
VOCATIONAL EDUCATION
AND TRAINING IN EUROPE
LITHUANIA



Please cite this publication as:

Kvalifikacijų ir profesinio mokymo plėtros centras. (2019). *Vocational education and training in Europe: Lithuania*. Cedefop ReferNet VET in Europe reports 2018.

http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Lithuania_2018_Cedefop_ReferNet.pdf

Author: Eglė Zybartienė

Contributor: Nijolė Daujotienė

Validated by: Kristina Valantinienė, Ministry of Education and Science

Reviewed by Cedefop

© Kvalifikacijų ir profesinio mokymo plėtros centras (Cedefop ReferNet Lithuania), 2018

Reproduction is authorised, provided the source is acknowledged.

This VET in Europe report is part of a series prepared by Cedefop's ReferNet network. VET in Europe reports provide an overview of national VET systems of the EU Member States, Iceland and Norway. The reports help to understand VET's main features and role within countries' overall education and training systems from a lifelong learning perspective, and VET's relevance to and interaction with the labour market.

VET in Europe reports follow a common Cedefop format. They are available at <http://www.cedefop.europa.eu/EN/Information-services/vet-in-europe-country-reports.aspx>.

The opinions expressed here do not necessarily reflect those of Cedefop.

VET in Europe reports are cofinanced by the European Union and ReferNet national partners.

ReferNet is a network of institutions across Europe representing the 28 Member States, plus Iceland and Norway. The network provides Cedefop with information and analysis on national VET. ReferNet also disseminates information on European VET and Cedefop's work to stakeholders in the EU Member States, Iceland and Norway.

<http://www.cedefop.europa.eu/en/events-and-projects/networks/refernet>



/cedefop



@cedefop

#refernet

Table of contents

CHAPTER 1. External factors influencing VET	5
1.1. Demographics.....	5
1.2. Economy and labour market indicators	5
1.3. Employment policies influencing VET	11
CHAPTER 2. Provision of VET.....	12
2.1. Introduction.....	12
2.2. Chart of the national education and training system.....	13
2.3. Government- regulated VET provision	14
2.3.1. VET programmes types.....	14
2.3.2. Participation in IVET	18
2.3.3. Main VET providers	19
2.3.4. Work-based learning	19
2.3.5. Key competences in IVET and CVET	20
2.3.6. Examples of qualifications	20
2.3.7. Learning forms	21
2.4. Other forms of training	21
2.5. VET funding.....	22
2.5.1. Funding IVET	22
2.5.2. Funding CVET for training employees	23
2.5.3. Funding CVET for training the unemployed	24
2.6. VET governance	24
2.7. Teachers and trainers	26
CHAPTER 3. Shaping VET qualifications.....	28
3.1. Anticipating skill needs.....	28
3.2. Designing qualifications	28
3.2.1. Sectoral qualifications standards	28
3.2.2. VET curricula design	29
3.3. Recognition of prior learning	30
3.4. Quality assurance	30
CHAPTER 4 Promoting participation in VET	33
4.1. Incentives for VET learners.....	33
4.1.1. Bringing GE and VET closer together	33
4.1.2. Measures to improve mobility between VET and higher education ..	34
4.1.3. Incentives for youth	34
4.2. Incentives for enterprises	35
4.3. Guidance and counselling.....	35
4.3.1. Main institutions.....	35
4.3.2. Organisation and funding.....	36
4.4. Key challenges and development opportunities	37

List of abbreviations.....	39
References	40
Websites.....	44

List of tables and figures

Tables

Table 1	Employees (aged 15 and over) by economic activity, 2017	6
Table 2	Formal IVET and CVET programmes	16
Table 3	Participation in higher VET	18
Table 4	Participation in IVET	19
Table 5	Funding for IVET institutions by source (%)	23
Table 6	Teaching personnel in IVET institutions.....	26

Figures

Figure 1	GDP growth rate in %, 2010 - 2017	6
Figure 2.	Employment rate in EU28 and LT, 2010-17	8
Figure 3.	Youth unemployment rate, 2010-17.....	9
Figure 4	Chart of the national education and training system	13

CHAPTER 1.

External factors influencing VET

1.1. Demographics

Lithuania has a population of 2 810 000 inhabitants (Statistics Lithuania, 2018). Population decreased by 1.37% in 2017 (by 1.4% in 2016), mainly due to emigration and natural decrease.

In 2017, emigration increased by 13.8%. More than 76% of emigrants were aged between 15 and 44 year old. (Statistics Lithuania 2018). An anticipated decline in the number of the working-age population is a cause of concern. High emigration creates a shortage of skilled labour and hinders future economic growth. At the beginning of 2018, the age group of 50-54 year-olds accounts for the largest share of the workforce, which is projected to shift to the group of 60-64 year-olds in 10 years' time. The shrinking population calls for more effective use of the potential of the workforce, especially of elderly people involvement in economic activity.

Although immigration to Lithuania increased (with a density of 10.4 immigrants per 1 000 population in 2017, compared with 7 in 2016), there are more emigrants than immigrants. For many years, the largest number of immigrants (about 82% on average) were returning Lithuanians. The rest included EU citizens (3%) and non-EU citizens (15%). In 2017, this trend changed: the proportion of returning Lithuanians fell to 50%, the share of EU citizens remained unchanged, but that of non-EU citizens went up to 47%. The largest number of immigrants come from Ukraine and Belarus (about 35% of all immigrants). Lithuanians accounted for 84.2%, Poles for 6.6%, Russians for 5.8%, Byelorussians for 2% and other nationalities for 1.1%. There are more women (54%) than men. Almost one third of the population (27.9%) is younger than 24 years, while 53.7% of the population is aged 25-64.

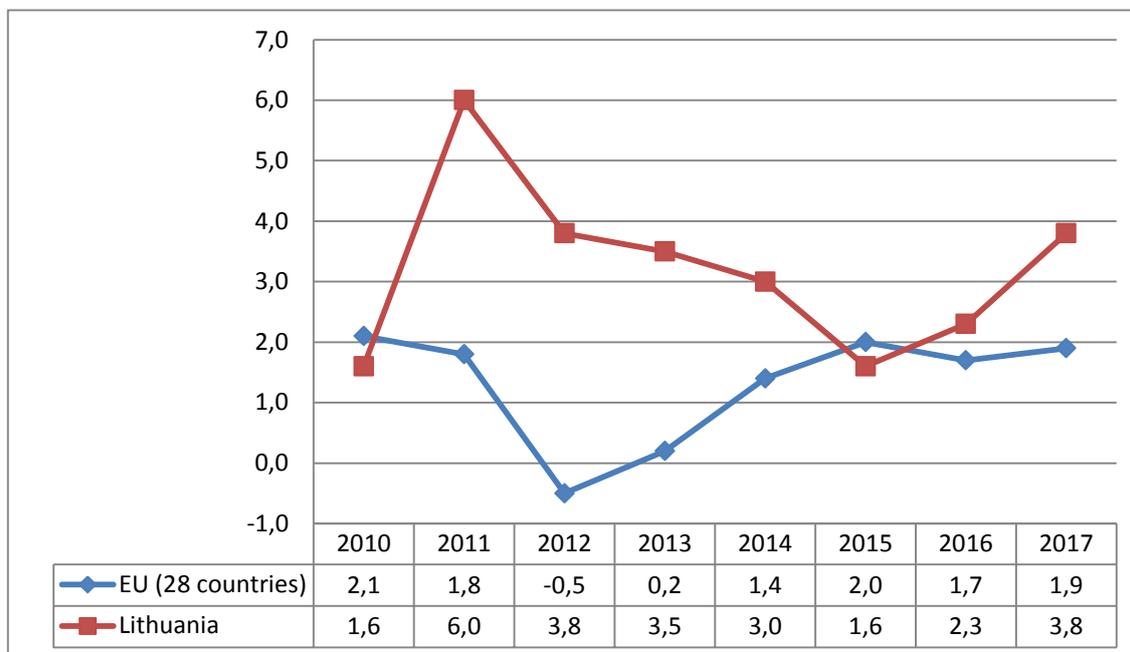
Ageing will remain an important concern for the future. At the beginning of 2017, the population aged 65 and older was 19,3%. According to Statistics Lithuania, in 2017-30 the number of people aged over 65 will increase by 10.4% (in 2005–16, the number of elderly persons increased by 3.2%), while the number of those aged 15-64 will decrease by 31%. It is likely that in the future, the employed population will have to bear a heavier burden to support retirees.

1.2. Economy and labour market indicators

According to Eurostat, a surge in the GDP in 2017 was prompted by the growth in final consumption spending and investment. The positive development in the GDP in 2017 (Figure 1) was largely attributable to the results of wholesale and retail, and of the results of the companies providing services in repairs of motor vehicles and

motorcycles, transport and storage as well as accommodation and catering companies (Statistics Lithuania, 2017).

Figure 1 GDP growth rate in %, 2010 - 2017



Source: Eurostat database. <http://ec.europa.eu/eurostat/data/database> [accessed 31.8.2018].

The years 2015-16 saw a moderate growth in the GDP, while the reduced export of goods and services had a negative impact on the growth of the economy (Ministry of Economy, 2016). The positive change in Lithuania's GDP since 2017 (+3,8% compared with +1.9% in the EU) has also been observed in 2018 (+3.2%) and mainly due to the growing investment.

Lithuania recorded an annual inflation of 3.9% in 2017 (December 2017, compared with December 2016), prices for consumer goods went up by 3.4%, and services by 5.3%. The inflation was driven by an increase in prices for food and non-alcoholic beverages, transport goods and services, housing-related products and services, water, electricity, gas and other fuels, hotels, cafes and restaurants, as well as group of various goods and services, and the decrease in prices for household furnishings, equipment and routine household maintenance services (Statistics Lithuania, 2018).

Table 1 Employees (aged 15 and over) by economic activity, 2017

Economic sector (NACE* rev2)	(000)	%
A Agriculture, forestry and fishing	116.3	8.7
B Mining and quarrying	2.5	0.2
C Manufacturing	200.1	15.0
D Electricity, gas, steam and air conditioning supply	12.6	0.7

Economic sector (NACE* rev2)	(000)	%
E Water supply; sewerage, waste management and remediation activities	18.0	1.3
F Construction	98.0	7.3
G Wholesale and retail trade; repair of motor vehicles and motorcycle	210.2	15.6
H Transportation and storage	119.4	8.7
I Accommodation and food service activities	36.1	2.7
J Information and communication	30.4	2.2
K Financial and insurance activities	19.8	1.4
L Real estate activities	15.1	1.2
M Professional, scientific and technical activities	56.2	4.2
N Administrative and support service activities	53.2	4.0
O Public administration and defence; compulsory social security	84.3	6.3
P Education	132.2	9.9
Q Human health and social work activities	90.4	6.8
R Arts, entertainment and recreation	28.4	2.1
S Other service activities	23.4	1.6
T Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	1.2	0.1
U Activities of extraterritorial organisations and bodies	--	--

NB: *Classification of economic activities in the European Union.

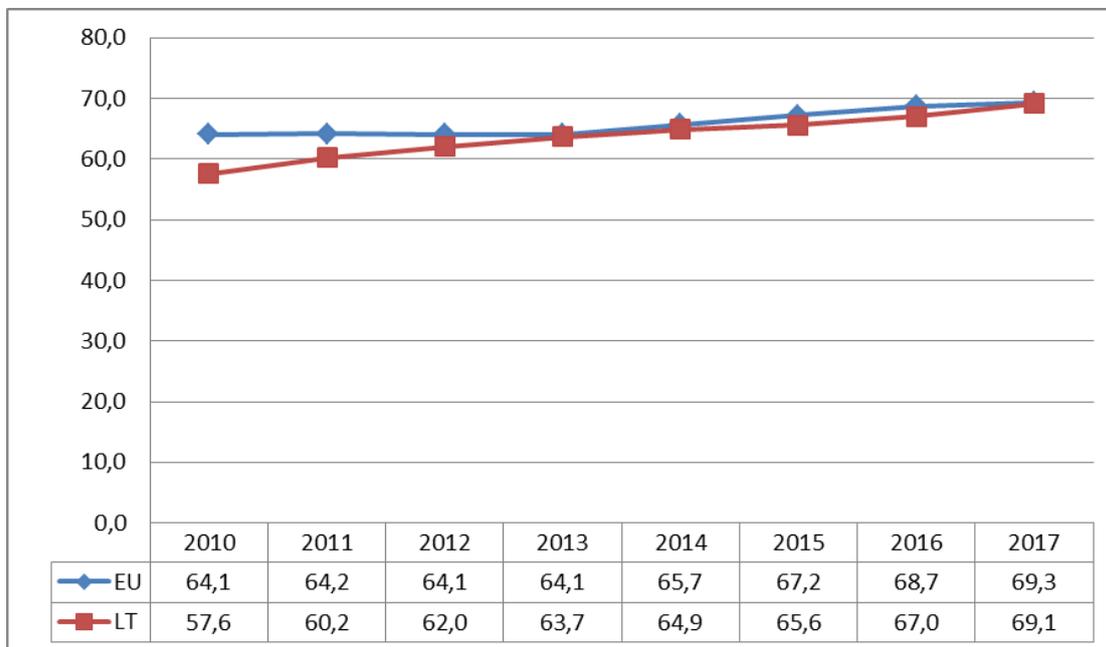
Source: Statistics Lithuania database of indicators. <https://osp.stat.gov.lt/temines-lenteles7> [accessed 31.8.2018].

VET institutions set themselves to the challenge of developing programs, taking into account the needs of workers and their employment in individual sectors of the economy. Since 2013, the employment in the industry has seen a steady growth. This has been the result of the recovery in exports market and increased tangible investments. Most of the population are employed (see Table 1) in trade, manufacturing and education. The number of those employed in construction, services, agriculture, forestry and fisheries came down in 2017. The construction sector was negatively affected by the temporary decline in EU fund investments, which largely went to infrastructure works. The decline in the number of people employed in the service sector was caused by sluggish employment in the wholesale and retail trade, information and communication companies. These negative trends were partially offset by the increased employment in the transport and storage sector, which has continued to successfully increase export volumes. Tangible investments have grown together with the recovering export market. The year 2017 saw the growing number in machine and equipment operators. Employment growth in these particular professions was driven by the growth in industrial sectors. There was also a growing demand for accountants, data entry operators, secretaries and other office staff.

In 2017, the employment rate among the population aged 15-64 stood at 69.1% (see Figure 2), which was 0.7% up compared to 2016. In 2017, the difference in the employment rate between men and women of this age (69.1% for men and 69% for women) almost disappeared. The youth employment rate (15-24 year-olds) in 2017

amounted to 29.3%, which was 0.3% up in 2017 compared to 2016. The employment in the EU grew by 1.5% in 2017 and by 1.6% in the Euro area compared to 2016.

Figure 2. **Employment rate in EU28 and LT, 2010-17**

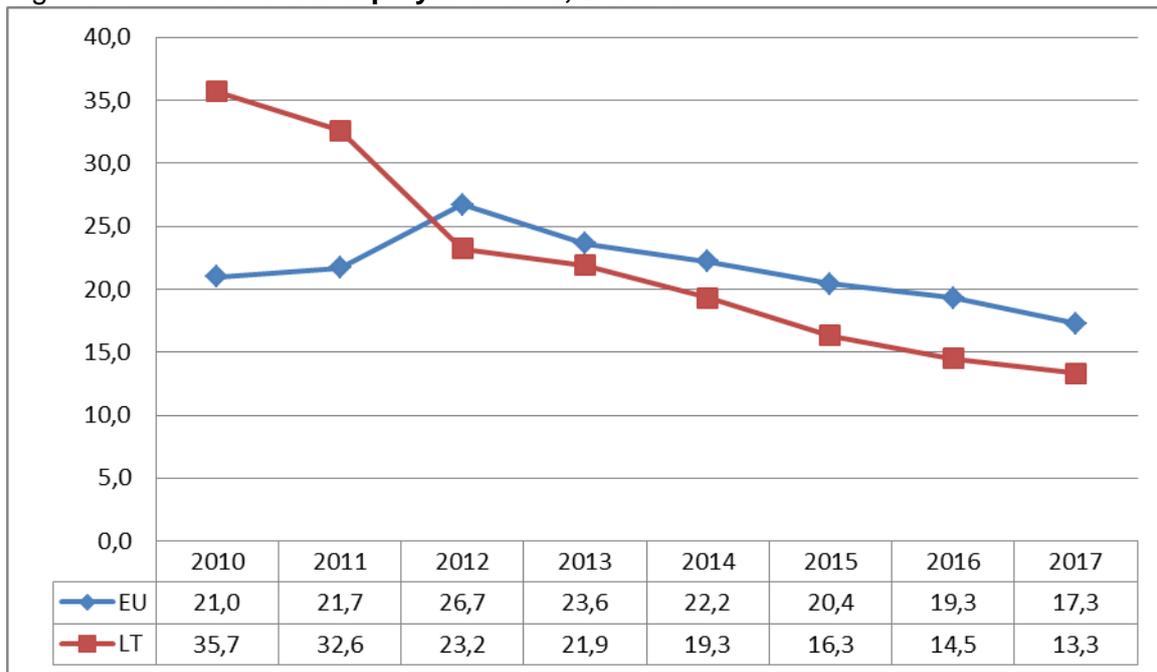


Source: Eurostat database. <http://ec.europa.eu/eurostat/data/database> [accessed 31.8.2018].

On 1 January 2018, local labour exchange offices registered 24.1 thousand of young people aged 16-29 (0.3 thousand less than in 2016) in Lithuania. The youth accounted for 15.8% of all the unemployed. The situation for the youth in the labour market changed. Youth unemployment rate (15-24 year-olds) in 2017 accounted for 13.3% and was 1.2% less than in 2016 (Figure 3). According to the Eurostat, in 2017, the youth unemployment rate in the EU was 17.3%, and compared to the previous year it was down by 2%.

In 2018, the new efficiency indicator in Lithuania has shown that integration into the labour market of VET graduates, is more sustainable three or six months after graduation. Within 16-29 year-old youth registered at the labour exchange offices, 55.9% had VET qualification and 44.1% were without any professional training. The unemployed with higher education (both, academic and VET-type) and upper secondary general education attainment was 24,4% and with lower secondary education level – 25,1% (Lithuanian Labour Exchange, 2018). The youth unemployment rate slightly decreased, standing at 7.1% (0.8% less than in 2016). The unemployment rate among men was 8.5% (fallen by 0.6%), and that among female 5.7% (fallen by 1%). The unemployment rate among men was 8.5% (fallen by 0.6%), and that among female - 5.7% (fallen by 1%).

Figure 3. Youth unemployment rate, 2010-17



Source: Eurostat database. lfsq_urgaed [accessed 31.8.2018].

The Employment programme for 2014-20 (Government, 2013) aims at 73% employment by 2020 by supporting the creation of jobs, linking VET qualifications to the needs of the labour market and improving the integration of current working population into the labour market. It focuses on

- quality guidance and counselling services accessible to all,
- Improving the labour market relevance of formal VET qualifications,
- improving the system of competence assessment and recognition as well as better lifelong learning services.

It aims to offer young people under the age of 25 years a good quality offer of employment, continuation of vocational education and training, apprenticeship or traineeship within a period of four months of becoming unemployed or leaving formal education. The programme includes measures to retain elderly and disabled persons in the labour market, including education and measures for unemployed to return to employment. It also foresees strengthening in-company work-based learning.

The Youth guarantee initiative implementation plan (Ministry of Social Security and Labour, 2013) sets out various measures for improving youth employability and their integration into the labour market for 2014-20. Examples of such measures include:

- improving guidance and counselling services quality and accessibility;
- creating a system to identify inactive youth not in employment, education or training (NEETs);
- entrepreneurship support;
- increasing work-based learning opportunities.

The Department of Youth Affairs under the Ministry of Social Security and Labour publishes annually calls for proposals to fund activity projects organised by open youth centres and spaces. The projects involve open work with young people to engage them in meaningful activities and safe leisure activities.

Open youth centres and spaces measures were implemented and started led to positive changes and youth unemployment. Within the Youth guarantee initiative actions, the network of youth labour centres (*jaunimo darbo centrai*) was expanded since 2013, from 11 (established between 1999-2013) to 36 open youth centres and 154 open youth spaces operating in Lithuania in 2018 ⁽¹⁾. Their role is to

- facilitate engagement in social and educational activities, including voluntary activities;
- provide guidance and counselling services (legal advice, employment availabilities, project preparation);
- support long-term youth employment;
- develop fundamental social, educational and professional competences,
- organise various training, seminars and other events that are appealing and help to develop youth's creativity (such as cooking classes, movie evenings and discussions, handcrafts or various sports, dance, music sessions, meetings with interesting people, table games, evening hikes).

For young unemployed persons several targeted Youth guarantee initiative projects were launched since 2018. For example, the project 'Discover yourself' ⁽²⁾, supports 35 000 unemployed young persons and NEETs with a variety of measures, such as guidance and counselling, identification of personal characteristics and skills assessment, site visits to companies, traineeships in companies and volunteering activities. The 'New start' project ⁽³⁾ offers VET courses, subsidised employment and workplace learning to more than 13 000 young persons.

Lithuania is recovering from the economic crisis, but to support recovery active introduction of innovation in all sectors of the economy, including traditional branches, is necessary. To face this challenge, initial and continuing vocational education and training (IVET and CVET) should be attractive and of good quality and the VET system should prepare employees for working with innovative technologies. By 2015, a network of 42 sectoral practical training centres (SPTCs) was established in selected VET institutions to offer quality practical training in simulated environments ⁽⁴⁾ (see 3.4). A high priority is put on making cooperation with employers more sustainable in shaping qualifications and VET curricula (Sections 3.2 and 3.3), assessing VET

⁽¹⁾ information and full map is available at: <http://www.jrd.lt/atviras-darbas-su-jaunimu>

⁽²⁾ Discover yourself (2015-18):

<https://jaunimogarantijos.lt/lt/jaunimo-garantiju-projektai/projektas-atrask-save/54>

⁽³⁾ New start (2015-18):

<https://jaunimogarantijos.lt/lt/jaunimo-garantiju-projektai/projektas-naujas-startas/61>

⁽⁴⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/lithuania-42-modern-practical-training-centres-established>

learners' competences (Section 3.4), overseeing VET governance and provision (Sections 2.6. and 2.3.) and updating VET teachers' technological competences (Section 2.7.).

1.3. Employment policies influencing VET

Adopted on 21 June 2016, the Labour Code came into force on 1 July 2017. It provides for a set of active labour market policy measures, together with apprenticeships in formal VET. These measures aim at higher employment rates, a sustainable labour market and integration into the labour market by offering fast track routes to gain practical skills at the workplace. The Labour Code also provides for new active labour market policy measures linked to training support. This support includes VET combined with new tools such as apprenticeship, recognition of competences acquired through traineeship, non-formal education and informal education.

Labour market services to be developed include registration/monitoring of job vacancies and jobseekers, guidance and counselling, assessment of employment opportunities, intermediation and entrepreneurial support as well as support to people that start working on a job relevant to the skills/qualification acquired.

In 2014-20 EUR 84.6 million ESF funding will be allocated in Lithuania for lifelong learning and VET: EUR 44.6 million for increasing the relevance and attractiveness of vocational and adult training to the labour market needs; and EUR 40 million for providing opportunities and incentives for life-long learning and ensuring efficient support. Either, in 2014-20 have been planned EUR 69,2 million for increase the availability of high-quality vocational and adult education by investing in infrastructure.

There are also active labour market policy measures aimed at helping to increase employment opportunities by balancing labour supply and demand (Article 2.1 of the Labour Code). These measures are related with revision of VET content and tools; organising practical training in formal VET (on-the-job-training/apprenticeship); modernising infrastructure in VET schools (labs, school workshops) as well as at the workplace, improve vocational guidance services; increasing the attractiveness and accessibility of vocational education and training; active involvement of employers, social partners/participation in the improvement of the vocational guidance system.

The Ministry of Social Security and Labour submits proposals to the Government on new employment support policy actions and plans employment support measures and labour market services. Employment support policy is implemented by the Public Employment Service (PES). Social partners participate in the Tripartite Council of the Republic of Lithuania and tripartite councils/committees/commissions established under the institutions implementing the employment support policy. These councils consider and make proposals for the priorities of the institutions' activities, purposefulness of preparation of programmes on increasing employment, provision of the labour market services and implementation of the employment support measures and efficiency of operations.

CHAPTER 2.

Provision of VET

2.1. Introduction

The Lithuanian education system comprises general education (primary, lower and upper secondary education), IVET at lower, upper and post-secondary levels, CVET and higher education (college and university studies). The national education and training system is presented in Figure 4.

VET is offered from lower secondary to post-secondary education (ISCED levels 2-4, LTQF and EQF ⁽⁵⁾ levels 2-5) ⁽⁶⁾. Higher education colleges offer VET-oriented programmes leading to a professional bachelor degree at EQF level 6 (Section 2.3.1.3). The new Law on VET (2017) ⁽⁷⁾ brought changes to many aspects of the VET system:

- it strengthened the role and quality of WBL and apprenticeship by stating that practical skills should be developed at the workplace and clarifying provisions for apprenticeship (Section 2.3.4.);
- the central professional committee will no longer operate and sectoral professional committees are nominated as advisory bodies coordinating strategic issues for the development of VET qualifications in their respective sector (Section 2.6.);
- it redefined VET quality assurance arrangements in line with EQAVET (self-assessment, internal quality management systems, regular external evaluation and (or) accreditation, use of indicators for monitoring VET) (Section 3.4.).

Reforming VET management, financing schemes and quality assurance mechanisms is part of policy priorities and developments in progress to raise the prestige of VET and its attractiveness among all VET stakeholders.

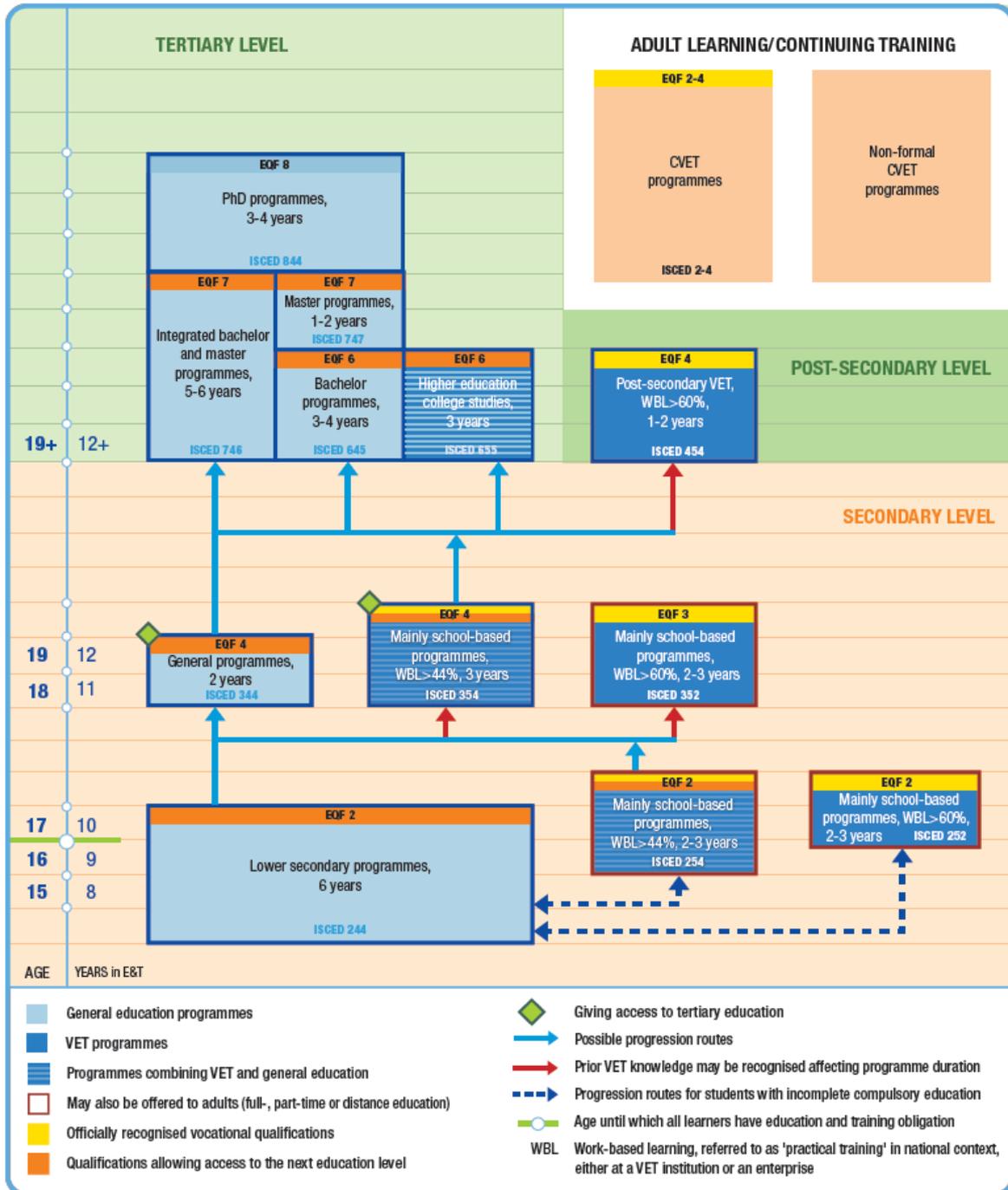
⁽⁵⁾ Cedefop (2018). *National qualifications framework developments in Europe 2017*. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/029873>, page 61, Lithuanian national qualifications framework (LTQF)

⁽⁶⁾ At the time of drafting the report, three VET programmes are offered at EQF level 5, there are ongoing discussions on VET qualifications (to be) awarded at this level.

⁽⁷⁾ Republic of Lithuania Law No XIII-888 amending Republic of Lithuania Law on Vocational Training No. VIII-450 of 14 December 2017
<https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/b0b6cda0eb0a11e7a5cea258c39305f6>

2.2. Chart of the national education and training system

Figure 4 Chart of the national education and training system



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Lithuania

2.3. Government- regulated VET provision

2.3.1. VET programmes types

Since 2013, priority has been given to designing modular VET programmes with a policy target that by December 2020 all VET programmes should be modular. VET programmes are designed for learners of different ages and educational backgrounds. VET modules in specific fields of studies may also be offered in general education programmes (see 4.1.1.) They are open to learners over 14 years old (education is compulsory till 16). In IVET, learners have an opportunity to acquire their first vocational qualification and, at the same time, complete general lower or upper secondary education. After the end of a training programme, learners must take an exam after which a VET diploma is awarded. CVET enables a person to improve an existing qualification (retraining or upskilling programmes), acquire a new qualification or gain the competence needed to perform a specific job (function) as regulated by legislation. VET programmes are based on learning outcomes.

Most IVET in Lithuania is school-based; however, practical training in schools and training in enterprises constitute a major part of the programme. For example, in IVET practical training comprises 44% to 60% of the total time allocated to teaching vocational subjects, of which 8 to 15 weeks is organised in a company or school-based workshop simulating working conditions (see Figure 4). IVET programmes are provided from lower secondary to tertiary education levels:

- lower secondary two- or three- programmes (ISCED 252) not leading to a basic education ⁽⁸⁾ certificate. The main target group are adults and young people. The two-year training programme is intended for those who have not acquired and do not seek to acquire basic education. The three-year training programme is intended to provide a vocational qualification certificate for those with special education needs related to intellectual disabilities who have completed an individualised basic education programme, a social skills programme, an adapted basic education programme or an adapted secondary education programme;
- lower secondary two- or three-year school-based programmes (ISCED 254) leading to a basic education certificate. The three-year training programme is intended to provide a vocational qualification and basic education for those who have not acquired basic education and those with special educational needs. The main target group are adults and young people;

⁽⁸⁾ Basic education, attested by a lower secondary school leaving certificate, is necessary to access upper secondary programmes

- upper secondary two- or three-year school-based programmes (ISCED 352) for learners having completed basic education. They do not lead to an upper secondary general education *matura* certificate ⁽⁹⁾ .
 - the two-year training programme is intended to provide a vocational qualification for those who have acquired basic education (including those with special educational needs related to hearing impairment). The main target group are adults and young people;
 - the three-year training programme is intended to provide qualifications for those with special educational needs who have completed individualised basic education programme, social skills programme, adapted basic education programme or adapted upper secondary education programme. The main target group are disability people;
- upper secondary three-year programmes (ISCED 354) leading to upper secondary general education *matura* certificate. They are school-based or delivered (in-company training/apprenticeship). The three-year training programme is intended to provide qualifications and secondary education attainment for those who have acquired basic education and those with special educational needs related to hearing impairment who have acquired basic education. The main target are group young people.
- post-secondary one- or two-year programmes (ISCED 454) for those with a *matura* certificate. They are delivered as school-based programmes or in apprenticeships (in-company training). Programmea are intended to provide qualifications for those who have acquired upper secondary education (received a *matura* certificate) or completed upper secondary education (completed individualised or adapted secondary education programmes for those who have special educational needs). The main target group are adults and young people.

CVET includes both formal training programmes to refresh existing knowledge or acquire new skills leading to qualifications at EQF levels 2-4 (see 2.3.1.) and non-formal CVET programmes for the (self-)employed. Some companies have their own training units and qualifications frameworks or apply internationally recognized sectoral qualifications and programmes.

Formal CVET programmes (accessible to learners over 18) average duration up to one year leading to recognised vocational qualifications EQF levels 2-4. In CVET, practical training covers 60-80% of the programme. Training for jobseekers is provided on the basis of contracts concluded between local employment offices, the unemployed and, if applicable, the enterprise (see 2.3.1.2.). Main providers of formal CVET programmes are labour market training centres offering in-company training (apprenticeships). Formal CVET is designed for people with different education

⁽⁹⁾ The *Matura* certificate attests completion of upper secondary education and gives access to tertiary level programmes

attainment levels, from primary to post-secondary; in some cases, a vocational qualification or work experience is a prerequisite to access these programmes.

Average study duration, vocational qualification certificates and further learning and career opportunities are summarised in Table 2. Information about VET programmes and qualifications is available in the Open information, counselling and guidance system (AIKOS) ⁽¹⁰⁾.

Table 2 **Formal IVET and CVET programmes**

	ISCED-P 2011 level	Average duration	Certificates awarded (part of formal education)	EQF level	Further learning and career opportunities
Programmes at lower secondary education level	252	2-3 years(*)	VET diploma	2	Access to labour market
Programmes at lower secondary education level	254	3 years	VET diploma; basic school certificate	2	Further training in VET institution or general education school; Access to labour market
Programmes at upper secondary education level	352	2-3 years(*)	VET diploma	3	Access to labour market
Programmes at upper secondary education level	354	3 years	VET diploma; <i>matura</i> certificate	4	Access to higher education/college or university study programmes; Access to labour market
Programmes at post-secondary education level	454	1-2 years	VET diploma	4	Access to higher education/college or university study programmes; Access to labour market
CVET programmes	2-4	Up to 1 year	VET diploma	2-4	Access to labour market

NB. (*) Programme duration depends on whether the programme is targeted at learners with special needs.

Source: ReferNet, Lithuania

Learners without general lower or upper secondary education have an opportunity to acquire it together with a vocational qualification. Thus VET programmes help to bring early leavers from education and training back into education or training. After completing general upper secondary education and having acquired a vocational qualification, VET learners may continue their studies in HE.

⁽¹⁰⁾ Counselling and Guidance System (AIKOS): <http://www.aikos.smm.lt>

In 2016 a new type of VET programmes (ISCED 454) leading to EQF level 5 qualifications was introduced and implemented as a pilot. In 2018 there are three programmes in the qualifications register⁽¹¹⁾. Implementation of EQF level 5 programmes is still under discussion.

2.3.1.1. VET for people with special needs

IVET and CVET for people with special needs is organised according to individual learning plans with other VET students or according to specially tailored VET programmes at ISCED levels 2 to 4 which lead to qualifications at EQF levels 2 to 4. According to data from Statistics Lithuania, there are around 1 300 learners with disabilities enrolled in IVET (1 334 in 2014-2015, 1 346 in 2015-2016, 1 359 in 2016-2017, 1 332 in 2017-2018). Most are in EQF level 2 programmes.

More than 40 CVET programmes for learners with special needs (for learning disability people) are listed in the qualifications register. These programmes are offered in VET institutions and other authorised (licenced) training institutions (see 2.3.3.).

2.3.1.2. VET programmes for the unemployed

Training for the unemployed and for those who have been notified of dismissal is organised via formal CVET programmes listed in the qualifications register. The local public employment service (PES)⁽¹²⁾ is responsible for training the unemployed. The unemployed and those notified of dismissal are referred to training providers, which they have chosen from the list published on the PES website. Training programmes are organised taking into account the specific needs of employers. Most unemployed persons follow programmes agreed with employers, who are obliged to hire the unemployed persons for a period of at least six months after training. Where it is agreed with the employer, practical training is organised at the workplace (see 2.5).

2.3.1.3. VET in HE

Higher VET is formally a part of higher education and includes three to three and half year college study programmes (ISCED 655) leading to a professional bachelor degree (corresponding to EQF level 6). College study programmes are provided by colleges – a type of higher education institution.

A *matura* certificate is required for entry to this type of programmes and rules of progression to EQF level 7 programmes (ISCED 747) are decided by universities (i.e. some universities may require college graduates to attend a one-year supplementary study programme). Work-based learning (practical placement in companies and other types of practical training in colleges) constitutes at least one third of the study programme where practical placement lasts roughly up to six months

⁽¹¹⁾ *Studijų, mokymo programų ir kvalifikacijų registras*, see also <https://www.aikos.smm.lt/en/StudyProgramm/SitePages/Study%20and%20Learning%20Programmes.aspx?ss=3f66a1ab-bcb9-4009-bdda-3e02a6fc2b63>

⁽¹²⁾ <http://ec.europa.eu/social/main.jsp?catId=105&langId=en>

(30 ECTS credits). For comparison, in university study programmes (ISCED 645), the volume of practical placement should be at least 15 ECTS credits.

Table 3 below presents an overview of VET enrolments in higher education colleges. The number of students in higher VET programmes is gradually decreasing due to a negative birth rate and emigration (36-32%).

Table 3 **Participation in higher VET**

	2015/ 2016	2016/ 2017	2017/ 2018
Total number of colleges	23	22	22
Total number of students in higher VET (000)	39.8	37.6	35.4
Share of students in colleges, compared to total number of students in universities, bachelor degrees (%)	39	36	32

Source: Statistics Lithuania database of indicators. <http://osp.stat.gov.lt/web/guest> [accessed 11.05.2018].

2.3.2. Participation in IVET

Due to the declining birth rate and emigration, the share of learners at all levels of education (EQF 1-8) has decreased in 2017/18. The general trend in declining admissions has been observed across all the fields.

Since 2017 admission to VET institutions is run through a unified electronic system initiated by the Ministry of Education and Science (MoES) and is managed by the a dedicated doby, the “Lithuanian Higher Institutions Association for Organizing Joint Admission” (LAMA BPO) ⁽¹³⁾ (see 3.4). Since 2017, applications for VET studies can be submitted online.

In 2018, VET institutions admitted 45% (to compare with 47% in 2017) of the total of those who have completed or left GE schools (drop outs) and who wish to continue training or studies. Universities accounted for 29% of overall admissions (28% in 2017) and colleges – for 26% (25% in 2017) ⁽¹⁴⁾.

⁽¹³⁾ Lithuanian Higher Institutions Association for Organizing Joint Admission:
<https://takeielts.britishcouncil.org/recognising-organisation/association-lithuanian-higher-education-institutions-lama-bpo>

⁽¹⁴⁾ <http://profesinis.lamabpo.lt/2017m-bendrojo-priemimo-rezultatu-apzvalga/>

Table 4 **Participation in IVET**

		2015-2016	2016-2017	2017-2018
Total number of students in upper and post-secondary education (000)		335	331	326
Total number of VET students in upper and post-secondary education (000)		46.5	47.6	42.1
Programmes at lower secondary education level	Total number of students (000)	5.3	5.5	5.1
Programmes at upper secondary education level	Total number of students (000)	20.5	20.1	18.4
Programmes at post-secondary education level	Total number of students (000)	20.7	22.0	18.5

Source: Statistics Lithuania database of indicators. <http://osp.stat.gov.lt/web/guest> [accessed 15.06.2018].

2.3.3. Main VET providers

The Law on VET stipulates that a VET provider may be any VET institution, a freelance teacher or any other provider (general education school, enterprise, organisation whose main activity is other than VET) authorised to develop and implement VET programmes. VET providers may accept learners and provide formal VET programmes after receiving a licence from the MoES. VET providers may have licences for both IVET and CVET.

In 2017 formal IVET programmes are carried out by 70 state VET institutions and three private ones. 226 institutions, whose main activity is other than VET, specialise just in CVET ⁽¹⁵⁾.

2.3.4. Work-based learning

The Law on VET provides a legal basis for apprenticeship. It clarifies the provisions for apprenticeship organisation: an apprenticeship labour contract (between the employer and the VET student) and a VET contract should be concluded among an apprentice and a VET provider. The Law on VET also states that sectoral professional committees should participate in planning the in-take of apprentices. However, apprenticeship has still not gained its position as a clear VET pathway and receives little attention from VET providers and companies.

The new Labour Code and accompanying legislation entering into force on July, 1 2017 introduces two types of apprenticeship contracts: with and without learning agreements. For apprenticeships that are part of formal VET, the regulation stipulates employers responsibility to ensure that apprentices acquire the learning outcomes defined in the VET programme. The law specifies also the main conditions for

⁽¹⁵⁾ such as joint stock companies, companies, and business associations.

apprenticeship delivery: work and learning time should not exceed 48 hours per week in total; apprentices' salaries should not be less than a minimum wage; and learning time spent in the VET institutions would not be paid by the employer and should not exceed one third of the contract duration.

In 2017, a new joint Baltic initiative was launched with the Erasmus+ project *Testing new approaches to training VET and workplace tutors for work-based learning (TTT4WBL)* (2017-20). Several VET institutions -the Qualifications and VET Development Centre, the Lithuanian Association of VET Institutions, Kaunas Chambers of Commerce, Industry and Crafts- have joined the initiative which aims to develop a joint training programme for VET school and enterprise tutors (with a total of 300 in company tutors concerned). In 2017 the first pilot joint training programme run with the participation of 56 VET school and enterprise tutors.

2.3.5. Key competences in IVET and CVET

In September 2017, the Qualifications and VET Development Centre template specifying the learning outcomes for key competences, in all modular VET programmes (see 3.2.2.)

Since November 2017, within the framework of an ongoing ESF-funded project for the 'Development of the Lithuanian Qualifications System' 2016-20 (first stage) an interactive e-learning tool to develop two key competences (learning to learn and initiative and entrepreneurship) is under development, as outlined in the European Parliament and Council Resolution Recommendation on key competences for lifelong learning (2006/962/EC) ⁽¹⁶⁾. It is expected that the tool will be integrated into 180 VET and non-formal adult education programmes by the end of 2019.

2.3.6 Examples of qualifications

Examples taken from the Qualifications Standard for Accommodation and Catering Services ⁽¹⁷⁾. Qualification Name Cook. Brief description of qualifications.

EQF level	II	III	IV
Focus of the activity	preparing and serving simple dishes.	preparation of main course of meat, fish, curd, egg, grain, flour, pasta and vegetable, side dishes and salad.	preparing and serving all types of dishes.

⁽¹⁶⁾ https://ec.europa.eu/education/initiatives/european-education-area/proposal-council-recommendation-key-competences-lifelong-learning_en

⁽¹⁷⁾ <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/371e8de24f4011e78869ae36ddd5784f?jfwid=rivwzvpvp>

EQF level	II	III	IV
Objectives of the activity	1) to select food products and raw materials; 2) to prepare the work place; 3) to process food products and raw materials; 4) to use technological equipment, utensils and tools, and to operate them safely; 5) to make and serve food preparations and simple dishes.	1) to select food products and raw materials; 2) to calculate the required food products and raw materials; 3) to prepare the work place; 4) to process food products and raw materials; 5) to use technological equipment, utensils and tools, and to operate them safely; 6) to make food preparations and assess their quality; 7) to prepare dishes, side dishes and salad.	1) to select food products and raw materials; 2) to calculate the required food product and raw materials; 3) to prepare the work place; 4) to process food products and raw materials; 5) to use technological equipment, utensils and tools, and to operate them safely; 6) to make food preparations and dishes; 7) to assess the quality of food preparations and dishes, 8) to serve dishes.
Additional information	graduates will be able to work in various types of companies providing catering services.	graduates will be able to work in various types of companies providing catering services.	graduates will be able to work in various types of companies providing catering services.

2.3.7 Learning forms

The forms of learning in general education and VET programmes are as follows:

1. group learning, where a teacher-led group (class, joint class, VET group, subgroup, temporary group, special medical physical fitness group or other) is set up for a certain period. It can be implemented part time or remotely; and
2. individual learning, where, for a certain period, a student gets individual tuition, or he individually and periodically attends a group and/or individual teacher consultations. It can be implemented individually, independently or remotely.

The forms of organising teaching and learning were approved by MoES in 2012 ⁽¹⁸⁾.

2.4. Other forms of training

In addition to formal VET leading to state-recognised qualifications described in Section 2.3, non-formal VET is also available. According to legislation the requirements for non-formal VET programmes and their implementation may be set by the organisation that requests training under these programmes or finances any such training. The objectives of non-formal VET programmes, admission criteria and duration are different and mostly depend on the target group. Decisions on tuition fees are made by providers. Non-formal adult education may be offered by any education provider,

⁽¹⁸⁾ <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.429262/QIwIbVypKd>

freelance teachers, and agencies, as well as companies or organisations that do not have education as their main activity but are authorised to provide education.

Non-formal VET is widely applied in continuing VET and is designed for the acquisition of a vocational qualification or individual competences. It is carried out in various forms: learning at the workplace, attending non-formal training courses for partial accreditation of a single competence ⁽¹⁹⁾, distance learning, etc. In most cases, the following three forms are used for organising CVET:

- non-formal courses for the (self-)employed initiated by the employer. It is organised in various settings, using forms and programmes chosen by the employer. Some companies apply internationally-recognised sectoral qualifications and programmes;
- state-funded training programmes for employees (such as civil servants and employees in certain economic sectors, for instance, healthcare, agriculture, etc.);
- training courses for the unemployed and people notified of dismissal, this type of training is funded through a voucher system introduced in 2012 to finance training in formal and non-formal education programmes.

2.5. VET funding

The new Law on VET (2017) indicated that a number of secondary legal acts need to be prepared and adopted. A new funding model for the entire VET system is being developed.

Since September 2018, a new teachers remuneration system has been put in place with a view to introducing more favourable payment conditions for teachers. Salaries are calculated not only for actual lessons but for all the time spent working. This will give teachers greater stability and security. The job consists of three components: contact hours (lessons, after-school activities, counselling, supervising students' final projects), non-contact hours (preparation for lessons, assessment of achievements) and non-contact hours for the school community ⁽²⁰⁾ (work with parents, guiding student pedagogical practical training and other efforts relevant to the school community).

2.5.1. Funding IVET

Funding for formal IVET is allocated from the State budget. Training costs are calculated per student (per capita financing of vocational schools). The methodology for calculating training costs determines the level of direct funding needed for training per learner enrolled in a formal training programme for one VET academic hour. The

⁽¹⁹⁾ for instance, a company may organise non-formal training for the competence 'cashier', which is part (module) of formal VET training programmes leading to the 'sales manager' qualification.

⁽²⁰⁾ <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/7f76a3f244d311e8b20ee164533e7a15>

unit costs (the so-called 'student basket') include allocations for staff salaries and social insurance, in-service training of teachers and funding for the acquisition of various training resources, including practical training. The latter category is calculated using a coefficient that varies depending on the programme area. Funding is allocated to the VET provider based on the actual number of learners multiplied by the number of hours for implementing the programme and costs of a training hour. Unit costs for learners with special needs are defined separately.

The share of funding from international organisations depends on the availability of European funds. In addition, VET providers may receive funding from the State budget (annual investment programme) for infrastructure, updating training facilities, etc. Such developments could also be supported from other funds, including EU structural funds. VET providers may receive income from physical and legal entities for services provided (such as training courses, rent of premises). This income is used for education and training purposes (Table 5).

Table 5 Funding for IVET institutions by source (%)

	2014	2015	2016	2017
State budget	75,1	94,7	101,8	103
Private sources (physical and legal entities)	7,1	10,6	13,1	13,4
International organisations	17,8	9,9	4,5	4,7

Source: Statistics Lithuania, 2018.

2.5.2. Funding CVET for training employees

Continuing training of employees is funded by the enterprise or learner. According to national legislation in certain cases training can be sponsored by the State.

To finance training of employees in the private sector, EU and enterprise funds are used. For example, the measure 'development of human resources in enterprises' from the 2007-13 human resources development operational programme aimed to improve the knowledge, skills and level of qualifications of company employees and managers. The measure supported training of employees and managers and organising training at workplaces. Support from the 2014-20 European Structural Funds will be allocated for several human resources development measures to be implemented in 2017-2023. The Ministry of Economy is responsible for these measures. For example, under the 'Competence Voucher' programme EUR 56.8 million will be allocated to fund the training of almost 42 000 private sector employees. Another measure called 'Human resources Invest LT' aims to support training of employees of foreign companies operating in Lithuania; 49 projects have already started in 2016 and will run until 2023. A total funding of EUR 11.6 million will be allocated from European Structural Funds to fund the measure. Companies must contribute funding for both measures (small enterprises will have to provide 30%, medium enterprises 40% and large enterprises 50% of the total training cost).

2.5.3. Funding CVET for training the unemployed

Training costs for the unemployed are mainly covered from ESF support. Starting in 2012 a voucher system was introduced by the Ministry of Social Security and Labour to fund relevant training. A training voucher is a document issued by the PES to an unemployed person. The local PES commits to paying a selected provider – within the limits of the voucher value – for training services under an agreed VET programme. The unemployed person can choose training providers from the list published on the PES website. There are two types of contracts which may be signed when organising training for the unemployed:

- a bipartite VET contract between the unemployed person and the local PES, In case of a bipartite contract, the unemployed person selects from a list of available VET programmes (leading to formal VET qualifications) established based on labour market forecasts and employers surveys. After the completion of the training programme, the unemployed person undertakes to work in the position offered by the local PES for at least six months or start own business; or
- a tripartite VET and employment contract (between the unemployed person, local PES and employer). In the case of a tripartite contract, the training programme and its provider are agreed with the employer. After the end of the training programme, the employer undertakes to employ the unemployed person for at least six months. If the actual costs of training exceed the limits established by the government, the difference is covered by the learner or the employer. The same procedure is applied to training persons notified of dismissal.

2.6. VET governance

The Ministry of Education (MoES) is the main body responsible for developing and implementing national VET policy, its main functions are to:

- plan human resources, develop and support the continuous professional development of VET school teachers and tutors and develop vocational guidance for students;
- approve and publish the list of accredited / licenced VET providers and accredited competence assessment bodies;
- approve the procedure for implementing formal IVET/CVET programmes and ensure quality of formal IVET and CVET qualifications (see table 2) based on qualification standards;
- draw up investment programmes for IVET and other retraining programmes; plan and implement a methodology for state-funded VET schools (per capita financing) and approve student enrolment in state-funding VET programmes (see 2.5.1.) ⁽²¹⁾

⁽²¹⁾ except for programmes of corrections officers VET and internal service VET institutions

- monitor the qualifications register which lists all formal VET qualifications (diplomas and certificates) and vocational qualifications programmes.
- approve the general criteria for admission to state and municipal VET institutions;
- submit to the government for approval the methodology for the calculation of VET funds per student and other.

The VET system is governed by the following State institutions:

The Ministry of Economy participates together with MoEs in human resources planning and development and VET policy implementation; it also

- participates in human resources planning, supports development of the continuous professional development of VET teachers in VET institutions under its jurisdiction;
- coordinates skills forecasting in priority sectors of the economy, makes proposals for future skill needs and qualifications, including by adapting existing and creating new qualifications;
- plans and organises awareness raising activities with the aim to attract more people in VET programmes (apprenticeships and other on-the-job training courses) for skills in priority sectors of the economy;
- manages the Lithuanian classification of professions and participates in the activities of sectoral professional committees.

The Ministry of the Interior and the Ministry of Justice, as well as other ministries and Government bodies are involved in VET policy in the remit of their respective responsibilities: plan VET funding, organise and manage enrolments in CVET courses for upskilling staff subject to their jurisdiction.

The Qualifications and VET Development Centre (*Kvalifikacijų ir profesinio mokymo plėtros centras* – KPMPC) organises development of qualifications standards and training programmes. It organises assessment and recognition of competences acquired in formal, non formal and informal learning through competences assessment centres. It supervises and coordinates the work of sectoral professional committees (SPC).

The Research and Higher Education Monitoring and Analysis Centre (MOSTA). Following the new VET Law (in force since February 2018) MOSTA ensures the monitoring framework for VET and higher education, research and innovation. It forecasts new qualification requirements in line with national policies and the needs of the economy. It plans human resources (VET teachers in schools) and provides strategic recommendations for training requirements of in-company trainers (nationally referred to as apprenticeship tutors and practical training instructors) ⁽²²⁾.

Sectoral professional committees (SPC) are advisory bodies which role has been strengthened in the new VET law (2017, in force by February 2018). They ensure cooperation between all VET stakeholders in a particular sector of the economy. They

⁽²²⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/lithuania-2018-VET-status-review-establishing-a-monitoring-system>

draft, update and approve qualification standards and assess (modules of) vocational training programmes. They also submit proposals to the MoES on qualifications that can be acquired through apprenticeships and give advise on validation arrangements and need for new qualifications to be included in the national register of qualifications (the qualifications register). (see also 3.2.1.)

Municipal authorities initiate the creation of a network of IVET and CVET providers to meet the needs of the local community.

2.7. Teachers and trainers

There are two types of teachers in IVET institutions: general education subject teachers and vocational teachers. On average, vocational teachers represent more than half of all teaching personnel (Table 6).

Table 6 **Teaching personnel in IVET institutions**

School year	Teaching personnel, total	Of which, vocational teachers	
		Total	%
2015/16	3 507	2 011	57.3
2016/17	3 481	1 958	56.2
2017/18	3 263	1 822	55.8

Source: Statistics Lithuania database, 2018

In CVET programmes leading to formal qualifications, theoretical and/or practical VET is provided by IVET teachers. Institutions that focus on training the (un)employed (such as labour market training centres) may introduce additional positions for trainers, for example, in-company trainers.

VET teachers must have a vocational and a pedagogical qualification or must have participated in a basic course on pedagogy and psychology. VET teacher training follows a consecutive model whereby a vocational qualification is studied first, followed by studies on pedagogy. Teachers without a pedagogical qualification, irrespective of their educational attainment level, are offered a 120-hour course on pedagogy and psychology. These courses are organised by accredited institutions and companies. Additionally, universities provide programmes for the pedagogical education of vocational teachers.

In October 2016, a national level project ⁽²³⁾ *'Development of the system for the development of vocational and adult teachers' qualifications'* was launched. It is coordinated by KPMPC, under the responsibility of the MoES. Continuous professional development training courses for VET teachers in schools include topics such as

⁽²³⁾ <http://www.kpmc.lt/kpmc/projektai/vykdomi-projektai/projektas-profesijos-ir-suaugusiuju-mokytoju-kvalifikacijos-tobulinimo-sistemas-pletra/>

creativity, distance learning methods, digitalisation of curricula, VET for special needs learners, as well as on training resources, mentorship, teaching methodologies and differentiation of learning. In 2017, 764 vocational teachers and VET institutions' managers attended training courses on such topics as empowerment of sectoral practical training centres, evaluation of learning outcomes, VET didactics, application of research in VET practice and other topics (Cedefop, 2018b).

Under a measure 'Development of formal and non-formal learning' ⁽²⁴⁾ a call for proposals was launched by the MoES has been running since 2017; it supports VET teacher training on technological competences (including preparation and update of training programmes, training material and training provision; each programme duration is at least 30 hours per year). VET institutions-business partnerships were required, in order applicants to be eligible for funding. The majority of applications were provided by social partner organisations (e.g. Chambers of Commerce Industry and Crafts, and Lithuanian Employers' Confederation). Training programmes for VET teachers were developed in 2017 and started in 2018.

⁽²⁴⁾ http://www.esinvesticijos.lt/lt/patvirtintos_priemones/formaliojo-ir-neformaliojo-mokymosi-galimybiu-pletra

CHAPTER 3.

Shaping VET qualifications

3.1. Anticipating skill needs

In 2016, the Government approved a national human resources monitoring framework that would link data from various registers (qualification map of skilled workers and human resources forecasting system) to allow the assessment of current and future trends in employment. The indicators approved by the MoES include, for instance, graduates' activities, and people in employment and further education. Analysis of the data are used to inform education / lifelong learning policy as well as the planning and funding of education programmes.

MOSTA has been assigned to coordinate the monitoring framework. In September 2018, it has published a first human resources status report which analyses trends of human resources in the country and presents a detailed analysis per region. Integration of skilled workforce into the labour market, at the beginning of their career and correspondence of HE and VET qualifications to the labour market needs are also examined ⁽²⁵⁾.

Since 2017, a two-year ESF project '*Development and renewal of human resources monitoring and forecasting system*' aims at improving medium-term forecasts by updating information systems to better monitor demand for human resources in the labour market and better linking the occupational groups under the Lithuanian Classification of Occupations with training programmes. (Cedefop, 2018b).

A methodical framework for the development of sectoral qualifications standards and VET curricula in line with the Lithuanian and European Qualifications Frameworks is under development ⁽²⁶⁾. In total, 24 qualifications standards will be created defining the major qualifications offered at different levels and sectors.

3.2. Designing qualifications

3.2.1. Sectoral qualifications standards

To improve the Lithuanian qualification development system, qualifications standards were given a legal basis by legislation in 2007. The qualifications standard is developed for a particular economic sector by describing the most important qualifications in the specific sector at different LTQF levels. For each qualification the qualifications standard describes competences that are grouped into qualification units.

⁽²⁵⁾ https://www.mosta.lt/images/tyrimai/nauji_pav/HR-status-2018-ENG.pdf

⁽²⁶⁾ The project runs under the on-going ESF-funded project for 2016-20 'Development of the Lithuanian Qualifications System (first stage)'

Till 2018, ten sectoral qualifications standards were designed ⁽²⁷⁾.and 14 new standards in different sectors will be designed till the end of 2020 ⁽²⁸⁾.

After sectoral qualifications standards are approved, they are used to design VET content and assess whether a person's learning outcomes meet the requirements for a qualification. Identifying requirements for all levels of qualifications at the same time should improve permeability between different educational levels and make qualifications development and improvement more flexible. The main responsibility for development and implementation of qualifications system policy is delegated to the MoES (defines the structure of qualifications standards, the procedure for standards' development, amendments and supplements). When relevant, other ministries and governmental institutions participate in developing qualifications standards.

The MoES has delegated development of sectoral qualifications standards to the Qualifications and VET development centre ⁽²⁹⁾ through its 18 sectoral professional committees (SPCs) set up to ensure effective social dialogue (see 2.6.). Sectoral professional committees are responsible for designing qualifications standards in specific sectors of the economy. (see also 2.6.).

3.2.2. VET curricula design

Since 2010, the Qualifications and VET development centre (KPMPC) is responsible for designing or updating national modular VET programmes (see 2.3.1.). Before a new programme is issued, sectoral professional committees are also consulted on sectoral qualifications standards used for developing the programme curricula.

VET providers and enterprises can also initiate and design modular training programmes, but in this case the quality of the VET programme has to be evaluated by the Qualifications and VET development centre.

In 2018, 89 modular programmes are registered in the national 'Study, training programmes and qualifications' register, of which 58 were implemented in the school year 2017-18 (47 in 2016-17), in the same year, 38% of VET learners were enrolled in such programmes (compared with 11% in 2016-17). New sectoral qualifications standards and modular programmes are being developed ⁽³⁰⁾, by 2020 70 new programmes will be developed.

⁽²⁷⁾ Within the project 'Formation of qualifications and development of modular VET system' implemented in 2010-15

⁽²⁸⁾ trade; polygraph, mass media and advertisement; manufacture of computer, electronic, optical and electrical equipment and products; manufacture of chemicals and chemical products; manufacture of machinery and equipment and motor vehicles; financial, insurance and real estate activities and others.

⁽²⁹⁾ The new VET law (2017) foresees that from 2019 on, qualifications standards shall be approved by director of Qualifications and VET Development Centre after sectoral professional committees have endorsed them.

⁽³⁰⁾ Under the ESF funded project for 2016-20 'Development of the Lithuanian Qualifications System (1st first stage)'

3.3. Recognition of prior learning

Individuals, with at least one-year work experience and older than 18, can apply to VET institutions for recognition of their competences. The skills and knowledge of an applicant are defined on the basis of sectoral qualifications standards and relevant VET programmes. The applicant and the school then agree on a timetable of courses as necessary and a final qualification exam. Individuals who pass the exam organised by an accredited competence assessment institution are awarded a VET diploma. When pursuing VET studies at a higher level, prior learning (or VET programme) is recognised as part of their training programme, affecting the duration of the programme.

Since 2018, the Qualifications and VET development centre is coordinating a four-year ESF-funded project ⁽³¹⁾ for the development of the national system for assessing and recognising competences and professional qualifications. Within this project, several SPTCs have been selected to become competences assessment centres for the assessment of individually acquired competencies (sections 2.6 and 3.4.). Employers and employers representatives will be involved in the project. The legal framework is subject to parallel changes to ensure that in the future competences assessment will be performed only through these SPTCs/competence centres, which will eventually replace the 31 accredited institutions. The project aim is to support the unemployed (including newly arrived migrants) to gain qualifications through validation of prior learning and recognition of professional qualifications. The project activities include the creation of reference material for validation of prior learning (such as a bank of competence assessment tasks), methodologies and methodological tools (with model tasks) for the assessment of competencies. It will enhance institutional capacity to assess competencies and/or qualifications otherwise acquired by individuals; and create monitoring and information tools for the assessment and recognition of the acquired competencies.

3.4. Quality assurance

The national approach for improving VET quality assurance is set out in the VET quality assurance system concept (2008). This concept took into account the experience of Lithuania and other European countries as well as the common quality assurance framework for VET in Europe (CQAF) and the European Quality Assurance in Vocational Education and Training (EQAVET). The concept laid down how quality in VET is to be assured and outlined the institutions involved, their responsibilities and foreseen activities. When implementing the concept and ESF projects, VET providers

⁽³¹⁾ <https://www.kpmc.lt/kpmc/en/ivairiais-budais-igytu-kompetenciju-ir-kvalifikaciju-vertinimo-ir-pripazinimo-sistemas-tobulinimas/>

have introduced internal quality assurance systems and external assessment of VET programmes was implemented providing recommendations for VET programmes quality assurance at national, sectoral and schools level. Aligning the VET quality assurance system with EQAVET is ensured through activities for developing a quality culture for VET providers, promoting PDCA (plan–do–check–adjust), known as the ‘quality circle’ nationally, encouraging and supporting regular self-assessment of VET providers. PDCA is embedded into VET provision and is regarded as the backbone of VET quality assurance. Other measures to assure VET quality at State level are:

- since 2017 admission to VET institutions through a unified electronic system was initiated by MoES and mandated to LAMA BPO ⁽³²⁾ (see 2.3.2.).The joint admission involves 19 universities, 21 colleges and over 70 VET institutions;
- following the 2017 Law on VET, MOSTA ensures the monitoring framework for VET and HE, research and innovation, planning human resources and forecasting needs for new qualifications in line with national policies and the needs of the economy;
- design and approval of sectoral qualifications standards -which are the basis of VET programmes - and assessment of learner achievements are under the sole responsibility of the Qualifications and VET Development Centre. As of 2019 sectoral qualifications standards will be approved by the director of Qualifications and VET Development Centre ⁽³³⁾ after sectoral professional committees have endorsed them;
- design and registration of VET programmes, issuing licences for VET providers: VET programmes have to follow qualifications standards (see 3.1 and 3.2.1.). Training programmes are designed by the Qualifications and VET development centre or by any other VET provider. In the latter case, the quality of the VET programmes must be checked by the Qualifications and VET development centre. If the VET programme receives a positive evaluation it is included in the Qualifications register. A licence to carry out a registered VET programme is issued to a VET provider if it has sufficient resources to implement the VET programme, and vocational teachers or candidates for vocational teachers meet the requirements prescribed in VET programmes and the Law of Education;
- supervision of VET programme implementation: relevant divisions of the MoES supervise the teaching process and activities, and audit activities, while the State audit office performs random checks of VET institutions, during which the rationale of their activities is also analysed;

⁽³²⁾ <http://www.lamabpo.lt/>

⁽³³⁾ Previously, sectoral qualifications standards were approved by the Minister for Education and Science and the Minister for Economy

- an independent system for assessment of knowledge, skills and competences is being developed through a four year ESF-funded project ⁽³⁴⁾ launched in 2018. It aims to improve the system of assessment and recognition of competencies and qualifications otherwise acquired by individuals;
- to use training funds and resources more efficiently, the network of IVET and CVET providers is being reformed since 2015. Priorities include developing larger regional VET institutions, and strengthening institutions where Sectoral Practical training centers have been created (42 SPTCs) (see 1.2). A SPTC is a type of VET institution equipped with modern facilities from one or several fields of activities. The main aim of these centres is to assure that learners gain practical skills that match labour market needs using state-of-the-art technologies and equipment. These centres are open to VET and HE students, employees in enterprises, vocational teachers, etc. A Map of EU 2014-20 investments in the VET system was prepared by the MoES. The paper analyses results from the previous programming period and new proposals as well as labour market (regional) trends and forecasts, and draws suggestions for improving SPTCs. (Cedefop, 2018b). Since 2017 only 21 SPTCs will be further supported from EU funding and funding amount allocated for each SPTC. It proposes that selected SPTCs should become 'competence centres' with extended responsibilities, including piloting new training methods and VET programmes, supporting the continuing professional development of VET teachers and training.

⁽³⁴⁾ ESF 2018-22 project on the improvement of the system of assessment and recognition of competencies and qualifications otherwise acquired by individuals

CHAPTER 4

Promoting participation in VET

This chapter focuses on the main incentives in place to make VET an attractive option for citizens, and to promote participation in VET and vocational guidance services.

Improving the image of VET is still a challenge. Traditionally, VET in Lithuania has not been considered prestigious by young persons, their parents and the population in general. Although participation in VET, in contrast to general and higher education, is currently stable or even increases at post-secondary non-tertiary level, participation in VET at upper-secondary education level remains one of the lowest among EU countries. This is, first of all, caused by the preference for higher education over VET by young persons and their parents. Another important reason is the fact that funding for general education schools and VET institutions depends on the number of students which leads to competition between these two networks in attracting and keeping learners. The situation should change for the benefit of VET if vocational education and training providers tailored VET programmes on the basis of skills forecasts.

An Action plan for the development of lifelong learning for 2017-20 (MoES, 2017) is in place to identify areas for VET development and propose a preliminary list of projects of strategic importance for VET development. The following measures are foreseen in the action plan that will continue until 2022 through projects supported by EU funds and the national budget:

- optimisation of the network of VET institutions and effective use of infrastructure;
- optimisation of the supply of VET programmes and improvement of the quality and relevance of these programmes;
- improvement of the system for the assessment and recognition of competences;
- improvement of training of teachers working in VET institutions;
- improvement of management and training quality in VET;
- provision of guidance and counselling services.

All these measures are aimed at improving the image of VET as an education sector of high quality. A project to promote the public image of VET and lifelong learning started already (2017-20). Some of the project activities (various promotion events, campaigns, skills competitions, etc.) have taken place in 2018. A total of EUR 4 million has been assigned to fund the project.

4.1. Incentives for VET learners

4.1.1. Bringing general education and VET closer together

As explained in Chapter 2, learners are able to acquire lower and upper secondary education together with vocational qualifications. Learners in general education programmes also have the possibility to deepen their knowledge on technologies in certain fields and develop their practical skills. In the upper secondary general

education path, (11th and 12th grades) learners may choose from optional technological modules in textile and clothing; applied art, crafts and design; tourism and nutrition technologies; construction and wood processing; business, management and retail trade; mechanics and repair. Also, some general upper secondary curricula include VET programmes modules. When learners continue their studies in VET, the above-mentioned fields and VET modules are recognised as part of their VET programmes.

Since 2010, a technology subject can be part (on an optional base) of the *matura* exams at the end of upper secondary general education. It is possible for learners in either general or vocational streams to replace one general education subject with the technology subject.

4.1.2. Measures to improve mobility between VET and higher education

VET graduates who have finished upper secondary education programmes and who choose to continue in HE have a few advantages over students coming from GE. Selection criteria and procedures for ranking graduates who apply for HE are defined annually in a specific regulation (MoES, 2016). This regulation awards an additional enrolment point for graduates from VET in the same field of studies who performed exceptionally, or who have at least one year of work experience in this field. This additional point increases their chances of being admitted to a state-funded study place in colleges and universities (from 2018).

In addition, to enter HE institution at least three *matura* exams have to be taken. For example, from 2016, Lithuanian language and mathematics exams are compulsory for those willing to receive state funding for their studies. For upper secondary VET graduates who want to enrol in technological HE programmes (ISCED 655), the final qualification exam may be recognised as a third *matura* exam.

Many IVET institutions have agreements regarding continuation of VET graduates studies in HE institutions. They also cooperate with HE institutions (colleges, universities) in drafting programmes that ensure continuity of VET programmes at tertiary level.

4.1.3. Incentives for youth

VET to acquire a first qualification is free of charge. IVET learners may receive a student grant (EUR 10-29) and other material support. Based on data from Statistics Lithuania, around 51% of IVET learners received such a student grant in 2017. Socially disadvantaged learners who do not receive the grant are provided free meals and other material support.

Learners who do not live near the learning institution are provided with hostel accommodation. Based on data from the Centre for Information Technologies in Education, around 99% of those who need hostel accommodation receive it (Statistics Lithuania, 2017).

4.2. Incentives for enterprises

To support participation in CVET tax incentives, grant schemes, paid and unpaid training leave and payback clauses are applied.

Tax incentives for individuals for both formal and non-formal VET were introduced in 2008. Persons paying income tax may claim training expenditure in their annual tax return. Up to 25% of training expenditure can be deducted. When a studying resident of Lithuania is not an income tax payer or has no possibility to exercise the right to deduct expenditure for VET or studies from their own income, such expenses may be deducted from their parents' or other family members' income.

Tax incentives for legal entities have been in place since 2005. The Law on Corporate Income Tax (Parliament, 2002) allows deductions for continuing training courses of employees that are linked to their present occupation.

The Labour Code (Parliament, 2016) sets out training leave conditions for employees participating in a VET programme, to prepare and take exams and tests, for consultations, etc. All employees who join a CVET course in formal CVET education programmes at a VET provider are entitled educational leave while retaining their average salary. Since 2015, according to the Labour Code, employees may be granted training leave for up to 5 working days per year to participate in non-formal adult education.

To finance CVET, enterprises and organisations may use the grant schemes available from EU structural funds (Chapter 4).

Payback clauses for individuals and future employers were both introduced in 2005. The provisions of the Labour Code allow employers to claim compensation from an employee for the costs of training over the past year if they quit their job before a previously agreed time.

4.3. Guidance and counselling

4.3.1. Main institutions

As defined by the Vocational Guidance Act (MoES and Ministry of Social Security and Labour, 2012) the main educational institutions that provide guidance services (career education, information and counselling) to their learners are general education schools and VET institutions. Municipalities are responsible for organising and coordinating guidance services within their territory.

Nation-wide guidance and counselling is coordinated by the Lithuanian Students' Non-Formal Education Centre. The centre is responsible for methodological assistance and advice to schools and educational support agencies and is involved in training career guidance staff. It ensures accessibility to modern guidance and counselling tools, and takes part in nationwide monitoring of guidance services for learners.

The Lithuanian Students' Non-Formal Education Centre, together with the Centre for Information Technologies in Education, are responsible for providing quality

information on learning opportunities and career planning on the main national web portal on learning opportunities, AIKOS⁽³⁵⁾. This is an open information, guidance and counselling system, which addresses students, employees and guidance and counselling personnel. It informs on education and training programmes, providers, qualifications, occupations, admission rules, education and employment statistics. Other education institutions (pedagogical and psychological services, education support agencies, etc.) are involved in providing guidance services to the extent this is related to their functions and actual guidance needs of learners.

The Education Exchange Support Foundation manages the Euroguidance project and disseminates information on good practice examples in Lithuania and other European countries, new methods, creates various guidance and counselling tools and organises training seminars for guidance practitioners.

Local PES also provide vocational information and counselling services for jobseekers in addition to employment mediation. Youth labour centres of PES organise info-days on career issues, job fairs, Youth Guarantee promotion events and help students and graduates with finding a job or traineeship.

4.3.2. Organisation and funding

General education and VET institutions appoint a coordinator who manages guidance-related activities of career guidance staff, class or group tutors, teachers/vocational teachers, social pedagogues, psychologists, and other support staff.

In 2014, a career education programme was approved by the Minister for education and science for implementation in general education and VET institutions starting from September, 2014 (MoES, 2014). The programme aims to help learners develop career management skills. It can be integrated into primary, general lower and upper secondary and VET curricula and can take the form of optional subjects or extracurricular activities.

Vocational guidance is funded from the 'student basket' (Chapter 2) and other national and local budgets, sponsors, etc. In 2010-15 an ESF project was carried out by the Students' Non-Formal Education Centre during which more than 1600 career guidance staff was employed in GE and VET institutions and trained. Funding was also provided for the development of guidance programmes and tools. By this project more than 163 000 learners received guidance and counselling services.

Learners can acquire career-related information on learning and job opportunities through information systems and various other activities such as study visits, excursions, meetings with representatives of educational institutions, employers and other people and other events. Vocational activation (*profesinis veiklinimas*), during which visits to enterprises and lectures are organised, is regarded as one of the most important aspects. Learners are encouraged to experience and learn about different

⁽³⁵⁾ Atvira informavimo, konsultavimo ir orientavimo sistema: <http://www.aikos/smm.lt>

types of work, employment areas, specific characteristics of occupations and career paths. Vocational counselling services help learners to identify and discuss individual needs and preferences, and advise them on issues related to career planning, choice of training or studies, employment and job search.

4.4. Key challenges and development opportunities

VET providers and non-formal VET providers in Lithuania offer more than 550 different specialties. Currently, there are 1 141 registered formal VET programmes. VET providers employ about 4 000 staff, they give training to about 45 000 students a year, but this is still below the market demand.

The share of early leavers from education and training in 2017 (all types of programmes) was 5,4%, which is below the national target set (9%). Nevertheless, the share of drop out from IVET programmes in the same year is higher: 12% of students in IVET programmes discontinued their training; 1% for underachievement; another 1% had to repeat the course, and 98% terminated their training for life abroad or for early participation in the labour market, or for lack of motivation to continue training.

The activities aimed at increasing the efficiency of the network of GE and non-formal education institutions (MoES, 2014) and preventing early leaving from education and training and reducing the number of early school leavers under the Action plan for the development of lifelong learning for 2017-2020 have been subject funding totalling to EUR 4.7 million from ESF and EUR 619 thousand from the state budget in 2017. Also, the year 2017 saw the continued professional empowerment programmes related to the development of motivation in students, their learning and career planning relying on decision-making, which is based on information and experience. They aim to reduce the risk of early school leaving.

Participation in lifelong learning was lower than in the majority of other EU countries (5.9%) and below the EU 2020 benchmark (15%). Also, a large share of the adult population aged 25-64 (28% in 2017) has completed GE programmes and not VET. Increasing access to lifelong learning and VET for adults and increasing their qualification level is a challenging task for the education and training system.

One of the challenges is to match skills with labour market demands. VET needs to refocus in terms of the actual needs for skills. An example would be the hotel, restaurant and beauty sector, which should admit significantly fewer students, as the total market is about 6 %. This indicates the need to reorganise to match the market demand for skills.

The second challenge is the conversion of VET curricula into a modular one. Modular training enables faster training, focusing on skills of relevance to business at a given time. Modular programmes would offer a greater number and more diverse forms of learning.

The third challenge is the adequate and effective financing of VET. The problem calls for agreement between the MoES, the Ministry of Social Security and Labour and the Ministry of Economy, which should work more closely together, while consulting each other in developing policies and strategies for IVET, training for unemployed, and retraining.

The fourth challenge is streamlining the current of IVET and CVET providers. This is likely to be achieved through the reorganisation of the network so that VET providers in the immediate vicinity do not run the same courses.

The fifth challenge is the elderly vocational and general education teachers. To address the problem, it would be important for the state to find resources and enable young skilled people to fulfil their professional abilities by working as vocational and general education teachers. Currently, there is a new model for staff remuneration in the pipeline, which should open up more opportunities and attract more qualified people to work in VET.

The sixth challenge is insufficient focus on the development of apprenticeship. Taking into account the amendments to the Law on VET, the Law on Education, the Law on Employment, the Law on Higher Education and Research, and the Law on Public Institutions, the MoES intends to make changes in linking closer the VET and the actual on-the-job- training and enabling the trainee to obtain professional qualification based on the competencies acquired through apprenticeship.

The MoES plans to implement the reform of VET by 2020. The VET reform focuses on the fact that VET programmes available in the largest cities of the country would be subjected to specialisation (limiting to 2-3 specialties), and VET institutions in the regions should offer a wider range of choice in this regard. The regions have the demand for versatility in this respect and strict specialisation would be a serious obstacle in terms of access to specific training for some part of the population. Furthermore, there are plans to combine GE and VET institutions in smaller Lithuanian towns in order to ensure better learning conditions. All future decisions will be taken to local communities for discussion. The management and funding of VET institutions will change with their transformation into public institutions. The reformed VET is expected to attract more students. The goal is to achieve, by 2020, the 50/50 proportion of students in VET and HE institutions, as it is in Europe ⁽³⁶⁾. Today this proportion is 30/70, respectively.

⁽³⁶⁾ Profesinio mokymo būklės apžvalga 2017: <https://www.sac.smm.lt/wp-content/uploads/2017/09/Profesinio-mokymo-bukles-apzvalga-2017.pdf>

List of abbreviations

CVET	Continuing vocational education and training
EQAVET	European quality assurance reference framework for vocational education and training
ECVET	European credit system for vocational education and training
EQF	European qualifications framework
GDP	Gross domestic product
ISCED	International standard classification of education
IVET	Initial vocational education and training
MOSTA	Research and Higher Education Monitoring and Analysis Centre
LTQF	Lithuanian qualifications framework
PDCA	'Plan–do–check–act' or 'plan–do–check–adjust', referred to as the 'quality circle' nationally
PES	Public employment service
MoES	Ministry of Education and Science [Švietimo ir mokslo ministerija]
SME	Small- and medium-sized enterprises
Statistics Lithuania	Lithuanian Department of Statistics [Lietuvos statistikos departamentas]
VET	vocational education and training
ESF	European Union Structural Funds
HE	Higher Education
GE	General Education
SPTC	Sectoral practical training centre
LAMA BPO	Association of Lithuanian Higher Education Institutions for the General Admission

References

Cedefop (2018a). *Developments in vocational education and training policy in 2015-17: Lithuania*. Cedefop monitoring and analysis of VET policies. <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/vetpolicy-developments-lithuania-2017>

Cedefop (2018b). *Developments in vocational education and training policy in 2015-18: Lithuania*. Cedefop monitoring and analysis of VET policies. [Unpublished]

European Commission (2017). *Lithuania: national reform programme 2017*. https://ec.europa.eu/info/sites/info/files/2017-european-semester-national-reform-programme-lithuania-lt_0.pdf

European Commission [2017]. *Švietimo ir mokymo stebėsenos biuletenis. Šalies analizė 2017* [Education and Training Tracking Bulletin. Country Analysis 2017]. https://ec.europa.eu/education/sites/education/files/monitor2017-lt_lt.pdf

Lietuvos Respublikos švietimo ir mokslo ministerija (2017). *Profesinio mokymo būklės apžvalga 2017*. [Overview of Lithuanian Vocational Education and Training status 2017]. http://www.kpmc.lt/kpmc/wp-content/uploads/2015/08/Profesinio-apzvalga-2017_FINAL.pdf

Lithuanian Government (2010). Resolution approving the description of the Lithuanian qualifications framework. Resolution No 535 of 4 May 2010. *Valstybės žinios* [Official Gazette], 2010, No 56-2761. http://www.kpmc.lt/LTKS_EKS/LTQF_official_translation.pdf

Lithuanian Labour Exchange (2018). *Darbo rinkos tendencijos 2017 metais* [Labour market trends in 2017]. <http://mipas.lt/2018/05/31/lietuvos-uzimtumo-2017-m-tendencijos-ir-prognozes/>

Lithuanian Ministry of Economy (2018). *Lietuvos ekonomikos apžvalga 2017* [Review of Lithuanian Economy 2017]. <https://ukmin.lrv.lt/uploads/ukmin/documents/files/Lietuvos%20ekonomikos%20ap%C5%BEvalga%202017.pdf>

Lithuanian Ministry of Social Security and Labour (2013). Lietuvos Respublikos socialinės apsaugos ir darbo ministro 2013 m. gruodžio 16 d. įsakymas Nr. A1-692 'Dėl jaunimo garantijų iniciatyvos įgyvendinimo plano patvirtinimo' [Legal act regarding Youth Guarantee Initiative Action Plan]. *Valstybės žinios* [Official Gazette], 2013, No 134-6863. <https://www.e-tar.lt/portal/lt/legalAct/b4432c10722e11e3bd0ecaafd80c672a/xQojlDjwE>

Lithuanian Parliament (2011). Lietuvos Respublikos švietimo įstatymo pakeitimo įstatymas. [Law on education]. *Valstybės žinios* [Official Gazette], 2011, No. 38-1804. <https://www.e-tar.lt/portal/lt/legalAct/TAR.9A3AD08EA5D0/TuZYJyRuWh>

Lithuanian Parliament (2017). Lietuvos Respublikos profesinio mokymo įstatymo Nr. VIII-450 pakeitimo įstatymas [Law on vocational education], 2017, No. XIII-888. *Teisės aktų registras* [Register of legal acts], 27.12.2017, No 21305 <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/b0b6cda0eb0a11e7a5cea258c39305f6>

Lithuanian Parliament (2001). Lietuvos Respublikos pelno mokesčio įstatymas [Law on corporate income tax]. *Valstybės žinios* [Official Gazette], 2001, No 110-3992. <https://www.e-tar.lt/portal/lt/legalAct/TAR.A5ACBDA529A9/nDmlUuROkE>

Lithuanian Parliament (2002). Lietuvos Respublikos gyventojų pajamų mokesčio įstatymas [Law on personal income tax]. *Valstybės žinios* [Official Gazette], 2002, No 73-3085. <https://www.e-tar.lt/portal/lt/legalAct/TAR.C677663D2202>

Lithuanian Parliament (2013). Lietuvos Respublikos Seimo 2013 m. gruodžio 23 d. nutarimas Nr. XII-745 “Dėl valstybinės švietimo 2013–2022 metų strategijos patvirtinimo” [National education strategy 2013-22]. *Valstybės žinios* [Official Gazette], 2013, No 140-7095. <https://www.e-tar.lt/portal/lt/legalAct/b1fb6cc089d911e397b5c02d3197f382>

MoES (2010a). Lietuvos Respublikos švietimo ir mokslo ministro 2010 m. rugpjūčio 27 d. įsakymas Nr. V-1435 ‘Dėl Formaliojo profesinio mokymo programų rengimo ir įteisinimo tvarkos aprašo patvirtinimo’ [Legal act regarding the designing and approving of formal VET programmes]. *Valstybės žinios* [Official Gazette], 7.9.2010, No 105-436. <https://www.e-tar.lt/portal/lt/legalAct/TAR.2E06D8EA73E7/SmSOASLiXB>

MoES (2010b). Lietuvos Respublikos švietimo ir mokslo ministro 2010 m. spalio 29 d. įsakymas Nr.V-1909 ‘Dėl Kvalifikacijų tvarkymo institucijos centrinio ir sektorialių profesinių komitetų uždavinių, funkcijų, komitetų sudarymo ir finansavimo tvarkos aprašo patvirtinimo’ [Legal act regarding the central and sectoral professional committees of qualifications management authorities, their objectives, functions, establishment and funding order]. *Valstybės žinios* [Official Gazette], 6.11.2010, No 130-6649. <https://www.e-tar.lt/portal/lt/legalAct/TAR.D6BDD4135F06/XoqRQDftkl>

MoES (2012). Lietuvos Respublikos švietimo ir mokslo ministro 2012 m. kovo 15 d. įsakymas Nr. V-482 ‘Dėl Formaliojo profesinio mokymo tvarkos aprašo patvirtinimo’ [Legal act regarding the procedure for formal VET implementation]. *Valstybės žinios* [Official Gazette], 24.3.2012, No 35-1734. <https://www.e-tar.lt/portal/lt/legalAct/TAR.2E06D8EA73E7/SmSOASLiXB>

MoES (2014). Lietuvos Respublikos švietimo ir mokslo ministro 2014 m. sausio 15 d. įsakymas Nr. V-72 'Dėl ugdymo karjerai programos patvirtinimo' [Legal act regarding the programme for career education]. *Teisės aktų registras* [Register of legal acts], 29.4.2014, No 2014-04888. <https://www.e-tar.lt/portal/lt/legalAct/99c37290cf9011e3a8ded1a0f5aff0a9>

MoES (2016). Lietuvos Respublikos švietimo ir mokslo ministro 2017 m. rugpjūčio 29 d. įsakymas Nr. V-718 'Dėl Geriausiai vidurinio ugdymo programą baigusiujų eilės sudarymo 2018 metais tvarkos aprašo patvirtinimo' [Legal act regarding the procedure for ranking graduates from upper secondary general education programmes to determine free access to higher education]. *Teisės aktų registras* [Register of legal acts], 29.8.2016, No 22828. <https://www.e-tar.lt/portal/lt/legalAct/031d41d06deb11e6a014b8463e530a88>

MoES (2017). Lietuvos Respublikos švietimo ir mokslo ministro 2017 m. birželio 2 d. įsakymas Nr. V-442 'Dėl 2017–2018 ir 2018–2019 mokslo metų pagrindinio ir vidurinio ugdymo programų bendrųjų profesinio mokymo planų patvirtinimo' pakeitimo [Legal act regarding the approval of general vocational education and training plans]. *Teisės aktų registras* [Register of legal acts], 26.7.2018, No 12441. <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/5e374b70910b11e8aa33fe8f0fea665f>

MoES; Lithuanian Ministry of Economy (2015). Lietuvos Respublikos švietimo ir mokslo ministro ir Lietuvos Respublikos ūkio ministro 2015 m. balandžio 30 d. įsakymas Nr. V-11/4-294 'Dėl Profesinio standarto struktūros, jo rengimo, keitimo ir papildymo tvarkos aprašo patvirtinimo' [Legal act regarding the procedure for the approval of qualifications standards structure, preparation and modification]. *Teisės aktų registras* [Register of legal acts], 6.5.2015, No 6781. <https://www.e-tar.lt/portal/lt/legalAct/c21af7f0f32e11e4927fda1d051299fb>

MoES; Lithuanian Ministry of Social Security and Labour (2012). Lietuvos Respublikos švietimo ir mokslo ministro ir Lietuvos Respublikos socialinės apsaugos ir darbo ministro 2012 m. liepos 4 d. įsakymas Nr. V-1090/A1-314 'Dėl Profesinio orientavimo vykdymo tvarkos aprašo patvirtinimo' [Vocational Guidance Act]. *Valstybės žinios* [Official Gazette], 2012, No 82-4284. <https://www.e-tar.lt/portal/lt/legalAct/TAR.1F89593BBB2C>

Qualifications and VET Development Centre (2012). *Referencing the Lithuanian qualifications framework to the European qualifications framework for lifelong learning and the qualifications framework for the European higher education area: national report 2012*. http://www.kpmc.lt/LTKS_EKS/LTKS_EKS_ataskaita_ENG.pdf

Statistics Lithuania (2017a). *Demographic yearbook 2017*. <http://osp.stat.gov.lt/services-portlet/pub-edition-file?id=23462>

Statistics Lithuania (2017b). *Education 2017*. <http://osp.stat.gov.lt/services-portlet/pub-edition-file?id=23298>

Statistics Lithuania (2018). *Population 2018* <https://osp.stat.gov.lt/en/gyventojai1>

MoES (2017). Lietuvos Respublikos švietimo ir mokslo ministro 2017 m. birželio 28 d. įsakymas Nr. V-536 „Dėl mokymosi visą gyvenimą plėtros 2017-2020 metų veiksmų plano patvirtinimo“. [Legal act regarding the Approval of the Action Plan for Lifelong Learning Development 2017-2020]. *Teisės aktų registras* [Register of legal acts], 29.6.2017, No 10920 <https://e-seimas.lrs.lt/portal/legalActPrint/lt?jfwid=-1c2dteoehp&actualEditionId=EkzluiWeNg&documentId=8e9c7f545d0511e7a53b83ca0142260e&category=TAD>

Lithuanian Parliament (2016). Lietuvos Respublikos darbo kodeksas [Labour Code]. *Teisės aktų registras* [Register of legal acts], 19.9.2016, No 23709. <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/10c6bfd07bd511e6a0f68fd135e6f40c/beZzDUFOSh>

Lithuanian Parliament (2016). Lietuvos Respublikos užimtumo rėmimo įstatymas, Nr. XII-2470 [Law on support for employment, No XII-2470]. *Teisės aktų registras* [Register of legal acts], 5.7.2016, No 18825. <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/b9ca8ad03de611e68f278e2f1841c088/hmJrpahvDb>

Order “Mokymo organizavimo formos patvirtintos Švietimo ir mokslo ministro 2012 m. birželio 28 d. įsakymu Nr. V-1049 “Dėl mokymosi formų ir Mokymo organizavimo tvarkos aprašo patvirtinimo”. <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.429262/qlwlbVypKd>

Websites

Centre for Information Technologies in Education [Švietimo informacinių technologijų centras]	http://www.itc.smm.lt
Euroguidance Lithuania	http://www.euroguidance.lt
Statistics Lithuania [Lietuvos statistikos departamentas]	http://www.stat.gov.lt/en/home
Lithuanian Labour Exchange under the Ministry of Social Security and Labour [Lietuvos darbo birža prie Socialinės apsaugos ir darbo ministerijos]	http://www.ldb.lt
Lithuanian Students Non-Formal Education Centre [Lietuvos mokinių neformaliojo švietimo centras]	http://www.lmnsclt/
Ministry of Economy [Ūkio ministerija]	http://ukmin.lrv.lt/en/
Ministry of Education and Science [Švietimo ir mokslo ministerija]	http://www.smm.lt/en/index.htm
Open information, counselling and guidance system [Atvira informavimo, konsultavimo ir orientavimo sistema AIKOS]	http://www.aikos.smm.lt/aikos/lang.do?language=en
Qualifications and VET Development Centre [Kvalifikacijų ir profesinio mokymo plėtros centras]	http://www.kpmpc.lt/kpmpc/en/
Statistics Lithuania database of indicators [Lietuvos statistikos departamento rodiklių duomenų bazė]	http://osp.stat.gov.lt/web/guest
EU structural assistance – Website dedicated to EU support in Lithuania	http://www.esparama.lt/