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DEVELOPING, ASSESSING AND VALIDATING TRANSVERSAL KEY
COMPETENCES IN THE FORMAL INITIAL AND CONTINUING VET

TRACK VET:

Developing, assessing and validating transversal key competences in
the formal initial and continuing VET

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INTRODUCTION

In the 21st century paradigm of teaching and learning, the idea of competences has become a well-established measuring instrument. Transition to a competence based approach means changing the very methodology of the learning process, including – apart from academic content – also the organizational and practical aspects of learning. Equal access to quality education throughout a person's lifetime is the safest way to ensure the well-being of society. As noted in the Sustainable Development Strategy of Latvia until 2030, *“Concurrently with accumulation of specific competences and qualifications, which determine the ability of people to integrate in the labour market and to pursue a successful professional career, education is also the development process of personal talent, emotional and social intelligence and personality. Due to this reason the quality, accessibility and content of education at all levels and age groups – from pre-school to adult education – is a development opportunity of Latvia and a precondition for added human capital value”*. The policy of lifelong learning is based on the idea of promoting lifelong personal growth and self-development at every stage and aspect of life, laying the ground for growth of entrepreneurial spirit and resilience of every citizen to achieve social inclusion, employment and active civic participation. Since the 1990-ies, the Organization for Economic Co-operation and Development (OECD) has been conducting extensive research on major educational issues. In 2015, OECD launched its new initiative (*Education 2030: the OECD key Competences Framework*), which in its first stage (2015-2018) resulted in an in-depth comparative analysis of curricula and a conceptual learning framework 2030¹.

According to the EU 2020 strategy proposed by the European Commission (EC), countries share a common development goal of smart, sustainable and inclusive growth, with emphasis on the European Social Dimension and a common identity. With regard to inclusive growth, the main objectives are to attain high levels of employment as well as social and territorial cohesion. To achieve these goals and promote employment and growth in Latvia, in 2011 the Cabinet of Ministers (Cabinet) approved the Latvian National Reform Program for the implementation of the EU 2020 Strategy².

The European Reference Framework for competences ³ is a widely used tool for promoting reform in the content of vocational education. Since 2006, European societies and economies have undergone major changes, digital and technological innovation, as well as labour market and demographic changes. Ten years ago, many contemporary jobs did not exist, and many more new jobs will be created in the future. An important aspect of quality education is the ability to ensure that education systems, including vocational systems, can incorporate all the knowledge, skills and competences that are most relevant in today's world.

Converting key competencies into learning outcomes is a challenge for implementation. It is important for policy makers, educational institutions, teachers and learners in education programs and in the individual educational process.

The Recommendations issued by the Council of Europe on May 22, 2018⁴, updated eight key competences for lifelong learning in their due order of importance: literacy; language competence;

¹ OECD Learning Framework 2030 (2018) <http://www.oecd.org/education/2030/learning-framework-2030.htm/> (viewed on 27.06.2018.)

² National Reform Program of Latvia for the Implementation of Europe 2020 Strategy², available at https://www.em.gov.lv/files/tautsaimniecibas_attistiba/LV_NRP_1.pdf (viewed on 23.07.2018.)

³ Recommendation of the European Parliament and of the Council (December 18th 2006) on key competences for lifelong learning Official Journal of the European Union, L 394. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:LV:PDF> (viewed on 23.07.2018.)

⁴ Council Recommendation of 22 May 2018 on Key Competences for Lifelong Learning. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CONSIL:ST_9009_2018_INIT&from=EN (viewed on 27.06.2018.)

mathematical competence and basic competence in science and technology; digital competence; personal, social competence and learning to learn; civic competences; entrepreneurship and cultural awareness and expression.

The idea of “transversality” (from Latin *transversus* - *cross-cutting*) in Latvian largely corresponds to the idea of transferability, which in the verbal expression “transversal competences” clearly reveals the key property of being part and parcel of every sphere of activity. This refers to personal, social competences and learning competence; civic competence; business competence and competences in cultural understanding and expression, which were key to the Erasmus + KA2 Strategic Partnership Project “Developing, assessing and validating transversal key competences in the formal initial and continuing vocational education and training (TRACK-VET)” launched in September 2017 under the leadership of the Warsaw School of Economics, where Latvia was represented by the National Centre for Education (NCE).

NCE is a public administration body directly owned by the Minister of Education and Science. It ensures the development of academic content in general and vocational education and supervises its implementation, provides methodological support, ensures the validation of learning achievements in general education and the development and conduct of state examinations in vocational education, as well as coordinates the development of appropriate teaching literature and implements teacher in-service training.

TRACK-VET Project Participant Collaboration (Poland, Slovakia, Austria, France, Norway, and Latvia) aims to prepare science-based research proposals for European Union education policy makers and other stakeholders involved in the development, assessment and recognition of transversal key competencies (TKC) in vocational and continuing vocational education and training. This is a report on the implementation of TKC in vocational education in Latvia prepared by the NCE working group according to the joint methodology of the TRACK-VET project countries. In the TRACK-VET project, acquisition of TKC is studied within initial (4 years) and continuing vocational education programs.

Abbreviations and acronyms

Cabinet	Cabinet of Ministers
CE	Council of Europe
CSB	Central Statistical Bureau
CVET	Continuing Vocational Education and Training
CVQE	Centralized Vocational Qualification Examination
EC	European Commission
EL	Education Law
EQAVET	European Quality Assurance in VET
EQF	European Qualifications Framework
ESF	European Social Fund
EU	European Union
IVET	Initial Vocational Education and Training
LEC	Latvian Employers' Confederation
LLL	Life- Long Learning
LQF	Latvian National Qualifications Framework
LVQ	Level of Vocational Qualification
ME	Ministry for Economics
NGO	Non-Governmental Organizations
MoES	Ministry for Education and Science
NQE	National qualification examination
NVES	National Vocational Education Standard
NCE	National Centre for Education
NVES	National Vocational Education Standard
OECD	Organization for Economic Cooperation and Development
PS	Profession Standard
SEA	State Employment Agency
SEC	Sectoral Expert Council
SEDA	State Education Development Agency
SQF	Sectoral Qualifications Framework
SSEQ	State Service of Education Quality
TKC	Transversal Key Competencies
VE/VET	Vocational Education and Training
VECC	Vocational Education Competence Center
VEL	Vocational Education Law
VEP	Vocational Education Program
VET	Vocational Education and Training
VET ED	NEC Vocational Education Department VET Examinations Division
VQE	Vocational Qualification Examination

Basic concepts

Centralised Vocational qualification examination (CVQE) - centralised examination set up according to special methods and organised by NCE in accordance with an agreed procedure at the State level, in order to evaluate learning achievements. Centralised examination shall be passed in accordance with the requirements of the National Vocational Education Standard (NVES), profession standards (PS) and Vocational Education Program (VEP). Vocational education institutions and examination centres organise the process of qualification examinations in co-operation with vocational education support institutions, sectoral ministries and professional organisations.

Competence - In the Vocational Education Law (VEL) only “professional competence” is defined: necessary skills, knowledge and responsibility in work situations. However, the definition used in context of the European qualifications framework (EQF) could be applied: 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. In context of the EQF, competence is described in terms of responsibility and autonomy.

Continuing Vocational Education and Training (CVET) - a special kind of VET which provides an opportunity for adults with previous education and professional experience to acquire a vocational qualification at a specific level. Thereby, the term is interpreted similarly to the international definition, namely, CVET can be broadly defined as professional or vocational development through education and training undertaken typically after one has completed initial VET. It is provided and undertaken on initiative of public authorities, social partners, sectors, enterprises, individuals as well as a range of voluntary and community organisations.

Formal learning - Includes basic education, secondary education and higher education.

General education subjects - are integrated in the content of VET programmes to such an extent that the graduates of these programmes are entitled to continue their education in vocational secondary education and training programmes to acquire knowledge and skills required for Level 3 vocational qualification (4EQL), or to continue their education in a general secondary education bridging course (duration of this course is 1 year), thus obtaining the rights to study in higher education programmes.

Latvian National Qualifications Framework (LQF) - similarly to the EQF, consists of eight reference levels and imparts all stages (basic, secondary and higher education) and types (general, vocational, academic and professional) of education.

Level of vocational qualification (LVQ) - theoretical and practical preparedness, which provides an opportunity to perform work corresponding to a certain level of complexity and responsibility. There are five levels of vocational qualification in Latvia.

Informal education - stands for evaluation of the professional competences acquired outside the formal education system by accredited vocational education institutions and examination centers, which leads to a nationally recognized document certifying professional qualifications.

Initial Vocational Education and Training (IVET) - is regulated by the State. Formally organised vocational education, mostly at upper secondary education level, which is similar to the international definition, namely, education undertaken after full-time compulsory education (mainly nine years primary and lower secondary education) to promote acquisition of the necessary knowledge, skills and competences to enter an occupation. Management and legal basis of initial vocational education are not separated from continuing vocational education. Most vocational education is implemented through school-based programmes, which include practical learning periods at school and enterprise; in Latvia initial vocational education is referred to as ‘vocational education’.

Name of a Vocational Education Institution - The name of a vocational education institution, depending on the level of education to be implemented, shall include one of the following words: 1) school (a trade school or other educational institution, which implements the programmes of vocational initial education or partial secondary level vocational education, which provides an opportunity to obtain a first or second level vocational qualification); 2) secondary school (a vocational secondary school or other educational institution, which implements programmes of vocational secondary education, which provide an opportunity to obtain a third level vocational qualification); 3) college [an educational institution which implements first level higher vocational education programmes (college education) and provides an opportunity to acquire a fourth level vocational qualification]. In addition to the level of education to be implemented, the name of the vocational education institution may include the characteristics of the education programme and status (e.g. Vocational Education Competence Center). A vocational education institution has the right to implement different levels of vocational education programmes. The name of the educational institution shall be determined pursuant to the highest level of education to be implemented in the relevant educational institution if the proportion of the relevant education programmes are not less than 30 per cent.

Professional orientation education - the acquisition of systematised knowledge and skills, as well as the formation of values orientation in art, culture or sport concurrently with the basic education or secondary education level, which provides a possibility to prepare for the acquisition of a professional education in the selected direction. No qualification is obtained.

Profession standard (PS) or professional qualification requirement (if profession does not need to develop profession standard) - determine the primary requirements of a vocational qualification, as well as the relevant specific requirements necessary for the performance of the main work tasks in the relevant profession. The profession standards and professional qualification requirements shall be determined by laws or Cabinet regulations.

Sector Qualifications Framework (SQF) - have been developed in cooperation with sectoral experts and correspond to LQF levels 2 to 7. They include descriptions of sector-specific learning outcomes at each level: knowledge, skills and competences (autonomy and responsibility). The frameworks of 15 sectors comprises core and linked occupations, specialisations and level(s) of qualifications.

Transversal key competencies (TKC) - in the TRACK-VET project, acquisition of transversal key competencies (*personal, social and learning competence, social and civic competences, initiative-taking and entrepreneurship, Cultural awareness and expression*) is studied within initial (4 years lasting) and continuing vocational education programmes.

Qualification - mean the result of official assessment and validation of any qualifications and skills by documentary evidence after a competent authority or body has determined that the individual has achieved learning outcomes complying with specific standards. This term raises ambiguity in the Latvian context: English term 'qualification' in Latvian means 'education document' or 'diploma'; while the Latvian term '*kvalifikācija*' refers only to vocational education.

Vocational Education Competence Center (VECC) - status of Vocational education institution, which implements vocational secondary education programmes, which enables to obtain the third level of vocational qualification (4 LQF/EQF), and additionally performs functions of assessment of professional competence acquired at regional or sectoral methodological center, in-service teacher education center and outside formal education system. VECC receives state budget funding for the performance of these functions.

Vocational education of adults - includes vocational continuing education and in-service training.

Vocational education programme (VEP) - the document regulating vocational education, which, in accordance with the National vocational education standard (NVES) of the relevant educational level and profession standard, shall determine 1) the tasks of the vocational education programme (VEP); 2) the content of the VEP; 3) the implementation plan of the VEP; 4) the requirements in respect of education acquired previously; 5) the staff, financial and material resources necessary for the implementation of the vocational education programme. The VEP shall be drawn up by the educational institution in co-ordination with the founder thereof.

Vocational basic education - partial secondary level vocational education which provides a possibility to obtain a second level vocational (2-3 EQL) qualification.

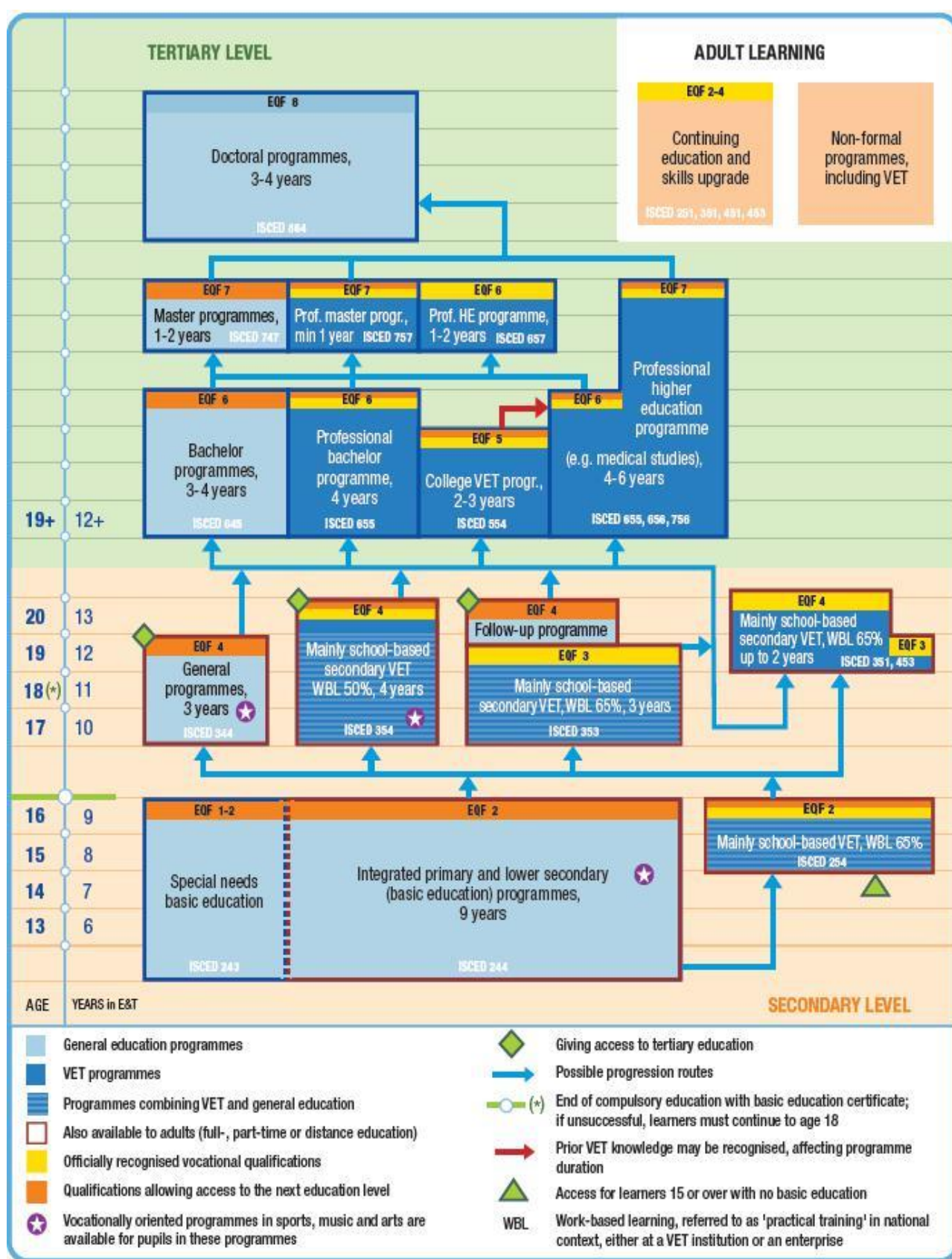
Vocational qualification examination (VQE):

a) is prepared at the educational establishment and approved by NCE;

b) is prepared at the NCE (*see before: Centralised Vocational qualification examination*).

Vocational secondary education - medium level vocational education, which provides a possibility to obtain a vocational third level (4 EQL) qualification.

Figure 1 VET in Latvia's education system



Source: Cedefop and ReferNet Latvia (2011.,2015).

CHAPTER 1: VOCATIONAL EDUCATION AND TRAINING IN LATVIA

1.1 Overview of the development of VET system in Latvia

In Latvia, lifelong learning is recognized and accepted as a tool that promotes human entrepreneurship, employability and resilience, active civic participation and social inclusion, as well as social inclusion and personal self-development. The concept of *lifelong learning* in Latvia is understood as learning throughout a person's life-span. The basis for lifelong learning is acquisition and further development of knowledge and skills driven by internal needs or external factors⁵. In VEP, mandatory lifelong learning modules include educational content that provides for the acquisition of key lifelong learning competences, including TKC:

The Latvian education system's main elements are:

- pre-school education;
- integrated primary and lower secondary education (hereafter basic education);
- upper secondary education - general or vocational secondary education (hereafter secondary education);
- higher (tertiary) education.

In Latvia, the Education Law (EL) stipulates that *vocational education* provides for a practical and theoretical background to carry out work in a profession, acquire professional qualifications and improve professional competence.

The objective of vocational education is to provide for continuing education after graduating lower secondary or secondary school with the aim of acquiring professional qualifications, developing abilities for continuing vocational education or obtaining the right to pursue education at a higher education level. The system of vocational education in Latvia is regulated by the Vocational Education Law (VEL) according to which vocational education institutions may be public (state or municipal) or private bodies. Article No. 4 of the VEL (1999) defines three levels of professional education:

1. Professional basic education;
2. Vocational secondary education;
3. Professional higher education - first level professional higher education (college education) and second level professional higher education.

The content of the VEP is determined by the NVES and the relevant PS. Upon graduation from vocational education programs with the acquisition of a professional qualification, the student conducts a VQE and given a certain level of professional qualification.

1.2 According to the VEL (1999), there are five levels of professional qualification (PQL) in the Latvian professional education system.

These PQL apply only to professional education and are automatically subject to LQF/EQF levels by law. The VET system (by VEL) sets out the following types of vocational education:

1. **Vocational initial education** – vocational education of a basic level, which provides a possibility to obtain a first level vocational qualification;

⁵ Profesiju standartu/ profesionālās kvalifikācijas prasību izstrādes metodika (Version 2), NCE, 2017, page 54.

2. **vocational secondary education** - medium level vocational education, which provides a possibility to obtain a vocational third level qualification;
3. **first level higher vocational education (college education)** - higher level vocational education, which provides a possibility to obtain a fourth level vocational qualification;
4. **second level higher vocational education** - higher level vocational education, which provides a possibility to obtain a fifth level vocational qualification;
5. **vocational further education** - a special kind of vocational education which provides an opportunity for adults with previous education and professional experience to acquire a specific level vocational qualification;
6. **vocational in-service training** - a special kind of vocational education which provides an opportunity for persons, irrespective of their age and previous education or vocational qualification, to acquire systematic vocational knowledge and skills corresponding to the requirements of the labour market.
7. **professional orientation education** - the acquisition of systematised knowledge and skills, as well as the formation of values orientation in art, culture or sport concurrently with the basic education or secondary education level, which provides a possibility to prepare for the acquisition of a professional education in the selected direction (*no qualification is awarded*).

Before 1990, there were no vocational education research institutions in Latvia. Research in vocational education was fragmented and had little impact on vocational education policies. The collapse of centralized economy and other changes have fundamentally affected vocational education, which used to be highly specialized, with many small single-profile schools linked to large industrial and collective farming enterprises⁶. In the first phase of the vocational education reform (1995-1998), the emphasis was more on developing legislation than on policy development and implementation. According to a report prepared by the Academic Information Center for the European Training Foundation, there were 143 vocational education institutions in Latvia in 1990/1991, including 86 VET institutions and 57 secondary schools providing vocational education (for comparison see Table 1).

In 2018, most of the vocational education institutions were established by the state, mostly (21) by MoES. Some VET institutions were also owned by the branch Ministries for Culture, Justice, Agriculture, Health, Defence, Welfare and the Interior. There were also vocational education institutions that were established (or taken over from the state) by municipalities, as well as private educational institutions. The VET system is managed by the Cabinet. The Cabinet defines the policies and strategies for vocational education, as well as the procedures for the development of occupational standards and professional qualifications, organization of internships, qualification requirements and professional qualifying examinations. The Cabinet controls the approval of Examination Centers, sets the criteria for awarding nationally recognized educational documents/qualifications and recognizing qualifications obtained abroad.

Since 2005, the number of school age children in Latvia has decreased by 20%, directly affecting the number of students in general secondary and vocational education, which subsequently has decreased by 21.6% over this period.

From 2010 to 2013, there was a 13% decrease of VET students (excluding higher education). The decrease is in line with demographic changes in the country.

⁶ Reviews of National **Policies** for Education. Latvia. OECD, 2000.

In 2018 in vocational education, the most popular fields are engineering and service-related fields with 35.4% and 25.4% of students, respectively⁷. Changes in the number of vocational education institutions and learners also speak for the changes that have happened during the educational reform. (Table 1)

Table 1 Number of VET schools and number of learners (2014-2019)

Indicators	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018./ 2019.
Number of schools providing VET programs	77	68	65	59 (incl.11 colleges)	60 (incl.11 colleges)
Number of learners at schools providing VET programs	29 855	27 938	28 950	28 528	27 937
Number of learners in general education, grades 1-12 (incl. 10-12)*	199 119 (28 510)	202 715 (28 325)	204 265 (28 674)	205 113 (29 069)	205 072 (29 160)

Source: MoES: <http://izm.gov.lv/lv/publikacijas-un-statistika/statistika-par-izqlitibu>

* Number of learners in evening and distance learning programs are not included.

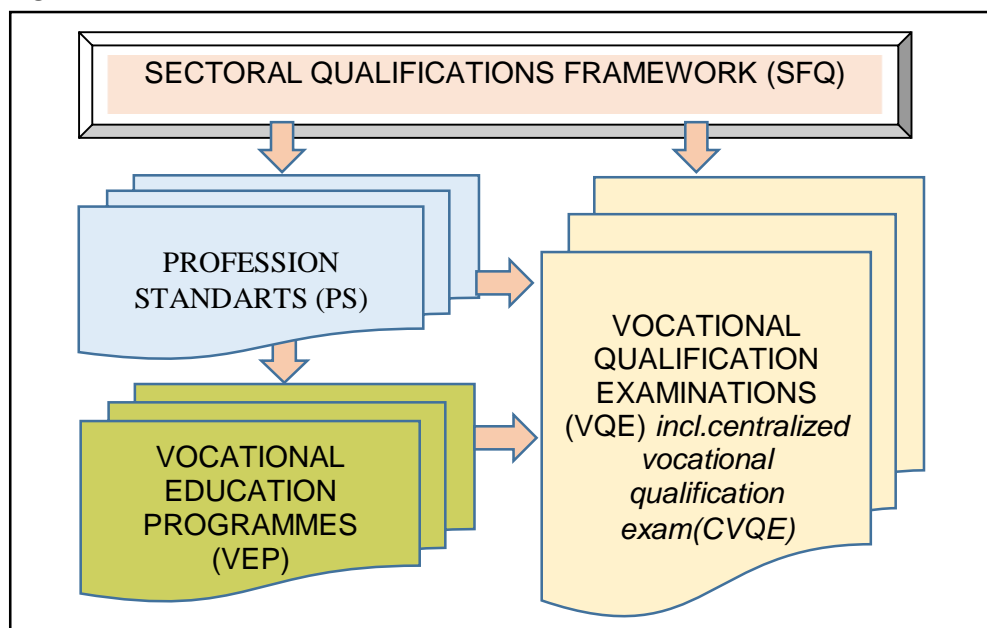
Historically, the modern VET system started to form in 1995, when MoES founded a state-owned non-profit organization “Agency for Vocational Education Development Programs” with the aim to promote vocational education policy and strategy development. From 1998 to 2000, the Agency also took care of the organizational work for reporting to OECD's Reviews of National Policies for Latvia. The report analysed the processes going on in Latvian education policies with a view to formulating recommendations for a future development strategy in education with the help of independent international experts. The report provided a basis for further changes in education.

Regular research in vocational education began in 1996, with the support of the European Training Foundation. From 2004, after accession to the EU, Latvia started to receive funding from the EU Structural Funds for research in education.

During 2005-2007 the first large-scale theoretical research was carried out in the form of an ESF National Program Project “Vienotas metodikas izstrāde profesionālās izglītības kvalitātes paaugstināšanai un sociālo partneru iesaistei un izglītošanai” (Development of a unified methodology for improving the quality of vocational education and involvement and education of social partners), which in line with Latvian culture developed six interrelated methodologies: sector-specific research methodology, methodology for the development of PS, methodology for the development of VET programmes, methodology for the development of the professional qualifying examination, methodology for quality assurance and assessment of VET institutions and methodology for the validation and skills assessment in non-formal education, as well as methodological recommendations: a mechanism for involving social partners to improve the quality of vocational education and an education program and methodological materials for educating social partners. (Figure 2).

⁷ Latvia Main statistical indicators in 2018 CSO

Figure 2 Relations between SQF,PS, VEP and VQE



In 2009, MoES developed a conceptual approach for increasing the attractiveness of vocational education and promoting active involvement of social partners. The conceptual approach document outlined the solutions for the main challenges in VET. The approach was a basis for implementing the European Social Fund (ESF) project “Nozaru kvalifikācijas sistēmas izveide un profesionālās izglītības efektivitātes un kvalitātes paaugstināšana” (Development of a sectoral qualifications framework and improvement of the efficiency and quality of vocational education and training) from 2010 to 2015 with the aim of stepping up the quality of VET to meet the needs of an operational, high quality system for delivering vocational content in line with sector-specific economic development.

Within the framework of the project, 14 sectors were carried out (Construction, Electronic and optical equipment manufacturing, Information and communication technology, Energy, Wood industry (forestry, wood processing), Chemical industry and its allied industries (Chemistry, Pharmaceuticals, Biotechnology, Environment), Metalworking, Mechanical engineering and Mechanical engineering, Food, Agriculture, Printing and Media Technologies, Textiles, Clothing, Leather and Leather Products, Transportation and Logistics, Tourism, Beauty, Business, Finance, Accounting, Administration (Wholesale, Retail and Commercial)) and sectoral research for educational needs identifying also the boundaries of each industry in Latvia, identifying the professions that exist in each sector.

The project led to:

- Foundation of 12 sectoral expert councils;
- Sector-specific research;
- A national sector-specific professional qualifications structure in line with the EQF by structuring the required professional qualifications by key professions, related occupations and specializations;
- 61 occupational standards and 19 professional qualification requirements for related professions and specializations, established or updated;
- 56 initial and continuing vocational programs developed through a modular approach;
- Improved content and procedure of vocational qualification examinations;
- Approved system for the assessment and recognition of knowledge, skills and competences acquired outside formal education;

- Provided introduction of a European Quality Assurance Framework in Vocational Education (EQAVET) in Latvia and implementation of a unified set of indicators for quality assessment in vocational education.

Sectoral and related occupational cards developed as a result of sectoral research are the basis for reviewing the content of existing profession standards and for developing or updating the required profession standards and / or professional qualification requirements. It is important that sectoral research is monitored every three years to ensure that the content of VET is updated to the actual needs of the industry.

Vocational education is further reformed through the next ESF-supported project “Nozaru kvalifikācijas sistēmas pilnveide profesionālās izglītības attīstībai un kvalitātes nodrošināšanai” (Development of the sectoral qualifications system for the improvement of vocational education and quality assurance) (2016-2021), which aimed at improving the content of vocational education and updating and developing:

- 15 SQF
- 162 PS and professional qualification requirements in accordance with the NQF/EQF
- 210 VQE
- 184 modular VEP
- Alongside with the development of VEP, the project supported inclusion or integration of individual lifelong learning modules “Initiative and Entrepreneurship”, “Individual and Societal Dimensions of Security”, “Information and Communication Technologies”, “Social and Civic Skills”, “Languages, Cultural Understanding and Expression” into the VET curriculum modules and general education subjects.

Vocational education institutions offer educational programmes in all areas of economic activity. Vocational education gives a chance to continue education and acquire initial professional qualifications after graduating from lower secondary or secondary school and provides for professional qualifications that meet the labour market needs through continuing vocational education, as well as the right to pursue education at higher education level.

The content of vocational education is set down in the following framework documents:

- Regulations regarding the the NVES (Cabinet Regulation No 211), which set down the strategic objectives of vocational education, its mandatory content and key principles and procedure for assessment. The Regulations are developed by MoES and approved by the Cabinet.
- PS and professional qualification requirements, which set down the key professional requirements (knowledge, skills and attitudes) for performing key tasks in the relevant occupations.
- VEP, which is a document regulating vocational education, and sets down the content, implementation plan, staffing requirements, financial and material resources and prior educational requirements in line with the NVES and the profession standards. Vocational education institutions use the national standard for education and PS to develop their own, founder approved education programs; otherwise the particular education program cannot be licensed and accredited.

In 2015, the modular principle was introduced in vocational education, thus significantly reducing the time required to respond to the immediate labour market demands. A VET module is a component of the professional qualifications curriculum which is based on a set of achievable learning outcomes and consists of a set of measurable and demonstrable competences, including knowledge

and skills. The module can be applied to one or more professional qualifications in the education program or implemented separately for perfecting separate professional competencies. Modular education programs, where certain professional competencies are acquired through one or several modules, enable continuation of education to obtain other related professional qualifications or specialization. Acquisition of one or several modules is attested by the educational institution by issuing a certificate with an annex describing the learning outcomes achieved. Such flexibility in the acquisition of a new profession ensures a competitive and mobile workforce in line with the changing labour market demands, and continuous acquisition of knowledge and skills throughout a person's lifetime.

1.3 Initial VET

In Latvia initial vocational education (IVET) is regulated by the State. IVET is formally organised vocational education, mostly at upper secondary education level, which is similar to the international definition⁸, namely, education undertaken after full-time compulsory education (mainly nine years primary and lower secondary education) to promote acquisition of the necessary knowledge, skills and competences to enter an occupation. Management and legal basis of initial vocational education are not separated from continuing vocational education (CVET). Most vocational education is implemented through school-based programmes, which include practical learning periods at school and enterprise.

Students are admitted to public vocational schools according to annual enrolment plans. The MoES collects, adjusts and transforms all school requests into enrolment plans regarding the proposals of the Sectoral Expert Councils (SEC). The plans are then endorsed by the National Tripartite Subcouncil for Cooperation in Vocational Education and Employment.

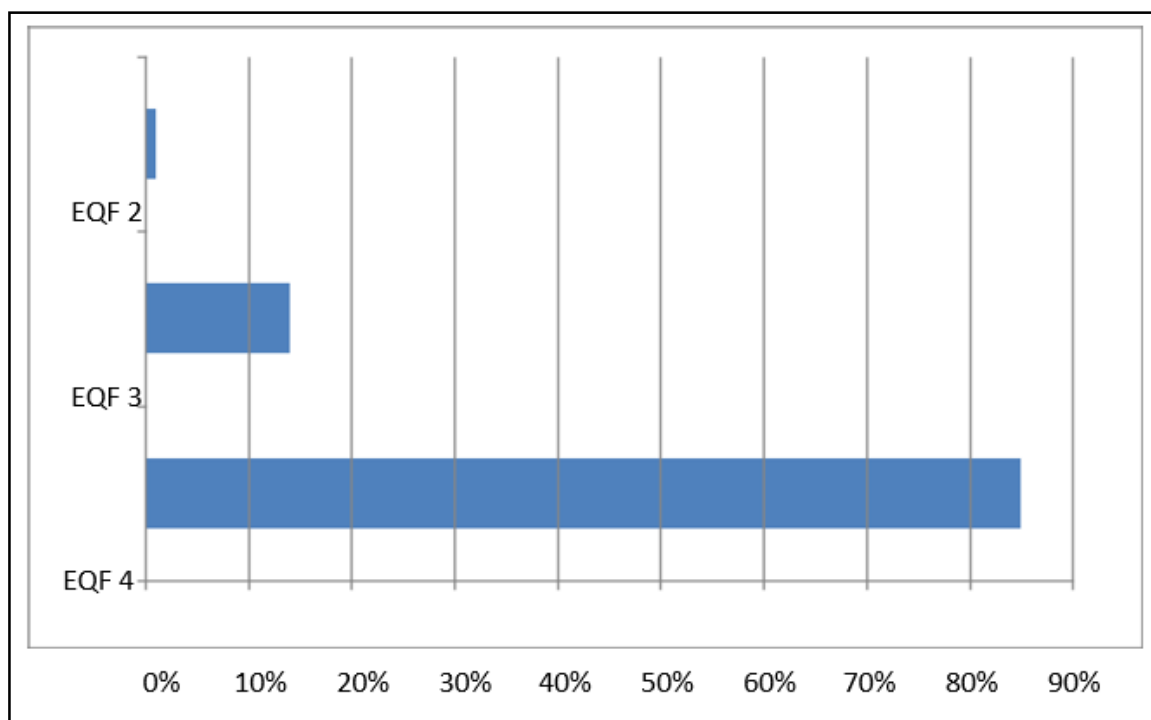
Most vocational education is offered at secondary level. In 2013, most of approximately 31 000 VET learners were in secondary vocational education, basic vocational education is marginal. In 2017/18, there were 28 528 vocational education learners, most of them (85%) were in EQF level 4 upper secondary programmes (Figure 2).

Secondary vocational education programs are open to persons with general or vocational lower secondary education. Such programs last for 4 years after the second stage of basic education, 1-2 years after vocational education or up to 2 years after completing the upper stage of secondary education.

At the end of the program, the graduate is awarded a vocational secondary education diploma (certificate) together with third level national vocational qualifications (NVQ), which correspond to 4th level LQF / EQF qualifications.

⁸ Division of lower and upper secondary education is not used in Latvia; therefore, lower secondary education belongs to primary education and is called the second stage of basic school (grades seven to nine) including both general and vocational education programmes. Upper secondary education refers to secondary education after nine years basic school; it lasts three to four years and includes both general and vocational education programmes. In Latvia IVET is referred to as 'vocational education'.

Figure 3 VET learners by EQF level in 2017/18



Source: CSB and MoES

VEP are mainly school-based, with practical learning periods at schools or enterprises. Since 2015, vocational education can be implemented also as an apprenticeship type scheme (nationally called 'work-based learning') with flexible curricula implementation taking place alternately at school and in enterprise.

The content of all VEP is set down by Cabinet Regulations No.211 "State Vocational Secondary Education Standard and the State Occupational Education Standard", as well as the corresponding PS/professional qualification requirements. Programmes are developed by educational establishments and after licenced based on the PS/professional qualification requirements, and the 2010 MoES Internal Regulations No.22, with due account of the following:

- A 50:50 ratio of hours in theoretical and practical classwork;
- General and vocational subjects are taught at a 60:40 proportion;
- General education subjects in VEP of humanitarian direction curricula are taught at a proportion: languages and communication (45%); maths, life-science and technology (33%); social and cultural studies (22%), whereas in VEP of technology-based curricula the proportion is: languages and communication (33%); maths, life sciences and technology (45%); social and cultural studies (22%).

General subjects are integrated in vocational secondary education programmes to an extent that entitles the graduates of the program to pursue studies in higher education. As in general secondary education, students take centralized exams in four general subjects at the end of the respective courses. In the final phase of training (to acquire a qualification at LQF/EQF levels 2 to 4), students have to undergo qualification practice and take a CVQE or Vocational qualification exam (VQE) at the end of the programme.

1.4 Continuing vocational education and training (CVET)

CVET is a special kind of vocational education which provides an opportunity for adults with previous education and professional experience to acquire a vocational qualification at a specific level. It aims to upgrade knowledge, help students acquire new skills, retrain and further their personal and professional development. Thereby, the term is interpreted similarly to the international definition, namely, CVET can be broadly defined as professional or vocational development through education and training undertaken typically after one has completed initial VET. It is provided and undertaken on initiative of public authorities, social partners, sectors, enterprises, individuals as well as a range of voluntary and community organisations.

Initial and continuing vocational education have a common legislative and governance framework. In both types of vocational education TKC as part of the lifelong learning modules are included in all education programmes, whereas such modules account for 30% of the total programme. CVET in Latvia may be pursued both formally and informally. As in initial vocational education, learners in continuing vocational education take the Cabinet approved VQE. (*more detailed in Chapter 4*).

In order to ensure that all graduates meet the professional knowledge, skills and competence requirements, the vocational institution holds exams in collaboration with their social partners and the NCE. CVET is included in the national classification system of education. CVET programmes are similar to those offered in IVET and should be based on PS at the rate of at least 30%. CVET programmes are always offered in relation to specific, nationally recognized qualification/profession. The minimum duration of an education program is 480 hours. The TRACK-VET study includes programs of the duration of 960 hours.

1.5 Quality assessment in vocational education

MoES is responsible for the policy aspects and strategy when granting access to education and quality, whereas quality of education is mainly in the scope of several institutions owned by the Ministry. Quality assurance policies and procedures in education programs are implemented at all LNQF levels.

Quality assurance and follow-up involves the following:

1. Developing education policies through strategic decision making;
2. Developing content;
3. Registering educational institutions;
4. Developing and licensing education programs;
5. Accreditation of educational institutions and programs;
6. Ensuring supervision of the education process.
7. The basic principles and procedures for assessing the acquired vocational education are set down in the national standards for education. Education in accredited education programs is completed by passing a state exam.

The learners demonstrate their learning outcomes in general subjects (vocational secondary education and occupational programs) during centralized state examinations and professional qualifying examinations, which are developed in accordance with the relevant occupational standards or professional qualification requirements. Learning outcomes show what the learner knows, understands and is able to do on completion of the learning process (knowledge, skills and competences). Students of initial vocational secondary education programs take four centralized state exams in general subjects: Latvian, mathematics, foreign language and one subject selected by the student. On successful completion of the centralized exams, the student obtains a general secondary education certificate and the right to enter a higher education program.

Upon graduation from a vocational program, when the final examination (centralized professional qualifying examination) has been passed with a rating of no less than “satisfactory-5”, the student is awarded a certain level of professional qualifications. On completion of an accredited vocational secondary education program, the student obtains a nationally recognized professional education certificate – i.e. a diploma certifying level 3 professional qualifications corresponding to level 4 LNQF / EQF.

Licensing and accreditation ensure appropriate quality of the education (incl. vocational) program. The license is an authorization for carrying out a certain educational program that meets all the requirements of national educational and occupational standards. The implementers have to provide the appropriate infrastructure and equipment, and, if appropriate, agree with the relevant professional associations. The license is open-ended. Accreditation means the right to issue a nationally recognized document attesting the level/ qualifications of the graduates of the relevant program. In the process of accreditation, the State Service of Education Quality (SSEQ) assesses the quality of the implementation of the relevant education program.

Qualification means the result of official assessment and validation of any qualifications and skills after a competent authority or body has determined that the individual has achieved learning outcomes complying with specific standards.

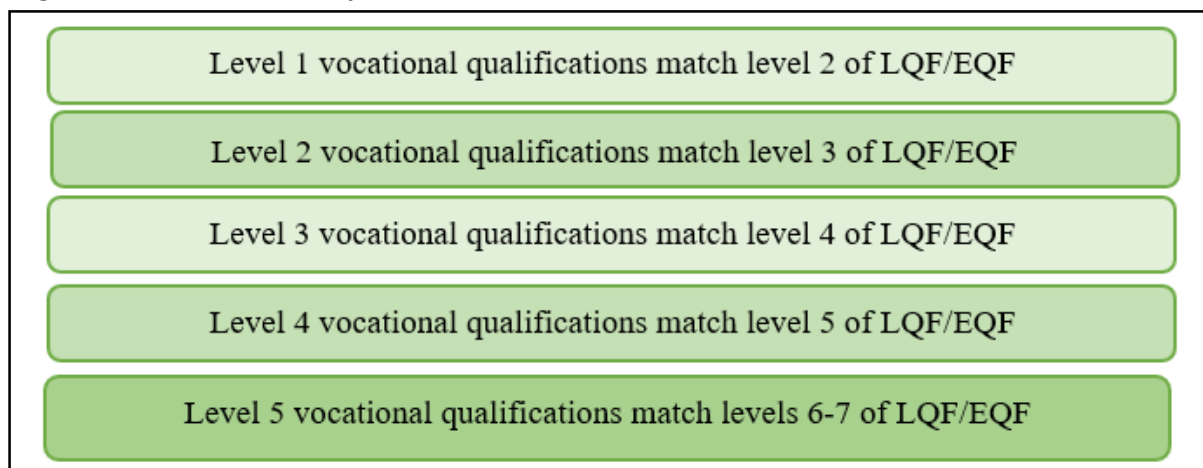
In accordance with the VEL Article No. 24.2 specified, the sectoral qualifications framework (SQF) is a general description of the professions of the sector as well as an overview of specializations and related professions in the field of occupations, indicating professional qualifications for occupations and specializations. SQF includes descriptions of professional qualifications for the pursuit of professional activities in the relevant field and is based on LNQF/EQF, which acts as a tool for comparing and explaining the acquired professional qualifications by promoting transnational mobility of learners and employees and promoting their lifelong learning.

Level of vocational qualification (LVQ) is theoretical and practical preparedness, that qualifies a person to perform work corresponding to a certain level of complexity and responsibility. The VEL outlines five levels of vocational qualification in Latvia:

1. Level 1 qualifications: theoretical and practical training, enabling performance of simple tasks in a specific sphere of practical operation;
2. Level 2 qualifications: theoretical and practical training, enabling independent performance of qualified craftsmans work;
3. Level 3 qualifications: higher theoretical preparedness and professional skill, enabling performance of specific craftsman duties, including planning and organising the work to be done;
4. Level 4 qualifications: theoretical and practical training enabling performance of complicated craftsmans work, as well as organization and management of the work of other professionals;
5. Level 5 qualifications: the uppermost vocational level in a specific sector, enabling, among other things, to plan and carry out scientific research in the relevant sector.

The above mentioned LVQ apply only to vocational education, and the matching LQF/EQF levels are shown in Figure 4

Figure 4 Relationship between VQL and LQF/EQF



Source: Centre for Academic Information (2015) <http://www.nki-latvija.lv/par-lki>

Duration of basic **VEP leading to LQF/EQF level 2** is one to three years and they are part of formal education. The main target groups are learners with intellectual disability and early leavers from compulsory basic education. Programmes are provided mainly by special education institutions/development centres or vocational education institutions. Young people (at least 15 years old) can enrol in such programmes regardless of their previous education. Share of learners in this programme type represents 1% of the total number of vocational education learners (in 2017). They lead to a certificate of basic vocational education (*apliecība par profesionālo pamatizglītību*), with professional qualification of EQF level 2 (such as cook's assistant, carpenter's assistant). Graduates can enter the labour market or progress to secondary level vocational education.

At secondary level, duration of vocational education (*arodizglītība*) **programmes leading to LQF/EQF level 3 is three years** and it is part of formal education. The main target group are young people after completion of basic education. Entry requirements are 15 years and basic education. Share of learners in this programme type is 5% of the total number of vocational education learners (in 2017). Vocational education programmes lead to a certificate of vocational education (*atestāts par arodizglītību*) with professional qualification of EQF level 3. It is possible to acquire such professional qualification through validation of prior learning. Graduates can enter vocational secondary education. These programmes do not give the right to enter higher (tertiary) education directly. For admission to higher education a one-year intermediate general secondary education 'bridge programme' must be followed.

The other type of **programmes leading to LQF/EQF level 3 is one year** secondary vocational education programmes. Entry requirements are age 17 and basic education or secondary education. Share of learners in this programmes type is 9% of the total number of vocational education learners (in 2017). These Short vocational education programmes (*arodizglītība*) lead to a certificate of professional qualification (*profesionālās kvalifikācijas apliecība*) of LQF/EQF level 3.

Duration of vocational secondary education (*profesionālā vidējā izglītība*) **programmes leading to LQF/EQF level 4** is four years and it is part of formal education. The main target group are young people after completing general basic education. Main providers are vocational education schools and some colleges. Entry requirements are age 15 years and basic education. Share of learners in this programmes type is 71% of the total number of vocational education learners (in 2017). General study subjects are compulsory part of this programme type and their share is 60%. Vocational secondary education programmes lead to a diploma of vocational secondary education (*diploms par profesionālo vidējo izglītību*) with professional qualification of EQF level 4 Vocational secondary education students

must also take State centralized exams in the following general study subjects: Latvian, mathematics, foreign language and one subject selected by the student. This provides students with a certificate of general secondary education (*vispārējās vidējās izglītības sertifikāts*) and the right to enter higher education.

One-and-half year vocational secondary education programmes is another type of **programmes leading to LQF/EQF level 4**. Entry requirement is secondary education. Share of learners in this programmes type is 14% of the total number of vocational education learners (in 2017). General study subjects are not included. These short vocational secondary education programmes lead to a diploma of vocational secondary education (*diploms par profesionālo vidējo izglītību*) with professional qualification of LNQF/EQF level 4.

Higher education programmes can be academic (lead to a degree) and professional (lead to a degree and/or professional qualification). More than two thirds of all higher education students study in professional higher education programmes that allow continuous progression from LQF/EQF levels 5 to 7.

Adult learning includes CVET and professional development programmes. Both programme types have been included in classification of the Latvian education system, referenced to the LQF/EQF. These programmes lead to a certificate of professional qualification (*profesionālās kvalifikācijas apliecība*) of LQF/EQF level 2-4.

The creation of the LQF (in accordance with EQF) has helped to define specific planned learning outcomes, according to which the content of the standards, programmes and the assessment system is developed. In 2010, these level descriptors were included in the amendments to the Cabinet of Ministers Regulations and they are based on learning outcomes expressed in three dimensions: knowledge (knowledge and comprehension); skills (ability to apply knowledge, communication, general skills); competence (analysis, synthesis and assessment).

1.6 Summary

- In line with the political changes and transition to market economy in the 1990s, a new education system emerged in Latvia with major changes in vocational education. This led to the elaboration of corresponding educational policy planning documents and legislation, with a view to solving the relevant VET system problems. New vocational education management units were set up. VET is still in transition to a new system for assessing content and learning outcomes, as the Cabinet framework documents governing the content of vocational education are being developed and approved.
- The Latvian education system has been matched with the European Qualifications Framework. An appropriate system of LNQF and levels of professional qualification has been introduced.
- In line with the new economic model and labour market requirements, the network of VET educational institutions is gradually made more efficient.

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CHAPTER 2: AN OVERVIEW OF TRANSVERSAL KEY COMPETENCES IN FORMAL VOCATIONAL EDUCATION

Professional and general competences (competencies in some contexts, *translator*) reflect an individual's ability to work in a specific context, i.e. professional environment; at the same time they presume a set of abilities which we call transversal, or transversal key competencies.

Competences in Latvia are often treated rather broadly and inconsistently even in regulatory and methodological documents. Most often, the term “competence(s)” is used as a synonym for the term “skills”. The oldest example of this can be traced to the 2006 *European Framework for Key Competences*, bearing the title “Lifelong learning — key competences” in Latvian (see <http://publications.europa.eu/resource/cellar/89e165de-b214-4013-81c6-c8a12e52330b>). 0021.02 / DOC_1) where 8 basic competences are called key competences.

The interviews conducted within the framework of the TRACK-VET project also confirm inconsistency in the understanding and use of “competence” and “skill”.

In general terms, TKC may be assumed to stand for an individual's values, goals and abilities leading to successful process, project and resource management, as well as planning, coordination, analysis, appropriate decision making, use of databases, finding out about innovations, communicating, etc.

2.1 Analyses of documents of national importance

Table 2 shows documents of national importance that contain both broad and general, and also specific references to TKC in education and vocational training.

Table 2

TITLE OF DOCUMENT	QUOTATIONS – reference to competences, TKC/comments
Sustainable Development Strategy of Latvia until 2030 (hereafter – Latvia 2030) (approved by the Saeima on June 10, 2010)	This is the highest national-level long-term development planning document that also speaks of the need for a paradigm shift in education. (It states that) education should be of high quality, accessible throughout one's lifetime and focused on creativity, enabling response to global competition and demographical changes; it should also be one of the preconditions for transition to a different economic model. The priorities for long-term action are: accessible education and changes in the organization of the education process, school as a center of social networking, contextual education and changes in the teaching profession, use of e-school and information technologies, lifelong learning. One of the objectives is the development of lifelong learning, including education of employed adults. Skills and competences need to be continuously developed and improved both to enhance the productivity and competitiveness of human resources and to help low-skilled workers get out of the low-income “trap”.
National Development Plan for 2014-2020	This is the main medium-term development planning document in Latvia; the action line “Competence development” points to the need of social partner involvement as a resilient and competitive vocational education system is being formed. Such a system would promote an increase in workforce labour productivity in line with the labour market requirements.

<u>Latvian National Reform Program for the Implementation of the EU2020 Strategy</u> (approved on April 26, 2011)	In order to achieve the goals set in the Europe 2020 strategy, the NRP includes measures to promote the implementation of the principle of lifelong learning, structural changes in vocational education and introduction of modern teaching methods.
Adult Education Governance Model Implementation Plan for 2016-2020 (May 5, 2016)	(..) “to enable all citizens to acquire key competences and competences, promote social cohesion and active citizenship (...) Lifelong learning is a comprehensive concept that includes both learning and teaching, formal and non-formal education, as well as the accumulation of skills, abilities and knowledge gained through daily interaction with other people. The skills and competences of adults affect not only their ability to compete in the labour market, but also individual social and civic values. Adult Education (AE) is a multi-faceted process of education of individuals that ensures the lifelong development of personality and competitiveness in the labour market. AE is a lifelong learning phase of adults from the age of 25 on, and is requisite throughout their lives. In Latvia, AE is governed by the Education Law, Section 47 (5), where adults are defined as one of the target groups for education”
Education Law (1991)	Section 1.4: “education is the process of systematic acquisition of knowledge and skills and development of attitudes, and the result thereof. The result of education is the totality of knowledge, skills and attitudes of a person”; Section 8¹Part 2: “The Levels of the Latvian National Qualifications Framework are described by their attainable learning outcomes. Every next level includes the knowledge, skills and competence defined for the previous level”
Vocational Education Law (1999)	Section 24: “An occupational standard shall determine the primary objectives and responsibilities related to a profession, professional qualification requirements, as well as the relevant specific requirements necessary for the performance of thereof (...)”.
Cabinet Regulations No 281 “Regulations Regarding the State General Secondary Education Standard, Subject Standards and Sample Education programs” (21.05.2013)	Section 2.1: “to ensure a student with the knowledge and skills necessary for personal growth and development, civil participation, employment, social integration and continuation of education”; Section 2.2: “to promote the improvement of a student as a mentally, emotionally and physically developed personality and to develop habits of healthy lifestyle”; Section 2.3: “to promote a socially active attitude of the student, retaining and developing his or her language, ethnical and cultural particularity, as well as to improve understanding regarding the basic principles of human rights included in the Constitution of the Republic of Latvia and other legal acts”; Section 2.4: “to develop the student’s ability to learn and improve independently, to motivate him or her for lifelong learning and an informed career”.
Cabinet Regulations No 211 “Regulations regarding the State Vocational Secondary	Section 2.5 of Section 2: “The strategic objectives of the vocational secondary education programs and industrial education programmes” states the following: “ensure that the learners after completing the education programs would acquire competences, including knowledge,

<p>Education Standard and the State Industrial Education Standard” (27.06.2000)</p>	<p>skills and attitudes, which have been set out in the occupational standards or professional qualification requirements (if the profession does not require elaboration of a separate occupational standard)”.</p> <p>Annex 1 “Primary Tasks of State Vocational Secondary Education Programs and Industrial Education Programs” sets out the level to be acquired by the learners for Level 3 professional qualifications”, listing <i>inter alia</i> TKC components (see Annex 3):</p> <p>“- Ethical assessment skills;</p> <ul style="list-style-type: none"> - Behaviour guided by a humanistic value system and ethics; - Knowledge of the key principles of business ethics; - Improved communication skills. Conflict solving ability. Ability to work and co-operate in a group; - Perception of national culture as part of global culture - Motivation for creative self-expression; - Healthy lifestyle; - Independence in gaining and assessing information; - A wide range of knowledge and skills to solve well-defined but unknown problems and problems that may not be projected in advance; - Knowledge and understanding of the historic development of neighbourhood, Latvia and the world; - Ability to assess physical and social processes and see them within a system and in development; - Awareness of the principle of a single ecological space and observation of environmental protection during professional activities; - Awareness of the key principles of market economy; - Ability to find his/her place and operate within the economic structure of society; - Understanding of the employer and employee relationship and knowledge of the relevant legislations; - Basic understanding of the political structure of the European Union, as well as of the principles of an integrated economic area and labour mobility; - Adequate assessment of own abilities; - Ability to plan own activities with due regard to the circumstances, possibilities and own abilities; - Task-appropriate time management; - Ability to make justified choices and independent decisions in familiar and less familiar circumstances; - Ability to bear responsibility for his/her own professional performance result, measured by quantity and quality; ability to bear partial responsibility for the performance of others; - Demonstration of determined, systematic and rational activity; - Diligence and accuracy. Ability to take initiative; - Knowledge of State political structure; - Awareness of the basic principles of justice and democracy and ability to implement own rights through the institutes of a democratic society; - Tolerance for people of other ethnic and social groups; - Awareness of the duties of an individual in promoting State and public security;
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	<ul style="list-style-type: none"> - Ability to purposefully select and critically evaluate sources of information; - Ability to pursue self-education and acquire new skills <ul style="list-style-type: none"> - Motivation to acquire new technologies; - Motivation to build a professional career; - Motivation to continue education; - Ability to form and express an opinion, demonstrate his or her performance result".
ESF and MoES Project "Development of a Unified Methodology for the Quality Improvement of Vocational Education and Involvement and Education of Social Partners" (2005-2007)	The paper developed in the project "Methodology for the Development of Occupational Standards" describes the basic features of professional competences: "(...) professional competences reflect an individual's ability to work in a particular context, i.e. in a professional environment; they also include individual ability, values, tools, goals or intentions". The methodology lists ability to successfully manage processes, projects, resources, plan, coordinate, analyse, make decisions, use databases, find out about innovations, communication skills, etc. Such abilities should clearly be seen as key competences of an individual, rather than professional competences.
ESF and MoES Project "Development of a sectoral qualifications system and improvement of the efficiency and quality of vocational education and training" (2010-2015)	The aim of the project was to improve an operational, high quality and sector based system for providing vocational content. The Project developed the following lifelong learning modules involving acquisition of transversal key competences: <i>Initiative and Entrepreneurship; Public and Human Security; Language, Cultural Understanding and Expression, Social and Civic Competences; Information and Communication Technologies.</i>
ESF and NCE Project "Development of the sectoral qualification system for the improvement of vocational education and quality assurance" Guidance for the elaboration of modular vocational education programs. (2015)	The Guidance on TKC (lifelong learning) indicates that the Compulsory Part (Part A) provides for modules that ensure lifelong learning competences for the core activities of the sector, while the Compulsory Elective Part (Part B) provides for modules that ensure lifelong learning competences for the relevant professional qualifications. In contrast, the Non-Compulsory Part (Part C) provides for modules in general subjects that help to acquire certain professional qualifications and additional lifelong competences.
ESF and NCE Project Methodology for the development of occupational standards/professional qualification requirements (Version 2, 2017.)	The methodology based on the Recommendations of the European Parliament and the Council (18 December 2006) "Key competences for lifelong learning" explains the key competences (also transversal key competences) in the context of lifelong learning and lists them together with clarifications (see Annex 1 of Chapter 2). An overview of other transversal competences relevant for vocational education is given in the Annex on "Transversal Competences" (see Annex 2 of Chapter 2).
ESF and NCE Project "Development of the sectoral qualifications system for the	As concerns TKC and assessment, the Project objectives are as follows:

improvement of vocational education and quality assurance” (2016-2021)	<ul style="list-style-type: none"> - Elaboration of occupational standards and professional qualification requirements to ensure the implementation and recognition of common European quality indicators for VET; - A methodology for evaluating the content of professional qualifying examinations and projected outcomes in accordance with the Latvian National Qualifications Framework, the European Credit System for Vocational Education and the European Quality Assurance Reference Framework for Vocational Education; - Development and implementation of modular vocational education programs, including assessment of their compliance with the Latvian Qualifications Framework and the European Quality Assurance Reference Framework, aimed at supporting lifelong learning and professional competence acquisition by covering such components as “Initiative and Entrepreneurship”; “Public and Human Security”, “Information and Communication Technologies”, “Social and Civic Competences”, “Languages, Cultural Understanding and Expression” or integrate them into vocational content.
EC Erasmus+ and MOES Project “National Coordinators for the Implementation of the European Agenda for Adult Learning” (2017-2019)	<p>Project objectives:</p> <ul style="list-style-type: none"> - Reinforcement of the network of adult education providers to improve, systematise, expand the adult education offer and collaboration in the field of adult learning, access to adult education and its relevance for life and work; - Development of offers for adult education with due account of the needs of the local, regional and national labour markets; - Provision of support and encouragement for vocational education institutions and other adult education providers by introducing an independent, flexible offer for adult education, individual approach, integration of adult learners of different ages into initial vocational education groups, looking into new, modern solutions for offering adult education, e.g. work-based learning, etc. <p>The industry experts and vocational education experts involved in the project have developed recommendations on adult education content for development of general skills on the basis of the key competences in lifelong learning.</p> <p>In order to provide for improvement of lifelong learning competences, working groups of VET experts have developed lifelong learning programs for adult education. The programs are designed according to the modular principle. Each module consists of the following sections:</p> <ul style="list-style-type: none"> - Description of the module including the module's purpose, tasks, entry conditions, module acquisition assessment and module relevance and applicability; - Content of the module, which summarizes the topics to be studied within the module, the recommended content of the modules and the results to be achieved: what the learner must be able to do, know and understand in the specific topic. Descriptions of medium and optimum level of module acquisition have also been provided, as well as a number of ideas for the implementers;

	<ul style="list-style-type: none"> - Description of the tests, including an initial assessment (clarification of the needs of the learner, assessment of preliminary knowledge for entrance in order to adapt the topics to the needs of the learner), regular assessments (if provided for in the module content) and the content of the final test and evaluation criteria. <p>The content of the modules is tailored to the needs of the industry, key competences in lifelong learning, and adult learning needs. Some modules, i.e. joint or integrated modules, combine several competences.</p> <p>The implementers of adult education programs may:</p> <ul style="list-style-type: none"> - implement one single module (by developing a program covering a certain number of hours); - integrate modular content into other lifelong learning modules and combine multiple modules into one; - develop content of a vocational development programs through a set of modules; - include modules in in the Lifelong Learning Competencies section of Part B or C of the CVET program.
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2.2 **Summary**

- The documents relating to education and the practical aspects of their implementation show inconsistency in the use and interpretation of the concepts of “competence(s)” and skill(s)”. For example, the Adult Education Governance Model Implementation Plan for 2016-2020 (see Table 1) states: “...The skills and competences of adults affect not only their ability to compete in the labour market, but also individual social and civic values.”
- Cabinet Regulation No 211, which is the next most important regulatory document (guiding action) after VEL in developing and implementing VET content, lists the most important TKC indicators to be implemented in VET programs within Latvia. This document also specifically defines acquisition of the four TKCs included in the TRACK-VET study. (See Table 1).
- Sample lifelong learning modules have been developed. The TKCs to be acquired in the sample modules are: “Initiative and Entrepreneurship”; “Public and Human Security”; “Language, Cultural Understanding and Expression”, “Social and Civic Competences” and “Information and Communication Technologies”. These modules account for 30 % of the programs and are mandatory in all IVET and CVET programs. A transition to modular VET program development and implementation has been started from 2015 to support programs of lifelong learning and professional competence programs. Acquisition of the content of lifelong education modules (incl. TKCs) is offered as part of separate modules or as integrated content of other (vocational) modules or general subjects as considered fit by the educational institution.
- In order to implement and approve the common European VET Quality Indicators, Latvia has developed 15 Sectoral Qualifications Frameworks (<https://visc.gov.lv/profizglitiba/nozkval.shtml>), which are basic for implementing the existing or updating new occupational standards or professional qualifications requirements.
- The methodology for elaborating the professional qualifying examination and outcomes assessment is under development, as required by the Project “Development of the sectoral

qualifications system for the improvement of vocational education and quality assurance (2016-2021)".

- Modern economy requires new professionals with contemporary professional and lifelong competences. Since lifelong competences are defined in the National Standards with regard to general education goals and in the Occupational Standards with regard to professional education goals, and in the European Parliament documents ("Education and Training 2020", "Vocational Education and Training 2020", etc.), they have to be acquired both in IVET and in CVET.

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CHAPTER 3: FORMULATION OF TRANSVERSAL KEY COMPETENCES AND THEIR LOCATION IN CURRICULA

3.1 **Structure and content of the VET programme**

The procedure for the development of VEP and their implementation in Latvia is governed by the following documents:

1. Legislation:
 - 1.1 The Law on Vocational Education
 - 1.2 Cabinet Regulation No 211
 - 1.3. MoES Internal Regulation No 22 (11.10.2010.) and No 25 (26.05.2016)
2. Documents developed by MoES and NEC:
 - 2.1 Sectoral Qualifications Frameworks
 - 2.2 Profession standards
 - 2.3 Methodological guidance for the development of modular vocational education programmes
 - 2.4 Guidelines for the implementation of modular VEP
 - 2.5 Modular maps and modular programmes

In April 2018, fifteen SQF were officially approved, marking agreement between educators and employers on qualifications required by the labour market SQF descriptions are available on the website of the NCE. (Accessible in Latvian: <https://visc.gov.lv/profizqlitiba/nozkval.shtml>).

Frameworks have been developed in cooperation with sectoral experts and correspond to LQF (the same as EQF) levels 2 to 7. They include descriptions of sector-specific learning outcomes at each level: knowledge, skills and competences (autonomy and responsibility).

The framework of each sector comprises core and linked professions, specialisations and level(s) of qualifications. The SQF cover only those professions essential for performing professional activities related to the sector and ensuring a complete cycle of production and/or services provided by the sector. It is expected that these professions will be in high demand and VET will be able to provide relevant qualifications for those professions.

The SQF serve as guidelines for developing and implementing VET programmes, including autonomous modules leading to specialisations.

Implementation of the SQF is part of vocational education reform supported by the 2016-21 ESF project. The project aids VET competitiveness, coordinated development of PS, corresponding modular VET programmes, teaching/learning aids and assessment methods.

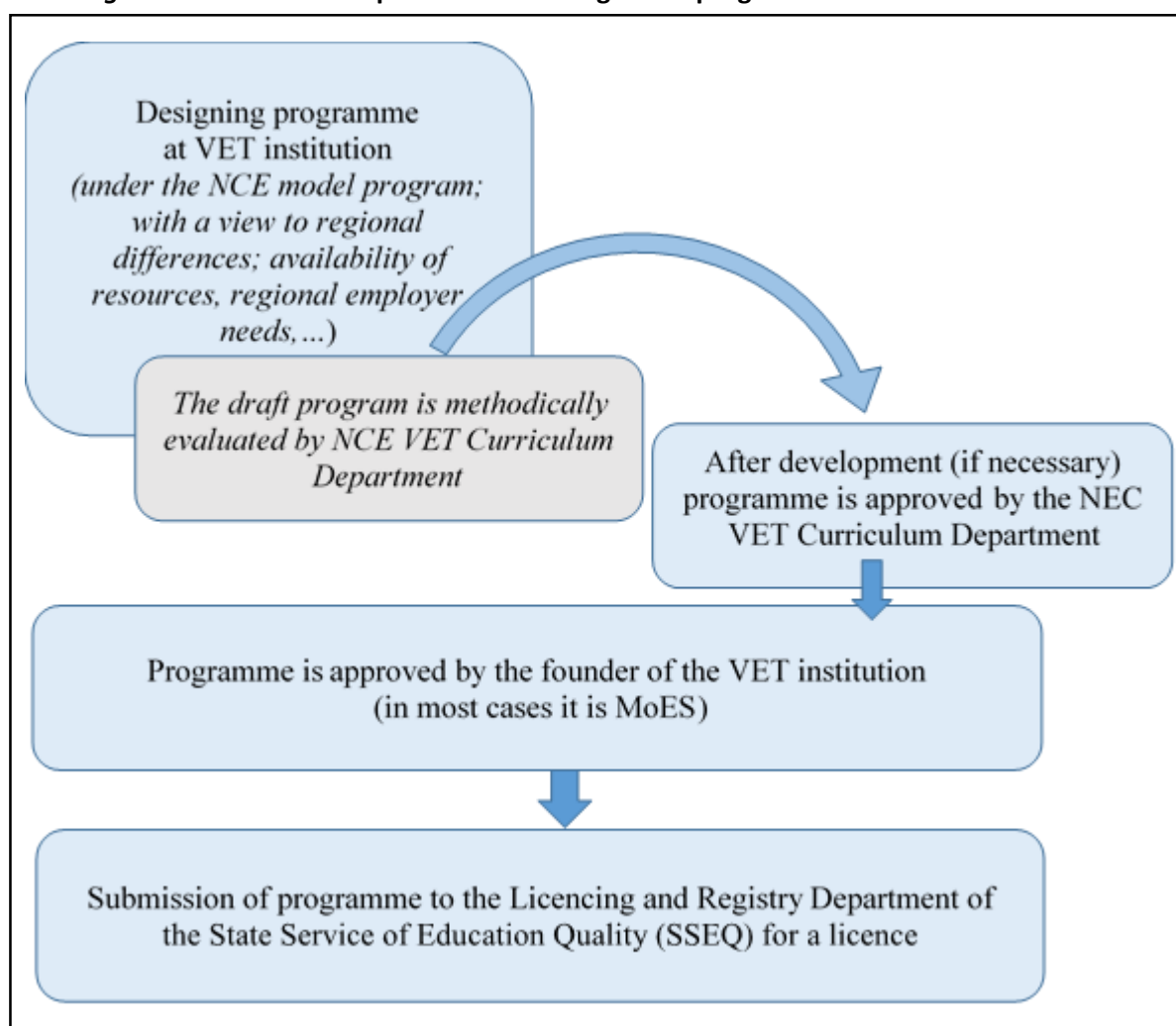
In accordance with Annex 1 of Cabinet Regulation No 211 (see Annex 3 to Chapter 2), the learner has mastered the chosen VEP, if he/she has acquired the level specified in the Regulation concerned (i.e. LVQ 3 or Level 4 of EQF) in relation to the essential objectives of the program. The text of the Regulation shows that the scope at which TKCs are included is as follows:

- Personal, Social Competence and Learning competence: within 15 programme objectives;
- Civic competence: within 4 programme objectives;
- Entrepreneurship competence: within 3 programme objectives;
- Cultural Awareness and Expression competence: in 6 programme objectives.

Within the framework of the TRACK-VET project, in the course of analysing the relevant profession standards and programmes, a detailed study of the offer of TKC in IVET (4-year training) and CVET was made.

In developing their respective education programs, vocational education institutions build on the samples in the ESF and MoES project “Development of a sectoral qualifications system and improvement of the efficiency and quality of vocational education and training” (2010-2015) described in Chapter 1 and 2 of this Report. In order to obtain a license for the implementation of the programme, educational institutions must follow these models, while certain appropriate changes may be introduced: with a view to regional differences, availability of resources, regional employer needs, etc. The initial evaluation of the draft program with respect to its quality and compliance with legislation is provided by the NEC VET Curriculum Department. If NEC’s assessment has been positive, the draft programme must be approved by the founder of the VET institution (in most cases it is MoES), and after that it can be submitted to the Licencing and Registers’ Department of the State Service of Education Quality (SSEQ) for a licence.

Figure 5 **The process of licensing of the programme**



The regulatory framework in Latvia allows implementing only licensed professional education programmes.

The programmes included in the TRACK-VET Project study have been selected on the basis of their popularity among the learners. According to the plan agreed between MoES and the Latvian Employers' Confederation (LEC), in 2018/2019, IVET qualifications "computer technician" is going to be provided by 10 educational institutions, "logistics worker" by 6 and "electrical technician" by 6 educational institutions.

In each sample programme produced by NEC and used for guidance by an educational institution, there is a certain ratio between general (60%) and vocational (40%) content in the acquisition of all the necessary competences. In Section "Vocational Content", all the programmes include lifelong learning competence modules "Entrepreneurship", "Public and Human Security", "Languages, Cultural Awareness and Expression", "Civic Competences" and "Digital Technologies". Depending on the specific nature of the qualifications to be obtained, lifelong learning competences may be integrated into related general education subjects or into vocational modules.

The module "Public and Human Security" is mandatory both in IVET programs and in CVET programs. The specific content has been defined in Section 8 of Cabinet Regulation No 211 as follows: "8. The following themes shall be included in all education programs in the relevant subjects:

- 8.1. health education;
- 8.2. environmental education;
- 8.3. education in safety of the work environment; and
- 8.4. education in the field of national defence."

Currently, vocational education in Latvia is in the process of transition to a fully modular system to be provided with the help of the on-going ESF and NEC Project "Development of the sectoral qualifications system for the improvement of vocational education and quality assurance" (2016-2021) aimed at ensuring compliance of vocational education with the European Qualifications Framework.

A modular secondary vocational education program has three parts - A, B and C (see Figure 1).

Part A includes compulsory subjects and modules:

1. General education subjects accompanied by a compulsory state final examination (in Latvian, foreign language and mathematics);
2. Lifelong learning modules for competences that are indispensable for professional activity in the relevant sector / sector;
3. Modules that include the knowledge, skills and competences required for several qualifications needed for professional activity in the relevant sector / sector.

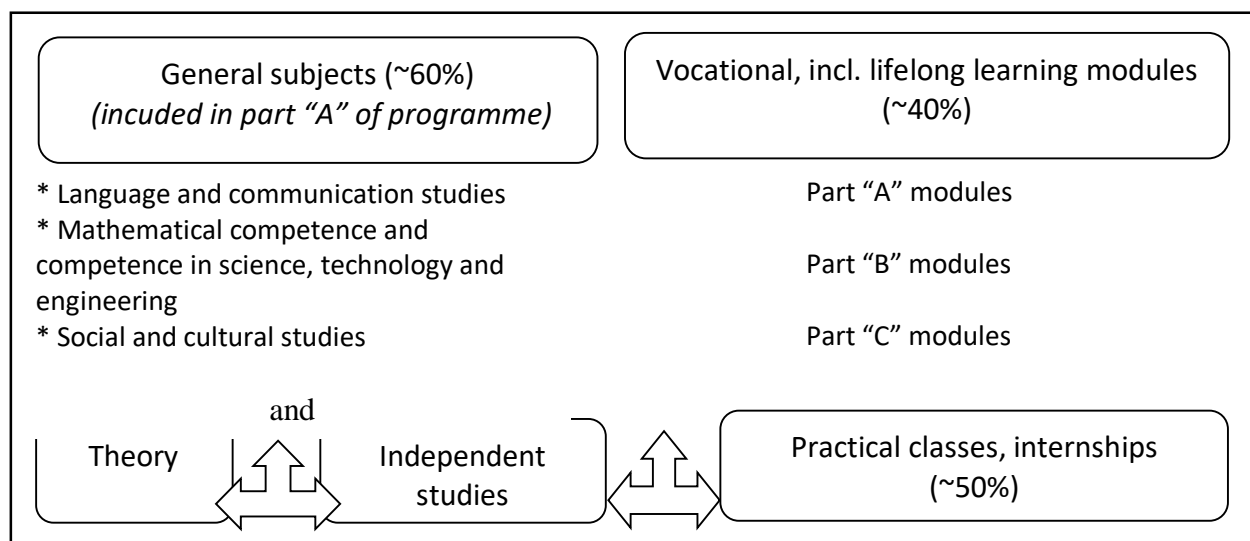
Part B is a compulsory elective part and includes:

1. Elective subjects of general education subjects accompanied by an elective state final examination (at the choice of the student - in any subject completed for at least 105 h)
2. Lifelong learning modules for competences that are indispensable for professional activity requiring related professional qualifications;
3. Modules that include the knowledge, skills and competences required for several qualifications needed for professional activity requiring related professional qualifications.

Part C is the non-compulsory part and includes:

1. Subjects of general education that facilitate acquisition of professional competences;
2. Lifelong learning competence modules that facilitate acquisition of professional competences;
3. Modules that include the knowledge, skills and competences required for regional needs regarding sectoral specifics and the changing situation in the labour market.

Figure 6 Structure of the IVET programme



An education program ready for licencing includes:

- The title page contains information the name of the educational institution; type of program; name of the qualifications to be awarded; professional qualifications and LNQF level (corr. to EQF); academic entrance requirements; duration of program; way in which the program is going to be acquired and education certificate proving completion of the VEP;
- Descriptive part setting out the purpose of the program, objectives, teaching methods, available continuing education and description of summative assessment;
- Implementation plan consisting of a timetable and a syllabus;
- Description of modular content in sequential order;
- List of material resources required for the implementation of the education program;
- Description of the teachers' professional qualifications.

Thus, lifelong competences may be included in programs in a number of ways; they may be included in Part A, Part B or Part C. The number of hours allotted for one course of lifelong learning competences in IVET is from 35 to 70, and they are included in the total number of vocational hours, i.e. in the 40% part of the total program.

3.2 TKC in the PS and in the IVET programme "Computer Technician"

The examples analysed in the Project show the exact way how TKC are defined in profession standard and programme (see Table 3).

Table 3 TKC in the profession standard and in the IVET program "Computer Technician" (see Annex 1 of Chapter 3).

TKC	PS for "Computer Technician"	TKCs in the IVET sample programme "Computer Technician" developed by NEC
Personal, social and learning competence	<i>Professional competences for professional activity:</i> (..)12. Ability to follow and find out about state-of- art technologies, tools and materials in the IT sector,	<i>Program objectives (knowledge, skills, competences):</i> (..) determine the sequence of tasks in the order of their priority, develop technical specifications for the work

	<p>use the web, data bases and other sources of technical information.</p> <p>13. Ability to draft reasonable proposals for computer hardware and local computer network deployment.</p> <p>14. Ability to assess the acquired knowledge and skills and continually improve own professional qualifications.</p> <p>15. Ability to communicate and collaborate with colleagues, users of computer technology and related professionals, hear them out and give a reasoned opinion.</p> <p>16. Ability to work independently and take responsibility for the results of own work (...).</p> <p>20. Ability to abide by the principles of professional ethics, professional communication and observe the standards of labour law.</p> <p>Skills:</p> <p>(..) 24. Plan tasks, their sequence and deadlines.</p> <p>25. Communicate and cooperate with colleagues and computer technology users hear out their suggestions and instructions.</p> <p>(..) 30. Evaluate one's performance with reference to the assignment, take responsibility for the result of own work.</p> <p>31. Find, evaluate, select and make use of information.</p> <p>(..) 33. Improve own professional competence.</p> <p>Knowledge requirements:</p> <p>(..) 3.21. communicational psychology;</p> <p>3.22. principles of professional ethics.</p>	<p>ordered, set the time-line for tasks, perform work independently and take responsibility for the result of own work. (..) assess the knowledge and skills and continually improve own professional qualifications. (..)</p> <p>Communicate and collaborate with colleagues, users of computer technology and related professionals, hear them out and give a reasoned opinion</p> <p>(..) Observe data protection and confidentiality principles. (..) Abide by the principles of professional ethics, professional communication and observe the standards of labour law.</p> <p>Expected outcomes:</p> <p>(..) Knows: essential tasks in teamwork and how they are essentially distributed;</p> <p>(..) Aware of: the role of teamwork in accomplishing a task, responsibility of each participant;</p> <p>(..) Able to: independently disassemble and assemble a computer (..)</p> <p>Able to: make use of a variety of ways for seeking types of information and sources (..)</p> <p>Aware of: importance of awareness among computer technology users and how it is related to personal data protection and safety, and efficiency (...).</p> <p>Aware of: safe user information storage.</p> <p>Aware of:</p> <p>Regular self-education in improving own professional qualifications.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ "Green skills" ○ "Public and human security " ○ "Social and civic competence" <p>In general education subjects.</p>
Civic competence	<p>Knowledge requirements:</p> <p>(..) 3.26. occupational safety requirements;</p> <p>3.27. basic ergonomics and health education;</p>	<p>Programme objectives (knowledge, skills, competences):</p> <p>(..) Organize, use and maintain a safe workplace, observe electrical safety and fire safety regulations, occupational</p>

	<p>3.28. fire safety and electricity-related safety regulations;</p> <p>3.29. environmental protection requirements;</p> <p>3.30. dangerous waste, storage and utilization;</p> <p>3.31. emergency assistance; (..)</p>	<p>safety and environmental regulations and provide emergency assistance. (..) observe data protection and confidentiality principles.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ “Green skills “ ○ “Public and human security” ○ “Social and civic competences” <p>In general education subjects.</p>
Entrepreneurship competence	<p>Knowledge requirements: (..) basic commercial activity (..)</p> <p>3.32. labour law.</p>	<p>Expected outcomes: (..) Able to: work in a team of learners in the eICT sector in developing a new product. Knows: the principles of teamwork Aware of: the role of teamwork (..) Able to: apply novelties and development trends in IT for construing new products.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ “Initiative and entrepreneurship” ○ “Public and human security “ ○ “Green skills” <p>In general education subjects.</p>
Cultural awareness and expression competence	<p>Knowledge requirements: (..)</p> <p>3.22. Principles of professional ethics</p>	<p>Programme objectives (knowledge, skills, competences): (..) Abide by the principles of professional ethics, professional communication and observe the standards of labour law.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ “Language, cultural awareness and expression “ ○ “Green skills” <p>In general education subjects.</p>

3.3 TKC in the PS and in the IVET programme “Electrical Technician”

Table 4 TKC in the profession standard and in the IVET programme “Electrical Technician” (see Annex 2 of Chapter 3).

TKC	PS for “Electrical Technician”	TKCs in the IVET sample programme “Electrical Technician” developed by NEC
Personal, social and learning competence	<p>Professional competences for professional activity: (...) Ability to analyse workplace and worktasks independently (...) Ability to set own time-line for worktask performance 13. Ability to communicate with the professionals involved in work procedures 14. Abide by the principles of professional ethics and ethical behaviour in general. (...) Ability to collaborate with supervisor and organize his/her own work and the work of his/her supervised staff in a target-oriented way. (...) Ability to supervise his/her staff of electricians and maintain a safe workplace. (...) Ability to find, evaluate and creatively apply the information gained during design, construction and maintenance of electrical installations. (...)25. Ability to work independently and take responsibility for the results of own work.</p> <p>Skills: 15. Plan and organize own work and the work of his/her supervised staff as required by the work-task. 28. Find, analyse and apply information about state of art technology in the sector, continually improve own professional competence 29. Evaluate one’s performance with reference to the assignment,</p>	<p>Programme objectives (knowledge, skills, competences): (...) Set and agree on own time-line for worktask performance. 10. Communicate with the professionals involved in work procedures; collaborate with supervisor and organize own work and the work of his/her supervised staff of electricians in a target-oriented way, prepare the staff of electricians for their worktasks. (...)18. Work independently and take responsibility for the results of own work.</p> <p>Expected outcomes: (...) Able to: collaborate with the workers of the electrical plant for performing electrical work jobs. Aware of: the role of teamwork in safe performance, responsibility of each participant (...) personal responsibility for observing instructions for safety at work while working with electrical installations. (...))</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ “Green skills” ○ “Public and human security” ○ “Social and civic competence” <p>In general education subjects</p>

	<p>take responsibility for the result of own work.</p> <p>Knowledge requirements: (..) 3.21. communicational psychology; 3.22. principles of professional ethics (..) social studies; 1.4. basic management.</p>	
Civic competence	<p>Professional competences for professional activity: (..) Ability to carry out electrical work jobs with due regard to occupational safety and environment protection requirements and use of personal and collective protection equipment.</p> <p>Skills: 24. Perform work with due regard to occupational safety and environment protection standards and make use of environment friendly materials.</p>	<p>Expected outcomes: (..) Aware of: effect of workplace environment risk factors on health, environmental and fire safety, and electricity related risks.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ "Green skills" ○ "Public and human security" ○ "Social and civic competence" <p>In general education subjects</p>
Entrepreneurship competence	<p>Professional competences for professional activity:</p> <p>Skills: (..) Observe the requirements of labour law.</p>	<p>Programme objectives (knowledge, skills, competences): Supervise a staff of electricians and maintain a safe workplace, evaluate performance and come up with proposals about workflow in electrical installations when using the appropriate technologies. . (..) Observe the standards of labour law.</p> <p>Expected outcomes: (..) Aware of: the importance of calculating the required resources for timely and proper performance of electrical work jobs, the relationship between resources and costs (..) Able to: compare the work performed in electrical installations with the technical design documentation and instructions by the producer of the electrical equipment.</p>

		<p>(..) Aware of: the importance of complying with the time-line in planning and organizing electrical work jobs.</p> <p>(..) Aware of: a well-organized technical documentation system in organizing electrical work jobs.</p> <p>(..) Aware of: the cost and quality relationship, competition in the market of electrical services and the nature of commercial secrets.</p> <p>(..) Aware of: the importance of the costs of developing a physical infrastructure on the time and price of the time required for fulfilling a job and its costs.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ "Green skills" ○ "Initiative and entrepreneurship" ○ "Public and human security" <p>In general education subjects</p>
Cultural awareness and expression competence	<p><i>Professional competences for professional activity:</i></p> <p>Knowledge:</p> <p>(..)abide by the principles of professional and ethical behaviour in general;</p>	<p>Programme objectives (knowledge, skills, competences):</p> <p>(..) Abide by the principles of professional ethics and ethical behaviour in general. (..)</p> <p>Communicate in state official language and one foreign language</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ "Language, cultural awareness and expression" ○ "Green skills" <p>In general education subjects</p>

3.4 TKC in the PS and in the IVET programme “Logistics Worker”

Table 5 TKCs in the profession standard and in the IVET programme “Logistics Worker”
(see Annex 3 of Chapter 3)

TKC	Occupational standard for “Logistics Worker”	TKCs in the IVET sample programme “Logistics Worker” developed by NEC
Personal, social and learning competence	<p>Professional competences for professional activity:</p> <p>(..) 6. Ability to hear out, accept a work-task, formulate an idea in a constructive and logical way and give instructions to the freight forwarder, carrier and consignee.</p> <p>7. Ability to carry out business communication with licencing and certification authorities and submit the required information.</p> <p>(..) 13. Ability to work independently, determine the sequence of tasks in the order of their priority, and act accordingly, set and observe time limits and timelines.</p> <p>(..) 17. Ability to resolve non-standard situations and perform worktasks under stress.</p> <p>(..) 24. Ability to pursue self-education and improvement of own professional competence.</p> <p>25. Ability to work alone or in a team, take responsibility for own work result.</p> <p>Skills:</p> <p>(..) 3. Take constructive action in problem situations</p> <p>5. Collaborate, hear out instructions, formulate ideas and give instructions.</p> <p>Required knowledge:</p>	<p>Program objectives (knowledge, skills, competences):</p> <p>(..) Hear out, accept a work-task, formulate an idea in a constructive and logical way and give instructions to the freight forwarder, carrier and consignee.</p> <p>(..) Carry out business communication with and certification authorities and submit information.</p> <p>(..) work independently, determine the sequence of tasks in the order of their priority, and act accordingly, set and observe time limits and timelines (..).</p> <p>16. Resolve non-standard situations and perform worktasks under stress.</p> <p>(..) 23. Pursue self-education and improvement of own professional competence.</p> <p>24. Work alone or in a team, take responsibility for own work result.</p> <p>Expected outcomes:</p> <p>(..). Able to: collaborate with other workers of the company</p> <p>(..) Knows: essential tasks in teamwork and how they are essentially distributed (..)</p> <p>Aware of: importance of teamwork in job performance, responsibility of every participant.</p> <p>(..)</p> <p>Able to: evaluate the compliance of a workplace in logistics with ergonomic requirements.</p> <p>(..) 7. Able to: determine the role of a range of psychological and social factors on work in logistics.</p> <p>(..). Able to: efficiently communicate with the operators involved in passenger transport (drivers, passengers, guides, etc.).</p>

		<p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ “Green skills” ○ “Public and human security” ○ “Social and civic competence” <p>In general education subjects.</p>
Civic competence	<p>Professional competences for professional activity: (..) 21. Ability to understand the requirements of environment protection legislation and perform worktasks without harming the environment.</p> <p>Knowledge: 3.21. Basic principles and requirements on environmental protection;</p>	<p>Program objectives (knowledge, skills, competences): 19. Understand and observe regulatory requirements on environment protection and perform worktasks without harming the environment.</p> <p>Expected outcomes: (..) Aware of: impact of safe work methods on personal safety and safety of other individuals. (..) Aware of: need for a passenger transport routing system and consequences of own working decisions. (..) Able to: fulfil the requirements of occupational safety and fire safety regulations, apply proper, ergonomic methods of work that do not present health risks.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ “Green skills” ○ “Public and human security” ○ “Social and civic competence” <p>In general education subjects</p>
Entrepreneurship competence	<p>Professional competences for professional activity: (..) 4. Ability to understand and apply regulatory documents that are binding for the logistics sector (incl. international agreements) and work practices’ regulations (..)14. Ability to understand and properly apply the taxation system of the Republic of Latvia.</p>	<p>Program objectives (knowledge, skills, competences): (..) 4. understand and apply regulatory documents that are binding for the logistics sector (incl. international agreements) and work practices’ regulations. (..) Work with a range of freight forwarding documents, their accumulation and filing, draft documents in accordance to worktasks and requirements for</p>

	<p>(..)23. Ability to observe labour law.</p> <p>Knowledge:</p> <p>(..) binding international and national law in the logistics sector;</p> <p>(..) principles of Project management and worktask planning; international shipping conventions and their application;</p> <p>3.11. international freight forwarding regulations; (..)</p> <p>3.13. insurance principles and types of insurance for shipping goods;</p>	<p>developing and drafting of such documents.</p> <p>9. Use office equipment and specialized logistics and calculation software for accomplishing worktasks, and drafting invoices and other documents, reports and statements. (...) deal with freight insurance issues (..)</p> <p>Implement control over the freight forwarding plan and time-line.</p> <p>(..)12. Evaluate data relating to the shipping procedures, draw conclusions. (..)</p> <p>14. Understand and properly apply the taxation system of the Republic of Latvia.</p> <p>15. Accumulate, file and summarize information and documents, prepare and submit the required information and documents for records.</p> <p>(..) 22. Observe labour law.</p> <p>Expected outcomes:</p> <p>(..) Aware of: the importance of company profile for fulfilling different shipping and logistics services.</p> <p>Aware of: differences between jobs in the transportation and logistics sector, differences in job descriptions and work organization.</p> <p>Able to: prevent specific work environment risk factors in the warehouse within own competence (..)</p> <p>Aware of: importance of the code system in identifying and recording goods.</p> <p>(..) Able to: fill out warehousing documentation.</p> <p>(..) Able to: identify the required freight documents. (..)</p> <p>5. Able to: take decisions on the compliance or non-compliance of the seal with the accompanying documents.</p> <p>(..)</p> <p>Able to: apply the Latvian system of fees and duties for inland routing (..)</p>
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		<p>Able to: calculate freight forwarding costs. (..)</p> <p>Aware of: impact of transport related financial flow on business activity (..).</p> <p>Able to: apply the specific conditions of freight distribution channels for organizing deliveries. (..)</p> <p>Able to: design materials' delivery schedules for production companies. (..)</p> <p>Able to: apply the system of fees and duties of Latvia and other countries when routing international passenger transport.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ "Green skills" ○ "Initiative and entrepreneurship" ○ "Public and human security" <p>In general education subjects</p>
Cultural awareness and expression competence	<p>Professional competences for professional activity:</p> <p>18. Ability to communicate in writing and by word of mouth in state official language and two foreign languages, incl. use of IT and Professional terminology.</p> <p>(..) 22. Ability to abide by the principles of professional ethics and ethical behaviour in general.</p>	<p>Program objectives (knowledge, skills, competences):</p> <p>(..) 21. Abide by the basic principles of professional ethics and ethical behaviour in general, and professional communication.</p> <p>Expected outcomes:</p> <p>(..) Able to: communicate with operators of in the logistics sector in state official language and two foreign languages.</p> <p>In modules of lifelong learning:</p> <ul style="list-style-type: none"> ○ "Languages, cultural awareness and expression competence" ○ "Green skills" <p>In general education subjects</p>

3.5 Structure and content of CVET programme

CVET programmes are implemented on request and if educational facilities have the required resources – government budget resources are not available. Programmes are always offered for a specific State-recognised qualification/profession:

- for learners with vocational secondary or vocational education to acquire a professional qualification of EQF level 4 (e.g. bookkeeper), minimum duration of the programme is 960-1 280 hours depending on the field;
- for those without a prior education requirement to acquire a professional qualification of EQF level 3 minimum duration of the programme is 480 or 640 hours depending on the field;
- for those without a prior education requirement to acquire a professional qualification of EQF level 2 minimum duration of the programme is 480 hours.
- Such programmes are frequently provided in cooperation with the State Employment Agency (SEA) and State Education Development Agency (SEDA) that implement specific educational projects, mostly with the support of the ESF.

There are three main types of CVET programmes in Latvia (see Table 6). They lead to a professional qualifications certificate, indicating the acquired LVQ and the matching LQF/EQF level.

Table 6 Types of CVET

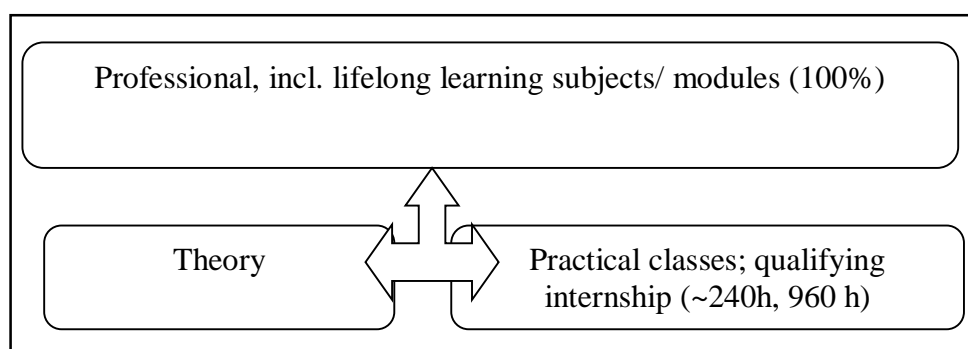
Projected LVQ, matching LQF/EQF level*	Entry requirements	Minimum duration of the programme (hours)
Level 3 LVQ - matches level 4 LQF/EQF	General secondary or vocational education	960 h (or more)
Level 2 LVQ - matches level 3 LQF/EQF	No prior education requirements	480 h or 640 h with account to the requirements of the corresponding PS
Level 1 LVQ - matches level 2 LQF/EQF	No prior education requirements	160 h

* The Vocational Education Law (1999., as amended in 23.04.2011.) sets the correspondence of professional qualifications level to LQF levels: LVQ 1 matches LQF/EQF 2, LVQ 2 matches LQF/EQF 3, LVQ 3 matches LQF/EQF 4, LVQ 4 matches LQF/EQF 5 and LVQ 5 matches LQF/EQF 6-7.

Cabinet Regulations No.322 "Regulations on classification of education in Latvia" (13.06.2017.) includes descriptions of knowledge, skills and competences and matching levels of educational programs and LQF/EQF levels.

The TRACK-VET Project research includes CVET programmes of duration of 960 hours leading to LVQ 3 (LQF/EQF 4). The CVET programs covered by the research are "Construction electrician" and "Commercial worker in advertising services".

Figure 7 Structure of CVET programme



According to the mapping of the professional qualification's modules in the NEC sample program, the educational institution includes training courses/modules on both – professional content and lifelong learning competences – in the specific CVET programme (Figure 7). The content of LLL competences, i.e. the content of TKCs, can be included in the program either as an independent course/module or as separate topics in professional training courses/modules. According to the methodology proposed by NEC, the recommended duration of one lifelong learning competence course is 10-35 hours. A test is envisaged at the end of each course/module and on completion of the programme, and the test is covered by the hours allocated to the program. After the last qualification practice learners take the VQE. These programmes lead to a certificate of professional qualification (*profesionālās kvalifikācijas apliecība*) of LQF/EQF level 2-4. It is possible to acquire such professional qualification through validation of prior learning. Graduates can enter labour market.

All public CVET programmes (480 hours or more) and professional development programmes (160 hours or more) must be licensed and accredited by SSEQ. Providers of professional development programmes (159 hours or less) must obtain a licence from local government. Public providers can offer non-formal learning programmes without a licence. Only accredited local governments' and private vocational education institutions may apply for State funding for CVET, professional development and vocationally oriented education programmes. During the licensing or accreditation process, SSEQ hires external experts and representatives of sectoral non-governmental organizations (NGO) and employers to evaluate the programmes' compliance with NVES, PS or professional qualification requirements and other regulations.

The CVET sample programmes analysed in the TRACK-VET project show the exact way how TKC are defined (see Table 7 and table 8).

3.6 TKCs in the CVET sample programme for “Construction electrician (see Annex 4 of Chapter 3)

Table 7

TKC		TKC location in the sample programme
Personal, social and learning competence	Quations from the programme	<p><i>In programme objectives (knowledge, skills, competences):</i></p> <p>(..) Independently fulfil electrical wiring jobs or organize them with the use of appropriate tools, mechanisms and materials, evaluate work result. (..) Diligently and independently plan the sequence of own work and the available and required resources (..)</p> <p><i>Expected outcomes:</i></p> <p>Aware of: the role of teamwork for safe performance, responsibility of each participant. (..)</p> <p>Evaluate the situation independently and act in accordance with the regulations, if unable to follow the occupational safety instruction or in case there has been a breach. (..)</p>
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Green skills” ○ “Public and human security “ ○ “Social and civic competence”
Civic competence	Quations from the programme	<p><i>Program objectives (knowledge, skills, competences):</i></p> <p>(..) Observe occupational safety and environment protection requirements, make use of personal and collective protection equipment, provide emergency assistance as required and act appropriately in emergency situations (..) organize work in accordance with occupational safety and environment protection requirements.</p> <p><i>Expected outcomes:</i></p> <p>Aware of: workplace health risks, risks for the environment, fire-safety, and electricity related risks.</p>
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Green skills” ○ “Public and human security “ ○ “Social and civic competence”

Entrepreneurship competence	Quations from the programme	<p><i>In programme objectives (knowledge, skills, competences):</i></p> <p>(..) Observe labour law.</p> <p><i>Expected outcomes:</i></p> <p>(..) Aware of: the importance of company profile for fulfilling different wiring jobs.</p> <p>Aware of: the role of a well-organized filing system for documents on electrical installations for work organization.(..)</p> <p>Able to: draft a calculation for wiring jobs. (..)</p> <p>Able to: form and maintain the resource required for individual wiring jobs.</p> <p>(..) Aware of: the cost and quality relationship, competition in the electricity services market and the nature of commercial secrets.</p>
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Green skills” ○ “Initiative and entrepreneurship” ○ “Public and human security”
Cultural awareness and expression competence	Quations from the programme	<i>In programme objectives (knowledge, skills, competences): not formulated.</i>
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Language, cultural awareness and expression” ○ “Green skills”

3.7 TKCs in the CVET sample programme for “Commercial worker in advertising services”

(see Annex 5 of Chapter 3)

Table 8

TKC		TKC location in the sample programme
Personal, social and learning competence	Quations from the programme	<p><i>In programme objectives (knowledge, skills, competences):</i></p> <p>(..) Organize and manage the advertising solution development and implementation process, evaluate the obtained result. (..)</p> <p>Analyse and evaluate own work result and that of the involved partners. (..) Work in a team and resolve conflict situations.</p>
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Green skills” ○ “Public and human security” ○ “Social and civic competence”

Civic competence	Quations from the programme	<i>In programme objectives (knowledge, skills, competences):</i> (..) Use state official language. (..) Perform worktasks without harming the environment.
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Green skills” ○ “Public and human security” ○ “Social and civic competence”
Entrepreneurship competence	Quations from the programme	<i>In programme objectives (knowledge, skills, competences):</i> (...) Participate in market research, analyse the market and the data obtained, interpret and apply the data.(..) Form company image. (..) Participate in business development forecasting and planning through evaluating and economic result. (..) Participate in developing proposals and company’s procurement-related activities. (..) Find and sign up clients and maintain long term relationships with them.
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Green skills” ○ “Initiative and entrepreneurship” ○ “Public and human security”
Cultural awareness and expression competence	Quations from the programme	<i>In programme objectives (knowledge, skills, competences):</i> (..) Use professional terminology un the state official language and at least two foreign languages.
	Corresponding LLL modules	<ul style="list-style-type: none"> ○ “Language, cultural awareness and expression” ○ “Green skills”

3.8 Summary

- The system of vocational education and its management in Latvia is structured top down. Educational content, validation and methodological guidance is supervised by the NEC owned by MoES. The content of VET based on profession standards (PS) has been developed for the qualifications included in the sectoral qualifications framework (SQF).
- Cabinet Regulations No. 211 is an important regulatory document for the inclusion of TKC in VET programs. This document shows that acquisition of TKC has been planned at the following extent: personal, social competence and learning competence in 15, civic competence in 4, entrepreneurial competence in 3, and cultural awareness and expression competence in 6 vocational secondary education program objectives.
- In vocational secondary education programs (IVET) TKC are included in general education subjects, professional modules and LLL modules.
- The top ranking TKC in all the PS examined relate to Personal, social and learning competence. During the interviews, the importance of this competence was confirmed and highlighted by

all respondents. Business competences and civic competences are similar in rank. Cultural awareness and expression competences ranks lowest, which is probably set off by separately including the five LLL modules for TKC acquisition (“Public and human security”, “Green skills”, “Initiative and entrepreneurship”, “Social and civic competence”, “Languages, cultural awareness and expression”).

3.9 Sources of information

1. Occupational standard for Computer Technician. Available at:
<https://visc.gov.lv/profizglitiba/dokumenti/standarti/ps0122.pdf>
2. Occupational standard for Electrical Technician. Available at:
<https://visc.gov.lv/profizglitiba/dokumenti/standarti/ps0198.pdf> (viewed on 17.08.2018).
3. Occupational standard for Logistics Worker. Available at:
<https://visc.gov.lv/profizglitiba/dokumenti/standarti/ps0425.pdf> (viewed on 17.08.2018.).
4. IVET for “Computer Technician” qualifications. Available at:
https://visc.gov.lv/profizglitiba/dokumenti/programmas/modularas/eikt_001/programmas/p01.pdf
5. IVET for “Electrical Technician” qualifications. Available at:
https://visc.gov.lv/profizglitiba/dokumenti/programmas/modularas/energ_001/programmas/p01.pdf .
6. IVET for “Logistics Worker” qualifications. Available at:
https://visc.gov.lv/profizglitiba/dokumenti/programmas/modularas/transp_001/programmas/p01.pdf .
7. CVET for “Construction electrician” qualifications. Available at:
https://visc.gov.lv/profizglitiba/dokumenti/programmas/modularas/energ_001/programmas/p03.pdf.
8. CVET for “Commercial worker in advertising services” qualifications Available at:
https://visc.gov.lv/profizglitiba/dokumenti/programmas/modularas/komerc_001/programmas/p05.pdf.
9. Methodological guidance for the development of modular professional education programs. ESF project “Nozaru kvalifikācijas sistēmas izveide un profesionālās izglītības efektivitātes un kvalitātes paaugstināšana” [Development of a sectoral qualifications system and improvement of the efficiency and quality of vocational education and training], NEC, 2015.
10. Daugavpils Technical School. IVET program “Electrical Technician”, 2018. (NEC VET Curriculum Department files).
11. Jelgava Technical School. IVET program “Computer Technician”, 2018. (NEC VET Curriculum Department files).
12. Jēkabpils Agricultural Business College. IVET program “Computer Technician”, 2017. (NEC VET Curriculum Department files).

13. Kandava Technical School. IVET program "Computer Technician", 2017. (NEC VET Curriculum Department files).
14. Kuldīga Technical School for Technology and Tourism. IVET program "Logistics Worker", 2017. (NEC VET Curriculum Department files).
15. Liepāja Technical School. IVET program "Computer Technician", 2017. (NEC VET Curriculum Department files).
16. Liepāja Technical School. IVET program "Electrical Technician", 2017. (NEC VET Curriculum Department files).
17. Liepāja Technical School. IVET program "Logistics Worker", 2017. (NEC VET Curriculum Department files).
18. Ogre Technical School. CVET program "Computer Technician" (960 h), 2017. (NEC VET Curriculum Department files).
19. Priekule Technical School. IVET program "Computer Technician", 2017. (NEC VET Curriculum Department files).
20. Rēzekne Technical School. IVET program "Electrical Technician", 2018. (NEC VET Curriculum Department files).
21. Rēzekne Technical School. IVET program "Computer Technician", 2018. (NEC VET Curriculum Department files).
22. Rīga State Technical School. IVET program "Computer Technician", 2018. (NEC VET Curriculum Department files).
23. Rīga State Technical School. IVET program "Electrical Technician", 2018. (NEC VET Curriculum Department files).
24. Rīga State Technical School. IVET program "Logistics Worker", 2018. (NEC VET Curriculum Department files).
25. Rīga Technical College. IVET program "Electrical Technician", 2018. (NEC VET Curriculum Department files).
26. Rīga Technical College. IVET program "Logistics Worker", 2018. (NEC VET Curriculum Department files).
27. Rīga Technical College. IVET program "Computer Technician", 2018. (NEC VET Curriculum Department files).
28. Rīga Trade Vocational Secondary School. IVET program "Logistics Worker", 2018. (NEC VET Curriculum Department files).
29. Smiltene Technical School. CVET program "Accountant" (960 h), 2017. (NEC VET Curriculum Department files).

30. Valmieras Technical School. IVET program “Logistics Worker”, 2018. (NEC VET Curriculum Department files).
31. Ventpils Technical School. IVET program “Computer Technician”, 2017. (NEC VET Curriculum Department files).
32. Ventpils Technical School. IVET program “Electrical Technician”, 2017. (NEC VET Curriculum Department files).

CHAPTER 4: ASSESSMENT AND VALIDATION OF TKC

The strategic goal set by the MoES of Latvia is to develop a unified education quality monitoring system, based on the measurement of statistical information, comparative education research results, national level learner performance and other indicators for educational institutions, as well as centralized examination results and accreditation and licensing information.

The modern education quality assessment process in the Latvian education system consists of the following levels:

International:

- Participation in international education research (OECD PISA, OECD TALIS, OECD INES, IEA TIMSS, IEA PIRLS)

National:

- Centralized examinations, tests, diagnostic papers
- National research on education policy
- Issues of accreditation and licensing, teacher evaluation

School:

- Tests, exams, e-class (or Mykoob) log ratings
- School quality assessment system, self-assessment reports

The system of quality assurance and assessment of education still includes the internal and external evaluation of the activities and educational programs of the educational institution as well as the assessment of the professional activities of the heads of educational institutions.

Internal evaluation is an educational institution's self-assessment, and within the framework of accreditation, the educational institution must prepare a self-assessment report, which is a prerequisite for accreditation of the institution and programs. In order to provide interested parties with the opportunity to obtain information about the quality of school life, the self-assessment report must be set out on the website of the public institution or its founder and must be available until the end of the accreditation period.

An external evaluation involves evaluating experts at an educational institution. In view of the fact that the vocational education process is oriented towards the acquisition of a specific professional qualification in order to qualitatively carry out quality assessment in professional education accreditation, expert commissions should include representatives of employers and employees of the relevant sectors - associations, unions, trade unions.

4.1 Acquisition of TKC

In the TRACK-VET research project, respondents pointed out with confidence that it was difficult to separate acquisition and evaluation of TKC from other competences during the learning process. Respondents see TKC to be cross-related and overlapping with specific professional competencies. This applies to all parts of the VET curriculum, both theory – consisting of general and (or) vocational content and the respective subjects of the curriculum, and practice – consisting of:

- general education and (or) vocational education content and the respective practical or laboratory classes in the subjects of the curriculum;
- practical training;

- qualifying internships.

Compulsory general education content in IVET programs covers the following areas of education with their respective subjects:

1. Language and Communication Studies:
 - Latvian language;
 - Foreign language (foreign languages);
 - Elective subjects.
2. Mathematics, Science and Engineering:
 - mathematics;
 - IT
 - Elective subjects;
 - Natural sciences or physics, or chemistry.
3. Social Science and Cultural Education:
 - History of Latvia and World history;
 - economics;
 - elective subjects;
 - Literature.
4. Sports

Compulsory professional content in IVET and CVET programs consists of the relevant vocational subjects and modules (including LLL modules covering also TKC), practical classes and qualifying internships, that provide the learner

- with basic professional skills;
- special professional skills;
- skills that are common for the sector;
- general skills and competences (incl. TKC);
- general and specific knowledge in the relevant profession.

4.2 Assessment, evaluation and CVQE

The ways how learning outcomes are going to be assessed, methodological techniques, the scope and number of tests and assessment criteria are determined by the teacher, with due regard to the content of the subject and the VET programme implemented. There are certain key principles set out in the regulatory acts on vocational and general education that are taken into account when assessing knowledge, skills, attitudes and competences:

1. the principle of summing up: learning is assessed by summing up the positive achievements in memorizing and understanding, use of knowledge and creative activity;
2. obligatory testing: the learners are assessed on how well they have mastered the compulsory content of the program;
3. transparency and clarity of the criteria defined for the knowledge, skills, attitudes and competences to be acquired: subject or module-based programs include compulsory content and basic requirements for achievements that are accessible and clear for all participants of the learning process;
4. diverse ways for assessing learning outcomes: different ways of testing and kinds of tests;

5. feasibility: the test should allow the learner to demonstrate knowledge, skills, abilities and attitudes in tasks and situations at all levels of acquisition; the scope of intermediate and results to be tested has to correspond to the content of the curricula.

Summative and formative assessment is carried out in order to describe the level at which the subject or module, or part of the programme or practical skills has been mastered, as well as during the state final examinations. Students are graded on a 10-point scale, where

- high level is marked with 10 (distinction) and 9 (excellent);
- optimum level is marked with 8 (very good), 7 (good) and 6 (almost good);
- mediocre level is marked with 5 (satisfactory) and 4 (almost satisfactory);
- low level is marked with 3 (weak), 2 (very weak) and 1 (very, very weak).

According to the criteria developed, qualifying internships and tests may either be graded on a 10-point scale or marked as “passed” or “not passed”.

The final state examinations on completion of an IVET programme include:

- a vocational qualification examination;
- at least four examinations in general education subjects: a centralized examination in Latvian, a centralized examination in one foreign language at the learner's choice, a centralized examination in mathematics and at least one examination at the learner's choice in a course of at least 105 hours.

The centralized examinations in all general subjects are graded and acknowledged by a certificate of general secondary education.

VQE after all VET programmes are taken for 1, 2 or 3 LVQ or for validation of professional competence acquired outside the formal education system.

The procedure of holding a VQE is set out in Cabinet Regulations No.662 of August 30, 2011 "Procedure for Professional Qualifying examinations in Accredited Professional Education Programs". According to the above mentioned Regulation, the examination has two parts, namely, theory and practice. Such a division is somewhat limiting for the introduction of new ways of testing. Therefore, one of the objectives of the ESF Project “Development of the sectoral qualifications system for the improvement of vocational education and quality assurance” (2016-2021) is to develop and update the content of the professional qualifying examinations in 210 professional qualifications and produce a common methodology for assessment of the content and projected outcomes of VQE. As early as in 2018 in this Project, tests (namely examination content) were developed and approved, and they have been structured to match the specific occupation and level of difficulty of the respective competences. Accordingly, NEC has initiated amendments in the regulatory framework set by the Cabinet to enable structuring the VQE as one complex task or as a set of successive or independent tasks. Assumedly, there are cases that do not require a separate theoretical and practical part of the examination, as set out in the current regulatory framework of Cabinet Regulations No.662.

The theoretical and practical part of the CVQE is developed in NEC by Vocational Education Department VET Examinations Division (VET ED) and is exactly the same in all centres/schools which conduct examinations in a given profession.

In some cases, content of the VQE (most often in qualifications that are provided by a single educational institution countrywide) is developed by the examination body itself, i.e. an accredited vocational education institution or an accredited examination center. However, also in these cases, the content of the examination developed must be validated by the NEC VET ED.

The learner can proceed to take the theoretical part of the qualifying examination, if his or her final learning outcomes in all subjects and practical classes have been graded on a 10-point scale or marked as “passed”, and he or she can take the practical part of the examination after final assessment of qualifying internship.

According to the applicable regulations, a diploma on vocational secondary education is awarded if:

- the learner has taken all the modules of parts A, B and C in the modular program, and the assessment has been at least “almost satisfactory (4)”;
- his/her outcomes in practical classes and qualifying internship have been graded on a “10 points” scale as at least “almost satisfactory (4)”;
- he/she has passed the final state examinations of the secondary vocational education program: 3 centralized examinations and one examination at the learner's choice in a general subject and received the respective assessments;
- he/she has passed the professional qualifying examination with a grade of at least “satisfactory 5”.

A person who is at least 18 and has acquired a certain VEP through self-education outside the formal framework, and also the theoretical knowledge and practical skills included in the professional standard, can take the qualifying examination in any appropriate examination institution in order to obtain the relevant education certificate.

The guidance document “Methodology for evaluating the content of professional qualifying examinations” (2007, amendments 2013) describes the structure of the examination (theoretical and practical part), the principles for building its content, as well as participation and involvement of social and collaboration partners and the procedure for developing the content of the examination.

The content of the examination is developed by a group of experts under the guidance of NCE VET ED, with the use of different ways and methods; it is a combined result of individual work, brainstorming, discussions, research, involvement of other experts, etc.

The work-group developing a qualifying examination program for an occupational standard has a team-leader with experience in developing or organizing a professional qualifying examination.

At least one representative of the relevant sector with appropriate professional education, work experience or experience in managing a professionals' work-group, and at least three vocational education teachers with appropriate education and experience are invited to participate in the development of the examination program and its content.

CVQE is developed through actions in the following sequence:

- A work-group is set up;
- The relevant PS and other regulatory documents are reviewed;
- The examination management programme is produced;
- A content database of the VQE (“task bank”) is developed;
- Evaluation criteria for the tasks are developed;
- Draft examination programme content is developed;
- Expert examination of the content takes place;
- Layout for the examination materials (for centralized examinations) is designed or agreed with the examination bodies (for the appropriate examinations).

When drafting a CVQE, the work-group, is guided by the sequence and structure developed in the ESF project “Development of the sectoral qualifications system for improvement of the efficiency

and quality of vocational education” of 2010 (e.g. see the examination program of 2018 for IVET professional qualification for “Electrical Technician” (4EQL) at:

https://visc.gov.lv/profizglitiba/eksameni/dokumenti/projekts/eltehn_pke/programma.pdf)

An important task for the group is looking at the task bank, replenishing and updating it as appropriate. The task bank for “Electrical Technician”, mentioned above, includes 350 tasks in the theoretical part

(see https://visc.gov.lv/profizglitiba/eksameni/dokumenti/projekts/eltehn_pke/teorija.pdf) and

2 tasks in the practical part requiring 180 min. for fulfilment

(see https://visc.gov.lv/profizglitiba/eksameni/dokumenti/projekts/eltehn_pke/prakse.pdf).

The Task Bank (Available in latvian: <https://visc.gov.lv/profizglitiba/eksameni/saturs.shtml>) is a collection of tasks from which the work-group selects the tasks for the theoretical and practical part of the examination, and it is also available to educational institutions as they implement the VET programme. The task bank (with several hundred tasks) is sizeable enough to enable varied examination content. Tasks included in the “bank” cover all the knowledge, skills and competences required by the occupational standard for conducting core professional activities. When developing the content of a particular examination, the required number of tasks specified in the examination program is selected from the task bank.

The draft examination is evaluated by an expert who assesses its compliance with the PS and labour market requirements, comes up with proposals for any appropriate changes in the content of the examination and, after the improvements have been made, endorses the examination.

The qualifying examination programme specifies the aim of the qualifying examination, the addressee, the envisaged work, equipment for its fulfilment, support tools and premises, as well as the procedure of evaluation.

The NEC VET ED developed centralized examination programmes are posted on the web (www.visc.gov.lv). If the programme and examination materials are developed by the educational institution or examination body, they must be submitted to NEC for validation purposes at least three months (for CVET – one month) before the qualifying examination is supposed to take place.

The date and time of the theoretical part of a centralized examination is set by NEC. In turn, the date and time of the practical part of a qualifying examination is set by the educational institution/examination body.

NEC produces an overview of the information received and posts the schedule of both parts of the CQE on the web site (www.visc.gov.lv).

The head of the educational institution/examination body forms an examination commission at least one month before the qualifying examination. The commission consists of three people from the relevant economic sector.

The examination body of a qualifying examination may only use NEC approved material.

After the theoretical and the practical parts of the examination, the commission assesses the qualifying examination papers (or other test performance results) at the examination venue.

The total score for the theoretical and practical parts of the qualifying examination is summed up in points according to an assessment scale with regard to the professional qualification level to be awarded.

After the qualifying examination, the commission completes the examination protocol with the appropriate recommendations on awarding professional qualifications and submits it to the head of

the educational institution/ examination body (see Annex 4 of Chapter 4). The person who has passed the qualifying examination may submit an application to the head of the relevant examination body with a request to review the assessment results within one month after they have been announced.

Within 10 working days after the last qualifying examination, the examination body submit to NEC a copy of the summarized examination results and the originals of the graded student papers from the theoretical and practical part of the centralized examinations (see Annexes 1 and 3 of Chapter 4).

Upon successful passing of the exam, the learner will be able to obtain an appropriate education document (Table 9).

Table 9 Latvian formal education qualifications and LQF/EQF levels

LQF/ EQF level 1-5)	Latvian education documents (qualifications)
1	Certificate of general basic education (special education programmes for learners with severe) mental development disorders or several severe development disorders)
2	Certificate of general basic education
	Certificate of vocational basic education
	Certificate of of professional qualification
3	Certificate of vocational education (<i>arodizglītība</i> – without rights to enter higher education)
	Certificate of professional qualification
4	Certificate of general secondary education
	Diploma of vocational secondary education
	Certificate of professional qualification (without rights to enter higher education)
5	Diploma of first level professional higher education (first level professional higher (college)
	education; length of full-time studies two to three years)

Source: Cabinet of Ministers, 2017.

4.3 Examples of analyses of the theoretical part of CQE

The TRACK-VET Project included a study of the content of the theoretical part of CQE for the qualifications “Computer Technician”, “Electrical Technician” and “Logistics Worker” in IVET programs for estimated inclusion of TKCs (see Table 10). The theoretical part of CQEs for all qualifications is composed of 70 core questions (with multiple choice answers) each scoring 1 point, and 10 open questions of higher difficulty level scoring 3 points for a correct answer. The theoretical part of the CQE has an accompanying response assessment form.

A documentary analysis conducted during the TRACK-VET project leads to conclude that the final examination (with a few exceptions) involves testing solely for the professional competencies of the relevant qualifications. As regards TKCs, assessment of the learning to learn and cultural awareness and expression competence is not included in any of the three examinations. Social and civic competence is assessed within two questions for the qualifications “Logistics Worker”. Initiative-taking and entrepreneurship competence is assessed for the qualifications of “Computer Technician” (within four questions) and “Logistics Worker” (within six questions).

Table 10

TKCs	External standardised assessment (summative) during the Centralized Qualifying Examination (CQE)	Continuous assessment by teacher (formative)
Learning to learn	<ul style="list-style-type: none"> • “Computer Technician” No questions on TKCs in CQE • “Electrical Technician”: No questions on TKCs in CQE • “Logistics Worker” No questions on TKCs in CQE 	<p>It is difficult to separate the competences assessed. Respondents confirmed that in most cases TKCs were cross-related and overlapped with specific professional competencies.</p> <p>Formative assessment of all competences is carried out by the teacher in various ways throughout the learning process.</p>
Social and civic competence	<ul style="list-style-type: none"> • “Computer Technician” No questions on TKCs in CQE • “Electrical Technician” No questions on TKCs in CQE • “Logistics Worker” The questions on TKCs included in the CQE: <i>“11. Which of the mentioned factors is an external factor with a direct impact on logistics?”</i> <i>33. What is the regular weekly work-time duration according to the Labour Law?”</i> 	<p>The purpose of formative assessment is to develop and improve the learner's skills, consolidate the knowledge acquired, provide the teacher and the learner with feedback on the learning process.</p> <p>When organizing and planning the learning process within a module, thematically appropriate criteria are developed for an unbiased assessment. They are developed by the teacher on the basis of the chosen assessment forms and methodological techniques. In individual cases learners are involved in the development of the criteria with a view to improving their assessment and self-assessment skills. Usually, formative assessment tests are relatively short facilitating fast feedback on student achievement from the teacher.</p>
Initiative-taking and entrepreneurs hip	<ul style="list-style-type: none"> • “Computer Technician” The questions on TKCs included in the CQE: <i>“22. When is there government budget deficit?”</i> <i>64. On what issues does the employer have to consult his employees?”</i> <i>65. What is the maximum duration of the trial period in an employment contract?”</i> <i>66. What determines the procedure of setting and reviewing the monthly salary amount?”</i> • “Electrical Technician”: No questions on TKCs in CQE • “Logistics Worker” The questions on TKCs included in the CQE: <i>“2. Which of the listed methods enable defining the company's strengths and weaknesses, opportunities and threats?”</i> <i>“3. What is the minimum additional rate added to the regular per-hourly rate for overtime?”</i> 	<p>Frequently used formative assessment methods are: discussion, practical work, brainstorming, situational analysis, correction of errors, multiple choice tasks; games, problem solving, narration-clarification, case review, group-work, role play, project method; field trip accompanied with a certain task; visualization.</p>

	<p>6. What types of business companies need a corporate agreement and by-laws?</p> <p>7. What does a production plan cover?</p> <p>10. Which of these statements describe economy as a science?</p> <p>15. What needs to be found out when taking decisions on the choice of supplier?"</p>	<p>Some practical examples:</p> <ul style="list-style-type: none"> • Source analysis method: "Please describe the macroeconomic situation of Latvia through using the sources available on the webpage of the Latvian Central Statistics Office." • Group-work: "In a group discussion, please, consider what type of company you would like to establish and what goods or services you would like to offer! What are the needs you plan to satisfy with your product (or service)? Develop, as a group, and draft the goal of the company's business activity and a description of your goods. Present the project developed with the appropriate reasoning". • Field trip: Each learner group gets a separate task that has to be accomplished during a field trip to the company. After the field trip the learners of the group present the accomplished task. Assessment: knowledge acquisition, practical application, collaborative and social competences.
Cultural awareness and expression	<ul style="list-style-type: none"> • "Computer Technician": No questions on TKCs in CQE • "Electrical Technician": No questions on TKCs in CQE • "Logistics Worker": No questions on TKCs in CQE 	

4.4 Other forms of assessment

Apart from formative and summative assessment, other important tools for assessing learning outcomes are:

- **Learner's portfolio:** contains information on the learner's participation in the academic events of the educational institution and out-of-class work activities in the educational institution and beyond.
- **Internship diary/report:** is a document certifying fulfilment of internship tasks, and the learner uses it for analysing the course of his/her internship with account of the tasks fulfilled. The internship report includes the information collected by the learner on the company (organization) where the internship takes place and its activities.
- **Diplomas:** for achievement (in competitions, olympiads, shows, etc.)
- **Acknowledgements:** for example, of participation in events organized by the institution or municipality and in their preparation.
- **Certificate** for attending additional courses/workshops/ other courses.

4.5 Assessment and validation of education acquired outside the formal education system

Apart from formal education, which represents structured and systematic learning to acquire an educational program, Latvia, as far as there is demand and interest, offers opportunities to engage in various informal (or non-formal) education activities (web-based learning, self-study, courses, seminars, practical skills' workshops, etc.). Professional competence acquired outside the formal education context is also formed by the knowledge, skills and abilities acquired during an individual's private life and work experience.

The labour market of Latvia includes workers that are employed without industry appropriate qualifications, and they have acquired knowledge, skills and important competences that are worth recognizing and evaluating through awarding professional qualifications.

In Latvia, informal education similarly to formal education, which includes vocational basic education, industrial education, vocational secondary education, continuing vocational education and professional higher education, can be recognised and assessed for the same set of professional qualifications (see Annex 2 of Chapter 4). An applicant can obtain level 2-4 LNQF/EQF qualifications by taking a qualifying examination in a chosen profession.

Accordingly, the professional competences acquired before – at a higher education institution or college, or through professional experience – are recognized through declarative methods, requiring the applicant to prove, by submitting the appropriate documentary evidence, academic and other achievements in previous formal education and informal learning, or informal learning through experience.

Validation of professional competences is a relatively new education service in Latvia. The regulatory framework for the procedure of assessing professional competences with the accompanying price-list for the service was developed in 2011. Professional competence is assessed by accredited educational institutions to which the SEQS has delegated this task. The list of institutions is available on the website of the SEQS <https://ikvd.gov.lv/arpus-formala-izglitiba/profesionalas-kompetences-novertesana/>.

Validation is implemented by an authorized body confirming that an individual has achieved the learning outcomes set out for the relevant occupational standard. It is an opportunity to prove the professional competence acquired during the individual's lifetime and – upon passing the qualifying examination – obtain a document certifying nationally recognized professional qualifications.

From 2008 and onward, occupational standards include a section entitled “Professional competences required for a professional activity”, which sets out the requirements in communication, language knowledge, computer use, collaboration, attitudes and values required for specific tasks in a given profession. An occupational standard includes a common core that characterizes a person's ability to use TKCs alongside theoretical knowledge and technical skills.

The State Service for Education Quality (SSEQ) is a direct administration institution owned by MoES, which, among other things, ensures quality control of vocational education (except for higher professional education), supervises and monitors the compliance of its procedures with the sector's regulatory framework, and also organizes validation of professional competences acquired in the informal system of education. As stated in the regulatory documents, SSEQ delegates the right to assess professional competences to an accredited education institution or examination body. On the quality service website, SSEQ publishes and updates a list of professional competence assessment bodies indicating the specific professional qualifications for competence assessment, and maintains a database of the individuals who have received nationally recognized professional qualification certificates through such assessment. According to the information collected by SSEQ

(<https://ikvd.gov.lv/arpus-formala-izglitiba/>), public demand for obtaining a particular professional qualification is determined and affected by the following:

1. regulatory requirements on the qualifications for workers of specific sectors;
2. employer interest in having qualified specialists;
3. professional compliance of staff employed in government institutions;
4. interest concerning the professions in demand on the job market.

Assessment of professional competences by the Latvian educational institutions has in a number of occasions been used by Latvian migrants, who have chosen to work abroad in the catering, vehicle repair and construction sectors.

Applicants are often insufficiently informed about the vocational education programs implemented by VET institutions and the modern vocational education system in general. Therefore, it is important for educational institutions to ensure a personalized approach, especially since most of the applicants tend to be of an age between 35 and 50 years. These individuals have acquired new skills and abilities during their lifetime learning outside the formal education system, as well as through the use of technologies and equipment that may differ from the tools and equipment at the disposal of the educational institution. The regulatory documents do not directly impose any academic, employment or age-related limitations on the applicants with the exception that they have to be at least 18 years old. Cabinet Regulations No 146 "Procedure for the Validation of the Professional Competence Acquired outside the Formal Education System" stipulates that educational institutions and examination centres are obliged to provide free consultancy to the applicants on the requirements of the occupational standards and the qualifying examination procedure. In formal education, learning outcomes are achieved through a systematic, methodical and planned learning process. In contrast, non-formal and informal learning activities differ in terms of both organizational and planning process and content. In order to determine the differences in learning content, it is important to establish the time (recency) of learning. This is an essential factor in determining learning outcomes, since traditionally, non-formal learning outcomes are perceived as less valuable than formal education. For proving his or her learning outcomes the individual is invited to demonstrate certain practical skills and theoretical knowledge level. Verification of relevant learning outcomes often requires interviews, documentary justification and also analysis of practical experience. An educational institution or examination center directs and motivates applicants in the course of assessing their professional competences, helping them to understand what knowledge they have and what is still lacking, and what improvements are required.

It is also important to inform the applicant about how the professional competences, knowledge, skills and abilities of the occupational standard are provided for in the relevant formal vocational education programs (basic, industrial education, secondary and continuous vocational education), since the content of the relevant education program is always, in part, included in the theoretical part of the professional qualifying examination. During the consultations, the applicant also receives information on the textbooks and information sources foreseen in the respective vocational program for acquiring content of the theoretical and practical part of the professional qualifying examination.

Before the examination, the candidate is given a chance to study the program of the professional qualifying examination – the themes covered by the tasks of the theoretical part, the themes and problems covered in the practical part, the time allocated for the tasks during the examination and the criteria for assessing the theoretical and practical part of the examination. The applicant's knowledge may not always be relevant to the requirements of a modern occupational standard, and additional learning on individual topics may be required. The professional competence assessment body should, where appropriate, provide the applicant with the chance to receive additional advice. Additional consultations may be held if the applicant, after attending the free consultations, has additional questions that have not been the subject of the free consultations. Where the applicant thinks that his

or her knowledge is not sufficient to pass the examination, the educational institution may also offer enrolment in an adult informal education program.

Within two months from the date when an application for professional competence assessment has been submitted, the educational institution holds a professional qualifying examination for assessment of professional competences in accordance with the application. The prevailing practice is that the applicant takes the examination during the scheduled VQE in IVET and CVET programmes.

4.6 Summary

- The key principles and procedures for assessing vocational education level are determined by VEL and the national standard on vocational secondary education.
- As the vocational education reform is further pursued, the plan is to propose amendments in the Cabinet Regulations in order to update the content, procedure and management of the centralized qualifying examination.
- The formative assessment templates for learning outcomes, methodological techniques, the scope and the number of tests and the assessment criteria are determined by the teacher.
- Certain key principles are observed when assessing knowledge, skills, attitudes and competences; they are the principle of summing up positive achievements, obligatory testing, transparency and clarity of the criteria, diversity of forms of evaluation, availability of the examination for all levels of learning.
- The content of a professional qualifying examination is defined centrally on the basis of a common methodology. The examination process is managed by the NEC Vocational Education Department VE Examinations Division.
- Qualifying examinations are taken to obtain professional qualifications on completion of basic, industrial, secondary and continuing VET programs in the cases when the individual wishes to be assessed for professional competence acquired outside the formal education system.
- The basis for assessment of professional competences acquired outside the formal education system is the relevant PS (as in IVET and CVET). In Latvia, assessment of nonformal education in educational institutions is mainly carried out within the framework of the relevant professional qualifying examination, together with the students of the formal education program.
- Qualifying examinations are mainly held for examining the relevant professional competences.
- It is difficult to separate the acquisition and evaluation of TKCs from other competences. Respondents see TKCs to be cross-related and overlapping with specific professional competence

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CHAPTER 5: OPINIONS OF KEY STAKEHOLDERS REGARDING DEVELOPMENT, ASSESSMENT AND VALIDATION OF THE TKC

This chapter consists of summary of analysis of the information acquired during two focus group discussions carried out within the TRACK-VET study and structured individual interviews.

5.1 What is our familiarity/knowledge of TKC?

The notion of competence defines the performance students of VEP and acknowledges abilities of a student to carry out qualified work in a specific occupation or place of work. After briefing on each of the TKC, all the respondents claimed knowing and understanding the necessity of those competences in vocational education. The respondents, who act also as supervisors of practical training noted that the TKC, which are acquired at educational establishments in Latvia, even exceed the demand in the labour market. It was discovered while applying for practical training at various work places. At the same time, employers taking part in the practical training have expressed discontent with the level of education of students. In most cases it concerns professional competencies, however, in some cases also insufficient level of cultural, social and, mostly, collaboration skills was mentioned.

The respondents noted that in definition and evaluation of learning outcomes in acquiring professional qualification, assessors indirectly take into account also the effect of the learning and practical training environment. Learning outcomes are formulation of knowledge and skills, which should be acquired and mastered by students upon graduation.

The interviews revealed that the notion of “learning outcomes” and “competencies” are not separated. In fact, frequently they are used as synonyms, or in some cases it is considered that the content of learning outcomes consists of competences, and it is proven by a graduate working at a particular work place. However, all the respondents agree that the TKC consists of universal competencies necessary for anyone, and they appear both in professional activity and in everyday life situations (personal, social etc. aspects). Therefore, some respondents faced difficulties in arranging the TKC by importance, because they considered them equally important and overlapping. However, all respondents named *personal, social and learning competence* the most significant TKC. On several occasions, this TKC was listed even above professional competencies. It is justified also by the fact that in a course of time a profession may change radically, or even cease to exist. This is where the related inter-disciplinary skills, *personal, social and learning competence*, come in handy – to survive and orientate oneself in the new circumstances.

Overall the understanding of the TKC is rather broad, responses seem declaratory and general, yet they acknowledge its significance. Lecturers stress the necessity for modern, up-to-date methodological auxiliary materials for acquisition of the TKC. Normative documents define the submissions, sample programs list themes, yet there are not enough specific, methodical materials for lecturers. Currently they have to update educational materials, required for acquisition of a subject or module, on their own, using resources within one's own discretion and reach.

Methodologists noted that it is rather difficult to attract new teachers to educational establishments and revealed instances of poor level of pedagogical skills of professionals coming from places of work.

5.2 The place of national importance documents in understanding of TKC

Respondents related to elaboration of content of vocational education and organisation of centralised vocational qualification examinations are very well aware of the relation between

normative documents: Article 8¹ of the EL "Latvian National Qualifications Framework" defines the general regulation of the LNQF. The LNQF has an eight-level national reference system, which lists Latvian educational system qualifications (in the context of the European Qualifications Framework (EQF)). The structure, set-up and functions of the LNQF have been developed in relation to the EQF, taking into consideration the context and traditions of the education in Latvia, as well as the interests of stakeholders. The levels of LNQF are characterized by the learning outcomes, which should be reach a specific level. Every next level contains also knowledge, skills and competences set for the previous level.

The respondents have accepted in their practical work that in development of the SQS, OS and educational programs and assessment requirements for acquisition of the IVET and CVET educational programs, systematisation of learning outcomes set by the LNQF is taken into account (knowledge, skills, competences (see Table 11).

Table 11

Knowledge (knowledge and understanding)	<p>Able to show extensive knowledge of facts, theories and regularities necessary for individual growth and development, civic involvement, social integration and further education.</p> <p>Able to deeply comprehend and show versatile knowledge of specific facts, principles, processes and notions in a particular occupational or study field in standard and extraordinary situations.</p> <p>Has a knowledge of technologies and methods for carrying out tasks at school or professional tasks at work.</p>
Skills (ability to use knowledge, communication and common skills)	<p>Able to plan and organize work, apply various methods, technologies (including ICT), devices, tools and materials for carrying out tasks.</p> <p>Able to find, evaluate and use creatively the information for carrying out educational tasks at school or professional tasks and solving problems.</p> <p>Able to communicate in at least two languages in writing and orally in familiar and unknown situation. Able to work in the profession, to learn and grow. Able to collaborate.</p>
Competency (analysis, synthesis and evaluation)	<p>Motivated to build one's own carrier, continue education, lifelong learning in a knowledge-oriented democratic, multilingual and multicultural society in Europe and worldwide.</p> <p>Able to plan and carry out tasks at school or professional tasks at work individually, in a team or lead a team.</p> <p>Able to assume responsibility for quality and quantity of learning and professional outcomes.</p>

Rely on the EQF, the LNQF and general normative documents and act only as stipulated thereto; dominating attitude in all the interviews.

Teachers showed broader and more creative interpretation, implementation and assessment of the TKC in the educational process. It is commonly assumed that to a great extent the foundation of the TKC is formed by the family. Also in the certified educational programs development of the TKC is considered suitable for acquiring qualification; whereas the grades-outcomes to a great extent depend on the attitude and motivation of students.

5.3 Opinions of stakeholders about acquisition of TKC

Table 12 summarizes opinion of all the respondents on how the acquisition of the particular TKC comes to light in acquisition of an educational program. Why is it so and what indicates to that?

Table 12 Stakeholder opinions on the presence of TKC in the IVET and CVET

Transversal key competences	Opinions of stakeholders (employers, teachers/school staff, policy makers)
Personal, social and learning competence	<p>Employers, teachers/school staff, policy makers consider this TKC the most essential, because it proves that learner has the following abilities:</p> <ul style="list-style-type: none"> - assume responsibility for execution of one's own daily tasks or task of the team; - find, analyse and apply information on the latest technologies in the field of specialization; - communicate with stakeholders involved in the field processes; - after graduating school develop one's own professional competency individually; - using different methods find creative solutions to challenges at work and in personal life; - find and apply the latest technical materials and documents; - capable of reasoned discussion on practical work-related issues; - comprehend work processes in standard and extraordinary situations; - show interest in actualities in other fields (wide perspective).
Social and civic competences	<p>Acquisition of TKC <i>social and civic competence</i> proves that student has the following abilities:</p> <ul style="list-style-type: none"> - take into account social responsibility and employment standards; - take into account laws and regulations in the field of environment protection and code of ethics, as regards one's own and other persons supervised at work; - mutual trust among colleagues and ability to assume responsibility; - comprehend and adhere to standards of work safety, electrical safety, fire safety and ergonomics; - collaborate with other specialists; - efficient collaboration with a client; - apply and adhere to professional communication principles; - be involved socially and engage in an NGO (projects, clubs, groups of interest etc.), take part in public initiatives of the school and local community (e.g., municipal). - share responsibility and participate (take part in regular upkeep of the surroundings – clean-up, social projects, self-initiative); <p>Students showing civic enthusiasm acquire volunteering work experience and essential practical skills making their candidacy more attractive in the</p>

	labour market, thus improving a chance to professional growth (career) and general socio-economic wealth.
Initiative-taking and entrepreneurship	<p>Acquisition of TKC <i>initiative-taking and entrepreneurship</i> proves that student has the following abilities:</p> <ul style="list-style-type: none"> - plan, organize and evaluate one's own daily work and the work of the team individually, in team and as a supervisor; - upon one's own initiative analyse work outcomes, look for a link between causes and consequences and act within the limits of competency; - control and assume responsibility for the quality of one's own work and that of a team; - have good knowledge of relevant laws; - have good knowledge of business partnership in public and private sector; - work in a group and motivate the group; - communicate effectively and lead negotiations; - analytic reasoning, creative thinking and ability to substantiate an opinion; - plan work; - take risk and not to be afraid to take risk; - develop new products; - comply with a business code of ethics; - ability to react in diverse unusual situations etc. - ability, desire and willingness to assume responsibility and take reasonable risk; - demonstrate presentation skills; broad application of new technologies; - leadership; - be focused, reason independently and show willpower; - acquire and continuously improve professional knowledge; - flexibility – ability to adapt and change depending the situation.
Cultural awareness and expression	<p>Acquisition of TKC <i>cultural awareness and expression</i> proves that student has the following abilities:</p> <ul style="list-style-type: none"> - master basic knowledge of one's own culture, cultural system and cultural identity; - recognize cultural heritage developing one's own identity and operation; - use language skills to communicate with international stakeholders within the field of speciality; - comply with the general and professional code of conduct; - comprehensively reason about the most significant cultural events and facts; - take part in cultural and sports events (at school, local municipality etc.) – joining amateur performance groups, organizing such events or attending as a spectator. - respect and make justified assessment of various cultural manifestations; - enjoy and assess different types of art; - understand the role of culture in building one's personal identity;

	<ul style="list-style-type: none"> - comprehend local, national and European cultural heritage and its purpose in the global context; it refers also to the modern popular culture; - be aware of ongoing cultural events and live in line with positive cultural values.
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5.4 Stakeholders' views on summative assessment

Assessment of learning outcomes is an integral part of the teaching and learning process. Assessment is diverse and complex, indirect and direct, it can have different manifestations and serve various purposes. General division by goal: summative and formative assessment, commonly known as *learning assessment* and *assessment for learning*. Both are equally important and they share a common characteristics – to support learning process.

In schools assessment is carried out systematically. Professional educational establishments follow internal normative documents defining the process of assessment of learning outcomes. The assessment is monitored and supervised by the head of the division and a deputy principal, specializing in learning and practical work. One of the aspects motivating students to learn and attend classes regularly is the possibility to get a scholarship. The learning outcomes assessment procedures of an educational establishment stipulate the regularity of the assessment. Commonly learning outcomes of students are being assessed at least once per month.

Purpose of the summative assessment is to establish and measure the outcome. It refers to a specific part of a program or standard – before closing the subject or at the end of the year or educational level. Apart from the above methods of assessment, students also have to take final examinations in the professional speciality subjects set by the school and a VQE at the end of the educational programme. VQE are substantial due to potentially awarded qualification document.

Two of the respondents on a daily basis supervise compilation of centralized examinations, management of the process and monitoring of the entire process.

Compiling the content of centralized qualifications examinations and organizing the examination process, educational establishments or NCE lean on the rules stipulated in the EL, the VEL, as well as regulations of the Cabinet of Ministers and occupational standards/professional qualification basic requirements and normative documents of the particular sphere. However, when analyzing the contents of the theoretical part of CVQE, it is obvious that the inclusion of TKCs in the evaluation is not in accordance with the regulatory framework.

In all the groups of respondents the above structure of the examination process from normative documents to generalization and assessment of examination outcomes is considered mandatory. Respondents-teachers have indicated that most changes are proposed after the examinations. The interviews revealed an urge for stringer co-operation and broader discussion leading to suggestions of the schools manifesting in changes of educational programs. Respondents-educational methodologists urges the NCE or another higher administrative unit to improve the outdated modules of the lifelong learning. Those are the indications of inability of schools to fully use the autonomy and the lack of creative approaches in development of authentic programs. Meanwhile, the Vocational Education Content Division of the NCE provides consult and urges educational establishments to make current changes upon receipt of educational programs submitted for evaluation before certification. A large amount of discussions spur on the topicality of the list of sources of information included in the educational programs, because on numerous occasions only the sources of information mentioned in the pilot programme, which is available on the website of the NCE and was developed 8 years ago within a ESF project. The schools blame busyness and and overload and a partial load of teachers involved implementation of lifelong learning modules.

Considering inclusion of questions containing TKC, the centralized examinations drawn up by the NCE VISC it can be concluded that the situation differs between various qualifications (see Annex 1–4 of Section 5).

Table 13 **Assessment of TKC relating theoretical part questions in the centralized examination for the professional qualification “Computer Systems Technician”**

(See Annex 1 of Section 5)

TKC	Formulations containing indications of TKC
Personal, social and learning competence	N/A
Civic competence	N/A
Entrepreneurship competence	<p>62. What is the designation of the quality management system certification standard?</p> <p>63. For how many minutes is it recommended to rest after working at the computer for two hours?</p> <p>64. On what matters should an employer consult its employees?</p> <p>65. What is the maximum trial period after conclusion of an employment agreement?</p> <p>66. Who sets the procedure for determining and revising the minimum monthly salary?</p>
Cultural awareness and expression competence	N/A

Table 14 **Assessment of TKC relating theoretical part questions in the centralized examination for the professional qualification “Electrician”**

(See Annex 2 of Section 5)

TKC	Formulations containing indications of TKC
Personal, social and learning competence	63. In the ABC technique the breathing versus indirect heart massage ratio is... [about emergency medical assistance]
Civic competence	N/A
Entrepreneurship competence	N/A
Cultural awareness and expression competence	N/A

Table 15**Assessment of TKC relating theoretical part questions in the centralized examination for the professional qualification "Logistics clerk"***(See Annex 3 of Chapter 5)*

TKC	Formulations containing indications of TKC
Personal, social and learning competence	<p>10. Which of the statements characterises economy as a science?</p> <p>20. Which organization in Latvia operates as the central bank?</p> <p>22. What causes budget deficit?</p> <p>33. What is a standard weekly labour time set by the Labour Law?</p> <p>67. Which of these examples depicts a risk in a mechanical working environment?</p> <p>68. Which of these factors intensifies the risk of effects of an electric shock on the human body?</p> <p>69. What is the procedure in case of a detected burning computer?</p> <p>70. What is the procedure in case of a detected burning engine of a car?</p>
Civic competence	<p>20. Which organization in Latvia operates as the central bank?</p> <p>22. What causes budget deficit?</p>
Entrepreneurship competence	<p>3. What is the minimum additional payment per hourly rate for overtime work set by the Labour Law?</p> <p>4. What do you call payments done by an enterprise for purchasing production resources?</p> <p>5. What do you call a discount rate for payment of advance payment of an invoice?</p> <p>6. Registration of what form of business requires partnership agreement and statutes?</p> <p>7. What does production planning include?</p> <p>8. What is a generating real capital?</p> <p>9. Which of these goods is a commodity?</p> <p>11. Which of these factors is an external factor directly affecting logistics?</p> <p>12. What is a micro-logistics system of a company?</p> <p>The following questions also contain indications of this competence: 13–19, 21, 23, 25–26, 28–32, 34–36, 42, 44, 60, 62–64.</p>
Cultural awareness and expression competence	N/A

Table 16**Assessment of TKC relating theoretical part questions in the centralized examination for the professional qualification "Commercial employee in advertising"***(See Annex 4 of Chapter 5)*

TKC	Formulations containing indications of TKC
Personal, social and learning competence	<p>22. What is the difference between influence via advertisement in a phone book and an advertisement in the mass media?</p> <p>29. What is a fast way of getting through a message to people speaking different languages?</p> <p>30. What communication barrier is based on a different perception of phrases</p>

	<p><i>and abbreviations?</i></p> <p><i>39. What is an allowed time-limit for a duration of an employment agreement?</i></p> <p><i>44. What is included in the information about a job vacancy?</i></p> <p><i>47. What do you call an actual moral state, when a moral obligation is executed via person's life, actions, relations?</i></p> <p><i>48. Where can one receive information on the effect of use of alcoholic beverages?</i></p> <p><i>54. What % of an employee's average daily salary is currently reimbursed for the second and third day of sick-leave under the sick-list A?</i></p> <p><i>60. Who can access information in the commercial register?</i></p> <p><i>64. What should be taken into consideration before providing information to a wide audience?</i></p> <p><i>66. Which of the answers contain all the potential mistakes in a conversation?</i></p> <p><i>67. Which method of influence is based on fascinating, inspiration (suggestion) of the other party?</i></p> <p><i>68. What is stress? Mark the most appropriate answer.</i></p> <p><i>69. What do clients notice?</i></p> <p><i>70. Which of these adaptive gestures express a positive attitude?</i></p>
Civic competence	N/A
Entrepreneurship competence	<p><i>1. Which of the trade marks is allocated to goods and services by producers?</i></p> <p><i>2. What should an intermediary take into consideration when buying in goods?</i></p> <p><i>3. Why do companies use the skimming strategy in setting prices?</i></p> <p><i>4. Which type of information in the market research is cheaper, more accessible, yet potentially inaccurate or incomplete?</i></p> <p><i>6. Is the notion of the competitiveness of a product wider than the notion of quality?</i></p> <p><i>7. What is the most common type of competition in business?</i></p> <p><i>8. What should be analysed in order to appraise competitiveness?</i></p> <p><i>9. What are the most characteristic basic aspects for a fair to take place?</i></p> <p><i>10. What does the success of a fair depend on?</i></p> <p>The following questions also contain indications of this competence: 13–21, 23–27, 31, 35, 38, 40, 43, 45, 50–64, 71–79.</p>
Cultural awareness and expression competence	<p><i>32. What is the psychological impact of a blue colour on a person?</i></p> <p><i>33. What colours are <u>not</u> recommended for large surfaces?</i></p> <p><i>34. What are the characteristics of a harmonic composition?</i></p> <p><i>41. In what case does the advertiser own copyright to a creative work done by the</i></p> <p><i>43. How is the optimum TV advertising time determined?</i></p> <p><i>46. What are the two most common ethical issues that advertising specialist has to</i></p> <p><i>65. Mark the correct manner of speech for providing information.</i></p>

From the research questions, assessment of entrepreneurship competence is included in centralized examinations of all qualifications, except professional qualification “Electrician”, which

does not contain assessment of any TKC.

According to the information provided by the respondents on the content of centralized examinations, it may be related to an opinion that in Latvia acquisition of the TKC, which is additionally developed via special lifelong learning modules (Individual and Societal Dimensions of Security, Green Skills, Social and Civic Skills, Languages, Cultural Understanding and Expression; see Chapter 3) and integrated into other VET curriculum modules and general education subjects, the acquisition of the TKC sufficiently represented in the content and assessment of education programs.

5.5 Stakeholders' views on formative assessment

The interviewed respondents noted that a student and a teacher should reflect on the essence and purpose of each class, share stories of their success and failures and the knowledge acquired in the particular lesson, in order to help memorizing it. Formative assessment motivates students, stimulates self-evaluation and responsibility. The goal of the formative assessment is to gather information on the learning process and use it for improving the quality of teaching, motivate students to learn, raise interest in students, stimulate responsibility and self-evaluation. It provides feedback for coordination of mutual correspondence between the learning process, the purpose of learning and the applied teaching techniques.

All the respondents agreed that it is difficult to separate assessment of individual TKCs, except for LLL modules ("Green skills", "Social and civic competence", "Initiative and entrepreneurship", "Public and human security", "Language, cultural awareness and expression"), because it is a transferability, which takes place within the general teaching-learning-assessment process. There are various formative assessment methods. Learning outcomes are assessed orally, in writing, in practice or using a mix of methods. It greatly depends on the creative mindset of a teacher. For standard regular assessment the descriptive assessment or "passed"/"not passed" is common. Learning tasks of a larger scale are assessed by grades from 1 to 10, provided the criteria have been previously defined for each grade.

Teacher selects the most suitable method of assessment depending on the teaching methods used in the learning process, for example, Q&A, completion of tasks (including usage of ICTs), working with text, audio/video recordings, images, situation simulations, crossword puzzles, tests, laboratory works, experiments, demonstrations, visualisations, role plays, situation analysis, individually, in pairs or in groups, essays, presentations, discussions etc.

Table 17 Examples of formative assessment

Method	Subject	Example of assessment
A short test in writing, Q&A	Economics Subject: <i>Demand, supply and balanced market.</i>	Goal – to test the ability of a student to read the supply-demand information from the chart and the ability to compile a supply-demand chart. Assessment is carried out during a lesson, observing and advising students, if necessary. Answers are discussed collectively right away. Ethical aspects of the subject may also be covered. Students get feedback during the lesson.
Work in groups, in pairs and individually.	Individual and Societal Dimensions of Security Subject: <i>How do your actions affect the</i>	Goal – improve the understanding of how one's actions affect the safety of other people. Students use a worksheet "How do your actions affect the safety of other people?" and fill out the mind map: write down three examples of actions potentially harming another person, for example, on

	<i>safety of other people?</i>	the street, during the Chemistry lesson, within family, on the beach etc. List one accident for each action. Teacher initiates discussion in pairs or groups. Students present their findings, collectively evaluate the ability to act responsibly and see the risk of potential harm to the safety of another person. Teacher summarizes the results.
Work with images and text, discussion, work in pairs	Basic Advertising Subject: <i>Information security in advertisements</i>	Goal – train the ability to identify security issues in the mass media. Students carefully browse through the 6 examples and fill in the table – what is being advertised and is everything depicted safely and ethically. Students present their conclusions. Teacher asks guiding questions. After the discussion students work in pairs, choosing one advertisement and devising the best method of advertising the particular product/service. Present the result. Teacher summarizes the results.

5.6 Stakeholders' views on other forms of assessment

The most common methods of informal assessment of outcomes is a professional portfolio summarizing personal achievements and the evidence of behavioural and learning style. The summarization requires project materials, awarded diplomas, certificates, presentations, awards, references etc.

The interviews revealed that the summarization of learning, hobby group activities and professional or civic activity is mostly used by the students of higher motivation, because it is not mandatory. It was noted that educational establishments use different methods to support and rouse interest (including demonstration of best examples of previous students) in building portfolio starting from the first months at school.

The second most common method of assessment of learning outcomes and achievements is participation in different projects. The TKC (foreign language, ICTs, social competences) are essential to students for participation in research projects. Therefore, if necessary, schools provide also paid training in order to make sure that students are prepared to participate in such projects. For example, the TKC are developed in training companies founded by educational establishments with the support from *the Junior achievement*. Another group of projects is related to diverse collaboration among vocational education institutions (business plan competitions, workshops, brainstorming sessions etc.). The group of individual projects is supported by the Career centre: Business day at the school, trips to companies, career-choice visits to schools, which the corresponding student has graduated from or visits (enrollment) of pupil from their former school, as well as professional workshops, Open Days and Shadow Day.

The third the most common method of the assessment of learning outcomes and achievements is called An hour at the museum.

There are approximately 200 museums in Latvia (see the Catalogue of Museums drawn up by the Latvian Museums Association: <http://muzeji.lv/lv/museums/>). Every largest museum has one or several tutors, whose main task is to develop and implement educational programs for diverse target audiences. Educational establishments broadly use this option, adapting the potential of a museum for the purpose of acquisition of the curriculum.

In the case of the visit to a museum, the method of assessment is much more interesting for students and for a teacher, because the visual materials acquired at the museum – handouts, photos and videos – can be used in the class.

For example, in the museum students can see photos only under the supervision of the tutor, but afterwards they can try out different techniques of taking photos and complete the task assigned by the teacher at school.

Nowadays, the interdisciplinarity applies to any field of education. For example, the swift development of technologies can be combined with the modern art creating brand new functions to previously unimaginable combination of knowledge. Therefore it is advisable to reduce boundaries between spheres, for example, between the Physics and the Culturology, the Mathematics and the Music, the Chemistry and the Literature. Museums provide a suitable environment for that purpose, because they basically exhibit an interdisciplinary content.

For example, the Museum of the Occupation of Latvia offers an activity for schools – Hour in the Museum explaining the social life particularities during deportations to Siberia. It provides students deeper knowledge about the historic period and refers to the Geography on the topic of climate peculiarities in diverse regions.

Since 2010, the Latvian association of science centers in four science and curiosity centers ZINOO offer insight into scientific achievements in different fields of science. *ZINOO* offers interactive expositions allowing visitors to try out various technologies and challenge natural laws: study Mathematics while jumping, try out gravitation swinging in the swings, learn about the friction driving in a specially equipped go-kart, see the sound, build cog-wheel transmissions, learn the basic principle of a catapult, build and operate robots, see the lightning etc.

In collaboration with the Riga Technical University the centre provides interactive and educational visiting sessions at schools aimed at popularizing the engineering sciences (<https://www.zinoo.lv/tjd/>).

Also visits to the Latvian Museum of Natural History, the Museum of the Occupation of Latvia and the Ethnographic Open-Air Museum of Latvia are also popular.

The fourth the most common method of assessment of learning outcomes in vocational education institutions is participation in extracurricular activities. A part of the extracurricular activities is provided by the educational establishment itself.

Centers of the extracurricular activities executed in several educational establishments (depending on the availability of resources and other means) are co-funded by the state and provide the following extra-curricular programs:

- Culture (Dance, Music, Visual arts, Drama, Folklore etc.);
- Technical-creative activity (e.g., car modelling, airplane modelling, ship modelling, electronics, robotics, video, photo etc.);
- Environmental education (Latvian rural youth organization, tour guides, ecology, floristics, study of nature and local history etc.);
- youth initiatives (youth clubs, scouts and guides, Young Guard etc.);
- Sports extra-curricular activities;
- Other programmes (e.g., journalism, aesthetics, foreign languages, literary work etc.).

The respondents noted that extracurricular activities for young people provide a chance to meaningfully spend their free time, express themselves creatively, develop talents, improve communication skills, gain the first professional skills and they can be useful in planning future career.

When calculating the amount of scholarships, educational establishments take into account also the civic activity of students, including participation in extracurricular activities.

5.7 Summary

Table 18

Group of interviewees	Short conclusions // comments resulting from interviews with each group of respondents
Representatives of agencies responsible for VET and the development of TKC (4 interviews)	<ul style="list-style-type: none"> • All respondents are fully informed about TKC; • A lot of information about TKC is available in the policy planning documents, social media, periodicals, informative materials produced within EU-funded projects; • Are aware of and keep track of TKC presence in education programs. Keep track of the assessment of TKC in their daily work; • TKC are more important than professional competencies; • Acquisition of TKC ensures a more successful career development; • The importance of TKC ranked by the most important: 1) Personal, social and learning competence; 2) Entrepreneurship competence; 3) Civic competence; 4) Cultural awareness and expression; • In Latvia extent of development TKC in IVET and CVET depends on the national educational policy • Ongoing state-level policy action is introduction of a competence-based framework curriculum in the general education where a lot of attention is paid to TKC (refers also to IVET) and development and introduction of new profession/occupation standards and modular programmes in VET; • Main strategies to promote TKC: centralized assessment of VEP (developed by the NCE, the MoES, SEQS); • Additional measures to promote the development of TKC in IVET and CVET should be implemented: <ul style="list-style-type: none"> ○ educating educators; ○ through the vocational education competence centres (VECC) which fulfil a realistic methodological function; ○ include more questions and tasks on TKC in centralized examinations.
Teachers/representatives of teacher associations (19 interviews)	<ul style="list-style-type: none"> • All respondents have general knowledge about TKC, but cannot sufficiently explain in detail what each TKC includes; • Do not feel the lack of information about TKC; • Rely on normative documents – the Cabinet of Ministers regulations, occupational standards and sample education programs, which can be modified by a teacher, which is rarely the case (mostly due to excessive workload);

	<ul style="list-style-type: none"> • TKC is seen as an integral part of the study process, though it is not often separately emphasized; • TKC are assessed using formative assessment (using existing criteria); • TKC is not sufficiently covered in the teacher CPD courses; • VET modules for acquisition of lifelong learning competencies (developed by the National Centre for Education), which mostly focus on TKC, are outdated; VET practitioners are dissatisfied (complain), but there are no initiatives to bring in the change; • In their daily work keep the track of the presence of TKC in education programs, as well as their assessment; • The following activities have a significant importance in further development of TKC: <ul style="list-style-type: none"> ○ project-funded activities, ○ extracurricular activities (workshops, contests, subject olympiads, competitions); ○ field trips, excursions; ○ work-based learning; ○ informal, career-oriented education. • Believe that TKC of VET students can be promoted through creation of a portfolio. • Importance of TKC ranked by the most important: 1) Personal, Social and learning competence, 2) Cultural awareness and expression; 3) Civic competence, 4) Entrepreneurship competence.
<p>Experts involved in designing curricula and assessment (deputy heads, heads of the methodological groups of teachers, methodologists) (8 interviews)</p>	<ul style="list-style-type: none"> • 30% of VET modules aimed at acquisition of LLL competencies ("Green skills", "Social and civic competence", "Initiative and entrepreneurship", "Public and human security", "Language, cultural awareness and expression") are included in education programs – either separately or integrated in the content of general education subjects or VET modules. • TKC are assessed using formative assessment (using existing criteria); TKC are included in the centralized examinations as an underlying aspect/indirectly (e.g., appear during practical work); • Teaching methodologies applied are important – in order to stimulate interest and motivate and not to press or force; • The acquisition of TKC is promoted by the opportunities to take part in the mobility projects. • As practice shows portfolio developed during the teaching process serves as an annex to the CV and has a significant role when applying for a vacant position; • Those teachers whose work is creative and innovative need to be supported by administration of school, municipality; • A great deal of job in developing of TKC is done by the mentor (tutor)* of the students' course; • The confidence of students needs to be strengthened by supporting their choice of profession;

	<ul style="list-style-type: none"> • Field trips to the companies are very important in building students' understanding of the real working environment and their suitability for the profession; • Adaptation period (month) for the first-year students; • In order to participate in research projects students need certain TKC (foreign languages, ICT, social competences) which also serve as the motivation for their acquisition; • During the parents' meetings and events at school the school staff has promoted parents' enrolment in lifelong learning courses offered by the school; • All the key competences are equally important; they overlap and are linked. Besides the 4 TKC, also critical thinking, problem-solving, teamwork skills, communication skills, analytical skills, creativity and intercultural competence are apparent throughout any module/subject and also is part of the key competences.
Representatives of employer associations involved in the design of VET policies (4 interviews)	<ul style="list-style-type: none"> • Emphasize the priority of acquisition of professional competencies during the educational process; • Acknowledge the significance of TKC both during the study period and in the workplace; • Lifelong learning is an important component of countries' socio-economic environment where TKC has an important role; • Representatives of the Sectoral Expert Councils** take part in formulation of competences by evaluating and approving the drafts of new profession/occupation standards; • Employers participate in improvement of education programs and development of new ones, including the acquisition of all TKC in their content; • Cooperation among employers and education establishments, municipalities and other social actors is important; • In all centralized VET qualification examinations, employers assess also the students' TKC; • Importance of TKC ranked by the most important: 1) Personal, social and learning competence; 2) Entrepreneurship competence; 3) Cultural awareness and expression competence; 4) Civic competence.
Representatives of trade union associations involved in the elaboration of VET policies (2 interviews)	<ul style="list-style-type: none"> • Have heard about TKC, but in their work do not single it out as a separate part of the educational process. • Consider that the current regulations hold enough reference to TKC; it is important to implement it in real life/to put it in practice. • Take part in coordination and validation of new occupational profiles/standards. • Respondents place TKC in the following order according to its importance: 1) Personal, social and learning competence; 2) Entrepreneurship competence; 3) Civic competence; 4) Cultural awareness and expression.
Decision-/policy makers	

(3 interviews)	<ul style="list-style-type: none"> • All respondents are fully aware of the TKC documents and their content, as well as work with them; • When drafting documents the EU recommendations on the key competences for lifelong learning are taken into account; <ul style="list-style-type: none"> • Consider that there is enough information on TKC, EU documents are translated into Latvian; • Educational institutions should set up their own system for strengthening development and implementation TKC; • Schools need to work together, incl., exchange experience in the field of methodology; • VECC* are quite passively performing the methodological work function, although normative documents determine/require it. • There were successful meetings held at the leading VECC* where the content of the learning modules was evaluated and suggestions for the policy makers were formulated. Proposals for changes in life-long learning modules (including those with TKC) were developed. This work must be done regularly. • Probably, the Ministry of Education and Science should ensure greater supervision / support of the content of educational programs (including TKC), not only in the form of informative seminars. • Majority of respondents place TKC in the following order of importance: 1) Personal, social and learning competence; 2) Entrepreneurship competence; 3) Civic competence; 4) Cultural awareness and expression;
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**A mentor (tutor) is a person sometimes a friend (or a guide or a teacher) who guides a less experienced person usually younger by building trust and modeling positive behaviors. Usually assisting with mentee's next professional step and carier's direction. One who is an experienced and trusted adviser.*

Various groups of respondents had a very different attitude towards TKC – from routine to real interest. The farthest from this topic were trade union representatives.

Commonly, there is a tendency to understand the TKC in broad, general, uncertain terms. Due to the different understanding of the topic amongst respondents, we used the TKC descriptions (in Latvian) and mentioned the most important indicators of each TKC during the interview. In 80% of cases at the beginning of the interview, the TKC is treated as an extracurricular work and activity. Therefore, the interviewer's comment was important linking the content of the TKC with study programs, their content and the qualification.

Latvia lacks more or less regular scientific research in vocational education, regarding the implementation of programs, evaluation, and validation of obtained qualifications.

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CHAPTER 6: PROPOSALS

In 2019, in Latvia reforms in development of the content of vocational education (development and update of the modular programs) and development of the centralized examination procedure and development of the examination content are ongoing, in order to align those with the latest trends in the educational content. In the times of change, the trainings for tutors in the form of workshops, courses and conferences are essential.

The study carried out within the framework of the TRACK-VET resulted in several proposals and conclusions for the policy makers and implementers other stakeholders in VET.

1. Commonly the competences in Latvia are defined too broadly and inconsistently, even in the normative and methodical documents. Mostly the notion "competence(s)" is used in the meaning of "skills" (see Chapter 2). In order to change that, a methodical material should be drawn up in collaboration with higher educational establishments, summarizing the historical development of the process and providing a theoretical and practical explanation of the use of the two notions.
2. The methodological commissions of the NCE and educational establishments analyze and appraise the outcomes of centralized qualification examinations scrupulously, thinking of possible improvements of the examination process, its content and the overall educational process. The outcomes affect also the promotion of prestige and attractiveness of a school. However, since the TKC assessment indicators (specific tasks) are rarely included in the centralized examinations (see Chapter 4), the TKC learning process in the IVET and the CVET programs is hardly ever evaluated and regularly improved or it is done in a free form upon discretion of a tutor and it is not measured.
3. In order to improve the qualification examination procedure it is important to allow the tutors involved in the teaching process and cooperation partners – representatives of the labour market and higher educational establishments – to observe the examination process, because their participation, conclusions and recommendations can improve the content of examinations according to the needs of the labour market and the particularities of the next educational level.
4. The respondents noted that tutor is the most essential component in the provision of high-quality education. Educational establishments face challenges in convincing all tutors of the necessity to use new, modern methods. It may be related to the senior age of tutors and the extensive experience in using rather outdated methods. Most tutors prefer summative assessment (without specifying grading criteria) even for small tasks, where the formative assessment is more appropriate. It is necessary to explain the basics of the formative assessment and its methodology to the tutors.

In order to prepare students for practical work, international competitions, scientific research, participation in local and international projects, the foreign language skills of students and tutors must be improved. Some tutors from other places of work of different spheres lack pedagogical knowledge and skills, and the understanding of the TKC. It is always in the interests of educational establishments to support the representatives of particular occupations in terms of pedagogical knowledge and skills. Low remuneration of tutors does not motivate younger tutors to work at vocational educational establishments.

5. Educational establishments are proud of achievements of their students in competitions, expositions and olympiads. However, the respondents note the insufficient administrative support on a national, industry and municipal level, in order to devote more time to gifted

students. This means systemic development of the skills of each student, providing the necessary learning environment and using modern methods and various techniques of social work for improving the level of professionalism of gifted students. Meanwhile, taking into consideration the varied level of background of students, the respondents noted that the learning quality of students may be improved by targeted discriminative approach towards the learning process.

6. The assessment and validation of basic competences acquired in diverse settings must be supported and developed. The support mechanisms for validation of the acquired lifelong learning competences in diverse settings must be developed, creating a mechanism for assessment and validation of professional and general skills. In the context of vocational lifelong learning, there should be an option to audit the skills of adults, in order to establish the level of existing skills and the need to upgrade qualification. At the national level several measures have been raised in relation to validation of the informal and standard learning and connection to the Latvian National Qualifications Framework.
7. The TKC in the vocational secondary education programs (IVET) are incorporated in the subjects of general education, as well as vocational education modules and lifelong learning modules (see Section 3). The acquisition of the TKC for students in the standard learning process depend on the knowledge of teachers and the implementation of the program/module/content of the subject. In order to gain the overall picture of the role of the TKC (content, assessment, outcomes and challenges) in specific stages of the educational process, educational establishments should develop specific monitoring tools for managing this process.
8. All the basic competences, including TKC, are considered equally important, since each of them help ensuring a healthy civil society. The competences are used in many different situations and combinations. They intertwine and relate, and aspects relevant to one field can help develop competencies in another. Such skills as critical thinking, problem-solving, teamwork skills, communication skills, analytical skills, creativity and intercultural competence are apparent throughout the key competences. Therefore at the state level significant support could be rendered to the national lifelong learning strategy, supporting and stimulating the development of key competences from early years throughout the person's life-cycle, thus ensuring a future-oriented management of personal life.

In order to offer development of LLL competences (in the Latvian laws and regulations all the TKC are included in this group of competences), the vocational educational establishments' expert work groups are developing new modules for acquisition of lifelong learning competences within the framework of the Ministry of Education and Erasmus+ project "National Coordinators for the Implementation of the European Agenda for Adult Learning". The content corresponds to the needs of specific fields on the grounds of recommendations of the Council of the European Union of 23 May 2018 "Recommendation on key competences for lifelong learning", emphasizing the acquisition of the TKC.

ANNEXES