of qualification levels within the LTQF

Level of Lithuanian qualifications	Description of the qualification level
1	<p>The qualification is intended for activities consisting of one or several simple specialised actions or operations. The activities require the ability to apply basic knowledge characteristic of the activities performed.</p> <p>The environment of the activities is clear, the activities are performed in line with detailed instructions, some cases require intense supervision, guidance and assistance.</p> <p>The situations, actions and operations constituting the activities are regular and constantly repetitive.</p>
2	<p>The qualification covers the activities consisting of actions and operations intended to solve simple problems. The activities performed require the application of the main factual knowledge characteristic of the activities.</p> <p>The activities performed require supervision, guidance and assistance.</p> <p>The activities and operations constituting the activities are regular.</p>
3	<p>The qualification is intended for activities consisting of actions and operations in narrow areas of activities. The activities may include several or more specialised activity tasks that require the application of well-known and tested solutions. Performance of the activities involves the ability to apply the knowledge characteristic of the activities performed pertaining to the facts, principles and processes of the activity area.</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>The activity environment may require the ability to adapt to simple context changes.</p>

Level of Lithuanian qualifications	Description of the qualification level
4	<p>The qualification is intended for activities consisting of actions and operations in relatively broad areas of activity. The activities are performed by carrying out several or more specialised activity tasks, solutions to which are not always tested or known. Performance of the activities involves the ability to apply factual and theoretical knowledge characteristic of a broad context related to the activity areas.</p> <p>The activities are performed autonomously, assuming the responsibility for the quality of the procedures and outcomes of performance. With the acquisition of experience, the qualification allows the transfer of practical skills to the staff of lower qualifications as well as supervision of their activities.</p> <p>The activity environment requires the ability to adapt to the developments predetermined by the context change, which is normally foreseeable.</p>
5	<p>The qualification is intended for activities distinguished by integrated coordination of activity tasks in different activity areas. The activities include the evaluation of the competences of lower-qualification employees and training thereof. The activities require coordination of comprehensive knowledge of the activity area with general knowledge in dealing with various specialised activity tasks in several different activity areas.</p> <p>The employee performs the activities independently and is supervised only as regards the evaluation of results. The activity tasks are set by an employee of a higher qualification, who frequently grants the employee performing the activities the discretion as to the choice of methods and measures to complete the tasks. The employee supervises the activities of lower-qualification staff, plans and assigns activity tasks, oversees the performance of the activities, provides consulting and verifies the performance quality.</p> <p>The technological and organisational requirements of the activities as well as their environment are constantly changing, the changes are often unforeseeable and may be related to new areas of activity.</p>
6	<p>The qualification is intended for complex activities distinguished by a variety of tasks and their content. Different means and methods are employed when dealing with problems in various areas of professional activities. Therefore, the performance of activities requires the application of broad theoretical knowledge based on the results of new fundamental and applied research or necessary for the introduction of various innovations.</p> <p>Activities are performed independently, selecting the methods for task completion and organising the work of the respective staff for the completion of the set tasks. Thus, the qualifications in this level include the ability to plan activities with respect to the set tasks, to analyse and record the activity results and to submit reports to activity coordinators, to modify activities based on the activity result analysis and specialist recommendations, and to carry out different project activities.</p> <p>The activity environment requires the ability to adapt to constant and normally unpredictable changes predetermined by the progress of knowledge and technologies in a specific professional sphere. The qualification allows the enhancement and extension of professional knowledge and, following the self-assessment of the activities, enables independent learning (development of cognitive competences) as required by the changing professional activities.</p>
7	<p>The qualification is intended for complex activities consisting of various interconnected tasks that may cover several related professional activities. Therefore, the performance of activities requires expert evaluation and application of the latest knowledge of the professional activities and similar or related areas, discovery of new facts in conducting applied research into the professional activities, and creative application of theoretical knowledge and research results.</p> <p>The activities are performed by means of independent setting of the tasks in the respective activity area and taking independent decisions aimed at activity enhancement and improvement. A peculiar characteristic of the activities is the supervision of other employees' activities. Thus, the qualifications of this level cover the abilities to independently carry out applied research, provide consulting in the activity area, coordinate projects aimed at the improvement of the qualifications of others as well as introduction of innovations, and to analyse and present the activity results.</p> <p>Due to the advancement of the knowledge, technology and labour organisation in various activity areas, the activities of this level and their environment undergo intense changes, the developments are difficult to predict, and the activities consist of constantly changing combinations of tasks. Thus, the activity changes require the ability to adopt innovative solutions based on research results as well as the evaluation of alternative solutions and possible social and ethical consequences of the activities.</p>

Level of Lithuanian qualifications	Description of the qualification level
8	<p>The qualification is intended for activities of exceptional complexity, distinguished by the development of new knowledge, ideas, technologies, as well as work practices, methods and processes. Consequently, the activity demands the discovery of new knowledge in the activity areas on the basis of fundamental and applied research findings, integrating knowledge in different activity areas. The activities are characterised by strategic activity objectives that may cover several different activity areas or research subjects.</p> <p>The activities are strategically planned by assuming the responsibility for the results and quality of other employees' activities and independent strategically important decision-making. The training and consulting of the specialists in the respective activity area is another characteristic. Thus, it is necessary to have the ability to adopt strategic decisions of public significance, to independently plan and conduct fundamental and/or applied research, to transfer the latest knowledge (to share know-how) to specialists in the respective area and to coordinate scientific and applied research projects.</p> <p>Intense and unpredictable changes in the activities and their environment require readiness for constant developments, openness to innovation, a positive attitude towards the development of the organisation and society, the ability to address issues originally in the light of their context, and the ability to initiate and make changes in various areas of activity and public life.</p>

Authors of the EQF admit that the qualifications framework and the EQF level criteria rest on pragmatic agreements among various, at times different, methodology approaches. There is a general consensus, though, that a common or single correct method on drafting or applying the descriptors of qualifications levels is impossible to establish. In other words, the identification of qualifications levels and the comparison of different qualifications framework levels and their criteria should be performed on the basis of pragmatic rather than theoretical and scientific argument.

The LTQF qualifications level descriptor criteria have been chosen with regard to Lithuania's context. The selection of these is built around the goal of making the qualifications contents of corresponding levels be more easily comprehended by the main qualifications system users, i.e. persons seeking to obtain the qualifications and employers. In order to place greater focus on the LTQF level descriptors when identifying the contents of qualifications, authors of the LTQF project have proposed an alternative version of the description of qualifications levels, in which criteria of activities are spread into a matrix, expressed through cognitive, functional, and general competences. Such LTQF qualifications descriptors, referred to as the *comprehensive descriptors*, are presented in the *Outline of the National Qualifications Framework of Lithuania* (2007).

The comprehensive descriptors also shed light on a number of crucial connections between the criteria employed in the LTQF and the EQF:

1. Connections between the concept of *knowledge*, used in the EQF descriptors and *cognitive competences*, used in the Lithuanian qualifications framework descriptors. In the EQF, knowledge means "the outcome of the assimilation of information through learning. Knowledge is the body of facts, principles, theories and practices that is related to a field of work or study. In the context of the European Qualifications Framework, knowledge is described as theoretical and/or factual." This definition widely contextualises the concept of knowledge and underscores the universality of knowledge. The Lithuanian qualifications framework defines cognitive competences as the complex skills of applying knowledge in various professional activities and learning situations.
2. Connections between the concept of skills, used in the EQF descriptors and concepts of *functional and cognitive competences*, used in the Lithuanian qualifications framework descriptors. In the EQF descriptors, skills are perceived as cognitive and practical (functional) skills: "In the context of the European Qualifications Framework, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments)". In the Lithuanian qualifications framework concept, cognitive skills are attributed to *cognitive competences*, while practical skills fall under functional competences that define the skills of performing certain tasks, operations, and functions of professional activities.

3. Connections between the concept of competence in the EQF and the concept of general competences as described in the Lithuanian qualifications framework. As mentioned before, the concept of competence as applied in the EQF is noted for its dual nature. Competence is perceived as the “*proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development,*” which, essentially, corresponds with the concept of competence used in the Lithuanian qualifications framework. *In the context of the European Qualifications Framework,*
- competence is described in terms of responsibility and autonomy.* In this respect, the concept used in the EQF interrelates with the criteria of *autonomy of activities* and *complexity of activities* as defined in the Lithuanian qualifications framework.
4. Connections between the criteria used in the definition of qualifications levels in the EQF and the Lithuanian qualifications framework. In the EQF, professional improvement and growth have different manifestations that are closely related to the criteria of activities, applied in the definition of the qualifications levels of the Lithuanian qualifications framework:

Criteria of professional improvement and growth in the EQF level framework (Explanation of the European Qualifications Framework for Lifelong Learning) http://ec.europa.eu/education/pub/pdf/general/eqf/broch_en.pdf	Criteria of activities applied in the description of qualifications levels in the Lithuanian qualifications framework
The complexity and range of knowledge and understanding	The complexity of activities
The complexity of practical application and the range of field	
The degree of relevant assistance and instructions	Autonomy of activities
The degree of relevant integrity, autonomy and creativity	
The degree of transparency and dynamics of circumstances	Variability of activities

Comprehensive descriptors of all the LTQF levels are as follows:

LTQF level 1

Criteria of activities	Cognitive competences	Functional competences	General competences
<p>The complexity of activities</p> <ul style="list-style-type: none"> • Activities consist of a single or several simple actions or operations. • Activities are narrowly specialised. 	Application of basic general knowledge and basic knowledge characteristic of the activities performed.	Performance of simple narrowly specialised actions or operations through the use of means, necessary for the performance of specific activity tasks.	Dealing with specific and basic problems that arise in performing activity tasks.
<p>Autonomy of activities</p> <ul style="list-style-type: none"> • Activities are under constant supervision, with intense supervision, leadership and assistance required in some cases. • Activities are performed following detailed instruction. 	Using information supplied in the detailed written instructions and those provided orally by the supervising person.	Performance of tasks assigned by the authorised person and following instructions provided.	Acceptance of information pertaining to the performance of tasks and solving simple problems as well as ability to provide feedback.
<p>Variability of activities</p> <ul style="list-style-type: none"> • Situations, actions, and operations that constitute activities are regular and constantly repetitive • Activity environment changes have no essential impact on actions and operations performed. 	No requirements for cognitive competences.	No requirements for functional competences.	No requirements for general competences.

LTQF level 2

Criteria of activities	Cognitive competences	Functional competences	General competences
The complexity of activities <ul style="list-style-type: none"> Activities consist of actions and operations intended to solve simple problems. Activities are narrowly specialised. 	Application of basic general and activity-characteristic factual knowledge.	Performance of simple actions or operations through the use of means, necessary for the performance of specific activity tasks.	Solving simple activity problems.
Autonomy of activities <ul style="list-style-type: none"> Activities are supervised. Activities are performed following instructions provided. 	Using the information supplied in the written instructions and those provided orally by the supervising person.	Performance of simple activities following the instructions provided.	Acceptance of information pertaining to the performance of tasks and solving problems as well as ability to provide feedback.
Variability of activities <ul style="list-style-type: none"> Actions and operations that constitute activities are regular. Activity environment changes have no essential impact on actions and operations performed. 	No requirements for cognitive competences.	No requirements for functional competences.	Adapting to changes with the help of the person in charge of supervising activities.

LTQF level 3

Criteria of activities	Cognitive competences	Functional competences	General competences
The complexity of activities <ul style="list-style-type: none"> Activities consist of actions and operations in narrow areas of activities. Activities comprise several specialised tasks that require the application of well-known and tested solutions. Activities are performed by using various methods, materials, and means. 	Application of activity-characteristic knowledge regarding facts, principles, and processes of the field of activities.	Performance of various specialised activity actions and operations through the application of well-known and tested solutions, means, and instruments.	Adapting to a variety of methods, materials, and means used to perform specific activities.
Autonomy of activities <ul style="list-style-type: none"> Separate activity tasks are solved autonomously, under leadership of a person with higher qualification. Activity supervision is restricted to performance quality control. 	Using provided tasks, plans, simple data systems and oral instructions.	Autonomous solving of various activity tasks and, if necessary, adjusting activity outcomes with regard to remarks and requirements presented during their assessment.	Autonomous solving of standard activity problems. Planning personal activities with regard to tasks provided and using the assistance of a person with higher qualification.
Variability of activities <ul style="list-style-type: none"> Activities and their environment are subject to change but changes are simple and easy to adjust to. Activities and environment changes are predictable. 	Updating current knowledge of the field of activities, adapting to foreseeable activity environment changes.	Updating current skills, adapting to specific foreseeable activity environment changes.	Autonomously adapting to simple changes in activity and its environment.

LTQF level 4

Criteria of activities	Cognitive competences	Functional competences	General competences
The complexity of activities <ul style="list-style-type: none"> Activities consist of actions and operations in several fields of activities. Activities are performed by implementing several or more specialised tasks, the possible solutions of which may not always be tested or known. Activities may comprise passing on practical skills to lower qualification employees. 	Integration of factual and theoretical knowledge of the field of activities along with general education knowledge.	Performance of actions and operations in several fields of activities through the application of various, not always well-known and tested solutions, means, and instruments.	Adoption of solutions in activities performed within a variety of activities and contexts. Passing on the experience and skills to lower qualification persons.
Autonomy of activities <ul style="list-style-type: none"> Activities performed autonomously, taking the responsibility for the quality of activity performance procedures and outcomes. Activities may comprise co-ordination and supervision of activities performed by lower qualification employees. 	Using specialised data systems, received and critically-evaluated oral instructions.	Autonomous solving of activity tasks by choosing methods, procedures, materials, and means of performing activities and controlling activity performance quality.	Planning and organising own activities in team work and co-operation with higher qualification persons.
Variability of activities <ul style="list-style-type: none"> Activity changes may be frequent and require adapting oneself. Activity changes pertain to the varying context of activities. 	Constant updating of current knowledge in the field of activities and general education, complementing it with current field of activity knowledge and practice.	Obtaining new skills that are necessary to adapt to changed activity context.	Adapting to the contents of tasks and frequent change of context.

LTQF level 5

Criteria of activities	Cognitive competences	Functional competences	General competences
The complexity of activities <ul style="list-style-type: none"> Activities are characterised by complex co-ordination of activity tasks across different fields of activities. Activities comprise the assessment of lower qualification employee competences and their training. 	Co-ordination of knowledge of different fields of activities with general knowledge.	Application of various work means, instruments, and methods.	Solving different content problems in varying contexts. Training lower qualification persons.
Autonomy of activities <ul style="list-style-type: none"> Activities are performed autonomously; supervision is restricted to the evaluation of their outcomes. Activity tasks are set by a higher qualification person, often granting the possibility for the person performing the activity to choose methods and means to solve the tasks. Activities are characterised by the leadership over activities of other persons. 	Application of extensive factual and theoretical knowledge in different fields of activities, consulting with colleagues and higher qualification specialists. Autonomous use of various information sources.	Autonomous planning of own and lower qualification employees' activities. Autonomous selection of methods and means to solve tasks assigned by higher qualification persons.	Planning and organising own and lower qualification persons' activities, supervising the performance of activities, being able to inspect the quality of activity performance.

Criteria of activities	Cognitive competences	Functional competences	General competences
Variability of activities <ul style="list-style-type: none"> Technological and organisational requirements of the activities as well as their environment are constantly changing; the changes are often unforeseeable and may be related to new areas of activity. 	Systematic updating of current knowledge through the acquisition of new knowledge, required for the adaptation to constant and often unforeseeable changes in several different fields of activities.	Mastering new methods, means, and instruments of solving problems in different fields of activities, required to adapt to constant and often unforeseeable changes.	Adopting group-level decisions under circumstances of unforeseeable environment changes. Initiating and organising own and lower qualification persons' continuous learning process. Self-motivation and motivation of others for the improvement in a chosen field of activities.

LTQF level 6

Criteria of activities	Cognitive competences	Functional competences	General competences
The complexity of activities <ul style="list-style-type: none"> Activities are complicated, characterised by the variety of tasks and their contents. Performance of activities involves the use of various means and methods. Activity tasks may comprise various fields of professional activity. 	Integration of extensive theoretical knowledge based on fundamental and applied research findings or required for the introduction of innovation along with practical knowledge, by solving tasks in various fields of activities.	Systematic application and management of complex methods, means, and information, required for the performance of activities.	Maintaining communication with specialists in the respective professional field, critical valuation of activities performed and their outcomes presented.
Autonomy of activities <ul style="list-style-type: none"> Activities are performed autonomously by choosing task performance methods. Activities require the ability to organise the work of respective people for the performance of the tasks set. 	Autonomous analysis, comparison, and accumulation of fundamental and applied research findings essential for the chosen field of professional activity as well as the data on innovations that emerge in the field of activities.	Planning complex activities with regard to goals set. Analysis of activity outcomes, referring to them when adjusting activities and taking responsibility for the quality of activity outcomes. Implementing various project activities.	Passing on information, ideas, and solutions to specialists and non-specialists.
Variability of activities <ul style="list-style-type: none"> Activities are constantly changing due to the advance of knowledge and technology in the specific professional field. Major part of activity changes is unforeseeable. 	Systematic enhancement and extension of the professional field knowledge.	Application of new instruments and means in the performance, management and adjustment of activities, taking into account changes taking place in respective activities.	Consistent and systematic learning with regard to activity outcomes and evaluation of the requirements raised by continuous activity changes.

LTQF level 7

Criteria of activities	Cognitive competences	Functional competences	General competences
<p>The complexity of activities</p> <ul style="list-style-type: none"> • Activities are complex, comprised of various interconnected tasks. • Activity tasks may comprise several related fields of professional activity. 	Expert evaluation and application of the latest theoretical knowledge in professional activity and field of study based on fundamental research findings.	Co-ordination and implementation of various applied research and innovation introduction, employee qualification improvement projects. Setting activity performance quality standards.	Adopting complex and systematic activity improvement solutions based on expert know-how and experience in various fields of activity. Co-operation with specialists in the respective professional and other fields, critical valuation of activities performed and their outcomes presented.
<p>Autonomy of activities</p> <ul style="list-style-type: none"> • Activities are performed by autonomously setting tasks of a respect field of activity. • Activities include taking leadership over other employees' work. • Activities pertain to the adoption of decisions, aimed at activity enhancement and improvement. 	Discovering new facts through the performance of applied professional activities and/or field of study research.	Autonomous performance of applied research. Providing consultations in the field of activities.	Creative leadership over the activities of people with various qualification and occupational backgrounds by sharing own experience and expert knowledge. Planning the improvement of own qualification.
<p>Variability of activities</p> <ul style="list-style-type: none"> • Activities and their environment are subject to intensive changes, conditioned by the knowledge and technology progress in various fields of professional activity. • Activities are comprised of constantly changing combinations of task. • Possible unforeseeable changes in activity environment. 	Creative enhancement and extension of the professional field knowledge through independent learning and applied research.	Improvement and adaptation of various means and instruments, required for the performance of applied research, studies, cultural and art activities or the introduction of innovations.	Adoption of innovative solutions based on research results as well as the evaluation of alternative solutions and possible social and ethical consequences of activities performed.

LTQF level 8

Criteria of activities	Cognitive competences	Functional competences	General competences
<p>The complexity of activities</p> <ul style="list-style-type: none"> • Activities are complex, characterised by the creation of new knowledge and innovation. • Activities are characterised by a broad variety of tasks and the complexity of their contents. • Activities are characterised by strategic activity objectives. 	Application of the latest knowledge based on fundamental and applied research results for the creation of new knowledge, ideas, activity performance methods, methodology, processes, and technology.	Creation, synthesising, and evaluation of new complex ideas, methods, processes, and instruments in handling strategically-important science, art, and social evolution and development, professional activity or cultural and art creation tasks.	<p>Maintaining communication with colleagues, scientific community and wider society by passing on the prospects of the innovations and further development in the personal field of expertise.</p> <p>Adoption of public-importance strategic decisions.</p>
<p>Autonomy of activities</p> <ul style="list-style-type: none"> • Activities are performed through strategic planning, often taking responsibility for the results and quality of work performed by other employees. • Activities pertaining to the adoption of strategically-important decisions. • Activities comprise training and consulting specialists in the respective professional field. 	Discovering new knowledge in various fields of activities based on fundamental and theoretical results of applied scientific research performed.	<p>Autonomous planning, implementation, and co-ordination of fundamental and applied scientific research or cultural and art creation projects.</p> <p>Passing on the latest knowledge to specialists and experts of various fields.</p>	Designing and developing long-term prospects of own and expert team's professional advancement.
<p>Variability of activities</p> <ul style="list-style-type: none"> • Activities are subject to constant and intensive changes. • Activity environment is unforeseeable (hardly predictable). 	Constantly taking interest in the latest fundamental and applied research as well as the knowledge created by these.	Initiation and design of original scientific research, study, and cultural and art creation, innovation creation means, instruments, and processes.	<p>Openness to innovation, developing positive attitude towards the development of the organisation and the society.</p> <p>Assuming responsibility for moral, social, economic, environmental, etc. consequences of the activities performed by oneself and the team.</p>

The Description of the LTQF approved by the Government indicates how qualifications of various levels can be acquired. In all cases it is possible to acquire them by learning according to relevant programmes registered with the *Register of Study and Training Programmes and Qualifications*:

- Qualifications of levels 1 to 4 are acquired by learning according to VET and/or general education programmes;
- Level 5 qualifications are acquired by learning according to training programmes intended for persons with a professional qualification as well as fixed-duration professional experience, and according to study programmes not leading to a degree (except residency);
- Level 6 qualifications are acquired by studying in cycle one of university or college studies and, in cases established by the Government of the Republic

of Lithuania or an institution authorised by it, according to study programmes not leading to a degree;

- Level 7 qualifications are acquired by studying in cycle two of university studies and, in cases established by the Government of the Republic of Lithuania or an institution authorised by it, according to integrated study programmes or study programmes not leading to a degree;
- Level 8 qualifications are acquired by taking doctoral studies.

It is also indicated that qualification of *any level* can be acquired by gaining professional experience or by independent study. It forms a legal basis for introducing mechanisms of recognition and legitimisation of learning outcomes of non-formal and informal learning through the entire scale of qualifications.

It is also noteworthy that the Description of LTQF indicates that in categorising the qualifications established in the Republic of Lithuania, qualifications for working and learning are differentiated. Qualifications for working in this case include qualifications where learning outcomes are oriented to a certain specific professional activity, and the main purpose of training in this case is to prepare a person for employment. For example, qualifications awarded in the vocational education and training sector belong to this group of qualifications. Meanwhile, qualifications for learning are considered to include the qualifications the main purpose of which is to prepare a person for further learning. Examples of such qualifications can be qualifications acquired upon completion of basic education or secondary education programmes.

The full text of the Description of the Lithuanian Qualifications Framework is given in Appendix 3.

3.3. Conformity of presently awarded qualifications with the LTQF

Drafting of the national qualifications framework was not aimed at creation of an essentially new hierarchical structure of qualifications. On the contrary, efforts were made for the prepared structure of the qualification levels to be related to the existing qualifications system as close as possible. In this section, examples of qualifications classified with various qualifications levels are given. For easier comparison, all examples of professional qualifications were taken from the same field of activity, i.e. construction.

Information on qualifications and programmes, according to which qualifications are awarded, is available in the AIKOS database at <http://www.aikos.smm.lt/aikos/qualifications.htm>. In case of vocational education and training, detailed programme descriptions are available at <http://www.kpmc.lt/programos.html> (in Lithuanian).

Level 1. This level of qualification in the Lithuanian Qualifications Framework is now meant, first of all, for individuals with learning difficulties. Its descriptor should be compared to the description of VET attainment level 1, which does not require any general education (see Table 1). Programmes of vocational education and training of this level are used in adult education, mainly for training of unemployed. *Painter's vocational training programme*, state code 162058203, can be an example of a programme leading to this level of qualification.

One can see that it is required to be able to perform several rather simple operations: to prepare surface for painting, to paint with non-aqueous paint and water-based paint and to wallpaper, also to acquire knowledge necessary for performance of these operations. The level of knowledge as well as of the qualification in this case is determined by a rather low general education.

Qualifications of this level are not awarded in the general education sector.

Table 3. Level 1. Painter's qualification

Certificate issued	Qualification certificate.
Education area (according to the ISCED)	Architecture and construction
Learning outcomes	A person with the painter's qualification: <ul style="list-style-type: none"> - is able to recognise construction painting materials, perform surface preparation work, select and match colour shades for premises, paint with non-aqueous paint and water-based paint, to wallpaper, calculate quantities of performed work and quantities of materials required to perform it; - knows surface preparation and painting technologies, requirements for safe performance of work.
Acquisition of qualification	Persons willing to pursue painter's qualification of this level need to have primary education completed. The qualification can be acquired in VET institutions by learning according to the <i>Painter's vocational training programme</i> , state code 162058203.
Employment and further learning	Upon acquiring the painter's qualification, a person can get employment in various construction companies and organisations performing painting, wallpapering works.
Award of qualification	The qualification is awarded by the vocational training provider, if the commission formed by the provider establishes during the examination that learning outcomes meet the programme requirements.

Level 2. In formulating this qualification level, orientation was made to the basic education provided in the general education system. The state code of the programme is 201001001.

Qualifications of this level are intended for further learning. In basic school pupils acquire some factual knowledge necessary for learning according to general education

or VET programmes under ISCED 3 level. Anticipated learning is not complicated, learning is supervised and, if needed, assisted by teachers, learning content is constant and predictable from the start. Thus, qualification confirming basic education is referenced to the LTQF level 2.

In the current formal education system VET qualifications of this level were not awarded.

Table 4. Level 2. Basic education

Certificate issued	Certificate of basic education.
Education area (according to the ISCED)	Main/general programmes
Learning outcomes	The certificate of basic education shows that the pupil has successfully completed the basic education programme (10 grades) and has acquired the basics of essential subject competences and general competences (knowing how to learn, communication, cognitive, personal, social, proactive and creativity competences) necessary for life, further learning and work that are described in the general programmes of basic education.
Acquisition of qualification	A pupil, having successfully completed the basic education programme (10 grades), is given a certificate of basic education, where evaluations of one's learning achievements are given.
Employment and further learning	The certificate of basic education grants the right to learn according to the secondary education programme, the VET programme, or the VET programme combined with the secondary education programme.
Award of qualification	Pupils who acquired basic education are issued certificates of basic education by the principal of the school under the procedure set by legal acts.

Level 3. In describing this level, orientation was made to the description of the second level of vocational education (see Table 1). The qualification of this level can be acquired learning both according to the programmes for adults and in the initial VET system. It should be noted that although the qualification of the same level is awarded, the learning outcomes in case of initial and adult learning programmes are markedly different. This, first of all, is caused by different objectives of learners who learn according to the given programmes. Adults usually come to learn seeking requalification. They usually have some qualification and working experience and want to adapt themselves to requirements for a certain job as quickly as possible. Meanwhile, initial vocational training programmes are chosen by young people who are only getting prepared for entering the labour market and want to have as wide choice in it as possible. The common character of both types of programmes is that basic education is an educational prerequisite.

Below is an example of qualification awarded in the adult learning system. The state code of the programme is 262058203.

Painter activities cover several specialised activity tasks, for example, preparation of various surfaces including facades and painting thereof, wallpapering. This corresponds to the requirements for qualifications under LTQF level 3. True, from the first sight, this is very similar to what is provided in the description of level 1 painter qualification. However, practical skills described in table 5 are based on broad knowledge of construction area covering both direct activities and adjacent activities. In addition, the ability to evaluate the quality of performed work and to eliminate defects is gained. The person trained for this qualification understands well the context of the activity and is able to work in rather large construction company team effectively and to accomplish tasks autonomously. Thus, the qualification described is attributed to the LTQF level 3. Qualifications of this level are not awarded in the general education sector.

Table 5. Level 3. Painter's qualification

Certificate issued	Qualification certificate.
Education area (according to the ISCED)	Architecture and construction
Learning outcomes	<p>A person with the painter's qualification:</p> <ul style="list-style-type: none"> - is able to prepare various surfaces for painting, wallpapering, to lute various surfaces with suitable putty, to prime various surfaces with suitable primer; to prepare various paint mixtures, glue, etc.; to paint plastered, brick, wooden, metal, plasterboard and other surfaces with water-based and non-aqueous paint with handheld and mechanical tools; to paint various facades with water-based and non-aqueous paint; to wallpaper various surfaces with various wallpaper; to assemble and disassemble scaffolding; to evaluate the quality of performed work; to eliminate defects; - knows main parts of buildings, their construction and purpose; properties, types, ways of using construction materials; requirements for surface preparation for decoration work; peculiarities of high-scaling work; the basics of colours; work safety and health requirements; - can concentrate one's attention well, is able to work responsibly, in an artistic way, to supervise other workers.
Acquisition of qualification	Persons willing to pursue painter's qualification of this level need to have basic education completed. The qualification can be acquired in VET institutions by learning according to the <i>Painter's vocational training programme, state code 262058203</i> .
Employment and further learning	Upon acquiring this qualification, persons can work as painters in various construction companies and organisations performing painting, wallpapering work or can start their own business.
Award of qualification	The qualification is awarded by the vocational training provider, if the commission formed by the provider establishes during the examination that learning outcomes meet the programme requirements.

Level 4. This level is a specific one as those who have reached it can start higher education studies. The main document confirming this right is a *Matura* attestation (school leaving certificate), which is acquired after proving that the person has achieved the learning outcomes formulated in the general programmes of secondary education. The learning qualification corresponding to the secondary education is described in Table 6. The state code of the programme is 301001001.

First of all, secondary education is oriented towards learning in higher education school. The subject knowledge provided is of rather high theoretical level and its range is wide: it covers languages, mathematics, natural sciences, social sciences, arts, technologies and other areas. This provides possibility to seek for very different higher level qualifications, i.e. a person who was awarded a *Matura* certificate is ready to learn and execute operations in broad areas of activity. This corresponds to requirements for complexity of activity under the LTQF level 4. The ability to learn independently and to take responsibility for own learning results correspond to the requirements for autonomy of activities whereas the ability to responsibly choose further learning path evidences that a person will be able to adapt to changes inevitable during study process. Qualifications for working are awarded at this level, too. They are awarded only in the initial vocational education and training system. An example is given in Table 7. The state code of the programme is 330058201.

It should be noted that level 4 qualification for working is awarded only in case a person has acquired secondary education.

Table 6. Level 4. Secondary education

Certificate issued	<i>Matura</i> attestation (school leaving certificate).
Education area (according to the ISCED)	Main/general programmes
Learning outcomes	After completion of secondary education programme, a person: <ul style="list-style-type: none"> - has acquired basic theoretical knowledge in a group of subjects and has learned to recognise reality by applying research methods in languages, mathematics, natural sciences, social sciences, arts, technologies and other areas; - has gained general competences: learning to learn, communication, cognition, social/ civic, sense of initiative, creativity, personal and cultural awareness; - is able to learn independently and to take responsibility for own learning results and to responsibly choose further learning path.
Acquisition of qualification	The <i>Matura</i> attestation (school leaving certificate) is given when the pupil has reached at least the satisfactory level of learning achievements on all subjects and has passed the compulsory school or state examination of the Lithuanian language and literature and one selected examination. Up to 5 examinations may be taken. The examination tasks are prepared in the centralised manner referring to <i>Matura</i> examination programmes approved by Minister of Education and Science. The secondary education is provided to pupils who have already acquired the basic education. The duration of the secondary education programme is two years. It consists of compulsory and optional subjects of general education and possible modules of VET programmes. Compulsory subjects of the general education make at least 60 percent of all the lessons to be taken by a pupil.
Employment and further learning	The <i>Matura</i> attestation (school leaving certificate) gives the right to access higher education.
Award of qualification	Students who acquired secondary education are issued school leaving certificates and their supplements by the principal of the school under the procedure set by legal acts.

Table 7. Level 4. Construction finisher's qualification

Certificate issued	Vocational training diploma.
Education area (according to the ISCED)	Architecture and construction
Learning outcomes	<p>A person with the construction finisher's qualification:</p> <ul style="list-style-type: none"> - is capable of selecting building materials, installing scaffolding, brick laying of simple constructions, processing wood with handheld tools, casting concrete base, reading blueprints, insulating a building with insulating boards, plastering with handheld and mechanical tools, laying tiles on horizontal and vertical surfaces, painting with handheld and mechanical tools, wallpapering, fixing plasterboards, mounting decoration panels and trimming profiles, working safely; - knows employees' safety and health requirements, rules for use of special working tools, the range and properties of building materials, workmanship evaluation criteria, the basics of the labour law; - can work responsibly, independently, can organise one's own work, efficiently communicate with colleagues and supervisors.
Acquisition of qualification	Persons willing to pursue the decorator's qualification of this level need either to have completed the basic education and simultaneously pursue the secondary education or get trained for the decorator's profession after getting the secondary education. In the first case the learning duration is 3 years, whereas in the second case it is 1 year. The qualification can be acquired in VET institutions by learning according to <i>Construction finisher training programmes</i> , state codes 330058201 and 440058201.
Employment and further learning	Upon acquiring the decorator's qualification, persons can work as construction finishers both inside and on construction sites as employees hired by companies performing building construction and repair works or can start their own business company. Upon acquiring working experience, they can supervise a team of builders in their work.
Award of qualification	The qualification is awarded by the vocational training provider if during the qualification examination organised by the Chamber of Industry, Commerce and Crafts a pupil demonstrates that his learning outcomes meet the programme requirements.

Construction finisher's qualification is attributed to the LTQF level 4 due to several reasons. Firstly, it covers actions and operations in relatively broad activity areas in construction - concrete pouring, bricklaying, plastering, painting, etc. Secondly, the qualification is based on general secondary education which creates conditions for effective application of factual and theoretical knowledge related to area of activity. Thirdly, broad range of knowledge and skills acquired enables autonomous and responsible performance of activities.

Level 5. Till 2004 qualifications of this level were awarded in vocational colleges. Currently, there are no qualifications of this level provided, although there is a demand for such level specialists following the labour force demand research. Therefore the pathways for the acquisition of this type of qualifications should appear when implementing the LTQF.

Level 6. Qualification degrees awarded in the first cycle of the higher education belong to this qualification level. They are of two types – professional bachelor's degree awarded by colleges and bachelor's degree awarded by universities. Tables 8 and 9 give example descriptions of the mentioned qualification degrees.

Table 8. Level 6. Professional bachelor's degree in civil engineering

Certificate issued	Professional bachelor's diploma.
Education area (according to the ISCED)	Architecture and construction
Learning outcomes	<p>A person having acquired the professional bachelor's degree in civil engineer must (Civil Engineering programme, state code 65302T101):</p> <ul style="list-style-type: none"> - be capable of analysing and selecting construction solutions for structures, constructional and computational schemes, developing the constructional part of a building blueprint, selecting building materials following requirements for buildings, preparing expense estimates, selection and application of building works technologies or building works technological cards, evaluation, analysis and preparation of documentation needed for the start and completion of building works, engineering of a building site, planning and organization of safety measures and environmental protection on the building site, selecting and applying technologies for repair works, organising a repair process, organising the activities of (a unit of) a construction company, supervising a team in their work; - know requirements for buildings, cultural heritage of real estate subject to protection, the specifics of technologies for installation of engineering systems for buildings under construction, safety and environmental protection rules; - be capable of solving professional and social problems, efficiently communicating with employees and business partners, working responsibly, diligently, independently and quickly, organising one's own and other people's work.
Acquisition of qualification	The professional bachelor's qualification degree in civil engineering can be acquired in colleges providing studies according to the construction programme. The duration of studies is 3 years. Persons willing to pursue the professional bachelor's qualification degree in civil engineering need to have completed secondary education.
Employment and further learning	<p>Upon acquiring the professional bachelor's qualification degree in civil engineering, persons can work as construction managers, masters, designers, drafters of expense estimates in various fields of civil engineering or can design building structures in construction organisations and design bureaus.</p> <p>Upon acquiring this qualification, a person can continue studying by choosing master degree studies if the requirements set by a higher education institution are satisfied.</p>
Award of qualification	College having the right to award this qualification

Table 9. Level 6. Bachelor's degree in civil engineering

Certificate issued	Bachelor's diploma.
Education area (according to the ISCED)	Architecture and construction
Learning outcomes	<p>A person having acquired the bachelor's qualification degree in civil engineering must (Civil Engineering programme, state code 61202T107):</p> <ul style="list-style-type: none"> - be capable of analysing design and construction documentation of buildings and structures, comparing and assessing reliable technical solutions, disposing of information necessary for designing of buildings, applying new software for designing of building structures, managing building designing processes, organising building construction processes, selecting rational building construction technologies, managing building construction supervision processes, rationally using and consuming constructions materials and energy resources, decreasing labour expenses, performing qualitative evaluation of construction works, investigating condition of buildings and their structures, implementing environmental protection projects, ensuring fire prevention, civil and work safety and health; - know state-of-the-art solutions for building structures and construction articles, the latest software for their computation, effective building construction technologies, requirements applicable to them, legal documents applicable to construction in the European Union and Lithuania, requirements for environmental and work safety, the basics of ergonomics; - be capable of thinking analytically, working independently, responsibly, diligently and quickly, organising one's own work, efficiently communicating with colleagues and specialists of similar fields.

Acquisition of qualification	The bachelor's qualification degree in civil engineering can be acquired in universities providing studies according to the civil engineering studies programme. The duration of studies is 4 years. Persons willing to pursue the bachelor's qualification degree in civil engineering need to have secondary education completed.
Employment and further learning	Upon acquiring the bachelor's qualification degree in civil engineering, persons can work as designers, construction managers in construction organisations and firms, construction designing firms, construction supervision institutions, city and district municipalities, scientific research institutions. Upon acquiring this qualification, a person can continue studying by choosing master degree studies if the requirements set by a higher education institution are satisfied.
Award of qualification	University having the right to award this qualification

The comparison of learning outcomes in tables 8 and 9 suggests that anticipated activity is complex in both cases. It covers design of constructions, selecting rational building construction technologies, organising building/ reconstruction processes, etc. Mastering the latest knowledge about construction materials and renewable construction technologies is necessary in order to perform this activity effectively. In addition, skills to plan own and subordinate employees activity, assess quality of works performed are acquired. A clear difference between professional bachelor's degree in civil

engineering and bachelor's degree in civil engineering is the fact that the first qualification is more focused on introduction of innovations in building sites, whereas the second qualification is more focused on design of buildings. Despite some differences observed, both qualifications described in tables 8 and 9 are to be referenced to the LTQF level 6.

Level 7. Qualification degrees awarded in the second cycle of the higher education belong to this qualification level.

Table 10. Level 7. Master's degree in civil engineering

Certificate issued	Master's diploma.
Education area (according to the ISCED)	Architecture and construction
Learning outcomes	A person having acquired the master's qualification degree in civil engineering (according to the architectural engineering branch) must (Civil Engineering programme, state code 62402T108): - be capable of evaluating the need for scientific research in the field of construction, planning it, selecting suitable research methods, performing research and, by use of information technologies, analysis, synthesis, systematisation, experiment and other methods of scientific research, obtaining and assessing results, modelling the architectural planned and constructional framework of structures, matching the artistic expression of structures and the effectiveness of the structure of constructions, computing bearing constructions of structures, assessing energy efficiency of structures, seeking for connections between architecture and engineering in designing of structures, advising construction contractors and clients in building complex structures of public and manufacturing purpose and performing such projects; - know tendencies in sciences of construction and architecture, the trends of development of architecture and constructions of structures, the state-of-the-art materials and their application technologies; - be capable of working responsibly, diligently, independently, organising one's own and colleagues' work, efficiently communicating with colleagues and clients.
Award of qualification	The master's qualification degree in civil engineering can be acquired in universities providing studies according to the civil engineering study programme. The duration of studies is 2 years. Persons willing to pursue the master's qualification degree in civil engineering (according to the architectural engineering branch) need to have the bachelor's qualification degree.

Employment and further learning	Upon acquiring the master's qualification degree in civil engineering (according to the architectural engineering branch), persons can work as civil engineering specialists in construction designing, construction work, structures technical maintenance companies, consultancy and expert examination firms, state agencies. Upon acquiring this qualification, one can choose to undertake doctoral studies.
Award of qualification	University having the right to award this qualification

It is obvious that requirements for learning outcomes presented in the above table correspond to the essential requirements legitimated in LTQF level 7 descriptor. Firstly, the activity for which a person is prepared consists of several interconnected tasks that cover two related professional activity areas, namely, construction and architecture.

Secondly, the abilities for expert evaluation and conducting applied research are acquired. Thirdly, the ability to improve the activity is developed when coordinating artistic expression of buildings and effectiveness of constructions, assessing energy efficiency of buildings, and searching for architectural and engineering coherence.

Level 8. Doctor of Science degree

Table 11. Level 8 Doctor of Science degree

Certificate issued	Doctor of Science diploma.
Education area (according to the ISCED)	
Learning outcomes	A person having acquired the Doctor of Science degree must be capable of carrying out scientific research and works of experimental (social, cultural) development and solving scientific problems independently. Doctoral studies give wide competence to a person that completed them and acquired the Doctor of Science degree: the most advanced knowledge in the research and neighbouring fields, their interaction; specialised abilities and methods for solving problems of scientific research and for increasing one's knowledge or professional practice; ability to work independently, science and professional know-how for generation of new ideas, creation of new processes and using them in studies and other activities.
Acquisition of qualification	Persons who have completed the doctoral studies and defended a doctoral thesis are awarded the Doctor of Science degree and given a Doctor's diploma. Persons are admitted to doctoral studies by way of an open competition under the procedure provided for in the regulations of doctoral studies. Persons having the master's qualification degree or equivalent higher education can participate in such competition.
Employment and further learning	Persons having completed doctoral studies can get employed and further develop their abilities in fields of scientific research and academic activities, pursue a scientific and academic career.
Award of qualification	University having the right to award this qualification

4. Referencing the LTQF to the EQF

4.1. Referencing process

The Qualifications and VET Development Centre (hereinafter referred to as “the QVETDC”), which is responsible for the implementation of the National Coordination Point functions, has been authorised by the Ministry of Education and Science to arrange the reference of the national qualifications system to the EQF. The implementation of the process commenced in 2010, when the European Commission announced its support for the European countries that aim to link their qualifications systems with the EQF and a corresponding project was launched in May.

Based on the practice of countries that had already implemented the referencing (Ireland, the United Kingdom, Malta), the process started by performing two studies, the goal of which was to accumulate the background material for the referencing process:

- performing a detailed comparison of the requirements for learning outcomes as formulated in general education, VET and higher education programmes against EQF level descriptors with the purpose to determine which EQF levels qualifications provided in Lithuania should be related to;
- performing a detailed analysis of the status of quality assurance in all sectors of Lithuanian education system with the aim to establish the extent to which it corresponds with the key European principles and guidelines as indicated in appendix 3 of the Recommendation.

Two independent consultants, who have not previously participated in the drafting of the Lithuanian qualifications framework, have been commissioned to carry out the research.

The activity was coordinated by the ad hoc Steering group including representatives of the QVETDC, the National School Assessment Agency and the Centre for Quality Assessment in Higher Education and three independent Lithuanian experts, each one representing higher education, VET and business sector.

Three international experts from Estonia, the United Kingdom and Finland were invited to monitor the referencing process.

To ensure high quality of reports, the researchers were consulting with Lithuanian and foreign experts.

Initially, consultants drew up preliminary research reports in Lithuanian. These were reviewed by the Lithuanian experts from the Steering group and the researchers presented them at the Steering group meeting attended by international experts.

Subsequently, the reports were amended with regard to the Lithuanian experts’ written comments and the verbal observations made at the Steering group meeting. The amended reports were then sent for Lithuanian experts’ re-evaluation. They were also translated into English and forwarded to the international experts who presented their written responses. The reports were also discussed at the Steering group meeting, attended by the international experts, and introduced at the national conference on reference results *“Links between Lithuanian and European Qualifications Frameworks”*. A wide range of stakeholders attended the conference. Discussions and workshops served as the platform for conference participants to voice their remarks.

The Management group held four sittings, the progress of the referencing process was twice discussed with the officials of the Ministry of Education and Science, and the results of the referencing process were presented and discussed at the Central Professional committee.

The final versions of the reports were prepared taking into account comments submitted by international experts, repeated remarks obtained from Lithuanian experts, conference participants and other sources. The reports are available at QVETDC’s website http://www.kpmc.lt/LTKS_EKS/LTQF_EQF.html.

A preliminary report on the *Referencing the Lithuanian Qualifications Framework referencing to the EQF* was drafted.

This marked the completion of the first phase in referencing the Lithuanian Qualifications Framework to the EQF, which led to the amendment of the LTQF description as specified in section 3 of this report. It was followed by the final stage of referencing the LTQF to the EQF. The following steps have been completed:

- employment of the *best fit* method made it possible to ascertain that the referencing of the Lithuanian Qualifications Framework to the EQF may be based on the comparison of LTQF and EQF qualification level descriptors;
- the report on *Referencing the Lithuanian qualifications framework to European Qualifications Framework for Lifelong Learning and Qualifications Framework for the European Higher Education Area* has been drafted through *respective* amendment of its preliminary version;
- consultations via e-mail have been made with concerned institutions;
- regional consultations with stakeholders have been organised;
- the report has been endorsed by the Central Professional Committee;
- awareness on the referencing process has been raised across Lithuania as part of the Adult Education Week campaign.

4.2. Referencing criteria

The primary objective of the referencing process is to link national qualifications systems with the EQF in a way that would make the EQF a medium of communication in the comparison and recognition of qualifications provided in different countries. To ensure that the referencing process is smooth and the referencing reports drafted by different countries are comparable, the EQF advisory group outlined the following 10 referencing criteria and procedures:

1. The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.

2. There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.
3. The national qualifications framework or system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.
4. The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.
5. The national quality assurance system(s) for education and training refer(s) to the national qualifications framework or system and are consistent with the relevant European principles and guidelines (as indicated in appendix 3 of the Recommendation).
6. The referencing process shall include the stated agreement of the relevant quality assurance bodies.
7. The referencing process shall involve international experts.
8. The competent national body or bodies shall certify the referencing of the national qualifications framework or system with the EQF. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies, including the National Coordination Point, and shall address separately each of the criteria.
9. The official EQF platform shall maintain a public listing of member states that have confirmed that they have completed the referencing process, including links to completed referencing reports.
10. Following the referencing process, and in line with the timelines set in the Recommendation, all new qualification certificates, diplomas and Europass documents issued by the competent authorities shall contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.

Answers to all of the aforementioned 10 referencing criteria are presented in this chapter of the report.

4.3. Criterion 1

The responsibilities and/or legal competence of all relevant national bodies involved in the referencing process, including the National Coordination Point, are clearly determined and published by the competent public authorities.

The referencing process involves the following national bodies:

- National Coordination Point;
- national institutions responsible for quality assurance in different education sectors;
- Central Professional Committee.

National Coordination Point (NCP). The Ministry of Education and Science has authorised the QVETDC to implement functions of NCP as the institution's activity is focused on *"assuring Lithuanian Qualifications System's development in accordance with economy needs as well as national and international initiatives"*. The QVETDC is the chief institution responsible for the arrangement of the referencing process. It is also the national body that assists in the implementation of the national policy for the quality assurance in vocational education training sector. The responsibility and functions of the QVETDC are regulated by the provisions of its statute, approved by the Order of Minister of Education and Science No. 2849 of December 31 2009.

Centre for Quality Assessment in Higher Education (CQAHE) is the national body that promotes the quality assurance in the higher education sector, assesses and recognises higher education qualifications acquired in foreign countries. CQAHE activity is regulated by the Law on Science and Study (Article 17) and the *Statute of the Centre for Quality Assessment in Higher Education*, approved by the order of Minister of Education and Science No. 1476 of July 10 2009. International experts group established by the European Association for Quality Assurance in Higher Education (ENQA) visited CQAHE on March 14-15 2012. The experts group foresees to publicise their evaluation conclusions in 2

months. The positive evaluation result would enable CQAHE to become an equal ENQA member.

National School Assessment Agency (NSAA) is the national body that promotes the quality assurance in general education sector. Its functions are described in the NSAA provisions, approved by the Order of Minister of Education and Science No. 1671 of August 6 2009.

Central Professional Committee (CPC) is a collegial, cooperation-based advisory body that coordinates strategic issues pertaining to the development of the qualifications system. The CPC has been established under the Law on Vocational Education and Training (Article 10, paragraph 3). Its membership is based on a tripartite principle and one of its functions, as referred to in the *Description of Objectives, Functions, Committee Establishment and Financing Rules for Qualifications Management Institution's Central and Sectoral Professional Committees*, approved by the Order of Minister of Education and Science No. V-1909 of October 29 2010, is to advise the Qualifications Management Institution, the functions of which are performed by the QVETDC, on linking national qualifications with the European Qualifications Framework. Principles for composing CPC and their main functions are described in more detail in section 2.1. The list of CPC members is provided in appendix 4.

4.4. Criterion 2

There is a clear and demonstrable link between the qualifications levels in the national qualifications framework or system and the level descriptors of the European Qualifications Framework.

The QVETDC has invited an independent consultant to identify the links between the Lithuanian Qualifications Framework (hereinafter referred to as "the LTQF") and the EQF. Since the LTQF was adopted on 4 May 2010 and is in its early stage of implementation, the initial goal was to verify that the LTQF is based on Lithuanian vocational education and training practice and qualifications currently provided. Subsequently, a comprehensive com-

parison of the LTQF and the EQF level descriptors was carried out, which revealed that qualifications acquired in Lithuania and classified under a specific LTQF level can be adequately and reliably referenced to certain EQF qualification level regardless of the differences in the nature of LTQF and EQF level descriptors. Three reviewers, representing higher education, VET and business sectors, have contributed to ensure the quality of the research conducted. Results of the analysis have been discussed at the Management Group meetings.

4.4.1. Referencing methodology

The methodology of the research for referencing the LTQF to the EQF consists of the following components:

- general comparison of the frameworks, taking into consideration the differences in their mission, objectives, and the context they are used in. Such a comparison is provided in section 3.2.
 - the assumption that in the comparison of both frameworks, learning outcomes defined in terms of knowledge, skills and competence as they are formulated in the EQF level descriptors are considered the basis. Correspondence is established by conducting a comprehensive expert analysis of the LTQF and extracting knowledge, skills and competence from a corresponding LTQF level descriptor and comparing them against the EQF level descriptors. For example, knowledge, skills and competence for LTQF level 3 are extracted in the following way:
- When extracting knowledge, it is aimed to describe the level of knowledge, its purpose and range. When extracting skills, cognitive and practical skills, their level and range are described. When extracting competence, autonomy and responsibility together with requirements for learning to learn are described. The latter are reflected within LTQF by variability of activity and its context.
 - comparative analysis is intended to show which of the EQF levels should each of the LTQF levels be attributed to. A match is identified by comparing the corresponding LTQF level descriptor with three contiguous EQF level descriptors. Analysis is performed in three stages:
 - assessing the extent to which requirements in each of the levels in comparison correspond with regard to knowledge, skills and competence taken individually;
 - establishing the degree of correspondence between the LTQF and the EQF levels in comparison by evaluating level descriptors as an integral unity of learning outcomes;
 - identifying which EQF level should the LTQF level qualification concerned be attributed to by applying the *best fit* principle.

Original	Divided into knowledge, skills, and competence
<p>The qualification is intended for activities consisting of actions and operations in narrow areas of activities. The activities may include several or more specialised activity tasks that require the application of well-known and tested solutions. Performance of the activities involves the ability to apply the knowledge characteristic of the activities performed pertaining to the facts, principles and processes of the activity area.</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>The activity environment may require the ability to adapt to simple context changes.</p>	Knowledge
	<p>Knowledge of facts, principles and processes. Fields of activity are narrow but may include several specialised activity tasks.</p>
	Skills
	<p>Ability to apply the knowledge and perform actions and operations characteristic of the field of activity, related with several specialised activity tasks that require the application of well-known and tested solutions.</p>
Competence	
<p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p>	
<p>In case of changes of the activity environment is able to adapt to simple context changes.</p>	

For illustration of these three stages of analysis, an example concerning decision to which EQF level LTQF level 3 should be attributed is provided below.

Comparison of the LTQF level descriptors with the EQF level 2, 3, and 4 descriptors

LTQF level 3 descriptor		EQF level 2 descriptor	Comparison of the requirements for knowledge, skills, and competence	General conclusion regarding the referencing of the LTQF level 3 to the EQF level 2
Original	Divided into knowledge, skills, and competence			
<p>The qualification is intended for activities consisting of actions and operations in narrow areas of activities. The activities may include several or more specialised activity tasks that require the application of well-known and tested solutions. Performance of the activities involves the ability to apply the knowledge characteristic of the activities performed pertaining to the facts, principles and processes of the activity area.</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>The activity environment may require the ability to adapt to simple context changes.</p>	<p>Knowledge</p> <p>Knowledge of facts, principles and processes. Fields of activity are narrow but may include several specialised activity tasks.</p>	<p>Knowledge</p> <p>Basic factual knowledge of a field of work or study.</p>	<p>Both descriptors compared make reference to the factual knowledge required for planned activity, while the LTQF level 3 also requires acquisition of knowledge about activity-characteristic principles and processes. In addition, in the EQF level 2 descriptor, it is pointed out that the basic knowledge is acquired in the field of work or learning, while no such limitation is mentioned in the LTQF level 3 descriptor, which shows that the LTQF level 3 raises higher requirements for the level of knowledge. The descriptor of the LTQF level 3 mentions that fields of activities are narrow. Thereby, it is stressed that activities or further learning are expected to require academically-oriented knowledge or relatively narrowly specialised professional activities without broader range of professional knowledge. In general, the comparison of the LTQF level 3 and the EQF level 2 shows that higher knowledge requirements are raised by the LTQF level 3.</p>	<p>Comparing the requirements that LTQF level 3 and the EQF level 2 raise for the constituents of learning outcome (knowledge, skills, and competence), it can be stated that across all of the constituents in the LTQF level 3 the requirements are higher than those in the EQF level 2. However, it must be recognised that differences are not strongly expressed.</p>
	<p>Skills</p> <p>Ability to apply the knowledge and perform actions and operations characteristic of the field of activity, related with several specialised activity tasks that require the application of well-known and tested solutions.</p>	<p>Skills</p> <p>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.</p>		

LTQF level 3 descriptor		EQF level 3 descriptor	Comparison of the requirements for knowledge, skills, and competence	General conclusion regarding the referencing of the LTQF level 3 to the EQF level 3
Original	Divided into knowledge, skills, and competence			
<p>The qualification is intended for activities consisting of actions and operations in narrow areas of activities. The activities may include several or more specialised activity tasks that require the application of well-known and tested solutions. Performance of the activities involves the ability to apply the knowledge characteristic of the activities performed pertaining to the facts, principles and processes of the activity area.</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>The activity environment may require the ability to adapt to simple context changes.</p>	<p>Knowledge</p> <p>Knowledge of facts, principles, and processes of the activities performed. Fields of activities are narrow but may include several specialised tasks.</p>	<p>Knowledge</p> <p>Knowledge of facts, principles, processes and general concepts, in a field of work or study.</p>	<p>Knowledge</p> <p>Both frameworks make reference to the acquisition of knowledge about facts, principles, and processes of the field of activities. The EQF descriptor includes an additional requirement for knowledge of general work or learning concepts. In case of the LTQF, it can only be inferred that the requirement for being able to perform activity tasks autonomously is linked with the knowledge of the general work or learning concepts. Hence, it may be concluded that the requirements for LTQF level of knowledge is partly lower than those of the EQF.</p>	<p>Comparison of the requirements that LTQF level 3 and the EQF level 3 raise for the constituents of learning outcome (knowledge, skills, and competence), shows no essential variance that would prevent referencing the LTQF level 3 to the EQF level 3.</p>
	<p>Skills</p> <p>Ability to apply the knowledge and perform actions and operations characteristic of the field of activities, related with several specialised activity tasks that require the application of well-known and tested solutions.</p>	<p>Skills</p> <p>A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.</p>	<p>Skills</p> <p>The EQF makes reference to the range of cognitive and practical skills that allow performing tasks and solving problems, thus stressing the extensive scope of skills. The LTQF, in the meantime, points out that „activities may include several or more tasks.“ The absence of the reference to problem solving in the LTQF may be explained by the inclusion of such requirements in the descriptor of level 2 qualification. Moreover, activity tasks in the LTQF are of similar complexity as tasks and problems mentioned in the EQF. Such claim is validated by the LTQF requirement to apply well-known and tested solutions when handling such tasks and the EQF requires the ability of performing tasks and solving problems through the application of basic methods. It can be concluded that skill requirements are similar.</p>	

LTQF level 3 descriptor		EQF level 4 descriptor	Comparison of the requirements for knowledge, skills, and competence	General conclusion regarding the referencing of the LTQF level 3 to the EQF level 4
Original	Divided into knowledge, skills, and competence			
<p>Competence</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>In case of changes of the activity environment is able to adapt to simple context changes.</p>		<p>Competence</p> <p>Take responsibility for completion of tasks in work or study; adapt own behaviour to circumstances in solving problems.</p>	<p>Competence</p> <p>The LTQF states that a person who obtains level 3 qualification is ready to perform activities autonomously. This is closely related to the EQF statement that a person takes responsibility for the performance of tasks. Such a statement should not be essentially influenced by the LTQF reference to leadership and external activity performance quality control. Requirements for a person to be „able to adapt to simple context changes“ (LTQF) and the ability to “adapt own behaviour to circumstances in solving problems“ (EQF) should be considered of equal value, too. The aforementioned comparison shows that LTQF level 3 and EQF level 3 competence requirements are similar.</p>	
<p>The qualification is intended for activities consisting of actions and operations in narrow areas of activities. The activities may include several or more specialised activity tasks that require the application of well-known and tested solutions. Performance of the activities involves the ability to apply the knowledge characteristic of the activities performed pertaining to the facts, principles and processes of the activity area.</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>The activity environment may require the ability to adapt to simple context changes.</p>	<p>Knowledge</p> <p>Knowledge of facts, principles, and processes of the activities performed. Fields of activities are narrow but may include several specialised tasks.</p>	<p>Knowledge</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study.</p>	<p>Knowledge</p> <p>The EQF level 4 descriptor includes two essential aspects: the broad context of activities and theoretical level. The LTQF 3, meanwhile, indicates narrow fields of activities and no requirement for theoretical level of these. Hence, knowledge requirements in the LTQF level 3 are lower than those of the EQF level 4.</p>	<p>Comparison of the requirements that LTQF level 3 and the EQF level 4 raise for the constituents of learning outcome (knowledge, skills, and competence), suggests that across all of the constituents the requirements in the descriptor of the EQF level 4 are clearly higher than those in the descriptor of the LTQF level 3.</p>
	<p>Skills</p> <p>Ability to apply the knowledge and perform actions and operations characteristic of the field of activities, related with several specialised activity tasks that require the application of well-known and tested solutions.</p>	<p>Skills</p> <p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.</p>	<p>Skills</p> <p>Cognitive and practical skills, necessary for the solution of specialised tasks through the application of well-known and tested solutions, need to be acquired to fulfil the LTQF level 3 requirements. On the other hand, the EQF requires that a person who obtains level 4 qualification would be able to handle specific problems, i.e. problems, the solutions of which are not always tested or known. This essentially constitutes higher requirements.</p>	
	<p>Competence</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>In case of changes of the activity environment is able to adapt to simple context changes.</p>	<p>Competence</p> <p>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.</p>	<p>Competence</p> <p>The EQF level 3 qualification means the person is ready to autonomously perform tasks formulated by the authorised higher qualification employee. Meanwhile, the EQF level 4 requires not only autonomous work but also the supervision of the work performed by others, taking responsibility for the evaluation of work performed. In addition, one must be ready to work under circumstances of varying, although often predictable, environment rather than merely adapting to simple context changes as required by the LTQF level 3 descriptor. This shows that the competence requirements as stated in the EQF level 4 are higher than those of the LTQF level 3.</p>	

General conclusion of the LTQF level 3 referencing to the EQF. Comparison of the LTQF level 3 descriptor with the EQF level 2, 3, and 4 descriptors suggests that since the LTQF level 3 requirements for learning outcomes are remarkably higher than those of the EQF level 2 and clearly below the EQF level 4, they

are closest to the EQF level 3 requirements. Therefore, based on the best-fit principle, the LTQF level 3 is recommended to be referenced to the EQF level 3.

Next, this section demonstrates the correspondence between the LTQF and the EQF level descriptors based on *best fit* method.

4.4.2. Comparison of the LTQF and the EQF descriptors best fit levels

LTQF level 1

LTQF level 1 descriptor		EQF level 1 descriptor
Original	Divided into knowledge, skills and competence	
<p>The qualification is intended for activities consisting of one or several simple specialised actions or operations. The activities require the ability to apply basic knowledge characteristic of the activities performed.</p> <p>The environment of the activities is clear, the activities are performed in line with detailed instructions, some cases require intensive supervision, guidance and assistance.</p> <p>The situations, actions and operations constituting the activities are regular and constantly repetitive.</p>	<p>Knowledge</p> <p>Basic knowledge of a field of work.</p>	<p>Knowledge</p> <p>Basic general knowledge.</p>
	<p>Skills</p> <p>The performance is based on applying basic knowledge and carrying out actions and operations characteristic of the activities performed. The situations, actions and operations constituting the activities are regular and constantly repetitive.</p>	<p>Skills</p> <p>Basic skills required to carry out simple tasks.</p>
	<p>Competence</p> <p>The activities are based on detailed instructions; some cases require intensive supervision, guidance and assistance.</p>	<p>Competence</p> <p>Work or study under direct supervision of a qualified person in a structured context.</p>

According to the LTQF, an individual who has acquired level 1 qualification can perform activity consisting of one or several simple actions or operations. Under the EQF, this level of qualification is attributed to the performance of simple tasks. Hence, both frameworks imply a fairly simple activity.

The direct comparison of knowledge requirements laid down in LTQF 1 and EQF level descriptors is encumbered by linguistic differences. Following the logic of knowledge requirements and moving up the EQF level ladder it can be assumed that the concept of '*basic general knowledge*' used in the descriptor of the level of knowledge suggests that the knowledge is of a generalising nature and may be linked both to professional activity and to learning. In the Lithuanian education terminology, the concept of '*basic general knowledge*' is used to refer to knowledge acquired after completing a 10-year general

education programme. For this reason the LTQF level 1 descriptor omits the word "*general*" and the specification of the level of knowledge in terms of cognition refers to the activity performed, which is comparatively simple.

Skill requirements as represented by the LTQF are slightly broader as they include the ability of applying the knowledge acquired and the practical skills necessary to perform the actions and operations required. However, the skills acquired in general are elementary because situations, actions and operations that constitute activity are simple, regular and repetitive. In EQF skills are described very concisely by simply indicating that they are elementary.

Competence is similar in both frameworks: in both cases, supervision is required and the LTQF reference on activities being based on detailed instructions, actually correspond to the EQF provision stating that the

individual is ready to work in a structured context. True, it might seem at first that the LTQF reference about occasionally required intensive supervision indicates greater independence as compared to the EQF, which states that work is performed “under direct supervision of other person”. In fact, the LTQF citation reflects the peculiarity of the introduction of qualifications level 1 in

Lithuania: in the initial version it was intended for individuals with learning difficulties.

In general, comparison of descriptors of level 1 of the LTQF and the EQF leads to the conclusion that qualifications requirements are congruous and that LTQF level 1 qualification certificates should contain reference to EQF level 1.

LTQF level 2

LTQF level 2 descriptor		EQF level 2 descriptor
Original	Divided into knowledge, skills and competence	
<p>The qualification covers the activities consisting of actions and operations intended to solve simple problems. The activities performed require the application of the main factual knowledge characteristic of the activities.</p> <p>The activities performed require supervision, guidance and assistance. The activities and operations constituting the activities are regular.</p>	Knowledge	Knowledge
	Main factual knowledge of activities.	Basic factual knowledge of a field of work or study.
	Skills	Skills
	Capacity of applying basic factual knowledge characteristic of the activities. Practical skills required to carrying out actions and operations intended to solve simple problems.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple materials and information.
	Competence	Competence
	Activities performed require supervision, guidance and assistance of other person. The activities and operations needed to perform are regular.	Work or study under supervision with some autonomy.

In the comparison of the LTQF and the EQF level 2 descriptors it must be stressed first that the qualification corresponding to LTQF level 2 is intended for individuals qualified to “solve simple problems”, while EQF level 2 makes reference to “routine problem” solving. On the one hand, this shows the transition to higher level qualification requirements, i.e. from simple task performance to problem solution. On the other hand, given the proximity of concepts “simple problem” and “routine problem”, a close correlation between requirements for learning outcomes formulated in LTQF 2 and EQF 2 level descriptors could be expected

The comparison of knowledge requirements in the LTQF and the EQF level descriptors exhibits good correspondence between the two: in both cases, basic factual knowledge in the field of activities performed is stressed. The use of the word “factual” is namely the indicator of a new level of knowledge: boundaries of basic knowledge are expanded to specific knowledge characteristic of activities performed.

Both LTQF and EQF descriptors mention cognitive and practical skills but certain differences are observed. LTQF directly states that the qualification requires application of basic factual knowledge characteristic of the activities and practical skills are required to carry out actions and operations intended to solve simple problems. Meanwhile, EQF skill requirements are presented in a more general sense. The descriptor indicates general 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.

Both frameworks provide that an individual granted level 2 qualification performs work with the supervision of another person but as regards requirements for competence, it must be admitted that in the case of EQF higher requirements may be envisaged as opposed to LTQF. In fact, EQF points out that despite supervision, the person may work with some autonomy, while the LTQF makes no reference to independent activity.

LTQF level 3

LTQF level 3 descriptor		EQF level 3 descriptor
Original	Divided into knowledge, skills and competence	
<p>The qualification is intended for activities consisting of actions and operations in narrow areas of activities. The activities may include several or more specialised activity tasks that require the application of well-known and tested solutions. Performance of the activities involves the ability to apply the knowledge characteristic of the activities performed pertaining to the facts, principles and processes of the activity area.</p> <p>The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control.</p> <p>The activity environment may require the ability to adapt to simple context changes.</p>	Knowledge	Knowledge
	Knowledge of facts, principles and processes. Fields of activity are narrow but may include several specialised activity tasks.	Knowledge of facts, principles, processes and general concepts in a field of work or study.
	Skills	Skills
	Ability to apply the knowledge and perform actions and operations characteristic of the field of activity, related with several specialised activity tasks that require application of well-known and tested solutions.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.
	Competence	Competence
	The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control. In case of changes of the activity environment is able to adapt to simple context changes.	Take responsibility for completion of tasks in work or study; Adapt own behaviour to circumstances in solving problems.

Level 3 qualification is not restricted to simple problem solution. In this case, activity may cover several specialised activity tasks, related to different areas of activity. Basic cognitive and practical skills are no longer sufficient and a full range of cognitive and practical skills, as well as autonomous activity and responsibility for completion of tasks, are required. Mainly these learning outcome requirements place level 3 qualifications above level 2.

Both frameworks indicate knowledge of the facts, principles and processes of the activity area. In addition, EQF mentions knowledge of the general concepts in a field of work or study. In case of LTQF, it can only be inferred that the requirement on performing activities autonomously pertains to the knowledge of the general concepts in the area of activity. It can be thus concluded that LTQF knowledge requirements are lower than those laid down in the EQF.

As concerns the comparison of skills, two aspects must be mentioned. First, the EQF refers to the range of cognitive and practical skills that enables accomplishing tasks and solving problems, thus underscoring

the abundance of skills. In the LTQF this is done by stating that “activities may include several or more tasks.” The fact that the LTQF does not mention problem solving might be due to it already being reflected in the descriptor of level 2 qualification. Second, activity tasks mentioned in the LTQF, and tasks and problems indicated in the EQF are of similar complexity. Such statement rests on the fact that tasks mentioned in the LTQF require the ability of applying well-known and tested solutions, whereas the EQF points out the requirement to be able to complete tasks and solve problems by applying basic methods.

Comparison of competence descriptors shows that autonomous activity provided by LTQF level 3 qualifications may be compared to EQF statement that the person takes responsibility for completion of tasks. This holds regardless of LTQF reference to external performance quality control. Requirements to “adapt to simple context changes” (LTQF) should be also viewed on a par with the competence of solving problems by “adapting own behaviour to circumstances” (EQF).

Since the comparison of the LTQF and the EQF level 3 descriptors did not demonstrate essential differences in

the learning outcome requirements formulated herein, it is assumed that LTQF level 3 may be related to EQF level 3.

LTQF level 4

LTQF level 4 descriptor		EQF level 4 descriptor
Original	Divided into knowledge, skills and competence	
<p>The qualification is intended for activities consisting of actions and operations in relatively broad areas of activity. The activities are performed by carrying out several or more specialised activity tasks, solutions to which are not always tested or known. Performance of the activities involves the ability to apply factual and theoretical knowledge characteristic of a broad context related to the activity areas. The activities are performed autonomously, assuming the responsibility for the quality of the procedures and outcomes of performance. With the acquisition of experience, the qualification allows the transfer of practical skills to the staff of lower qualifications as well as supervision of their activities. The activity environment requires the ability to adapt to the developments predetermined by the context change, which is normally foreseeable.</p>	<p>Knowledge</p> <p>Ability to apply factual and theoretical knowledge characteristic of a broad context related to the activity areas. Activities consist of actions and operations in relatively broad areas of activity.</p>	<p>Knowledge</p> <p>Factual and theoretical knowledge in broad contexts within a field of work or study.</p>
	<p>Skills</p> <p>The ability to apply practical and theoretical knowledge characteristic of a broad context. Practical skills are acquired to handle several specialised activity tasks in relatively broad areas of activity. Task solutions are not always known.</p>	<p>Skills</p> <p>A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study.</p>
	<p>Competence</p> <p>Autonomously, assuming the responsibility for the quality of the procedures and outcomes of performance. The individual acquires initial competence of transferring practical skills to other and supervising their activities. The activity environment requires the ability to adapt to the developments predetermined by the context change.</p>	<p>Competence</p> <p>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.</p>

Broad range of activity contexts with possible changes in environment, the requirement for theoretical background of knowledge acquired, readiness to supervise activity of other employees position this level of qualification hierarchically above level 3.

In both frameworks knowledge requirements are almost identical, comprising factual and theoretical knowledge of a broad context. The LTQF descriptor possibly provides more information about the possible context for the area of activity.

Skill requirements in EQF level 4, just like in level 3, provide for the acquisition of a range of cognitive and practical skills. However, in level 3 the skills were designated to “accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information,” while level 4 determines the use of such skills to “generate solutions to specific problems.” This new skill requirement is introduced in the LTQF by indicating that activities cover “several or more speci-

alised activity tasks, solutions to which are not always tested or known,” thus highlighting specificity of the activity and the necessity of being ready for innovations.

Competence requirements are defined in the EQF by: exercising self-management and the ability to supervise the routine work of others. Both frameworks are almost identical if the first aspect is compared. Requirements slightly diverge on the second aspect, though. The EQF specifies that an individual of this level of qualification shall be ready to “supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities”. The LTQF, meanwhile, points out that such competence will be obtained only through experience. To conclude, competence requirements in the LTQF are slightly lower.

In general, the comparison demonstrates that regardless of minor variances, LTQF level 4 and EQF level 4 have good correspondence and may be interlinked.

LTQF level 5

LTQF level 5 descriptor		EQF level 5 descriptor
Original	Divided into knowledge, skills and competence	
<p>The qualification is intended for activities distinguished by integrated coordination of activity tasks in different activity areas. The activities include the evaluation of the competences of lower-qualification employees and training thereof. The activities require coordination of comprehensive knowledge of the activity area with general knowledge in dealing with various specialised activity tasks in several different activity areas.</p> <p>The employee performs the activities independently and is supervised only as regards the evaluation of results. The activity tasks are set by an employee of a higher qualification, who frequently grants the employee performing the activities the discretion as to the choice of methods and measures to complete the tasks. The employee supervises the activities of lower-qualification staff, plans and assigns activity tasks, oversees the performance of the activities, provides consulting and verifies the performance quality.</p> <p>The technological and organisational requirements of the activities as well as their environment are constantly changing, the changes are often unforeseeable and may be related to new areas of activity.</p>	<p>Knowledge</p> <p>Comprehensive factual and theoretical knowledge within different activity areas. Knowledge required in dealing with various specialised activity tasks in several different activity areas.</p>	<p>Knowledge</p> <p>Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge.</p>
	<p>Skills</p> <p>Cognitive skills cover not only the application of knowledge in a particular area of activity but also coordinating knowledge of the activity area with general knowledge. Practical skills are used to solve specialised activity tasks in several different activity areas. The individual learns to composite-ly coordinate task solution across different activity areas. A person of this qualification chooses task solution methods and measures.</p>	<p>Skills</p> <p>A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.</p>
	<p>Competence</p> <p>Independently perform activity under conditions of constantly changing technological and organisational requirements, while changes are often unpredictable.</p> <p>The individual acquires competence to supervise the activities of lower-qualification staff, to verify the performance quality, train them and evaluate their acquired competences.</p> <p>The activity tasks are set by an employee of a higher qualification, who frequently grants the employee performing the activities the discretion as to the choice of methods and measures to complete the tasks.</p>	<p>Competence</p> <p>Exercise management and supervision in contexts of work or study activities where there is unpredictable change;</p> <p>Review and develop performance of self and others.</p>

First and foremost, EQF level 5 differs from level 4 in that an individual who acquires this qualification obtains comprehensive specialised knowledge and an awareness of the boundaries of that knowledge, a broad range of skills that offer possibilities of creative problem solving, prepares the individual to exercise management over others, review and develop their performance. With regard to the LTQF, this level is rather specific as such qualifications are currently not provided in Lithuania. Since higher education system for the time being does not provide for the introduction of short cycle study programmes, the main target group for this level includes individuals who have already acquired professional qualification and work experience and seek to deepen their knowledge and obtain new skills. This was

a determining factor in the development of learning outcome requirements for this level LTQF qualification.

Both frameworks indicate specialised and comprehensive knowledge linked with the activity area. In addition, EQF requires an awareness of the boundaries of that knowledge. The LTQF has no direct indications to such requirement, although it does implicitly suggest that an individual must learn to coordinate activity tasks as well as to coordinate knowledge of the activity area with general knowledge.

The fact that an individual who acquires LTQF level 5 qualification will gain a broad range of cognitive and practical skills is testified by the LTQF requirement to be ready to “deal with various specialised activity tasks in several different activity areas.” From this point of view, skill

requirements in both frameworks may be considered similar. EQF reference to the skills of developing creative solutions to abstract problems may be also inferred from some of the activity descriptors in the LTQF, e.g., integrated coordination of activity tasks in different activity areas; changes of the activities and their environment are often unforeseeable and may be related to new areas of activity. However, the two frameworks have one essential difference: the EQF underscores solution of abstract problems and the LTQF is focused on practice.

With regard to competence requirements, no inconsistencies are observed between the frameworks:

both systems highlight management and supervision of others in an environment that is subject to unpredictable changes, reviewing and developing performance of self and others. And yet some variations exist. For instance, LTQF notes that “activity tasks are set by an employee of a higher qualification”. On the other hand, LTQF points out that activity covers training of lower qualification employees and assessment of competences acquired. No such requirement is included in the EQF.

To sum up, it can be stated that despite variations observed, it is purposeful to relate LTQF level 5 referenced to EQF level 5.

LTQF level 6

LTQF level 6 descriptor		EQF level 6 descriptor
Original	Divided into knowledge, skills and competence	
<p>The qualification is intended for complex activities distinguished by a variety of tasks and their content. Different means and methods are employed when dealing with problems in various areas of professional activities. Therefore, the performance of activities requires the application of broad theoretical knowledge based on the results of new fundamental and applied research or necessary for the introduction of various innovations.</p> <p>Activities are performed independently, selecting the methods for task completion and organising the work of the respective staff for the completion of the set tasks. Thus, the qualifications in this level include the ability to plan activities with respect to the set tasks, to analyse and record the activity results and to submit reports to activity coordinators, to modify activities based on the activity result analysis and specialist recommendations, and to carry out different project activities.</p> <p>The activity environment requires the ability to adapt to constant and normally unpredictable changes predetermined by the progress of knowledge and technologies in a specific professional sphere. The qualification allows the enhancement and extension of professional knowledge and, following the self-assessment of the activities, enables independent learning (development of cognitive competences) as required by the changing professional activities.</p>	<p>Knowledge</p> <p>Broad theoretical knowledge based on the results of new fundamental and applied research necessary for the introduction of various innovations. Knowledge required for complex activities distinguished by a variety of tasks and content.</p>	<p>Knowledge</p> <p>Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles.</p>
	<p>Skills</p> <p>Skills acquired in this level include the ability to plan own activity and that of subordinates with consideration of the set tasks, to modify one's activities based on the activity result analysis, and to carry out different project activities. This is performed with the ability to adapt to constant and normally unpredictable changes predetermined by the progress of knowledge and technologies in a specific professional sphere.</p>	<p>Skills</p> <p>Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study.</p>
	<p>Competence</p> <p>Implement complex activities which are characterised by a variety of tasks and contents. Activities are performed independently, selecting the methods for task completion and organising the work of the respective staff for the completion of the set tasks.</p> <p>Ability to adapt to constant and normally unpredictable changes; development of cognitive competences.</p>	<p>Competence</p> <p>Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts;</p> <p>Take responsibility for managing professional development of individuals and groups.</p>

Qualifications of this level are attributed to learning outcomes obtained upon completion of higher education first cycle programme. In the LTQF it has a direct reference (LTQF description, clause 10). In case of the EQF, it is certified by the comparison of the EQF and the QF-EHEA descriptors. Accordingly, descriptor of activity characteristic of this qualification entails new features: activity complexity, advanced knowledge and its correlation with the latest scientific achievements, critical understanding of theories and principles, etc.

Two features are defining the level of EQF knowledge. First, the knowledge must be advanced, and second, it should not be limited to facts but rather include critical understanding of theories and principles. In the LTQF innovative knowledge is very clearly highlighted by stating that it must be built on the results of new fundamental and applied research or necessary for the introduction of various innovations. Critical understanding of knowledge is testified by high level of theoretical background and the nature of anticipated activity. For instance, individuals are required to analyse the activity results, to modify one's activities based on the activity results analysis, to adapt to constant and normally unpredictable changes.

In both frameworks skill requirements are defined by the complexity of activity and unpredictability. The LTQF describes complexity through the variety of tasks and their contents as well as means and methods used to solve them, while unpredictability is linked with the progress in knowledge and technologies. Meanwhile, advanced skills that demonstrate mastery and innovation as stated in the EQF are represented in the LTQF by the ability to apply bro-

ad theoretical knowledge based on the results of new fundamental and applied research, to plan one's own activity, to analyse its results, to modify one's activities with regard to the activity results analysis, etc.

As regards competence, the EQF requires to implement complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts. Such requirements are rather expressly reflected in the LTQF. LTQF level 6 descriptor states that anticipated activity is complex, that work environment requires the ability to adapt to constant and normally unpredictable changes, that there is a necessity to be able to independently select task completion methods, plan and modify activity, implement different project activities, etc. True, the word "responsibility" is not used directly but it may be inferred from the context that the word "independently" basically means the same. Another EQF competence requirement – taking responsibility for managing professional development of individuals and groups – is not directly reflected in the descriptor of LTQF level 6. It may be deduced from the statement that activity is performed independently by organising the work of the respective staff for the completion of the set tasks. Furthermore, we may recall that already in LTQF level 5 there was a reference to the activity of the training of lower qualification employee's and evaluation of acquired competences.

Comparative analysis of the LTQF and the EQF 6 descriptors suggests that requirements for learning outcomes set in the two frameworks are rather similar, i.e. LTQF level 6 should be related to EQF level 6.

LTQF level 7

LTQF level 7 descriptor		EQF level 7 descriptor
Original	Divided into knowledge, skills and competence	
The qualification is intended for complex activities consisting of various interconnected tasks that may cover several related professional activities. Therefore, the performance of activities requires expert evaluation and application of the latest knowledge of the professional activities and similar or related areas, discovery of new facts in conducting applied research into the professional activities, and creative application of theoretical knowledge and research results.	Knowledge	Knowledge
	The latest knowledge of the professional activity and similar or related areas, allowing discovery of new facts in conducting applied research into the professional activities. Acquired knowledge creates the possibility to perform activity consisting of different interconnected tasks.	Highly specialised knowledge, some of which is at the forefront of knowledge in a 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.

LTQF level 7 descriptor		EQF level 7 descriptor
Original	Divided into knowledge, skills and competence	
<p>The activities are performed by means of independent setting of the tasks in the respective activity area and taking independent decisions aimed at activity enhancement and improvement. A peculiar characteristic of the activities is the supervision of other employees' activities. Thus, the qualifications of this level cover the abilities to independently carry out applied research, provide consulting in the activity area, coordinate projects aimed at the improvement of the qualifications of others as well as introduction of innovations, and to analyse and present the activity results.</p> <p>Due to the advancement of the knowledge, technology and labour organisation in various activity areas, the activities of this level and their environment undergo intense changes, the developments are difficult to predict, and the activities consist of constantly changing combinations of tasks. Thus, the activity changes require the ability to adopt innovative solutions based on research results as well as the evaluation of alternative solutions and possible social and ethical consequences of the activities.</p>	<p>Skills</p> <p>Skills obtained include expert evaluation of the latest knowledge, creative application of theoretical knowledge and research results, implementation of applied research, coordination of projects aimed at the improvement of the qualifications of others and introduction of innovations.</p>	<p>Skills</p> <p>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.</p>
	<p>Competence</p> <p>Evaluating alternative solutions under conditions of intense environment changes and the changes are difficult to predict.</p> <p>Adopting innovative solutions based on research results and aimed at activity enhancement and improvement.</p> <p>Evaluate possible social and ethical consequences of activity with regard to decisions made.</p>	<p>Competence</p> <p>Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches;</p> <p>Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.</p>

From the standpoint of EQF and LTQF comparison, this is the most complicated level. First, knowledge, skills and competence as described in LTQF level 7 are so intertwined that it is difficult to provide a reliable break-down. In addition, doubts prevail about whether the same understanding of the dividing line between the bachelor's and master's study programmes was applied when defining learning outcomes for EQF and LTQF. For instance, the EQF stresses specialisation, while the LTQF has no reference to specialisation whatsoever and instead discusses activity consisting of different interrelated tasks that may cover several related professional areas. True, there are features that suggest comparability between LTQF level 7 and EQF level 7, for example, the ability to perform scientific research and development of new professional knowledge and practical experience.

Two requirements define the level of knowledge in the EQF. First, it is highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research. Second, the EQF insists that an individual with

EQF level 7 qualification would develop critical awareness of knowledge issues in a field and at the interface between different fields. As mentioned before, the LTQF includes no reference to knowledge specialisation but it does point out that performance of anticipated activity requires expert evaluation and application of the latest knowledge, discovery of new facts in conducting applied research. This corresponds to the second part of the first EQF requirement and the second requirement because critical awareness of knowledge issues is prerequisite to expert evaluation.

Requirements for skills described in the LTQF and the EQF display a satisfactory level of correspondence. The specialised skills to perform scientific research and introduce innovations as specified in the EQF are clearly indicated in the LTQF, underlining that they are used not only to obtain new knowledge but also to discover new facts, introduce innovations, solve interconnected tasks, etc.

Two new features are used to describe competence in the EQF: first, the ability to manage and transform

work or study contexts that are complex and unpredictable and, second, taking responsibility for contributing to professional knowledge and practice. In both cases it is stated that strategic thinking and acting must be developed. Similarly, the LTQF puts forward equivalent requirements for competence. First, it is stated that an individual with this level of qualification shall be ready to adopt research-based innovative solutions under conditions of intense unpredictable changes taking place in activity and environment, and evaluate alternative solution options. Second, individuals are required to be able to evaluate possible social and ethical consequences of activities, and this presupposes responsibility for one's own activity. It is also worth mentioning that the LTQF mentions supervision of the activity of others, which

should not be understood as the management of task groups, which was highlighted in the descriptor of level 5 qualifications, but rather responsibility for changes made in the contents of activity strategy pursued by the managed group. However, based on the fact that the LTQF does not contain direct mention of the ability to employ strategic thinking and assume responsibility, doubts remain about whether these fundamental aspects of competence for level 7 qualifications shall receive due consideration in the implementation of the LTQF.

Nevertheless, despite some differences observed in the descriptors of the LTQF and the EQF and possible subjectivity of assessment, conditioned by extremely different description of learning outcomes, it is presumed that LTQF level 7 should be referenced to EQF level 7.

LTQF level 8

LTQF level 8 descriptor		EQF level 8 descriptor	
Original	Divided into knowledge, skills and competence		
<p>The qualification is intended for activities of exceptional complexity, distinguished by the development of new knowledge, ideas, technologies as well as work practices, methods and processes. Consequently, the activity demands the discovery of new knowledge in the activity areas on the basis of fundamental and applied research findings, integrating knowledge in different activity areas. The activities are characterised by strategic activity objectives that may cover several different activity areas or research subjects.</p> <p>The activities are strategically planned by assuming the responsibility for the results and quality of other employees' activities and independent strategically important decision-making. The training and consulting of the specialists in the respective activity area is another characteristic. Thus, it is necessary to have the ability to adopt strategic decisions of public significance, to independently plan and conduct fundamental and/or applied research, to transfer the latest knowledge (to share know-how) to specialists in the respective area and to coordinate scientific and applied research projects.</p> <p>Intense and unpredictable changes in the activities and their environment require readiness for constant developments, openness to innovation, a positive attitude towards the development of the organisation and society, the ability to address issues originally in the light of their context and the ability to initiate and make changes in various areas of activity and public life.</p>	<p>Knowledge</p> <p>Knowledge, which if integrated with knowledge in different activity areas, serves as the basis to create new knowledge, ideas, technologies, work processes, methods and processes, helps initiate and create changes in different areas of activity and public life.</p>	<p>Knowledge</p> <p>Knowledge at the most advanced frontier of a field of work or study and at the interface between fields.</p>	
		<p>Skills</p> <p>Ability to adopt strategic decisions of public significance, independently plan and conduct fundamental and/or applied research, to transfer the latest knowledge (share know-how) to specialists in the respective area, to coordinate scientific and applied research projects.</p>	<p>Skills</p> <p>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.</p>
		<p>Competence</p> <p>Be ready to adopt strategically important decisions and assume responsibility for the results and quality of activity performed by other employees.</p> <p>Be open to innovations; take a positive attitude towards the development of organisation and society.</p>	<p>Competence</p> <p>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.</p>

This is the highest level of qualifications in both frameworks and its main distinctive feature as opposed to level 7 is the development of new knowledge, processes and work practices. Naturally, this is possible only by acquiring most advanced knowledge in a given field of activity and at the interface between related fields, perfectly mastering highest levels of cognition, namely synthesis and evaluation, learning to apply latest methods of analysis in research and innovations. It is also obvious that an individual who has acquired this level of qualification shall demonstrate substantial authority, will be able to employ innovation and autonomy, display scholarly and professional integrity, etc. This is why the key learning outcome descriptors within the LTQF and the EQF match and each of the requirements defined in the EQF can be referenced to a corresponding requirement in the LTQF. Therefore, LTQF level 8 referencing to EQF level 8 dispels any doubts about possible discrepancies. The main issue at this point is not the level of requirements but rather the extent to which these are fulfilled.

4.4.3. Conclusions

To sum up the comparison performed concerning the LTQF and the EQF levels of qualifications, the following features of the process of referencing the two frameworks may be identified:

- both frameworks compared are designated to promote lifelong learning and improve the professional career opportunities and mobility; however, the EQF is more focused on the encouragement of further learning, while the LTQF focuses on professional career;
- different description of learning outcomes. In one case they are described on the level of knowledge, skills and competence acquired, while in another case descriptors are linked with the complexity, autonomy and variability in the activity for which the individual acquiring the qualification is ready. This encumbers the referencing process. Although in the first stage of referencing, when certain LTQF

level descriptors are compared against several adjacent EQF level descriptors and learning outcomes of the qualification described are viewed as an integral unit, it is rather simple to identify the best fit between a specific EQF level and the LTQF level in question. However, a comprehensive comparison that entails breaking down learning outcomes into knowledge, skills, and competence to be able to establish links between corresponding the LTQF and the EQF level descriptors, the process becomes more subjective;

- Comparison of the LTQF and the EQF allowed to reliably establish the EQF levels to which each of the LTQF levels should be referenced to:

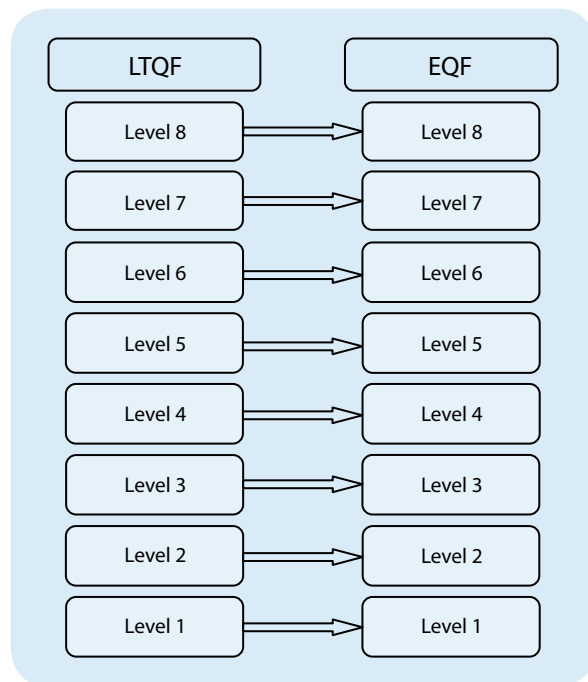


Fig. 3. LTQF and EQF level references

4.5. Criterion 3

The national qualifications framework or system and its qualifications are based on the principle and objective of learning outcomes and linked to arrangements for validation of non-formal and informal learning and, where these exist, to credit systems.

4.5.1. LTQF and learning outcomes

The Lithuanian Qualifications Framework (appendix 3) uses the following criteria to define activity to which a corresponding level of qualification pertains:

- complexity of activity performed;
- independence of activity performed;
- changeability of activity performed.

It is difficult to establish a direct link between the criteria and learning outcomes that are expressed in knowledge, skills and competence. This can be achieved by referring to the comprehensive descriptors of the LTQF, which link activity with the competence required to perform it, each of the activity criteria described according to three competence criteria:

- functional competences required to perform activity, which define individual's ability to carry out specific professional activity tasks, operations, functions;
- cognitive competences required to perform activity, which define individual's ability to apply wide-purpose general education knowledge in professional activity; to use special vocational knowledge about materials, techniques, technologies, etc.; to apply knowledge about activity process planning and management, work safety and environmental requirements, etc.;
- general competences required to perform activity. These include transferable individual skills, the development of which is mostly based on personal features. This group of competences includes ethical and social competences, ability of analytical thinking, learning, team work, initiative taking, working independently, etc.

This way description of competences, serving as the basis for qualifications requirements, is used to define LTQF qualifications levels and refer them to knowledge, skills and competence.

The extent to which learning outcomes have been used in different education sectors has until now been uneven:

- in the general education sector, learning was traditionally academically-focused, paying greatest attention to knowledge and comparatively little regard to their application. However, recent revision of general programmes highlighted the general

competences and subject-related key discipline competences. At the secondary education level, which entitles graduates the right to study at high schools, evaluation of students' learning outcomes is implemented on a national level;

- in vocational education and training, all the programmes that grant graduates a qualification, are based on competences which are linked to the knowledge and skills required to acquire them. Vocational education providers are not the ones to perform learning outcome evaluation. This function is delegated to the Chamber of Industry, Commerce and Crafts and the Chamber of Agriculture;
- studies at colleges, which provide LTQF level 6 qualifications, are also based on competences, while not all study programmes in universities currently are based on learning outcomes. Extensive efforts are underway to eliminate this shortfall.

4.5.2. Evaluation and recognition of non-formal and informal learning

The possibility to evaluate and recognise learning outcomes acquired through non-formal and informal learning is legitimised by the laws that regulate education, a number of bylaws are prepared that describe the procedures of the evaluation and recognition process. In the LTQF description it is stated that different level qualifications may be acquired not only in the formal education and training system but also through non-formal and informal learning, as well as through one's professional experience. Therefore, political preconditions for the evaluation and recognition of non-formal and informal learning already exist. However, the process is only in its early phase of implementation across all education sectors.

VET standards in vocational education and training provide national-level learning outcome requirements for the acquisition of a corresponding qualification. Moreover, the Chamber of Industry, Commerce and Crafts and the Chamber of Agriculture are the authorised institutions that evaluate learning outcomes. Such division of responsibilities of providing learning and assessing its outcomes benefits the evaluation and recognition of prior learning. Unfortunately, the acquisition of qualifi-

cation by accumulating credits is not yet possible as the credit system introduction is still in progress.

As concerns higher education, some colleges and individual universities have approved internal non-formal and informal learning outcome evaluation and recognition procedures. These are applied in the recognition of learning that took place in any other non-academic environment along with credit transfer and accumulation schemes. On the national level, though, these issues are yet to be solved. Minister of Education and Science approved "Recommendations on the Assessment and Recognition of Non-formally Acquired Competences in Higher Education Institutions" by his Order No. V-2319 of December 15 2010. This should speed up the process of implementation of the recognition of prior learning in the higher education sector.

4.5.3. Credit systems

Back in 2000, the Law on Higher Education adopted in the Republic of Lithuania introduced the term "study credit", meaning a unit of the volume of studies, equaling 40 hours of study work (in the classroom, laboratory, independently, etc.), i.e. the credit system to measure the study input has been used in higher education sector for a long time now. It must be noted though that it was comparatively recently that the introduction of European Credit Transfer and Accumulation System (ECTS) began. According to this system, credits are granted not only in view of the amount of study time but also learning outcomes. Under a new rule introduced on 1 September 2011, one year of studies represents 60 credits.

ECVET system introduction in vocational education has only been commenced.

4.6. Criterion 4

The procedures for inclusion of qualifications in the national qualifications framework or for describing the place of qualifications in the national qualification system are transparent.

A state-recognised certificate of learning outcomes is granted only upon completion of programmes inclu-

ded in the Register of Study and Training Programmes and Qualifications. The Ministry of Education and Science is authorised to manage the register (LE, Article 56, paragraph 4). The inclusion of programmes into the register are governed by the procedures approved by the Order of Minister of Education and Science No. V-1913 of 29 October 2010. It provides for the inclusion of programmes across different education sectors.

In general education sector, education programmes are developed in line with the General Programmes that are approved by Minister of Education and Science. Drafts of these programmes are an object of extensive discussions at education professionals' associations, school leaders' associations; draft programmes are published online so as to enable each Lithuanian citizen to submit personal comments. Before General Programmes are submitted for minister's approval, they are considered by the Lithuanian Education Council. Specific programmes that are tailored for general education are included in the register following proposals by the specialist of the Ministry of Education and Science who has been preparing the respective data.

In vocational education and training sector, the QVETDC is responsible for the organisation of registration of new programmes. Programme registration and legitimisation details are provided in the *Description of Formal Vocational Education and Training Programme Preparation and Legitimation Procedure*, approved by the Order of Minister of Education and Science No. V-1435 of August 27 2010. Drafting or amendment of the programme can be initiated by the QVETDC, training providers, citizens or legal entities of the Republic of Lithuania or other countries, organisations and their units that do not have the status of legal entity. It is required, though, that newly proposed programme would be modular and the authors of the proposal would present guidelines on ensuring the quality of the programme and its correspondence to the requirements of the Lithuanian Qualifications Framework.

In higher education sector, study programmes are drafted by higher education schools themselves, in consideration of appropriate study field description (if available) and other legal acts applicable to a particular

study programme. Draft programmes are submitted by higher education school authorities to the CQAHE for accreditation. The guidelines on preparing a new study programme for accreditation are provided in the order by the director of the CQAHE. The programme submitted is accredited in line with the rules approved by Minister of Education and Science, last updated on 29 July 2011.

Medical residency, dentistry residency and veterinarian medical dentistry programmes are developed and approved by universities. Requirements for these programmes were established by the Ministries of Health and Education and Science.

4.7. Criterion 5

The national quality assurance system(s) for education and training refer (s) to the national qualifications framework or system and are consistent with the relevant European principles and guidelines (as indicated in appendix 3 of the Recommendation).

There are 9 common EQF principles, which refer to the requirements for quality assurance and for the institutions in charge. They are listed in Appendix 3 of the Recommendation of the European Parliament and of the Council on the Establishment of the European Qualifications Framework for Lifelong Learning:

1. Quality assurance policies and procedures should underpin all levels of the Lithuanian Qualifications Framework (LTQF);
2. Quality assurance should be an integral part of the internal management of education and training institutions;
3. Quality assurance should include regular evaluation of institutions, their programmes or their quality assurance systems by external monitoring bodies or agencies;
4. External monitoring bodies or agencies carrying out quality assurance should be subject to regular review;
5. Quality assurance should include context, input, process and output dimensions, while giving emphasis to outputs and learning outcomes;
6. Quality assurance systems should include the following elements:
 - a. clear and measurable objectives and standards;
 - b. guidelines for implementation, including stakeholder involvement;
 - c. appropriate resources;
 - d. consistent evaluation methods, associating self-assessment and external review;
 - e. feedback mechanisms and procedures for improvement;
 - f. widely accessible evaluation results;
7. Quality assurance initiatives at international, national and regional level should be coordinated in order to ensure overview, coherence, synergy and system-wide analysis;
8. Quality assurance should be a cooperative process across education and training levels and systems, involving all relevant stakeholders from all LTQF sectors;
9. Quality assurance orientations at the national level may provide reference points for evaluations and peer learning.

Answers on how the quality assurance system existing in the education and training system of Lithuania is built on the national qualifications framework and its compliance with the key European principles and guidelines, as stipulated in Appendix 3 of the Recommendations, are based on the information provided in section 2.3 of the report and conclusions of the research *“Conformity of Quality Assurance in Lithuanian Education System with the Common Principles Indicated in EC Recommendations’ Appendix 3”* carried out by independent consultant Prof. Kęstutis Pukelis (English version of the research can be found at http://www.kpmc.lt/LTKS_EKS/KPU-research.pdf).

1. Quality assurance policies and procedures should underpin all levels of the Lithuanian Qualifications Framework (LTQF)

Quality assurance policies and procedures underpin all levels and parts of the Lithuanian Qualifications Framework. This is delivered directly, based on the LTQF quality assurance principles, or indirectly, through the

quality assurance policies, systems and procedures of partner and stakeholder bodies which have responsibility for qualifications. Quality assurance principles may vary from legal requirements to harmonised guidelines and are applied at all levels – from strategic planning to certification of successful learners.

2. Quality assurance should be an integral part of the internal management of education and training institutions

Internal quality assurance is carried out by all institutions that provide qualifications or deliver accredited education/studies programmes that are listed in LTQF (except for vocational education and training institutions that have not yet validated their internal quality assurance systems). Currently, a project of quality assurance is being implemented, and the project provides an opportunity to all VET providers to launch internal quality assurance systems. They are launched in accordance to the VET Quality Assurance Concept, which is in line with documents of the European Union concerned and experience available in Lithuania.

3. Quality assurance should include regular evaluation of institutions, their programmes or their quality assurance systems by external monitoring bodies or agencies

Quality assurance covers assessment of educational institutions and their programmes (in VET sector partly), which is carried out by external assessment agencies on a regular basis. External assessment of quality assurance is organised and performed by three main agencies, namely, CQAHE, QVETDC and NSAA. These quality assurance agencies carry out assessment of education and training institutions, their programmes and internal quality assurance systems on a regular basis. Universities and colleges are assessed by CQAHE every six years (or every 2 years, depending on the outcome of assessment), the Law on Vocational Education and Training (Article 18, paragraph 2) stipulates that external assessment of VET institutions should be carried out, and QVETDC intends to start the assessment in 2012. Quality assurance of activities of general education schools should be subject to an NSAA assessment at least once every 7 years. CQAHE is responsible for assessment of

higher education programmes, while QVETDC assesses VET programmes.

4. External monitoring bodies or agencies carrying out quality assurance should be subject to regular review

All external monitoring institutions are subject to all types of reviews. External CQAHE evaluation was performed on 14-15 March 2012 by international experts group established by the European Association for Quality Assurance in Higher Education (ENQA). The evaluation results will be published in the future.

5. Quality assurance should include context, input, process and output dimensions, while giving emphasis to outputs and learning outcomes

The procedure of quality assurance should include context, input, process and output dimensions, while giving emphasis to outputs and outcomes of learning/studies. It may be difficult to distinguish quality assurance, which is directly linked with the LTQF, from other broader activities of quality assurance that are carried out by quality assurance agencies. Quality assurance in quality assurance agencies, as well as in universities, colleges, VET and general education schools is based on learning outcomes, as all the LTQF qualifications are based on learning outcomes. Nevertheless, evaluation instruments and methods of learning outcomes are still in need of improvement, as this is the first year of universities, colleges, VET centres and schools starting to introduce learning outcomes, as defined by the LTQF, in their programmes. Assessment of context, resources and processes has been performed for years.

6. Quality assurance systems should include the following elements:

a) clear and measurable objectives and standards.

Agencies are required to work in accordance with clear and measurable objectives and standards. A special focus is placed on standards in VET sector as development of formal VET programmes, as well as granting of qualifications is based on standards. The majority of university and college programmes are also prepared in accordance with qualifications descriptors or other relevant documents, especially when it comes to professions that are regulated by the state and that have to comply with

European and international dimensions. National institutions in charge of quality assurance are responsible for recognition of quality assurance systems of institutions that provide qualifications; they also define and proclaim evaluation standards that have to be met.

b) guidelines for implementation, including stakeholder involvement.

The main agencies responsible for quality assurance prepare and announce thorough guidelines for implementation of quality assurance. Systematic inclusion of stakeholders in all levels of formation and implementation of quality assurance policies is characteristic to all quality assurance agencies.

c) appropriate resources.

All quality assurance institutions and agencies are provided with funding from the budget of the Government of the Republic of Lithuania. Financing can be supplemented with other official sources of financing. Governmental funding largely depends on the necessity and operational efficiency of the specific quality assurance institution or agency.

d) consistent evaluation methods, associating self-assessment and external review.

At all levels and sectors of the Lithuanian education system, quality assurance processes harmonise and involve self-assessment and external assessment. Each quality assurance agency has a clear and consistent attitude on external institutional assessment and systems that guarantee its comprehensiveness and systematic application.

e) feedback mechanisms and procedures for improvement.

Each quality assurance agency applies formal and informal feedback mechanisms in order to evaluate the existing quality processes and their efficiency. Based on the feedback received, all agencies make regular changes and improvements.

f) widely accessible evaluation results.

Quality assurance agencies, which carry out operations that could be linked with the LTQF, prepare operational reports. CQAHE, QVETDC and NSAA perform evaluation of activities of all education and training institutions which are receiving public funding in an effort

to guarantee consistent, efficient and effective use of the financing. Reports on institutional assessments and key evaluation aspects are published.

7. Quality assurance initiatives at international, national and regional levels should be coordinated in order to ensure overview, coherence, synergy and system-wide analysis.

The Ministry of Education and Science of the Republic of Lithuania, as well as QVETDC and other quality assurance agencies are involved in continuing discussions with partners, stakeholders and colleagues from other European countries in an effort to encourage and bring about appropriate forms of convergence and articulation between quality approaches. To meet the objective, special projects are implemented, particularly, in the sector of higher education in order to reference the framework of qualifications of higher education with LTQF, Dublin Descriptors, as the case has been in some countries (New Zealand, Ireland, the United States, the United Kingdom, Australia, etc.). CQAHE is involved in the process of referencing higher education qualifications to the QF-EHEA. QVETDC is a member of EQAVET and ECVET networks.

8. Quality assurance should be a cooperative process across education and training levels and systems, involving all relevant stakeholders from all LTQF sectors.

Quality assurance in all levels and systems of education in Lithuania is a process that still lacks sufficient coordination; sometimes the stakeholders are not included in the processes to a sufficient degree. One has to admit that the processes of quality assurance differ, depending on the sector of education; however, they cover all sectors of the Lithuanian education system. Cooperation with stakeholders, particularly those from the labour market, has to be enhanced and developed for mutual benefits (recognition of qualifications, evaluation of VET and higher education programmes, assessment of learning achievements, etc.).

9. Quality assurance orientations at the national level may provide reference points for evaluations and peer learning.

Quality assurance tendencies at the national level provide reference points for evaluation and peer

learning. All the key agencies take steps to ensure that the outcomes of their work can provide good practice models, case studies and reference points for evaluation and peer learning. The dissemination of good practice is one of the key activities of all agencies, responsible for quality assurance of processes related with LTQF.

4.8. Criterion 6

The referencing process shall include the stated agreement of the relevant quality assurance bodies.

All main institutions, which are in charge of quality assurance of qualifications provided under LTQF, including the Ministry of Education and Science of the Republic of Lithuania, were involved in drafting this report. The report was discussed, harmonised and agreed by the following institutions:

- Central Professional Committee;
- Ministry of Education and Science;
- Ministry of Economy;
- Centre for Quality Assurance in Higher Education;
- National School Assessment Agency;
- Qualifications and VET Development Centre.

4.9. Criterion 7

The referencing process shall involve international experts.

Three international experts were involved in the referencing process:

- Trevor Clark, *Head of Credit and Qualifications Framework for Wales*;
- Külli All, *Adviser for Lifelong Learning, Vocational and Adult Education Department, Ministry of Education and Research of Estonia*;
- Raija Timonen, *Counsellor of Education, the Finnish National Board of Education*.

The main criteria for the selection of countries, which international experts were invited from, were the following: one of the experts came from one of the Baltic states (Estonia was selected); one from a country that

had already completed referencing process (the United Kingdom was selected); and one came from a country with an educational system similar to Lithuania's educational system with school based vocational education and training, and binary higher education system (Finland was selected). Specific candidacies were proposed by AG EQF member of relevant countries.

The foreign experts came to Lithuania twice. During the visits they attended meetings of the Management Group and communicated with Lithuanian experts helping with the referencing process; they were also briefed on the activities of institutions in charge of education quality assurance in Lithuania (Ministry of Education and Science, QVETDC, NSAA, CQAHE); visited a vocational school; provided written comments on the studies which were carried out by local experts.

4.10. Criterion 8

The competent national body or bodies shall certify the referencing of the national qualifications framework or system with the EQF. One comprehensive report, setting out the referencing and the evidence supporting it shall be published by the competent national bodies, including the National Coordination Point, and shall address separately each of the criteria.

The report underpins all sectors of the Lithuanian educational system and gives proposals on referencing all qualifications provided in the Lithuanian educational system to the EQF.

All information about referencing of the Lithuanian Qualifications Framework to the EQF contained in the report was discussed within the Management Group of the referencing process, also harmonised with institutions concerned. The report provides harmonised answers to all 10 referencing criteria and procedures drafted by the EQF Advisory Group.

The studies that served as a basis for the referencing report are available on the website of QVETDC, which serves as the National Coordination Point in Lithuania: http://www.kpmpc.lt/LTKS_EKS/LTQF_EQF.html.

4.11. Criterion 9

The official EQF platform shall maintain a public listing of member states that have confirmed that they have completed the referencing process, including links to completed referencing reports.

After harmonisation of the final version of the report, the Ministry of Education and Science or an institution authorised by the ministry will announce Lithuania's completion of the referencing process and will forward the report to the EQF Advisory Group. Furthermore, authorised representatives of Lithuania will present the report and its outcomes to the EQF Advisory Group. Full report will be available on the websites of organisations, representing all sectors of education, social partners and governmental institutions, which have delegated members to the Central Professional Committee, including National Coordination Point.

4.12. Criterion 10

Following the referencing process, and in line with the timelines set in the Recommendation, all new qualification certificates, diplomas and Europass documents issued by the competent authorities contain a clear reference, by way of national qualifications systems, to the appropriate European Qualifications Framework level.

Cooperation among all ministries will facilitate, that preparations will be in place by the end of 2012 to specify relevant levels of the LTQF and the EQF in all new certificates of formal education, diplomas, Europass documents and/or verifying documents (certificates and diplomas supplements) issued by competent institutions.

5. Compliance of the LTQF with the Qualifications Framework of the European Higher Education Area (QF-EHEA)

At a meeting in Bergen in 2005, European ministers, responsible for higher education, adopted the Qualifications Framework of the European Higher Education Area (QF-EHEA), which can be used as an instrument that will allow enhancing the level of international comparability, transparency, recognition of qualifications of higher education and student mobility. At the same time, European countries were invited to elaborate national frameworks for qualifications and to reference them to QF-EHEA. As Lithuania had already started developing its national qualifications framework and merging all educational sectors into a single system, a separate framework of higher education qualifications was not worked out. LTQF encompasses all levels of qualifications and degrees, including those provided in the higher education.

In Lithuania higher education studies of three cycles are provided. They are completed with the Bachelor's, Master's and Doctor's degrees. On 21 November 2011 the Decree of the Minister of Education and Science No. V-2122 "Concerning the approval of descriptors of the levels of higher education studies" was issued. The purposes of this document comply with the goals of the QF-EHEA. These purposes include the comparability of the higher education degrees and qualifications, enhancement of the mobility of learners, facilitating the transparency of the processes of acquisition, assessment and awarding of qualifications, their accessibility, informing the learners about the possibilities of further studies and lifelong learning in the system of higher education of Lithuania. More information about the cycles of higher education studies and their provided degrees can be found in section 2.2.3.

In referencing the LTQF to the QF-EHEA outlined below seven criteria defined by the Bologna Working Group on Qualifications Frameworks in 2005 were considered.

5.1. Compliance with the verification criteria

1. The national framework of higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education

Description of the first criterion of referencing the LTQF to the EQF indicates, that the Qualifications and VET Development Centre (further in the text - QVETDC) acting under mandate of the Ministry of Education and Science, is the main institution organising the development of the system of qualifications in Lithuania and referencing of the LTQF to the EQF. Regulation of the QVETDC in the paragraph 11.5 states that QVETDC cooperates with the Centre for Quality Assessment in Higher Education (further in the text - CQAHE) in the field of regulation of higher education degrees and qualifications. This cooperation also comprises design and development of the levels descriptors of the LTQF and their referencing to the EQF and to the QF-EHEA. The LTQF was officially approved by the decree of the Government of Lithuania in 2010. More information about it can be found in section 3.1.

2. There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the QF-EHEA

In the previous chapter of the report, the compliance of the LTQF and the EQF levels was proven based on the referencing criteria formulated by the EQF Advisory Group; namely, levels 6, 7 and 8 of LTQF, which describe learning outcomes of cycles 1, 2 and 3 of higher education, should be referenced to relevant levels of the EQF. In this chapter, descriptors of LTQF levels are compared with descriptors of QF-EHEA cycles, which list learning outcomes in a different manner characteristic of higher education. At the beginning, with the help of the *best fit* method, it was established that LTQF level 6 corresponds to QF-EHEA cycle 1, LTQF level 7 corresponds to QF-EHEA cycle 2 and LTQF level 8 corresponds to QF-EHEA cycle 3. The differences between descriptors of LTQF and QF-EHEA levels identifying a "best fit" are provided below.

Level 6 of LTQF

LTQF descriptor	Descriptor of QF-EHEA cycle 1 Qualification degree is awarded to student who:	Comparison of Descriptors
<p>The qualification is intended for complex activities distinguished by a variety of tasks and their content. Different means and methods are employed when dealing with problems in various areas of professional activities. Therefore, the performance of activities requires the application of broad theoretical knowledge based on the results of new fundamental and applied research or necessary for the introduction of various innovations. Activities are performed independently, selecting the methods for task completion and organising the work of the respective staff for the completion of the set tasks. Thus, the qualifications in this level include the ability to plan activities with respect to the set tasks, to analyse and record the activity results and to submit reports to activity coordinators, to modify activities based on the activity result analysis and specialist recommendations, and to carry out different project activities.</p> <p>The activity environment requires the ability to adapt to constant and normally unpredictable changes predetermined by the progress of knowledge and technologies in a specific professional sphere. The qualification allows the enhancement and extension of professional knowledge and, following the self-assessment of the activities, enables independent learning (development of cognitive competences) as required by the changing professional activities</p>	<p>Have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</p>	<p>LTQF 6 requires acquisition and application of knowledge based on results of new fundamental and applied research or necessary for the introduction of innovations, while descriptor of QF-EHEA cycle 1 requires demonstration of knowledge and understanding, supplemented with understanding of a higher level of textbook knowledge and certain knowledge about the latest achievements in the field of study. The requirements for knowledge and understanding are, in part, higher in LTQF 6 than those in QF-EHEA 1.</p>
	<p>Can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</p>	<p>The ability to apply knowledge and understanding is emphasised in both cases. The ability to validate one's decisions is referred to directly in QF-EHEA 1, while LTQF 6 reflects it in characteristics of activities, such as planning, selection of operational methods, modification of activities, etc.</p> <p>LTQF 6 and QF-EHEA 1 stipulate similar requirements for understanding and application of knowledge.</p>
	<p>Have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;</p>	<p>Work with data is not mentioned directly in LTQF 6, however, the requirement to analyse and record the activity results testifies the necessity to be able to work with existing data and collect new data. Furthermore, LTQF 6 qualifications allow the enhancement or extension of professional knowledge. LTQF 6 and QF-EHEA 1 stipulate similar requirement for gathering and analysis of information.</p>
	<p>Can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</p>	<p>The ability to disseminate information, ideas and decisions to others is hardly reflected in LTQF 6 – this can only be found in the requirement to be able to organise other people's work.</p> <p>The requirements for the capacity to teach others and communicate results are lower in LTQF 6 than in QF-EHEA 1.</p>
<p>Have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</p>	<p>LTQF 6 requires an ability to learn independently, which would enable adapting to constant and unpredictable changes, while QF-EHEA 1 descriptor requires development of independent learning skills to a degree that would facilitate preparations for studies in cycle 2.</p> <p>LTQF 6 envisages higher requirements for learning capacities than QF-EHEA 1.</p>	

According to the descriptor of QF-EHEA cycle 1, an individual who completes cycle 1 studies possesses the latest knowledge of a relevant field, understands it and is able to apply it in one's activities, has the initial skills for gathering and interpreting data, which are necessary for problem solution.

In the comparison of descriptors of LTQF level 6 and QF-EHEA cycle 1, it is important to remember that the education system of Lithuania is academically oriented historically, with a focus on knowledge often overshadowing practical activities. Therefore, it is not surprising that a comparison of descriptors of LTQF level 6 and

QF-EHEA cycle 1 gives a picture that the requirements for knowledge and learning skills in LTQF are, in part, higher than those in QF-EHEA. This could also be an effect of the duration of cycle 1 studies in universities, which is 4 years.

Meanwhile, the requirements for skills to communicate information, ideas and decisions to others are, on the opposite, higher in QF-EHEA. On the one hand, recalling the explanations stated in the comparison of

the descriptors of LTQF level 6 and EQF level 6, the difference can be explained that the knowledge communication skills have already been listed in descriptor for LTQF 5.

Regardless of the differences, it can be stated that the requirements for learning outcomes in LTQF level 6 and QF-EHEA cycle 1 feature sufficient similarities to be referenced.

Level 7 of LTQF

LTQF descriptor	Descriptor of QF-EHEA cycle 2 Qualification degree is awarded to student who:	Comparison of Descriptors
<p>The qualification is intended for complex activities consisting of various interconnected tasks that may cover several related professional activities. Therefore, the performance of activities requires expert evaluation and application of the latest knowledge of the professional activities and similar or related areas, discovery of new facts in conducting applied research into the professional activities, and creative application of theoretical knowledge and research results.</p> <p>The activities are performed by means of independent setting of the tasks in the respective activity area and taking independent decisions aimed at activity enhancement and improvement. A peculiar characteristic of the activities is the supervision of other employees' activities. Thus, the qualifications of this level cover the abilities to independently carry out applied research, provide consulting in the activity area, coordinate projects aimed at the improvement of the qualifications of others as well as introduction of innovations, and to analyse and present the activity results.</p> <p>Due to the advancement of the knowledge, technology and labour organisation in various activity areas, the activities of this level and their environment undergo intense changes, the developments are difficult to predict, and the activities consist of constantly changing combinations of tasks. Thus, the activity changes require the ability to adopt innovative solutions based on research results as well as the evaluation of alternative solutions and possible social and ethical consequences of the activities.</p>	<p>Have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</p>	<p>Cycle 2 of Dublin Descriptors require demonstration of knowledge and understanding that would allow original development and/or application of ideas, often within a research context, LTQF 7 requires possession of a ability of expert evaluation of the latest knowledge of professional activities, discovery of new facts through research, innovative decision-making based on research results.</p> <p>The comparison shows similarities of the requirements for knowledge and understanding in descriptors of LTQF 7 and QF-EHEA 2.</p>
	<p>Can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</p>	<p>QF-EHEA 2 specifies that knowledge and understanding thereof have to enable the individual to operate in an unfamiliar or multidisciplinary environment. LTQF 7 emphasises the complexity of activities involving several related professional activities. Furthermore, intense changes of the environment of activities are underlined, changes are difficult to predict.</p> <p>In the aspect of application of knowledge and understanding, the requirements formulated in LTQF 7 and QF-EHEA 2 are similar.</p>
	<p>Have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments;</p>	<p>The ability to integrate knowledge and handle complex problems with incomplete information in case of LTQF 7 is reflected by the requirement to be capable of expert evaluation, creative application of knowledge and research results and work in conditions of changes that are difficult to predict, make alternative solution versions, etc. The ability to make ethical and socially-responsible decisions is also referred to in LTQF 7 descriptor. Consequently, the requirements provided in LTQF 7 and QF-EHEA 2 should be considered similar.</p>
	<p>Can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</p>	<p>In LTQF 7, the ability to communicate information, ideas, problems and solutions is reflected in the requirement that a person awarded LTQF 7 qualifications must be able to supervise other employees. Furthermore, LTQF 7 requires that a person should be able to provide consulting, coordinate projects aimed at improvement of qualifications of others.</p> <p>Nevertheless, a reasoned comparative conclusion is a difficult task due to highly different descriptors.</p>
	<p>Have the learning skills to allow them to continue studying in a manner that may be largely self-directed and autonomous.</p>	<p>LTQF 7 no longer refers to independent learning skills, as this is already acquired in LTQF 6 qualification.</p>

As compared with LTQF level 6 and QF-EHEA cycle 1, descriptors of QF-EHEA cycle 2 and LTQF level 7 feature a new quality of requirements for learning outcomes. The most important outcome is the ability to work in an innovative manner. In QF-EHEA, this is done by indicating that knowledge and understanding enable individuals to develop and apply ideas in an original way, address problems in new and unfamiliar environments, solve problems with incomplete information, etc. In the

descriptor of LTQF level 7, innovation of activities is first of all linked with the ability to independently perform applied research. In the light that innovative activities can lead to positive and negative consequences, both frameworks specify the need of possessing a capacity to assess possible social and ethical effects.

As the main feature of cycle 2 of higher education – the ability to work in an innovative manner – is clearly reflected in both frameworks, LTQF level 7 may be referenced to QF-EHEA cycle 2.

Level 8 of LTQF

LTQF descriptor	Descriptor of QF-EHEA cycle 3 Qualification degree is awarded to students who:	Comparison of Descriptors
<p>The qualification is intended for activities of exceptional complexity, distinguished by the development of new knowledge, ideas, technologies, as well as work practices, methods and processes. Consequently, the activity demands the discovery of new knowledge in the activity areas on the basis of fundamental and applied research findings, integrating knowledge in different activity areas. The activities are characterised by strategic activity objectives that may cover several different activity areas or research subjects.</p> <p>The activities are strategically planned by assuming the responsibility for the results and quality of other employees' activities and independent strategically important decision-making. The training and consulting of the specialists in the respective activity area is another characteristic. Thus, it is necessary to have the ability to adopt strategic decisions of public significance, to independently plan and conduct fundamental and/or applied research, to transfer the latest knowledge (to share know-how) to specialists in the respective area and to coordinate scientific and applied research projects.</p> <p>Intense and unpredictable changes in the activities and their environment require readiness for constant developments, openness to innovation, a positive attitude towards the development of the organisation and society, the ability to address issues originally in the light of their context, and the ability to initiate and make changes in various areas of activity and public life.</p>	<p>Have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;</p>	<p>Superb research skills and capacities are insisted by both LTQF 8 and QF-EHEA 3. Nevertheless, LTQF 8 does not feature the requirement of demonstrating a systematic understanding of one's study field. A general conclusion can be drawn that the requirements for understanding of knowledge and research skills and capacities are similar.</p>
	<p>Have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;</p>	<p>The requirement to be able to conceive, design, adapt and implement a research process is formulated in both QF-EHEA 3 and LTQF 8. However, LTQF 8 does not specify a direct reference to the necessity to follow scholar principles/integrity in research.</p>
	<p>Have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;</p>	<p>Innovation and originality of research (innovative development) is emphasised in both QF-EHEA 3 and LTQF 8, however, LTQF 8 does not refer to the requirement to have research work published in national or international refereed publications.</p>
	<p>Are capable of critical analysis, evaluation and synthesis of new and complex ideas;</p>	<p>The ability of strategic thinking and acting, which is mentioned repeatedly in LTQF 8, is close to the evaluation criterion specified in QF-EHEA 3.</p>
	<p>Can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;</p>	<p>The ability to train and consult others, communicate the latest knowledge to specialists of a relevant area, coordinate research projects and assume responsibility for the results of other people's activities, as specified in LTQF 8, is only possible with the ability to communicate with colleagues, a wider research community and the society in general.</p>
	<p>Can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</p>	<p>The ability to develop new knowledge, ideas, technologies, work practices, methods and processes of activities alongside with communication with colleagues, a wider research community and the society in general about the field of expertise should indeed facilitate contribution to technological, social and cultural advancement.</p>

Cycle 3 of education is exclusive being the last level on the scale of qualifications hierarchy. Formally, it does not have any restrictions from above for learning outcomes. In the light of the range of professions, readiness for creative work is the exclusive character of this level of qualifications. In QF-EHEA, this is underpinned to superb research skills and the ability to implement a research process that allows preparing research works relevant for publishing in national or international refereed publications. This level of qualifications is understood in a highly similar manner in LTQF, which insists that a person who has acquired the qualification is ready for complex activities that involve development of new knowledge, ideas, technologies, work practices, methods and processes, also specifying that the person is capable of independent planning and conducting fundamental and applied research, etc. According to the descriptor of QF-EHEA cycle 3, persons with these qualifications are expected to promote technological, social and cultural advancement within the academic and professional contexts.

3. The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits

The LTQF and its implementation process partially comply with this criterion. Referring to the description of the third criterion of the referencing of LTQF to the EQF indicated in the section 4.5, the levels of LTQF are defined and described on the basis of characteristics of vocational activities by linking these activities to derived competences. It must be noted, that the competence based higher education studies are executed only by the colleges of higher vocational education, providing qualifications referenced to the sixth level of the LTQF. Universities currently are in the process of transition to the learning outcomes based study programmes. Implementation of the ECTS in the universities of Lithuania has started only recently. Legal provision has been approved since the 1 of September 2011, saying that the volume of the year of study is 60 credits. More information about it can be found in the section 4.5.3.

4. The procedures for inclusion of qualifications in the national framework are transparent

This criterion essentially complies with the fourth criterion of the referencing of the LTQF to the EQF. Transparency of procedures for inclusion of qualifications and degrees in the LTQF is ensured by the requirement, that the diplomas of these degrees and qualifications are issued only after the completion of studies included in the Register of Study and Training Programmes and Qualifications regulated by the Ministry of Education and Science. Other important provision ensuring the transparency of inclusion of degrees and qualifications in the LTQF is accreditation of study programmes executed by the CQAHE. More information about the procedures for inclusion of higher education degrees and qualifications in the LTQF can be found in the section 4.6.

5. The national quality assurance system for higher education refer to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process

This criterion essentially complies with the fifth criterion of referencing LTQF to the EQF. Policies and procedures of quality assurance encompass all the parts and levels of the LTQF. All the providers of higher education degrees and qualifications execute the procedures of internal quality assurance in implementing accredited programmes of studies. External quality assurance of the programmes of studies is executed every six years or every two years (depending on the outcomes of evaluation) by the CQAHE, which assesses the universities and colleges of higher vocational education. However, it is still necessary to improve and develop the measures and methods of assessment of learning outcomes, because the implementation of learning outcomes in the study programmes has started quite recently. The CQAHE works referring to clear and measurable aims and standards. The activities of this institution are financed from the state budget and other official sources of funding. The processes of quality assurance of studies combine and integrate internal self-assessment and external evaluation. Special projects in the referencing of degrees and qualifications provided by the Lithuanian higher education establishments to the QF-EAHEA

and in the implementation of the ECTS are implemented. More information about the reference of national system of higher education quality assurance to the LTQF can be found in the sections 4.7. and 2.3., as well as in the third appendix of recommendations.

The International experts group established by the European Association for Quality Assurance in Higher Education (ENQA) has performed external CQAHE evaluation on 14-15 March 2012. The evaluation results will be published in the future.

6. The national framework and its correspondence to EHEA are shown in all diploma supplements

It is foreseen, that responsible institutions will be prepared to indicate the referencing of higher education degrees and qualifications to the LTQF and the EQF in all diploma and supplements by the end of 2012.

7. The responsibility of stakeholders involved in qualifications framework is clearly defined and public

The process of implementation of the LTQF complies with this criterion. According to the laws of the Republic of Lithuania the functions of the implementation of national policy of education, as well as regulation and administration of the national system of education are delegated to the Ministry of Education and Science. To execute these tasks in the field of higher education the Ministry of Education and Science is assisted by two national institutions - CQAHE and the Centre for the Monitoring and Analysis of the Science and Studies. As it is indicated in the text above, the CQAHE cooperates with the QVETDC (the main institution regulating the national system of qualifications in Lithuania) in seeking the compliance of the higher education system in Lithuania with the LTQF and the QF-EHEA, as well as executes external evaluation of the quality of activities of higher education providers, accredits the programmes of studies, evaluates and (or) recognises higher education degrees and qualifications provided abroad. The Centre for the Monitoring and Analysis of the Science and Studies executes the functions of science and studies system monitoring and provides the recommendations for the development of this system. There is also one advisory institution in the field of higher

education - the Council of Higher Education. This institution advises the Ministry of Education and Science in the field of higher education strategic development. More information about the responsibilities of these and other stakeholders of the LTQF in the field of higher education can be found in the section 2.1.

5.2. Compliance with the QF-EHEA process criteria

1st procedure. The competent national body/bodies shall self-certify the compatibility of the national framework with the European framework.

The working group for the referencing of Lithuanian Qualifications Framework to the EQF consisted of the representatives of quality assurance agencies from the all sectors of education (including CQAHE), independent experts representing higher education, vocational education and training and three international experts. The referencing report was endorsed by the Central Professional Committee – a collegial, cooperation-based advisory body that coordinates strategic issues pertaining to the development of the qualifications system. The main principles of constitution of this committee and its functions are approved by the Order of the Minister of Education and Science No. V-1909 „On the approval of the Description of Objectives, Functions, Committee Establishment and Financing Rules for Qualifications Management Institution’s Central and Sectoral Professional Committees” issued on 29 October 2010. The Central Professional Committee includes the representatives of the Ministry of Education and Science, Ministry of Economy and the Ministry of Agriculture, as well as the CQAHE, QVETDC, Lithuanian VET schools Association, Lithuanian Colleges Directors’ Conference and Lithuanian Universities Rectors’ Conference, representatives from the Association of Local Authorities in Lithuania and 9 representatives of social partners. The representatives of social partners are delegated to the Central Professional Committee by the employers organizations (Confederation of the Industrialists of Lithuania, the Confederation of the Business Employers of Lithuania, Chambers of Commerce, Industry and Crafts of Lithuania, Chambers of Agriculture of Lithuania)

and employees organisations (the Confederation of Trade Unions of Lithuania, the Trade Union „Solidarumas“ and Labour Federation of Lithuania).

2nd procedure. The self-certification process shall include the stated agreement of the quality assurance bodies in the country in question, as recognised through the Bologna Process.

Representatives of the Centre for Quality Assessment of Higher Education were officially involved in the referencing process of the Lithuanian Qualifications Framework to the EQF and in the related consultations. The CQAHE has been a member of the group of referencing process and currently is a member of the Central Professional Committee. On 17 November 2011 the members of the Central Professional Committee endorsed the conclusions of the Referencing Report of the Lithuanian Qualifications Framework to the EQF and together approved the compatibility of the Lithuanian Qualifications Framework to the EQF and to the QF-EHEA.

3rd procedure. The self-certification process shall involve international experts.

Three international experts were involved in the referencing process:

1. Trevor Clark, *Head of Credit and Qualifications Framework for Wales*;
2. Külli All, *Adviser for Lifelong Learning, Vocational and Adult Education Department, Ministry of Education and Research of Estonia*;
3. Raija Timonen, *Counsellor of Education, the Finnish National Board of Education*.

The main criteria for the selection of countries, which international experts were invited from, were the following: one of the experts came from one of the Baltic states (Estonia was selected); one from a country that had already completed referencing process (the United Kingdom was selected); and one came from a country with an educational system similar to Lithuania's educational system with school based vocational education and training and binary higher education system (Finland was selected). Specific candidacies were proposed by AG EQF member of relevant countries.

The foreign experts came to Lithuania twice. During the visits, they attended meetings of the Management Group and communicated with Lithuanian experts helping with the referencing process. They were also briefed on the activities of institutions in charge of education quality assurance in Lithuania (Ministry of Education and Science, QVETDC, NSAA, CQAHE), visited a vocational school and provided written comments on the studies which were carried out by local experts.

4th procedure. The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out.

The self-certification is included in the Report of Referencing of Lithuanian Qualifications Framework to the EQF, which will be published as separate document and accessible from the web-sites of the all member organisations of the Central Professional Committee.

5th procedure. The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process.

Qualifications and VET Development Centre together with the Centre for Quality Assessment in Higher Education, which is empowered member of ENIC and NARIC networks from Lithuania shall provide the Report on Referencing of Lithuanian Qualifications Framework to the EQF to the above mentioned networks in order to include Lithuania in the list of States that have completed the self-certification process. The Referencing Report will be published after its presentation in the launching conference that is planned to be held on 24 May 2012.

6th procedure. The completion of the self-certification process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.

In cooperation with all ministries it will be achieved, that by the end of 2012 all higher education providers will be ready to indicate the links of provided degrees and qualifications with the corresponding LTQF and EQF levels in their issued Diploma Supplements.

6. Process of consultations

After the draft report was prepared, consultations with stakeholders were organised in October 2011. Consultations were carried out in the following ways:

- requesting remarks to be sent via e-mail;
- discussing the report at regional seminars.

E-mail consultations covered target groups of national level management and administration, general and higher education schools students associations, education providers associations and social partners. Consultations questionnaire was sent to 73 respondents (institutions, organisations), return of responses – 35 replies, i.e. 48% of the total number of the respondents. Distribution of respondents and responses according to target groups was as follows:

Target group	Number of respondents	Return of responses
National level management and administration institutions	30	17 (57%)
Students associations	4	2 (50%)
Education providers associations	19	10 (53%)
Social partners	20	6 (30%)

Participants were asked to get acquainted with the report and provide answers and comments on the following 4 questions:

1. Is the chosen referencing methodology understandable and ensures the reliability of results?
2. Do you endorse the conclusions drawn up regarding the referencing of the Lithuanian Qualifications Framework to the European Qualifications Framework?
3. Are the responses to referencing criteria sufficient to ensure that other countries trust the qualifications system of the Republic of Lithuania?
4. What was it that you found useful or lacking in the referencing report?

The majority of the respondents (approx. 75%) replied with a 'yes' to the first 3 questions, while the rest of the res-

pondents (approx. 25%) replied with 'partly' to at least one of the questions. No negative replies were received.

Almost all of the respondents provided positive replies regarding the importance of the referencing of the LTQF to the EQF has for the state and the benefit it yields to different target groups. Some replies, in particular those supplied with the answer 'partly', were non-standard and rather interesting. For instance, one of the respondents has given the following comment together with the response to question 3: „Other countries' trust in the qualifications system of the Republic of Lithuania will be created and guaranteed not so much by the Lithuanian qualifications framework and its referencing to the European qualifications framework as by the specific practices of qualifications comparison, assessment and recognition; mobility processes of employees and those still learning; practices and experiences of international cooperation between institutions responsible for the qualifications system, etc. Referencing may only create the preconditions for the development of the mutual trust but cannot guarantee such trust per se.”

In addition, a number of proposals have been made on possible improvements in the report so that it would reflect the Lithuanian qualifications framework more accurately and the report would be easier to understand for readers not acquainted with the Lithuanian education system. Following the consultations, the report was revised with regard to the submitted proposals.

Regional consultations were conducted in all ten counties of Lithuania. Consultative seminars involved participation of business, local government, education providers, associated youth, employer and employee organisation representatives. Depending on the region, the number of participants ranged between 30 and 140. The programme of seminars was divided in two parts: (1) discussion of the draft referencing report and (2) brainstorming on the best visualisation of the LTQF and the EQF referencing when explaining its importance and benefits to different stakeholders.

In the first part, participants were asked to discuss and formulate responses to 5 questions. Four of them were the same as those sent in e-mail consultations and the fifth question was as follows:

5. What is your opinion on the importance and added value of the referencing process?

Participants of all the seminars showed positive response regarding consultations and suggested that much more similar events should be organised. Even those participants who were not properly acquainted with the report, have actively engaged in discussions and left the event with a clear determination to get better acquainted with European and Lithuanian initiatives regarding the implementation of the EQF and the LTQF and to start using the developed instruments in their work. After getting acquainted with the report and considering the fact that the experience of countries that completed the referencing process had been used in drafting the document, comprehensive research was performed, foreign and Lithuanian experts had monitored and assessed the referencing process, consultations had been conducted with all the interested parties, etc., seminar participants agreed that the referencing process was reliable and the first three questions were answered with 'yes'. It must be noted that when discussing the third question almost all the participants drew attention to the fact that reliance on the national qualifications system may be guaranteed only by assuring high quality of education and training, including the assessment of learning outcomes.

Extensive discussions emerged concerning the question about the importance and added value that the referencing process had yielded. Sometimes the same qualification assessment criteria for all countries were mentioned, sometimes the importance of the referencing process for each individual was underscored. However, the freedom of movement in the common

European labour market was most often the ultimate aspect agreed upon by all. Probably the most interesting idea has been drawn in the following conclusion of a seminar: „The added value of the referencing process lies in the fact that we shall feel full-fledged participants of the EU labour market because knowledge, skills and competence will be understood equally.”

The seminar participants often mentioned the weaknesses of the Lithuanian qualifications system, too. One of them is the assessment and recognition of non-formally and informally acquired knowledge and skills. For instance, one of the seminar reports states: „The possibility of assessing and recognising non-formal and informal learning outcomes is legitimised by the laws that regulate education. Most of the subordinate legislation legal acts describe procedures of such assessment and recognition. The LTQF description points out, that different level qualifications may be acquired not only in the formal education system but also by way of non-formal and informal learning as well as by means of professional experience. Thus, political preconditions for the assessment and recognition of non-formal and informal learning already exist. However, at the implementation level the process is still in its early stages.” It was also noted on several occasions that the Lithuanian Register of Study and Training Programmes and Qualifications currently includes qualifications provided exclusively by the formal education system and leaves no room for qualifications gained through work experience.

In the second part of the seminar participants were divided into groups and each of them was asked to think of ways to depict visually the referencing process in a drawing, a movie, etc. A number of proposals were accumulated in this way and will be used to raise awareness about the LTQF and the EQF implementation and the ideas of referencing the national qualifications frameworks to the EQF.

7. Further developments

After Lithuania regained independence in 1990, a number of changes occurred in the country's system of qualifications, namely studies of 3 cycles were legitimated in higher education back in 1991, all qualifications in VET are learning outcomes based since 2000, etc. The Bologna and Copenhagen processes and the development of the European Qualifications Framework, which was started in 2004, triggered new reforms in the system of qualifications.

In Lithuania the development of the Lithuanian Qualifications Framework was started in 2005; its draft was published in 2007 and approved by the government in 2010. At the same time tasks closely linked with implementation of the ideas contained in the Lithuanian Qualifications Framework were underway in the education system.

Transition to learning outcomes based qualifications

Transition to learning outcomes based qualifications in all education sectors is one of the most important achievements in the development of the Lithuanian Qualifications Framework. Until then, it was launched merely in the VET sector.

In general education the focus was on detailed description of contents of individual subjects. The new approach to formulation of academic results was listed in General Programmes in the Strategy for Formation, Assessment, Updating and Introduction of Educational Content of General Education, which was approved by the Minister of Education and Science in 2007. Current efforts are focused on formulation of learning outcomes necessary for acquiring basic education (10 grades, Level 2 of the Lithuanian Qualifications Framework) and secondary education (12 grades, Level 4 of the Lithuanian Qualifications Framework), with discussions underway that general programmes should link achievement levels after 6, 8, 10 and 12 years of education to LTQF levels 1, 2, 3 and 4 respectively.

The Law on Education of the Republic of Lithuania puts higher schools under the obligation to harmonise the delivered higher education qualifications with the Li-

thuanian Qualifications Framework, while the Law on Science and Studies (2009) stipulates that study programmes should be learning outcomes based. In order to guarantee compliance of the programmes with the Lithuanian Qualifications Framework and to secure quality of transition to learning outcomes, subject benchmark statements on the national level are being prepared. They are drafted in accordance to the Recommendations for Drafting of Subject (Group of Subjects) Benchmark Statements approved by the Minister of Education and Science in 2011. The plan is to have the subject (group of subjects) benchmark statements ready within the three coming years. Furthermore, higher education schools involved in the national project "Development of the Concept of the European Credit Transfer and Accumulation System (ECTS) at the National Level: Harmonisation of the Credit and Implementation of the Learning Outcomes Based Study Programme Design" (hereinafter referred to as the "ECTS project") have prepared methodical recommendations for authors of study programmes. As the first step it is recommended to perform research of the field of professional activity in order to define subject and general competences, which are necessary for performance of professional activities by specialists of a certain field. Also, detailed methodical recommendations have been drafted for working groups updating programmes (Updating Study Programmes: Methodology for the Development of Competences and Assessment of Learning Outcomes).

Flexibility of acquisition of qualifications

In order to achieve a higher level of flexibility of learning, launching of modular education and training has been started in all sectors of education. In general education, subjects of the Lithuanian language, mathematics, history, biology, chemistry and physics are being divided into modules to provide pupils aged 14-19 with a broader choice of learning fields.

In the VET sector, first attempts were made a few years ago to group learning outcomes of individual qualifications into units and to divide the curricula into separate modules. The Description of Order of Desi-

gning and Legitimizing of Formal VET Programmes was approved by the Minister of Education and Science in 2010. It stipulates that all newly-drafted programmes should be modular, while existing programmes should be gradually updated and revised into modular ones. This is to facilitate favourable conditions for credit accumulation and to bridge gaps between initial and continuing education. Currently, preparations are about to be completed for launching modular training processes in vocational education and training.

The Description for General Requirements for First Cycle and Integral Study Programmes, approved by the Minister of Education and Science in 2010 also introduces the concept of module, however, it suggests that study programmes can also be subject-based. In both cases, the possibility of accumulating credits is required, i.e., learning outcomes and their assessment should be separately envisaged for every module or subject.

Quality assurance of assessment of learning outcomes

The system of assessment of learning outcomes in the sector of general education in Lithuania is focused on assessment of subject competences rather than general competences. A new assessment system is being developed to enable parallel assessment of subject-based and general competences. The system should be launched in 2013. Preparations are also underway for a graduation thesis, which would serve as one of the instruments for assessing general and subject-based competences of a pupil who has completed the secondary education programme.

According to the Law on Vocational Education and Training, competences required for acquisition of certain qualifications are prescribed by a qualifications standard (*profesinis standartas*), and assessment of the competences acquired is carried out by relevantly accredited institutions. Up until now, the functions were performed by the Chamber of Commerce, Industry and Crafts and the Chamber of Agriculture. In order to increase the diversity of these institutions, the selection of institutions that assess competences is currently carried out following the government-approved accreditation procedure. Such organisation of learning outcomes assessment facilitates recognition of competences that had been acquired

non-formally, informally or at work. Activities are also carried out to help improve the quality of VET providers. First of all, all VET providers – state-run and private – have been encouraged to develop internal quality assurance systems and received support for this purpose. Under the contracts signed, the tasks should be completed in 2013. External assessment of VET programmes has also been launched to analyse the quality of implementation of all programmes listed in the certain fields of education.

Higher education schools have already launched internal quality assurance systems and are searching for ways of using them to assure high-quality assessment of learning outcomes. The national ECTS project led to preparation of Recommendations for Integration of Methodology for the Development of Competences and Assessment of Learning Outcomes into the Internal Quality Assurance System.

Inclusion of stakeholders

Effective development of qualifications system is possible only having close cooperation among representatives of the education system, social partners and other stakeholders concerned. For this purpose, a system of professional committees consisting of the Central Professional Committee and Sectoral Professional Committees has been established under the Qualifications and VET Development Centre, pursuant to a governmental resolution. The Central Professional Committee was founded in 2010. A brief description of the committee's composition and functions is available in section 2.1 of the report. Seventeen sectoral committees were established in 2012 and are starting their activities.

Each individual sectoral committee consists of nine or more members representing employers, employees and education providers. The committee's main function is to advise the Qualifications and VET Development Centre regarding sectoral qualifications and competences needed to acquire them, to set priorities for the development of qualifications standards listing requirements for various levels of qualifications necessary for the specific sector, as well as to endorse standards. With approval from the sectoral committee, qualifications standards are approved by ministers of education and science and employment. Sectoral committees also analyse consistency of training programmes with the requirements prescribed in the standards.

Appendix 1. Descriptors defining levels in the European Qualifications Framework (EQF)

Appendix 2. Vocational Education and Training Standard of a Waiter-Bartender

Appendix 3. Description of the Lithuanian Qualifications Framework

Appendix 4. List of Central Professional Committee members

Appendix 5. Information sources

APPENDIX 1

DESCRIPTORS DEFINING LEVELS IN THE EUROPEAN QUALIFICATIONS FRAMEWORK (EQF)

	KNOWLEDGE	SKILLS	COMPETENCE
Level 1	basic general knowledge	basic skills required to carry out simple tasks	work or study under direct supervision in a structured context
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 or 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	comprehensive, 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
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 a 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 of a 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

VOCATIONAL EDUCATION AND TRAINING STANDARD OF A WAITER-BARTENDER

I. DETAILS OF THE VET STANDARD

1. Vocational education level – 3rd.
2. State code – S381102.
3. Qualification awarded – waiter-bartender.
4. Basic education – secondary.

II. CONTENT OF THE VET STANDARD

5. Brief description of occupational activity:

5.1. The VET Standard of a Waiter-Barman (hereinafter referred to as “the Standard”) has been developed taking into account changes on the labour market as well as findings of the qualification study carried out by the Standards’ Development Working Group and based on experience in other countries. The present Standard serves as a basis for the development of a training programme of vocational education level 3.

5.2. The Standard defines the minimum training requirements of a Waiter-Barman for working in the following main activity areas: customer service in a catering institution; handling special orders; organisation of barman’s work.

5.3. A waiter-bartender shall meet and serve customers in a catering institution and beyond; he/she shall be able to make necessary preparations for meeting and serving guests for a banquet, reception, or official dinner party, as well as conference participants and hotel guests. A waiter-bartender shall serve customers at the bar, prepare and serve mixed beverages and cocktails as well as hot drinks. A waiter-bartender shall prepare catering facilities, set tables, and serve customers in restaurants or coffee-houses. A waiter-bartender shall have good knowledge of the assortment of foods and beverages, quality requirements, and service. A waiter-bartender shall be able to communicate with customers at least in one foreign language.

5.4. A waiter-bartender shall work safely in accordance with the laws of the Republic of Lithuania as well as retail and public catering, sanitary, workers’ safety and health, and fire prevention rules and requirements. A waiter-bartender shall be able to measure the quality of foodstuffs and raw materials, meals and beverages based on their sensory qualities. A waiter-bartender shall be able to use

technical literature, information tools as well as apply state-of-art work technologies. A waiter-bartender shall have good knowledge of application and maintenance of technical equipment and electronic cash registers and shall be able to handle them.

5.5. A waiter-bartender shall be expected to demonstrate the following personal qualities: openness, integrity, credibility, dutifulness, creativity, discretion, motivation, self-confidence, sincerity, responsibility, tidiness, patience.

6. The objective of a waiter-bartender is to serve customers of catering institutions as well as guests of banquets and receptions and settle with customers following etiquette requirements.

7. Activity areas and competences of a waiter-bartender are listed in Appendix 1 of the Standard.

8. The scope of waiter-bartender’s competences, training objectives and competency assessment are provided in Appendix 2 of the Standard.

9. A waiter-bartender is expected to demonstrate the following abilities:

- 9.1. communication skills;
- 9.2. good command of a foreign language;
- 9.3. use of information technologies;
- 9.4. problem-solving;
- 9.5. attentiveness to customers;
- 9.6. dutifulness;
- 9.7. mathematical literacy.

10. Final qualification assessment:

10.1. The qualification of a waiter-bartender shall be awarded to a pupil who has completed the whole training programme and acquired competences defined in the Standard and been given a positive final qualification evaluation.

10.2. In accordance with the competency assessment criteria listed in the Standard, the following shall be tested and evaluated:

- 10.2.1. during the training process - all competences defined in the Standard;
- 10.2.1. during the final qualification assessment - selected competences.

10.3. Organisation and performance of the final qualification assessment and issuance of documents is regulated by the Ministry of Education and Science of the Republic of Lithuania.

APPENDIX 2

Appendix 1 to the VET Standard of a Waiter-Barman

AREAS OF ACTIVITY AND COMPETENCES OF A WAITER-BARTENDER

Areas of Activity	Competences
Customer service in catering institutions	Working safely Preparing for customer service Describing starters, soups, main meals as well as cold and hot drinks Describing alcoholic beverages and matching them with foods Customer service in catering institutions
Handling special orders	Guest service in banquets, receptions, and official dinner parties as well as service for conference participants Service for hotel customers
Organisation of barman's work	Preparing for customer service in a bar Preparing mixed beverages and cocktails Customer service at the bar Performing and formalising accounting of work and tangible assets

APPENDIX 2

Appendix 2 to the VET Standard of a Waiter-Barman

RANGE OF WAITER-BARTENDER'S COMPETENCES,
TRAINING OBJECTIVES AND COMPETENCY ASSESSMENT

Areas of Activity	Description of Competences		Training objectives	Competency Assessment
	Competences	Range of Competences		
1. Customer service in catering institutions	1.1. Working safely	Electric safety, fire prevention, workers' safety and health requirements. First medical aid. Environmental requirements.	1.1.1. Good knowledge of electric safety, fire prevention, workers' safety and health requirements	Describing electric safety, fire prevention, workers' safety and health requirements.
			1.1.2. Providing first medical aid	Providing first medical aid.
			1.1.3. Good knowledge of environmental requirements	Describing environmental requirements.
	1.2. Preparing for customer service	Types of catering institutions, catering facilities and their preparation. Personal hygiene and sanitary requirements and those for the workplace. Types of crockery, cutlery, glassware, table linen and other tableware and their preparation for table-setting. Menus: their types and rules of menu-making. Price lists. Tabletop design and table-setting Working with electronic cash registers (hereinafter referred to as the ECR). Computerised accounting systems for restaurants.	2.1.1. Preparing catering facilities and the workplace for customer service	Preparing catering facilities and the workplace in accordance with requirements.
			2.1.2. Selecting and preparing crockery, cutlery, glassware, table linen and other tableware for table-setting	Enumerating personal hygiene and sanitary requirements and those for the workplace. Selecting crockery, cutlery, glassware, table linen and other tableware.
			2.1.3. Good knowledge of types of menus and price-lists and their making rules	Describing menus and price-lists.
			2.1.4. Good knowledge of table-setting rules, table-setting	Table-setting.
			2.1.5. Working with the ECR	Preparing the ECR, work throughout the day and end-of-the-day procedures.
	1.3. Describing starters, soups, main meals as well as cold and hot drinks	Classification of foodstuffs, foodstuff groups, marking, storage, quality indicators. Initial and thermal preparation of raw materials. Groups of meals and beverages and their description.	1.3.1. Good knowledge of foodstuff groups, their marking, storage conditions, basic quality indicators.	Describing initial and thermal preparation methods of foodstuffs and raw materials.
1.3.2. Describing initial and thermal preparation of raw materials.			Explaining foodstuff groups, their marking, storage conditions, and basic quality indicators.	
1.3.3. Good knowledge of meals and beverages served in a catering institution and their preparation methods.			Describing initial and thermal preparation of raw materials. Explaining a customer how meals and beverages are prepared and what preparation methods are used.	

APPENDIX 2

Areas of Activity	Description of Competences		Training objectives	Competency Assessment
	Competences	Range of Competences		
1.4. Describing alcoholic beverages and matching them with foods		Laws of the Republic of Lithuania concerning retail trade, retail trade in alcoholic beverages and tobacco products.	1.4.1. Good knowledge of laws of the Republic of Lithuania concerning retail trade, retail trade in alcoholic beverages and tobacco products.	Explaining laws of the Republic of Lithuania concerning retail trade, retail trade in alcoholic beverages and tobacco products.
		Alcoholic beverages. Countries and regions of wine, kinds of wine grapes, wine quality categories, types of wine. Types of strong alcoholic beverages.	1.4.2. Describing kinds of alcoholic beverages and refreshments and matching them with foods	Describing alcoholic beverages, refreshments and matching them with meals.
		Types of beer, description. Refreshments and their types. Matching alcoholic beverages with foods. Storage conditions for alcoholic beverages and refreshments, basic quality indicators.	1.4.3. Good knowledge of storage conditions for alcoholic beverages and refreshments; ability to evaluate their quality.	Explaining storage conditions for alcoholic beverages and refreshments and basic quality indicators.
1.5. Customer service in catering institutions		Knowledge in communication psychology. Professional ethics skills; conflicts and their solutions.	1.5.1. Good knowledge of basic communication psychology principles	Describing basic communication principles.
		Communicate with customers at least in one foreign language.	1.5.2. Good knowledge of etiquette and protocol requirements	Explaining etiquette and protocol requirements.
		Etiquette basics and protocol.	1.5.3. Good knowledge of systems, forms, and methods of customer service	Describing methods, forms, and systems of customer service.
		Rules, forms, and methods of customer service in catering institutions.	1.5.4. Serving meals and beverages, settling with customers in accordance with requirements	Meeting and serving customers.
		Meeting customers, taking and communicating orders.	1.5.5. Communicating in fluent national language and at least in one foreign language	Removing dishes and changing table-setting according to requirements.
		Ways of serving meals and beverages, sequence, serving.	1.5.6. Describing peculiarities of customer service related to different religious backgrounds and customs	Preparing and performing the duties at a customer's table.
		Customer service; service provided in the course of eating and drinking.	1.5.7. Removing dishes, changing table-setting	
		Waiter's duties at the table. Bill-settlement with customers. Peculiarities of customer service related to different religious backgrounds and customs.	1.5.8. Preparing and performing the duties at a customer's table.	

APPENDIX 2

Areas of Activity	Description of Competences		Training objectives	Competency Assessment
	Competences	Range of Competences		
2. Handling special orders	2.1. Guest service in banquets, receptions, and official dinner parties as well as conference participants	Types of banquettes and receptions. Menu of banquettes, receptions, and official dinner parties. Planning customer service during banquettes, receptions, and official dinner parties. Table-setting for banquettes, receptions, and official dinner parties. Customer service. Preparing customer service for conference participants.	2.1.1. Good knowledge of types of banquettes and receptions and their service requirements	Enumerating types of banquettes and receptions and their service requirements.
			2.1.2. Describing menus of banquettes, receptions, and official dinner parties	
			2.1.3. Preparing for service of guests in banquets, receptions, and official dinner parties as well as conference participants	Preparing for service of guests in banquets, receptions, and official dinner parties as well as conference participants.
			2.1.4. Guest service in banquets, receptions, and official dinner parties as well as conference participants	Guest service in banquets, receptions, and official dinner parties as well as conference participants.
	2.2. Service for hotel customers	Service of guests in hotel restaurants and buffets. Room service of meals and drinks. Mini-bars and their service. Types of breakfast, table-setting, serving.	2.2.1. Describing service of hotel guests in hotel restaurants and buffets.	Explaining service of guests in hotel restaurants and buffets.
			2.2.2. Good knowledge of room service of meals and drinks and mini-bar service	Explaining room service of meals and drinks. Describing table-setting for different types of breakfast and guest service.
			2.2.3. Describing types of breakfast and their peculiarities	
			2.2.4. Table-setting for different types of breakfast and guest service	
3. Organisation of barman's work	3.1. Preparing for customer service in the bar	Bar inventory, crockery, glassware, their purpose, and preparation. Preparing bar showcase and arranging items for display. Preparing barman's workplace. Ordering and accepting bar products. Price-list of bar drinks. Purpose of mechanic, thermal, refrigerating, measuring equipment, their application and safety requirements.	3.1.1. Preparing bar showcase, arranging items for display	Preparing bar showcase and arranging items for display. Identifying bar inventory, crockery, glassware.
			3.1.2. Identifying and preparing bar inventory, bar crockery, and glassware	
			3.1.3. Preparing barman's workplace	Preparing barman's workplace as well as displaying items in accordance with requirements.
			3.1.4. Good knowledge of ordering and accepting bar products	Explaining the procedures related to ordering and accepting bar products.
			3.1.5. Describing the purpose of mechanic, thermal, refrigerating, weighting, measuring equipment and their application.	Drawing up the price-list of bar drinks. Describing the purpose of mechanic, thermal, refrigerating, weighting, measuring equipment and their application.

APPENDIX 2

Areas of Activity	Description of Competences		Training objectives	Competency Assessment
	Competences	Range of Competences		
3.2. Preparing mixed beverages and cocktails	Components and additives of cocktails and mixed beverages and selection. Classification of mixed beverages and cocktails. Selecting glassware for cocktails. Preparation of mixed beverages and cocktails and serving.		3.2.1. Describing components and additives of cocktails and mixed beverages and being able to select them	Describing and selecting components and additives of cocktails and mixed beverages. Classifying mixed beverages and cocktails. Preparing and serving mixed beverages and cocktails.
			3.2.2. Selecting glassware for cocktails.	
			3.2.3. Preparing and serving mixed beverages and cocktails	
3.3. Customer service at the bar	Meeting customers, taking orders. Serving customers at the bar. Settlement.		3.3.1. Preparing and serving hot drinks at the bar	Preparing and serving hot drinks. Meeting and serving bar customers.
			3.3.2. Serving customers at the bar, settling bills	
3.4. Performing and formalising accounting of work and tangible assets	Handling of the main accounting documents of the bar. Accounting of purchasing and selling raw materials and products. Material responsibility. Accounting of tangible assets. Calculating prices and mark-ups. Formalising accounting procedures using information technologies.		3.4.1. Good knowledge of accounting documents of the bar and ability to handle them	Handling accounting documents of the bar. Calculating amounts of raw materials, the stock, prices, and mark-ups. Explaining material responsibility, accounting of tangible assets. Calculating the sales price. Performing tasks using information technologies.
			3.4.2. Calculating amounts of raw materials, the stock, prices, and mark-ups	
			3.4.3. Good understanding of material responsibility and good knowledge in accounting of tangible assets	
			3.4.4. Calculating the price of bar drinks	
			3.4.5. Working with information technologies	

Approved by
Government of the Republic of Lithuania
Resolution No 535 of 4 May 2010

DESCRIPTION OF THE LITHUANIAN QUALIFICATIONS FRAMEWORK

I. GENERAL PROVISIONS

1. The Description of the Lithuanian Qualifications Framework (hereinafter referred to as 'this Description') sets out the system of the levels of qualifications established in the Republic of Lithuania on the basis of competencies required for personal activities. According to the Lithuanian Qualifications Framework laid down in this Description, the qualifications established in the Republic of Lithuania shall be categorised, assessed and compared by linking the Lithuanian qualifications system, which covers the Lithuanian Qualifications Framework, qualification planning, implementation, recognition and management, with the qualification systems of other Member States of the European Union. The Lithuanian Qualifications Framework is in conformance with the Recommendation of the European Parliament and of the Council on the establishment of the European Qualifications Framework for lifelong learning (2008/C111/01) and the 8 levels of the qualifications framework established therein. The qualifications defined in this Description shall be ascribed to the qualification levels established in this Description, which specify the functional, cognitive and general competencies necessary for the performance of activities of similar complexity, autonomy and variability.

2. This Description was drafted with the aim to:
 - 2.1. to categorise the qualifications established in the Republic of Lithuania, indicating separately the qualifications for work and/or for study;
 - 2.2. to establish the conditions for adapting qualifications to the needs of the national economy and to coordinate the national economic, social and employment policies;
 - 2.3. to ensure the clarity and accessibility of the processes of definition, acquisition, evaluation and recognition of qualifications;
 - 2.4. to inform persons on the content, acquisition, development and/or change of qualifications necessary for various professional activities;

- 2.5. to enable the facilitation of workforce mobility on the national and international scale;
- 2.6. to encourage lifelong learning through the application of all the forms and methods of formal, non-formal and informal learning with the purpose of moving between different levels of qualification.

3. Definitions for the purposes of this Procedure:

High professional qualification shall mean a qualification attested by evidence of the qualification of higher education or, by derogation from this provision where so permitted by the Lithuanian legislation, a minimum professional experience of five years which is equivalent to the qualification of higher education and is necessary for the profession or sector specified in the employment contract or binding job offer.

The other terms used in this Description are defined in the Law on Vocational Education of the Republic of Lithuania (*Valstybės žinios* 1997, No 98-2478; 2007, No 43-1627), the Law on Education of the Republic of Lithuania (*Valstybės žinios* 1991, No 23-593; 2011, No 38-1804), and the Law on Science and Studies of the Republic of Lithuania (*Valstybės žinios* 2009, No 54-2140) as well as other legislative acts.

II. LEVELS OF QUALIFICATIONS

4. The Lithuanian Qualifications Framework shall consist of 8 levels of qualifications.
5. The levels of qualifications are arranged hierarchically, with regard to the underlying competence of the qualifications, the ways of acquiring the qualifications as well as the criteria defining the levels of qualifications:
 - 5.1. complexity of activities shall be a qualification criterion used to describe the character of activities, the variety of tasks and the degree of responsibility;
 - 5.2. autonomy of activities shall be a qualification criterion used to describe changes in the activity organisation and nature of subordination;
 - 5.3. variability of activities shall be a qualification criterion used to describe activities in terms of changing technological and organisational environment.

APPENDIX 3

6. Each level of qualifications includes the qualifications intended for the performance of activities of similar complexity, autonomy and variability.

7. (Repealed) *Amendments to the paragraph: No 986, 24 08 2011, Valstybės žinios, 2011, No 107-5057 (08 30 2011)*

8. Qualifications of levels I-IV shall be acquired by completing vocational education and/or general education programmes or by independent study or by gaining professional experience;

9. Level V qualifications shall be acquired by completing training programmes intended for persons with a professional qualification as well as fixed-duration professional experience, higher education programmes not leading to a degree (except residency) and/or through professional experience and independent study.

10. Level VI qualifications shall be acquired by completing cycle one of university or college studies and, in the cases and according to the procedure specified in the legislation – by completing study or requalification programmes not leading to a degree and/or through professional experience and independent study.

11. Level VII qualifications shall be acquired by completing cycle two of university studies or integrated study programmes, in the cases and according to the procedure specified in the legislation – by completing study or requalification programmes not leading to a degree and/or through professional experience and independent study.

12. Level VIII qualifications shall be acquired by completing doctoral studies and/or, in accordance with the procedure prescribed by the legislation, through professional experience and independent study.

12¹. Qualifications of levels VI-VIII shall be treated as the high professional qualification.

13. In accordance with the procedure prescribed by the legislation, qualification sub-levels linked to professional experience may be introduced in each of the qualification levels for the purposes of promoting professional development of employees.

14. The Lithuanian Qualifications Framework does not prevent persons whose professional qualification has been recognised pursuant to the Law of the Republic of Lithuania on the Recognition of Regulated Professional Qualifications (*Valstybės žinios* 2008, No 47-1747) from accessing the labour market in the manner prescribed by the legislation.

15. The levels of Lithuanian qualifications are described in the Annex.

III. APPLICATION

16. The provisions of this Description shall apply to:
- 16.1. the management of the Register of Studies, Training Programmes and Qualifications, other national and institutional registers as well as information systems;
 - 16.2. the development and approval of professional standards and vocational training standards;
 - 16.3. the development and implementation of formal vocational education and training or higher education programmes;
 - 16.4. the evaluation of the abilities acquired through formal, non-formal and informal learning;
 - 16.5. the provision of information and consulting on the issues of the Lithuanian system of qualifications;
 - 16.6. the evaluation and recognition of qualifications acquired in the country and abroad;
 - 16.7. the attribution to the respective qualification levels of qualifications acquired before the approval of this Description and during the period preceding the reorganisation of the vocational education and training and higher education programmes pursuant to the Framework;
 - 16.8. the issue of qualification certificates to persons.

LIST OF LITHUANIAN QUALIFICATION LEVELS

Level of Lithuanian qualifications	Description of the qualification level
I	<p>The qualification is intended for activities consisting of one or several simple specialised actions or operations. The activities require the ability to apply basic knowledge characteristic of the activities performed. The environment of the activities is clear, the activities are performed in line with detailed instructions, some cases require intense supervision, guidance and assistance. The situations, actions and operations constituting the activities are regular and constantly repetitive.</p>
II	<p>The qualification covers the activities consisting of actions and operations intended to solve simple problems. The activities performed require the application of the main factual knowledge characteristic of the activities. The activities performed require supervision, guidance and assistance. The activities and operations constituting the activities are regular.</p>
III	<p>The qualification is intended for activities consisting of actions and operations in narrow areas of activities. The activities may include several or more specialised activity tasks that require the application of well-known and tested solutions. Performance of the activities involves the ability to apply the knowledge characteristic of the activities performed pertaining to the facts, principles and processes of the activity area. The activities are carried out autonomously, under the guidance of an employee of a higher qualification and subject to external performance quality control. The activity environment may require the ability to adapt to simple context changes.</p>
IV	<p>The qualification is intended for activities consisting of actions and operations in relatively broad areas of activity. The activities are performed by carrying out several or more specialised activity tasks, solutions to which are not always tested or known. Performance of the activities involves the ability to apply factual and theoretical knowledge characteristic of a broad context related to the activity areas. The activities are performed autonomously, assuming the responsibility for the quality of the procedures and outcomes of performance. With the acquisition of experience, the qualification allows the transfer of practical skills to the staff of lower qualifications as well as supervision of their activities. The activity environment requires the ability to adapt to the developments predetermined by the context change, which is normally foreseeable.</p>
V	<p>The qualification is intended for activities distinguished by integrated coordination of activity tasks in different activity areas. The activities include the evaluation of the competencies of lower-qualification employees and training thereof. The activities require coordination of comprehensive knowledge of the activity area with general knowledge in dealing with various specialised activity tasks in several different activity areas. The employee performs the activities independently and is supervised only as regards the evaluation of results. The activity tasks are set by an employee of a higher qualification, who frequently grants the employee performing the activities the discretion as to the choice of methods and measures to complete the tasks. The employee supervises the activities of lower-qualification staff, plans and assigns activity tasks, oversees the performance of the activities, provides consulting and verifies the performance quality. The technological and organisational requirements of the activities as well as their environment are constantly changing, the changes are often unforeseeable and may be related to new areas of activity.</p>

APPENDIX 3

Level of Lithuanian qualifications	Description of the qualification level
VI	<p>The qualification is intended for complex activities distinguished by a variety of tasks and their content. Different means and methods are employed when dealing with problems in various areas of professional activities. Therefore, the performance of activities requires the application of broad theoretical knowledge based on the results of new fundamental and applied research or necessary for the introduction of various innovations.</p> <p>Activities are performed independently, selecting the methods for task completion and organising the work of the respective staff for the completion of the set tasks. Thus, the qualifications in this level include the ability to plan activities with respect to the set tasks, to analyse and record the activity results and to submit reports to activity coordinators, to modify activities based on the activity result analysis and specialist recommendations, and to carry out different project activities.</p> <p>The activity environment requires the ability to adapt to constant and normally unpredictable changes predetermined by the progress of knowledge and technologies in a specific professional sphere. The qualification allows the enhancement and extension of professional knowledge and, following the self-assessment of the activities, enables independent learning (development of cognitive competencies) as required by the changing professional activities</p>
VII	<p>The qualification is intended for complex activities consisting of various interconnected tasks that may cover several related professional activities. Therefore, the performance of activities requires expert evaluation and application of the latest knowledge of the professional activities and similar or related areas, discovery of new facts in conducting applied research into the professional activities, and creative application of theoretical knowledge and research results.</p> <p>The activities are performed by means of independent setting of the tasks in the respective activity area and taking independent decisions aimed at activity enhancement and improvement. A peculiar characteristic of the activities is the supervision of other employees' activities. Thus, the qualifications of this level cover the abilities to independently carry out applied research, provide consulting in the activity area, coordinate projects aimed at the improvement of the qualifications of others as well as introduction of innovations, and to analyse and present the activity results.</p> <p>Due to the advancement of the knowledge, technology and labour organisation in various activity areas, the activities of this level and their environment undergo intense changes, the developments are difficult to predict, and the activities consist of constantly changing combinations of tasks. Thus, the activity changes require the ability to adopt innovative solutions based on research results as well as the evaluation of alternative solutions and possible social and ethical consequences of the activities.</p>
VIII	<p>The qualification is intended for activities of exceptional complexity, distinguished by the development of new knowledge, ideas, technologies, as well as work practices, methods and processes. Consequently, the activity demands the discovery of new knowledge in the activity areas on the basis of fundamental and applied research findings, integrating knowledge in different activity areas. The activities are characterised by strategic activity objectives that may cover several different activity areas or research subjects.</p> <p>The activities are strategically planned by assuming the responsibility for the results and quality of other employees' activities and independent strategically important decision-making. The training and consulting of the specialists in the respective activity area is another characteristic. Thus, it is necessary to have the ability to adopt strategic decisions of public significance, to independently plan and conduct fundamental and/or applied research, to transfer the latest knowledge (to share know-how) to specialists in the respective area and to coordinate scientific and applied research projects.</p> <p>Intense and unpredictable changes in the activities and their environment require readiness for constant developments, openness to innovation, a positive attitude towards the development of the organisation and society, the ability to address issues originally in the light of their context, and the ability to initiate and make changes in various areas of activity and public life.</p>

Amendments:

1. Government of the Republic of Lithuania, Resolution No 657, 08 06 2011, *Valstybės žinios*, 2011, No 71-3402 (11 06 2011) AMENDING RESOLUTION NO 535 OF THE GOVERNMENT OF THE REPUBLIC OF LITHUANIA OF 4 MAY 2010 APPROVING THE DESCRIPTION OF THE LITHUANIAN QUALIFICATIONS FRAMEWORK

2. Government of the Republic of Lithuania, Resolution No 986, 24 08 2011, *Valstybės žinios*, 2011, No 107-5057 (08 30 2011) AMENDING RESOLUTION NO 535 OF THE GOVERNMENT OF THE REPUBLIC OF LITHUANIA OF 4 MAY 2010 APPROVING THE DESCRIPTION OF THE LITHUANIAN QUALIFICATIONS FRAMEWORK

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Chairperson:

Romualdas Pusvaškis – Ministry of Education and Science of the Republic of Lithuania, Director for Vocational Education and Training

Deputy Chairperson:

Tatjana Babrauskienė – Federation of Lithuanian Education and Science Trade Unions, International secretary

Members:

Danukas Arlauskas – Lithuanian Business Employers' Confederation, Director General

Saulius Baliukynas – Association of Lithuanian Chambers of Commerce, Industry and Crafts, Project Manager

Giedrė Beleckienė – Qualifications and VET Development Centre, Director

Alfonsas Daniūnas – Vilnius Gediminas Technical University, Rector

Zita Duchovskienė – Ministry of Agriculture of the Republic of Lithuania, Economics and Programmes Evaluation Department, Head of Strategic Planning and Science Division

Alvydas Pranas Grevas – Kaunas Food Industry Vocational School, Director

Linus Kadys – Ministry of Economy of the Republic of Lithuania, Head of Human Resources Division

Sonata Kisielienė – Chambers of Agriculture of the Republic of Lithuania, Senior Specialist for Vocational Education and Training

Kristina Krupavičienė – Lithuanian Trade Union „Solidarumas“, Executive Secretary

Vaidotas Levickis – Lithuanian Business Employers' Confederation, Director of Projects Department

Lina Makarskienė – Concern SBA, Human Resources Manager

Jonas Mickus – Association of Local Authorities in Lithuania, Adviser

Vydas Puskepalis – Lithuanian Labour Federation, Chairperson

Gitenis Subačius – „Achema“ AB, Human Resources and Common Affairs Director

Natalija Šedžiuvienė – Šiauliai State College, Director

Aurelija Valeikienė – The Centre for Quality Assessment in Higher Education, Deputy Director

APPENDIX 5

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