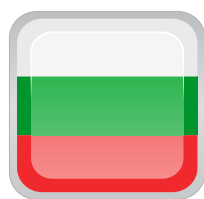

VOCATIONAL EDUCATION
AND TRAINING IN EUROPE

BULGARIA





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CHAPTER 1.

External factors influencing VET

1.1. Demographics

The population of Bulgaria is 7 153 784 (2016), including 51.4% women. Almost three-fourths of people live in cities. The population (Table 15 of Annex 1) is ageing as in many other European countries. In 2016 the share of people aged 65 or more reached 20.4%, while there were only 14% 15 14 (or less) year-olds. The average age of the population has increased from 41.2 years in 2005 to 43.3 in 2015. At the end of 2015, the share of the working age population was 60.8%; 24.3% were over and 14.9% under the working age. In December 2014, every 100 retiring people were replaced by 64 younger (active age) people, compared to 124 in 2001. The age dependency ratio ⁽¹⁾ has also increased from 45.1% in 2005 to 51.2% in 2015.

1.2. Economic activity

According to Eurostat, in 2015, there were 3.34 million active people aged 15-64 (Table 17 of Annex 1). The activity rate ⁽²⁾ (69.3%, Table 18 of Annex 1) has increased by 0.3 percentage points (pp) compared to the previous year.

1.3. Employment

According to Eurostat, in 2012-15, the total number of employees (Table 19 of Annex 1) increased by 3.3%, including 15-64 year-olds by 2.7%. The employment rate of 15-64 year-olds (Table 20 of Annex 1) has increased from 58.8% in 2012 to 62.9% in 2015. It has decreased by 1.6% for 15-24 year-olds and has increased from 45.7% to 53% for the 55-64 age group.

⁽¹⁾ The share of children (aged under 15 years) and the older population (aged 65+) divided by the working-age population (aged 15-64 years) and multiplied by 100.

⁽²⁾ Calculated as the number of economically active people of the population in the age group 15 to 64 years old.

Table 1. **Distribution of employees by economic sector in 2012-15 (%)**

	2012	2013	2014	2015
Agriculture	6.4	6.7	7.0	6.9
Industry	24.3	23.1	22.9	22.8
Construction	7.0	7.0	7.2	7.1
Services	62.2	63.2	62.9	63.2

Source: Eurostat.

As demonstrated in Table 1, service sector comprises more than 60% employees. Together with agriculture and construction, these sectors have been growing since 2012. At the same time, the share of employees in industry has decreased.

The employment rate ⁽³⁾ for the age group 15-64 shows the link between the level of education (ISCED 2011) and the employment rate (see more data in Table 21 of Annex 1).

Table 2. **Employment rate of 15-64 year-olds by the highest level of education attained (%)**

Education level	2012	2013	2014	2015
Less than, primary and lower secondary education (ISCED levels 0-2)	27.4	27.8	29.7	29.6
Upper secondary and post-secondary non-tertiary education (ISCED levels 3-4)	63.4	63.6	65.2	67.2
Short cycle tertiary education, bachelor, master and doctor or equivalent (ISCED levels 5-8)	81.1	80.7	81.7	84.0

Source: Eurostat.

The employment rate was the highest (84% in 2015) for those with tertiary education. It was lower (67.2%) for those with an upper secondary diploma and the lowest (29.6%) for low-skilled.

According to the National Statistical Institute (NSI), in 2014, the number and the share of employers and self-employed persons have increased. The share of employees in the public sector decreased by 0.6 pp (to 23.1%) and in the private sector increased by 1.1 pp (to 64.9%) from the total number of employed.

⁽³⁾ The number of unemployed persons aged 15-24 divided by the economically active population for the same age group.

Table 3. **Labour market structure in 2012-15 (thousands)**

	2012	2013	2014	2015
Total	2 934.0 (100%)	2 934.9 (100%)	2 981.4 (100%)	3 0319 (100%)
Employers	104.5 (3.6%)	115.1 (3.9%)	113.5 (3.8%)	1 083 (3.6%)
Self-employed	210.9 (7.2%)	221.6 (7.6%)	238.1 (8.0%)	236.8 (7.8%)
Employees	2 594.1(88.4%)	2 578.7(87.9%)	2 609.1 (87.5%)	2 667.2 (88%)
Unpaid family workers	24.5 (0.8%)	19.6 (0.7%)	20.6 (0.7%)	19.5 (0.6%)

Source: Eurostat

1.4. Unemployment

In 2012-16, the number of registered unemployed has decreased (Table 22 of Annex 1). In 2015, the unemployment rate in the country decreased by 2.2 pp compared to 2014, reaching 9.2% (Table 23 of Annex 1). In 2012-15, the unemployment of men was higher than that of women. The share of long-term unemployed increased by 6 pp, reaching 61.2% in 2015. The long-term unemployment rate of the active population has decreased from 6.8% to 5.6% for the same period (Table 24 of Annex 1).

Table 4. **Unemployment by age group (thousands)**

	2012	2013	2014	2015
15-64	12.4	13.0	11.5	9.2
15-24	28.1	28.4	23.8	21.6
25-34	13.8	15.3	12.8	10.0
35-44	10.0	10.3	9.6	7.7
45-54	10.2	10.2	9.4	7.8
55+	9.9	11.9	11.1	8.3

Source: National Statistical Institute.

In 2012-15, the unemployment of 15-24 and 25-34 year-olds has decreased by 6.5 pp and 3.8 pp reaching 21.6% and 10.0% respectively.

Table 5. **Unemployment rate by education level (%)**

	2012	2013	2014	2015
Higher education	5.8	6.3	5.1	4.0
Upper secondary education, including:	11.6	12.3	10.6	8.3
vocational	11.1	11.5	10.2	8.1
general	12.7	13.7	11.5	8.7
Lower secondary education	24.0	26.4	25.7	21.8
Primary education or lower	51.5	47.3	42.6	43.0

Source: National Statistical Institute.

As shown in Table 5, higher levels of education result in lower unemployment. In 2015, it was the lowest for higher education graduates (4%) and the highest for those with primary (or lower) education (43.0%). The unemployment rate for secondary VET graduates is traditionally lower (8.1% in 2015) than the one for general education graduates (8.7%). After the economic crisis the gap became even more evident.

According to Eurostat data, in 2015, the share of early leavers from education and training in Bulgaria was 13.48%. It is the highest value since 2010. Only 2.94% of them were employed and 10.54% were unemployed (6.1% did not want to work and 4.4% expressed an intention to work) (Table 22 of Annex 1).

1.5. Labour force demand

In 2015, there were 2.2 million occupied jobs, 15 000 more than in 2014. Statistics ⁽⁴⁾ show that in 2015 the share of the service and sales workers (17.9%) was the highest followed by that of professionals (17.7%). The lowest share was that of the skilled agricultural, forestry and fishery workers (0.6%), while the highest growth of jobs was for the managers (3.2%) and clerical support workers (3.2%).

In 2015, there were 17.5 thousand job vacancies, 9.8% more than in 2014. The highest shares were for professionals (30%), and plant and machine operators, and assemblers (16.8%). The highest growth of job vacancies was for the plant and machine operators and assemblers (32.6%) and for elementary occupations (39.3%).

In 2015, the labour force demand in real economy has increased. A slight growth of the declared vacant jobs has been registered by the labour offices since 2011. It reached its highest values in 2014 and 2015 that are comparable with the pre-crisis levels.

Traditionally, sectors with most job vacancies are:

- (a) manufacturing;

⁽⁴⁾ Source: Annual Review of the Employment Agency 2014.

- (b) wholesale and retail trade;
- (c) repair of motor vehicles and motorcycles;
- (d) accommodation and food service;
- (e) administrative and support services;
- (f) agriculture, forestry and fishing;
- (g) construction;
- (h) education;
- (i) real estate.

In 2015, there was a significant growth of labour demand in manufacturing, wholesale and retail trade, repair of motor vehicles and motorcycles, accommodation and food service. The most sought after were workers of the clothing and textile industry (tailors, machine operators in textiles, apparel, leather products). Waiters, bartenders, cooks, medical care personnel, workers in food production, in mining and construction are also in high demand.

There was a relatively high demand for drivers of cars, trucks and buses, as well as for security guards, workers in construction, financial specialists, cashiers, collectors and accountants. It was low for lawyers, engineers, hairdressers, librarians and beauticians.

1.6. Active labour market policy

Active labour market policy measures decrease the unemployment of young (29 years old or less) people. The main priorities of the 2016 active labour market policy include improving access for disadvantaged groups, guidance and counselling, and training for competitiveness on the labour market. The target groups are defined in the National employment action plan (2016):

- (a) unemployed young people up to 29 years of age (with a sub group of young people up to 24 years of age);
- (b) unemployed people over 50 years of age;
- (c) unemployed people with low (or low-in-demand) qualifications who lack key competences, including Roma;
- (d) people with disabilities;
- (e) inactive (discouraged) people.

Co-financed by the EU funds, the policy measures supported 15 266 people in 2015, (including training of 11 592 unemployed). Measures for young people (up to 29 years of age), included practical work experience in public institutions ('Career Start') and private companies; financial support for employers providing permanent (and also part-time) jobs to young people, including at-risk groups.

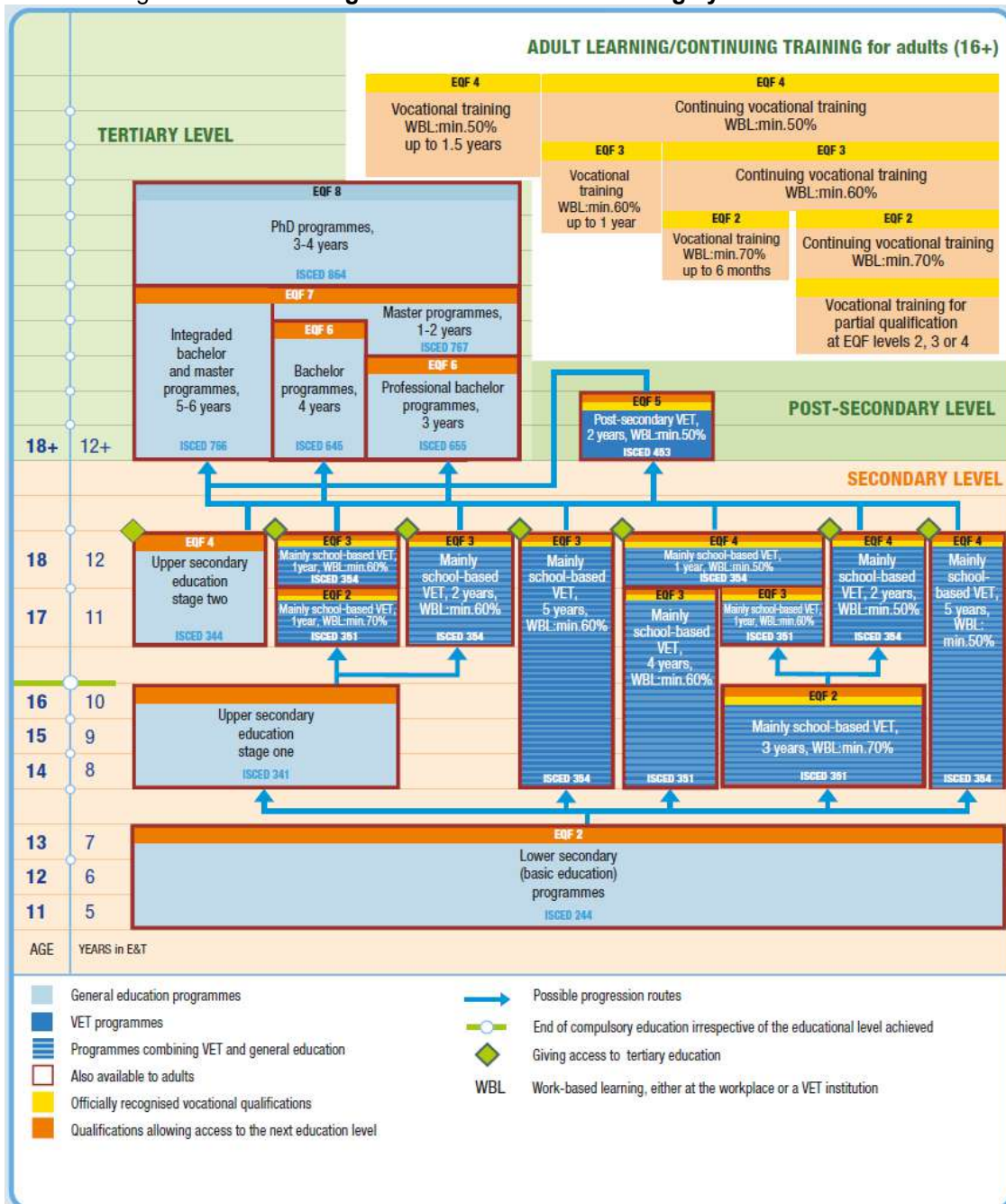
Since 2015, a new ESF 'training and employment for youth' measure has been introduced for young (up to 29 years of age) people offering VET and key competence (foreign languages and digital competence) training. It should help 23 thousand unemployed people find a job in the future.

CHAPTER 2.

Providing VET in a lifelong learning perspective

2.1. Diagramme of the education and training system

Figure 1. VET in Bulgaria's education and training system



NB: ISCED-P 2011. Valid for learners enrolled after 1 August 2016.
 Source: Cedefop and ReferNet Bulgaria.

2.2. Policy background

2.2.1. Recent legislation changes

Bulgaria's Constitution guarantees all citizens the right to education. Education and training is further regulated by the:

- (a) Pre-school and School Education Act (2015, in force since August 2016);
- (b) Vocational Education and Training Act (1999, last amended in 2016);
- (c) Higher Education Act (1995, last amended in 2016).

In August 2016, the Pre-school and school education act (2015) has replaced the Public education act and related regulations. The new act applies only to learners who have been enrolled in grades 1 or 5 since 2016/17 (and also in grade 8 since 2017/18) (hereinafter referred to as newly enrolled learners). Former regulation applies to the rest of learners (hereinafter referred to as current learners).

The Pre-school and School education act (2015) also introduces 19 State educational standards with requirements for educational outcomes.

Section 8 of the act facilitates the access to VET through validation of competences at primary or lower secondary level (EQF levels 1 and 2) acquired in non-formal and informal learning by young people who have not met the minimum requirements for acquiring a qualification under the terms and conditions of the VET act. It also expands the access to VET for learners with special education needs and for prison inmates.

The Vocational Education and Training Act (1999) regulates the organisation, management and financing of VET. The 2014 amendments of the act ⁽⁵⁾:

- (a) broaden the access to VET through validation of non-formal and informal learning carried out by VET providers;
- (b) better match the competences acquired in VET with the labour market demand;
- (c) strengthen the quality assurance of the training providers;
- (d) allow learners to accumulate credits towards the acquisition of a vocational qualification. Credits can be transferred between qualifications in the same 'vocational area';
- (e) restructure the state educational standards for VET qualifications, including units of learning outcomes and assessment criteria;

(5) <http://dv.parliament.bg/DVWeb/showMaterialDV.jsp?idMat=86590> [accesssed 14.2.2017]

- (f) introduce dual training, that combines school- and work-based learning since 2015. Dual training is based on a partnership between VET providers and employers;
- (g) oblige the VET providers to establish internal quality assurance systems in order to ensure a correspondence of the services provided with the expectations and needs of the society.

Recent (2016) amendments harmonised the VET act with the Pre-school and school education act and introduced additional opportunities for acquiring a vocational qualification in the new structure of the secondary education (two stages). They also aim at improving the quality of VET by changing the ratio between theoretical and practical training in favour of the latter, including practice in a real working environment.

The share of practical training varies by level of qualification. EQF level 2 qualifications are related to the performance of routine activities and practical training comprises 70% of the learning time or more. For qualifications that require the performance of a complex set of activities (EQF level 3) it is no less than 60%; qualifications requiring managerial (EQF level 4) and financial (EQF level 5) skills comprise no less than 50% practical training.

Table 6. **Minimal share of practical training in VET**

VET qualification levels	For current learners		For newly enrolled learners
	<16 years old	16+ years old	all learners
First	40%	50%	70%
Second	40%	50%	60%
Third	40%	50%	50%
Fourth	-	50%	50%

Source: VET act.

Following the amendments in the VET act, the Labour Code (1986) has also been amended in 2014 to support the work-based form of learning (dual) as a type of apprenticeship:

- (a) labour contracts for training during work define the forms, place and duration of the training, the compensation which the parties owe when failing to fulfil their obligations and other issues related to training provision;
- (b) dual training lasts 1-3 years for regular VET learners;
- (c) work-based learning for employees that is not regulated by the VET act lasts six months or less;

- (d) after a successful completion of an employee's training, an employer has to offer and an employee has to accept a permanent job; this is not the case for VET learners in dual training.

2.2.2. Strategic documents

The national strategies are the basis for development of the VET system.

The VET development strategy 2015-20 sets as a priority the introduction of dual VET which requires the elaboration of framework curricula at a school level for learners in grades 11-12 and the training of teachers (in schools) and mentors (in enterprises).

The 2015-17 Action plan of the strategy aims at: ensuring the quality and efficiency of VET through wider application of modules; better access through flexible VET; provision of easily accessible and high-quality career guidance services for learners and for adults; opening VET to lifelong learning through the introduction of credits.

The national employment strategy 2013-20 (updated in 2013) supports VET providing job-relevant skills and competences.

The national lifelong learning strategy (2014-20) prioritises the improvement of education and training quality. The strategy is implemented through annual plans, monitoring reports and analyses. The 2016 plan includes elaboration of state educational standards for quality management of training institutions. These standards introduce in a systematic way quality assurance mechanisms, including creation of a unified system for assessment of students, teachers, school management and school environment.

The national strategy for development of pedagogical staff (2014-20) outlines the priorities for training of teaching staff in coordination with the five headline targets of the Europe 2020 strategy.

The higher education development strategy (2014-20) prioritises the development of new curricula for teacher training with an emphasis on practical exercises within the academic classes in a partnership with the business in a respective professional area.

2.3. Education levels and providers

The education and training system comprises several levels (Table 7) provided by education and training institutions (Table 8).

Table 7. **Education levels**

For current learners	For newly enrolled learners
Basic education: 1. primary (grades 1-4) 2. lower secondary (grades 5-8)*	Basic education: 1. primary (grades 1-4) 2. lower secondary (grades 5-7)
Secondary education: 3. upper secondary (grades 9-12)*	Secondary education: 3. upper secondary stage one (grades 8-10)* 4. upper secondary stage two (grades 11-12)*
Higher education: 4. professional bachelor 5. bachelor 6. master's 7. doctoral	Higher education: 5. professional bachelor 6. bachelor 7. master's 8. doctoral

NB: * – includes VET.

Source: Public education act (until August 2016), Pre-school and school education act, and Higher education act.

Table 8. **Education and training providers by type**

For current learners	For newly enrolled learners
Primary school (grades 1-4)	Primary school (grades 1-4)
Basic school (grades 1-8)**	Basic school (grades 1-7)
Pro-gymnasium school (grades 5-8)**	-
Vocational gymnasium (grades 8(9)-12)*	Vocational gymnasium (grades 8-12)*
Profiled gymnasium (grades 8-12)**	Profiled gymnasium (grades 8-12)**
Vocational school (grades 8-12)*	-
-	United school (grades 1-10)** ⁽⁶⁾
Secondary general education school (grades 1-12)**	Secondary school (grades 1-12)**
Sports school*	Sports school*
Art school*	Art school*
Culture school	Culture school
Religious school*	Religious school*
Special school**	Special school*
-	Prison school**
Bulgarian school abroad	Bulgarian school abroad
-	Special educational support centres*
Vocational training centre* (training only)	Vocational training centre* (training only)
Vocational college* (training only)	Vocational college* (training only)
Independent college (higher education)	Independent college (higher education)
University (higher education)	University (higher education)
-	Research university (higher education)
Specialised higher school (higher education)	Specialised higher school (higher education)

NB * – provides VET; ** – may provide VET.

⁽⁶⁾ Merged pro-gymnasium and primary schools.

2.3.1. Primary and lower secondary education (ISCED 2011 levels 1 and 2)

2.3.1.1. For newly enrolled learners

Primary and lower secondary education are merged into the so called basic education (grades 1-7) that is compulsory from 6(7) to 16 years of age. It can be obtained in state, municipal and private schools (primary, basic, united and secondary). There are no VET programmes in primary and lower secondary education.

After graduation, learners may continue to general (including profiled) or vocational secondary education. The profiled general education emphasises selected subjects, for example, mathematics, natural sciences and foreign languages.

2.3.1.2. For current learners

Learners who have started their basic education before August 2016 will graduate after grade 8. In the profiled gymnasiums, learners who have enrolled after grade 7 will acquire basic education after completing grade 9.

2.3.2. Upper secondary education (ISCED 2011 level 3)

2.3.2.1. For newly enrolled learners

Upper secondary education can be general (ISCED 344 and 341) and vocational (ISCED 351 and 354). It is free, compulsory for learners until they reach age 16 and comprises two stages: the first (three years) and the second (two years). At the end of grade 12, learners who pass State matriculation examinations receive a secondary education diploma (EQF level 4).

There are two State matriculation examinations (organised twice a year) for students in both general and vocational education: Bulgarian language and literature, and one optional, e.g. foreign language, mathematics, informatics, etc. If learners decide not to sit the State matriculation examinations they receive a certificate for the completion of grade 12 that gives access to vocational training for adults (16+) but not to higher education.

Upper secondary general education is provided by secondary and united schools, and profiled gymnasiums.

Vocational secondary education provides the acquisition of both a general education and a qualification ⁽⁷⁾ in compliance with the respective state educational standard for the profession.

⁽⁷⁾ At EQF levels 2 to 4; the qualification should be included in the list of professions for VET.

2.3.2.2. *For current learners*

The upper secondary education will not be split into two stages. It starts in grade 9 and ends after the completion of grade 12 and the passing of the State matriculation examinations.

2.3.3. Higher education (ISCED levels 6, 7 and 8)

Higher education comprises the following programmes:

- (a) professional bachelor (ISCED 655, EQF level 6);
- (b) bachelor (ISCED 645, EQF level 6);
- (c) master's (ISCED 766, 767, EQF level 7);
- (d) PhD (ISCED 864, EQF level 8).

The VET and higher education systems are regulated by different laws. VET qualifications are at EQF levels 2-5 and higher education qualifications are at levels 6-8. Higher education providers can however establish vocational training centres and provide vocational training but this is not considered as higher VET.

Partnerships between VET and higher education providers ease transitions from VET to tertiary programmes. Learning outcomes acquired in VET may be recognised by higher education providers, sometimes allowing VET graduates to enrol in tertiary programmes without entry examinations. Some higher education programmes even reserve seats for VET graduates. For example, the National Sports Academy (NSA) reserves 10% of their seats for VET graduates from the State sports school.

Article 77(2) of the Education Minister's decree for evaluation of learning outcomes of students (2016, No 11) states that the admission of students in higher education could be implemented through assessing the State matriculation examinations results.

Bachelor programmes (NQF level 6b, EQF level 6) last for at least four years and give access to the labour market and to master's studies. Learners are required to have a secondary education diploma to gain access.

Professional bachelor programmes (NQF level 6a, EQF level 6) last for at least three years and the acquired qualification gives access to the labour market or to master's studies in the same field. These programmes are more practice-oriented than the regular bachelor programmes.

Master's programmes require a bachelor's degree (for one- to two-year programmes) or a secondary education diploma (for five- to six- year programmes, for example, medicine). A master's degree gives access to the labour market and to doctoral studies.

A doctor's degree is awarded by a jury of scientists (according to the Law for the development of the academic staff) after at least three-year training and a successful defence of a dissertation thesis.

2.4. Government-regulated VET

This section encompasses all learning opportunities leading directly to government-recognised qualifications irrespective of age or previous learning experience. Initial and continuing VET are presented together in this report.

Table 9. **Participation in VET by education level and provider type in 2014/15**

	2014/15
vocational schools after VI and VII grade (VET qualification level 1)	2 432
vocational schools after VIII grade (VET qualification level 1)	988
vocational gymnasiums and schools (VET qualification level 2)	32 095
vocational gymnasiums (VET qualification level 3)	96 100
arts and sports schools (VET qualification level 3)	7 802
vocational training centres, adults 16+ (VET qualification level 1)*	4 994
vocational training centres, adults 16+ (VET qualification level 2)*	3 535
vocational training centres, adults 16+ (VET qualification level 3)*	5 744
vocational training centres, adults 16+ (part of a profession at any level)*	65 573
vocational colleges, adults 16+, post-secondary, non-tertiary vocational training (VET qualification level 4)	1 618
Total	141 035

NB: * – in calendar year 2015 (and not in the 2014/15 school year).
Source: NSI and NAVET.

2.4.1. Upper secondary VET

School VET is provided only at a secondary level. Until August 2016, the lowest level of qualification could also be acquired in lower secondary education programmes. Out-of-school adults (16+) can still acquire the lowest VET qualification level (VET qualification level 1, EQF level 2) before secondary education.

The Upper secondary VET aims at obtaining a vocational qualification but also comprises a general education part that is required to acquire secondary education. The vocational education and training complies with the requirements of the state educational standards and consists of theory and (study and production) practice. The study practice is conducted during the learning process and is performed mostly in schools. The production practice usually takes place at the end of 11 and 12 grade in a real work environment. VET may also be organised as work-based learning (dual training system).

Schools providing VET are vocational gymnasiums, art schools and sports schools. Other providers (profiled gymnasiums, secondary schools, prison's schools) may also provide VET in separate classes.

Examples of qualifications at upper secondary level are builder, electro technician, electronic equipment technician, cook, waiter, assistant trainer in sports and system programmer.

Upper secondary VET is completed with State matriculation examinations in 'Bulgarian language and literature' and a State qualification examination. Graduates receive a secondary education diploma (EQF level 4) and a certificate of vocational qualification (EQF levels 3 or 4). The acquired vocational qualification gives access to the labour market. Students, who are willing to continue their education, can enrol in higher education institutions (universities, research universities, specialised higher schools or independent colleges).

2.4.2. Post-secondary VET

Post-secondary, non-tertiary vocational qualifications (ISCED 2011 level 4, EQF level 5) can be acquired only by people with completed secondary education. The acquired qualification at this level provides access to the labour market but does not provide a higher educational level.

Examples of such qualifications are company manager, hotel manager, restaurant manager as well as sports and military/defence qualifications.

Providers of post-secondary VET are the vocational colleges. The share of VET learners in vocational colleges compared to the total number of VET learners is around 1% (Figure 2). Vocational gymnasiums, art schools and sports schools can also provide VET in EQF level 5 qualifications if decided by the respective minister.

2.4.3. Dual training

There are three types of dual training:

- (a) apprenticeships for VET learners (regulated by the VET act);
- (b) apprenticeships for employees;
- (c) internships.

Apprenticeships for VET learners allow acquiring a VET qualification. The practical training in a company is altered with periods of theoretical training in a school or another VET provider. In-company mentors are responsible for the practical training. They are required to have a VET or higher education qualification and at least three years of work experience. Apprenticeships for VET learners last for 1-3 years and are regulated by the VET act.

Apprenticeships for employees do not offer a formal VET qualification but often guarantee a job in the end of training, according to the contract with the employer. The duration of this type of apprenticeships is up to six months.

Internships are for young people (up to 29 years old) who have already acquired a VET qualification (or higher education degree) but have no work experience in the profession. The duration of internships is 6-12 months.

Table 10. **Main characteristics of apprenticeships and internships**

	Apprenticeship		Internship
Regulated by	Labour Code; VET act; Dual VET ordinance	Labour Code	Labour Code
Type of contract between employer and learner	Labour contract with conditions for dual training	Labour contract with conditions for training during work	Labour contract with conditions for internship
Number of possible contracts per person*	1	1	1
Duration	1-3 years	up to 6 months	6-12 months
Age	16+ years	16+ years	up to 29 years
Minimal education requirements	Upper secondary stage one	-	Secondary education and a VET qualification or higher education
Work experience	-	-	none
Remuneration	Yes, at least 90% of the national minimal wage (varies by sector)	Yes, at least 90% of the national minimal wage (varies by sector)	Yes
Mentors	Yes	No	Yes
Requirements to the mentors	VET qualification or higher education degree; 3+ years of work experience	-	VET qualification or higher education degree; 3+ years of work experience
Specialised training for the mentors provided by the employer	Yes	-	No
Obligation of the employer to offer a job	No	Yes, up to 3 years	No
Obligation of the employee to accept the job	No	Yes, up to 3 years	No
Partnership with a VET provider (school, college or vocational training centre)	Yes	No	No
Number of days per week in class	3 or less in grade 11; 2 or less in grade 12	-	-
Final examination	Yes, according to the VET Act	Yes, by the employer	No
Documents issued	Certificate for vocational qualification	-	Recommendation describing learning outcomes achieved

NB: * with the same employer and for the same qualification.

Source: Labour Code; VET act; Ordinance 8 (2015) regulating dual training.

2.4.4. VET qualification levels

There are four VET qualification levels:

- (a) level 1: acquired competences for performance of routine activities (at least 70% practical training since August 2016) – NQF/EQF level 2;

- (b) level 2: acquired competences for performance of complex activities in a changing environment (at least 60% practical training since August 2016) – NQF/EQF level 3;
- (c) level 3: acquired competences for performance of complex activities in a changing environment, including human resource management (at least 50% practical training since August 2016) – NQF/EQF level 4;
- (d) level 4: acquired competences for performance of a broad range of complex activities in a changing environment, including human and financial resource management (at least 50% practical training since August 2016) – NQF/EQF level 5.

2.4.5. VET programmes

VET programmes are designed based on framework programmes approved by the Education Minister.

Table 11. Framework programmes

Type	IVET	CVET	Dual VET	Available for adults (16+)	EQF level	VET qualification level	Duration (years)	Provided by
A	☑	-	☑	☑	2	1	≤0.5 ^(A) , 1 or 3	VET schools and centres
B	☑	☑	☑	☑	3 and 4 ^(A)	2 or 3	≤1.5 ^(A) , 1 or 4	VET schools and centres
C	☑	☑	☑	-	3-4	2 or 3	1, 2 or 5	VET schools
D	☑	☑	☑	adults only	5	4	≤2 ^(A)	VET schools and colleges
E	☑	☑	☑	☑	2-4 partial	-	1	VET schools and centres
F	-	☑	☑	adults only	2-4 partial	1, 2, 3 or none	not defined	VET schools and centres

NB: ^(A) for programmes for adults only. IVET – initial VET; CVET – continuing VET. Only type C programmes offer access to higher education upon graduation and only if a general part of the programme has been completed in addition to a vocational part.

Framework programmes include:

- (a) general provisions, including the regulatory basis, the aim and purpose of the programme;
- (b) requirements ⁽⁸⁾: entry (age, medical, previous education and qualification level), career and education pathways, form(s) of training (day, evening, part-time, individual, distance, dual, self-learning);
- (c) curriculum ⁽⁷⁾;
- (d) training module content (theoretical and practical);
- (e) graduation requirements (state examinations for full qualifications and final examinations for partial qualifications).

⁽⁸⁾ Different requirements apply for learners over 16 years of age.

2.4.6. Access requirements

The requirements for enrolment in VET programmes are minimum age, health condition, previous education and qualification level.

The minimum required age is 13 (in the year of application) for vocational gymnasiums and schools and 16 for vocational training centres (initial and continuous VET providers for employees and unemployed, without acquisition of an education level). The health condition of the applicant is certified by a medical certificate proving the fitness for the selected occupation. Previous education requirements are at least a completed primary or secondary education or a successfully completed literacy course under the Employment Promotion Act.

The following programmes are available for VET learners (12).

Table 12. VET programmes for VET learners

Framework programme	For current learners		For newly enrolled learners		EQF level
	duration (years)	minimum entry requirements	duration (years)	minimum entry requirements	
A	up to 3	grade 6	3	basic education	2
	-	-	1	upper secondary stage 1	2
	-	-	3	grade 7*	2
B	up to 4	basic education	-	-	-
	-	-	4	basic education	3
	-	-	1	upper secondary stage 1 and VET qualification level 1	3
C	4-5	grade 7-8	5	basic education	3-4
	-	-	2	upper secondary stage 1 and VET qualification level 1	3-4
	-	-	1	grade 11 and VET qualification level 1 or 2	3-4
E	up to 1	grade 4	up to 1	basic education	2-4 (partial qualification)
	-	-	-	grade 7*	2-4 (partial qualification)
	-	-	-	grade 7**	2 (partial qualification)

NB: * learners with special educational needs; ** learners with special (mental) educational needs.

For individuals above age 16, the following programmes are available (**Error! Reference source not found.**):

Table 13. VET programmes for individuals above age 16

Framework programme	For current learners	For newly enrolled learners	EQF level		
	duration (years)		duration (years)	duration (years)	
A	up to 1 year	primary education or literacy course	up to 6 months	primary education or literacy course	2
	-	grade 7*	-	grade 7*	2

B	1 year	at least one year of secondary education	up to 1 year	upper secondary stage 1	3
	-	-	1.5 years	secondary education or grade 12 without passing state mature exam	4
D	up to 2 years	secondary education	up to 2 years	secondary education	5
E	-	none	-	same as for the full qualification	2-4 (partial)
F	-	partial qualification	-	partial qualification	2
	-	VET qualification level 1	-	VET qualification level 1	3
	-	VET qualification level 2	-	VET qualification level 2	4

NB: * learners with special educational needs.

In order to acquire a VET qualification, adult learners study for:

- (a) 300 hours for EQF level 2;
- (b) 660 hours for EQF level 3;
- (c) 960 hours for EQF level 4;
- (d) 1260 hours for EQF level 5.

2.4.7. VET providers

VET providers are (9):

- (a) vocational gymnasiums (364);
- (b) art schools (22);
- (c) sports schools (23);
- (d) vocational colleges (40) and
- (e) vocational training centres (1005).

Vocational gymnasiums offer vocational education leading to VET qualifications at levels 1-3. They enrol learners with completed basic (grade 7) or stage 1 of secondary (grade 10) education. They may also provide a VET qualification at level 4, partial qualifications and training for learners of age 16 or more.

Art and sports schools provide vocational education leading to a VET qualification at levels 2-3 (and sometimes 4).

Vocational colleges provide vocational training leading to a VET qualification at level 4 and accept learners with completed secondary education.

⁹⁾ Figures in parentheses refer to the total number of VET providers in 2016/17.

Vocational training centres provide vocational training leading to a VET qualification at levels 1-3 and partial qualifications to individuals of age 16 or more.

Vocational gymnasiums, vocational colleges, vocational training centres and information and vocational guidance centres are state, municipal and private. Sports schools are state or municipal. Arts schools are state.

The license for vocational training or guidance is issued by the National Agency for Vocational Education and Training that also undertakes the follow-up control of vocational training centres and information and vocational guidance centres.

Continuing vocational training is carried out by formal education and training institutions, mainly vocational gymnasiums, vocational colleges and vocational training centres.

Based on a quality merit (innovative elements in the content, organisation, management, learning environment and teaching) the government may grant 'innovative' status to basic and secondary education providers.

2.5. VET governance

VET governance comprises the following institutions at national, regional and local levels:

2.5.1. At a national level

VET governance comprises the following institutions at national level:

- (a) the National Assembly of the Republic of Bulgaria – implements the legislative activity in the field of VET;
- (b) the Council of Ministers sets out the government policy in the field of VET;
- (c) the education ministry manages, coordinates and implements the VET policy;
- (d) the labour ministry participates in the implementation of the national VET policy;
- (e) the culture ministry implements the VET policy in art schools;
- (f) the sports ministry implements the VET policy in sports schools;
- (g) the health ministry participates in the coordination of the list of professions;
- (h) the sectoral ministries are involved in the development, coordination and updating of the State educational standards for the acquisition of qualifications; in the development, coordination and updating of the list of professions; in coordinating the admission plan for schools, funded by them;

- (i) the employers' representatives participate in the development, coordination and updating of the State educational standards for the acquisition of qualifications, the legislative framework and policy documents, as well as in the updating of the list of professions and in organising and conducting qualification examinations;
- (j) the Economic and Social Council discusses and makes proposals with regard to issues, related to education, including VET in the context of lifelong learning;
- (k) the National Council for Tripartite Cooperation discusses and gives opinions on draft legislation regarding employment and vocational qualification and thus participates in the formulation of VET policy. The Council is composed on the tripartite principle. It is a body for consultations and cooperation at a national level for labour, social insurance and living standard issues, consisting of two representatives of the Government (of whom one is the Vice Prime Minister), two representatives of trade unions and two representatives of employers' organisations;
- (l) the National Council for Vocational Qualifications at the labour ministry coordinates the development of national policies and strategies for training for unemployed and employees, leading to the acquisition of professional qualifications;
- (m) the National Council for the Promotion of Employment at the Ministry of Labour and Social Policy is also constituted on the tripartite principle. Its functions are to discuss and give opinions regarding the development and implementation of the employment policy and the National action plan for employment;
- (n) the National VET agency is a specialised body within the Council of Ministers. The Agency develops the State educational standards for the acquisition of VET qualifications; it maintains the list of professions according to the needs of the labour market; it licenses and exercises further control over the activities of VET institutions for people over 16 years of age and over the activities of vocational guidance providers;
- (o) the Employment Agency implements the state policy on promoting employment and provides career information, counselling and training for employees and unemployed;
- (p) the Human Resource Development Centre is a National Agency, which coordinates the management and administration of the EU Erasmus+ Programme.

2.5.2. At a regional level

VET governance comprises the following institutions at regional level:

- (a) the Regional administration participates in the implementation of the Government policy for employment and acquisition of VET qualifications;
- (b) the Regional Employment Service Departments implement the Government policy for training of unemployed and employed adults for acquiring a vocational qualification; they offer training measures and projects; provide coordination and support in the field of vocational training, consultancy of and guidance for the local employment offices;
- (c) the Regional Inspectorates of Education (territorial administrative units of the education ministry, situated in the 28 district centres) implement the state policy in the field of VET at a regional level through projects, programmes and strategies for development, functioning and improvement of VET at a district level;
- (d) the permanent and temporary employment committees to the Regional Councils for regional development identify, organise and control the implementation of the state policy on the promotion of employment and training for acquiring a vocational qualification at a regional level.

2.5.3. At a local level

VET governance comprises the following institutions at local level:

- (a) the municipalities participate in the development of a VET policy within their territories regarding: the employment needs for vocational guidance and training of students, unemployed and other groups; the necessary equipment of schools, vocational training providers and centres for information and guidance through funds from the municipal budget;
- (b) the Labour offices of the Employment Agency provide career services: career information; advice and guidance for inclusion in the appropriate program/measure for employment and training;
- (c) the Cooperation Councils at the Labour office Directorates monitor the implementation of programmes and measures included in the National action plan for employment.

2.6. Participation in VET

Since 2011/12, the total number of learners in education and training has decreased by 1.5% (Table 27 of Annex 1). However, this trend has not affected basic and higher education. There is even a 10% increase in participation at EQF level 8 (PhD).

In VET schools (Table 28 of Annex 1), the total number of learners has been decreasing since 2010/11 (in 2015/16, by 20 501 learners, or 12.7 %). This is largely due to lower enrolment rates in vocational gymnasiums offering a VET

qualification at level 3 (by 12 382 learners, or 11.4%) and in vocational gymnasiums and schools offering a VET qualification at level 2 (by 11 130 learners, or 25.8%).

In 2014/15, the number of learners following programmes after grades 6-7 to acquire a VET qualification at level 1 has increased slightly compared to 2013/14 (Table 29 of Annex 1). At the same time, an increase is seen in architecture and construction programmes. The number of learners in programmes leading to a VET qualification at level 1 after grade 8 has increased overall (Table 16 of Annex 1), mostly in agriculture, forestry and fisheries programmes. This development is the opposite of the situation in the previous school year when there was a decrease.

In 2014/15, the number of learners in programmes leading to a VET qualification at level 2 (Table 31 of Annex 1) decreased by 690 (2.1%) compared to 2013/14. No learners were enrolled in 'physics and chemistry studies' and 'social services' programmes.

In 2014/15, the number of learners enrolled in programmes leading to a VET qualification at level 3 continued to increase (Table 32 of Annex 1). It is largely due to an increased interest in 'services for individuals' programmes.

Data on the participation of students in programmes after completion of secondary education for acquiring a VET qualification at level 4 in 2014/15 show a decrease by 19.1% (Table 33 of Annex 1) compared to the previous year and 49.8% compared to 2010/11. The decrease is most evident in 'services for individuals' programmes (by 162 learners or 32.6% compared to the previous year), followed by business and administration studies (by 115 learners or 13.8%).

The number of active vocational training centres (Table 34 of Annex 1) is constantly growing. In the end of 2014, their number increased further to 1 005 (97 more than in 2014 or 9.6%). In 2015, 79 386 learners received certificates which is a 6% decrease:

- (a) Certificate of Vocational Training (issued upon the successful completion of a training course in part of a profession, focused on acquiring, updating, improving professional knowledge, skills and competences) – 63 285 certificates (about 80% of all certificates issued);
- (b) Certificate for Vocational Qualification (a document certifying an acquired level of vocational qualification in a particular profession and specialty) – 12 382 certificates (15.6% of all certificates issued);
- (c) Competence Certificate (a document that is issued for some jobs that require licenses) – 3 719 certificates (4.7% of all certificates issued).

The share of learners in programmes leading to partial qualifications is about 80% of all learners in vocational training centres. For a large number of

unemployed people, especially from disadvantaged groups, the inclusion in vocational training provided by the centres is the only opportunity to get a job and maintain their employment.

The 2015/16 data show a decrease in the total number of higher education students enrolled in universities and specialised higher education institutions. (Table 35 of Annex 1).

2.7. VET funding

According to Eurostat the total public expenditure for education and training in 2014 was 4.1% of GDP. The Pre-school and school education act defines the basic principles of financing education. They will come into force in 2017, and will cover VET. The education ministry determines the cost per student for state and municipal schools in coordination with the finance ministry and in accordance with the state standards. The cost per student comprises expenditure for school infrastructure, teacher salaries and additional remuneration (for extra work, achievements, participation in projects etc.) and social security.

The so-called delegated budgets ⁽¹⁰⁾ are introduced to schools and are determined as a function of the standard for cost per student and the number of students.

According to the VET act, sources of financing for state and municipal schools, vocational training centres for information and vocational guidance and training centres for trainers are:

- (a) the state budget;
- (b) the municipal budget;
- (c) donations;
- (d) own revenue;
- (e) national and international programmes;
- (f) other sources.

The financing of vocational training offered after secondary education is provided by individuals under the terms and conditions set by the Education Minister. The training is financed by:

- (a) learners;
- (b) employers;
- (c) the state budget (active labour market policy);
- (d) EU programmes (mainly ESF).

⁽¹⁰⁾ In which the administrator has the right to make corrections.

In 2015, self-funding of training courses by the trainees was the most common funding source (49.1%), followed by funding of employers (26.6%) and funding through national or European public resources (24.3%).

2.8. Teachers and trainers in VET

In 2014/15, the total number of teachers and trainers was 102 799 (Table 37 of Annex 1). According to data collected by the National Statistical Institute the teaching staff in vocational schools, vocational gymnasiums and vocational colleges during 2014/15 was 12 482 (Table 38 of Annex 1). According to National Agency for VET data, the staff employed in vocational training centres was over 5 000. Their basic employment contract is with vocational gymnasiums or companies in the respective industrial branch.

The national policy regarding teachers' education is provided in the regulations governing teacher qualifications, employment and career development ⁽¹¹⁾. The basic rules and regulations addressing initial teacher training are common for the whole country and are contained in the uniform state requirements for the acquisition of the qualification of 'teacher', adopted by the Council of Ministers in 1997. The first prerequisite for the acquisition of this qualification is to obtain a professional bachelor, bachelor or master's degree. In addition, teachers must have a teacher's qualification certificate, which requires a compulsory minimum of theoretical and practical training in pedagogy, psychology, audio-visual and information technology in teaching and methodology of teaching. This teacher training certificate may be acquired simultaneously with the primary specialty training or further on, after graduation. The possession of this document, however, as previously noted, is mandatory only for teachers in general subjects (including foreign language), but not for teachers in the specific vocational subjects in the VET system, as the Public education act and its Implementation Rules specifically stipulate that: 'The position of 'teacher' in a subject of vocational training can be occupied by persons with a higher education diploma for the relevant specialty and without a professional qualification 'teacher'. This legal statement promotes the involvement of highly qualified business professionals in educational activities in VET that should be encouraged with a view to a closer alignment of VET with industry.

While initial teacher training is carried out by many higher education institutions, the postgraduate qualification that is directly related to career

⁽¹¹⁾ <http://www.mon.bg/?h=downloadFile&fileId=10486> [20.2.2017]
and <http://www.mon.bg/?h=downloadFile&fileId=10269> [20.2.2017]

development can be acquired only in specialised departments of three higher education institutions.

Ordinance No 1 (September 2015) on the terms and conditions for providing work-based learning (dual training) prescribes employers to have a mentor(s)/instructor(s) for each learner. According to the ordinance, the mentor is an employee in the enterprise who possesses a professional qualification in the profession, at least three years of work experience in the same profession and has completed a training to be a mentor, provided by the employer. This person participates in the elaboration of curricula for practical training in a real working environment of students aged 16 or more.

In 2016, the National programme for development of pedagogical staff includes a measure aimed at creating conditions for continuing qualification of the teachers in vocational training in the following areas: 'Informatics', 'Sports', 'Food Technologies' and 'Textile, Apparel, and Leather Technologies'.

The Pre-school and school education act (2015) sets the requirements for qualification update programmes for teachers and trainers. These programmes can be provided by companies, organisations and others and they are included in a register called 'Information register of approved programmes for improving the qualifications of pedagogical specialists'. Its creation and maintenance are organised by the Education Minister.

2.9. Other forms of training

Training for the acquisition of vocational qualifications may be carried out by ministries, municipalities, employers' or employees' organisations and individual employers. For training their own employees the enterprises provide informal continuing vocational training. The forms could be vocational training courses, in-service trainings, seminars, conferences and other.

The Employment promotion act stipulates that vocational training for unemployed people could be organised by the employers themselves under certain conditions.

Various non-governmental organisations, enterprises and companies offer informal training. The Community Centres also have the potential for carrying out such training. These traditional Bulgarian cultural and educational organisations can perform a number of activities to enrich people's knowledge and their integration to science, art and culture, including the importance of professional development. They are often the only organisations that provide access to a library, the Internet, and other information sources in smaller towns and villages.

CHAPTER 3.

Shaping VET qualifications

3.1. Anticipating skills needs

The demand for qualifications is forecasted based on the macro-economic model (for medium and long-term forecasts) and the annual employer skill needs survey (for short-term forecasts).

Medium- and long-term forecasts take into account the demographic trends and changes in the educational attainment of the labour force and in the structure of the economy. They provide information on labour demand and supply by:

- (a) level of education (primary, lower secondary, secondary or higher);
- (b) economic activity ⁽¹²⁾;
- (c) profession ⁽¹³⁾;
- (d) structural shortage/surplus of labour by education level.

According to the model, in 2020 the labour market will require qualifications at the following levels:

- (a) primary education or lower – 1.1 %
- (b) lower secondary education – 6.2 %
- (c) upper secondary education – 67.1 %
- (d) higher education – 25.6%

In the long-term (2030), the labour demand for persons with higher education will increase and for those with upper secondary education will decrease:

- (a) primary education or lower – 0.9 %
- (b) lower secondary education – 6.2 %
- (c) upper secondary education – 64.1 %
- (d) higher education – 28.8%

The employer skill needs survey (2015) by the Employment Agency anticipated an increase in new job creation by 13.5% of employers in 2016. The most sought after occupations were forecasted to be:

- (a) for those with higher education: ICT, business and administrative (financial and sales) professionals, teachers, mathematicians, etc.;

⁽¹²⁾ According to the Classification of economic activities (2008).

⁽¹³⁾ According to the National classification of occupations (2011).

- (b) for those with secondary education: service and sales workers (cooks, waiters, bartenders, hairdressers and beauticians), workers in food and wood processing, operators of stationary machinery and equipment, drivers of motor vehicles, etc.;
- (c) for those with primary or lower secondary education: workers in agriculture, forestry and fisheries; workers in mining and manufacturing, construction, workers in food processing, clothes and wood products manufacturing, etc.

The survey showed that 10.3% employers planned to provide training to their employees, mostly leading to a professional qualification of accountant, bodyguard, teacher assistant, waiter, bartender and workers in catering and entertainment. The acquisition of key competences (social, civil, digital, initiative and entrepreneurship) and training on new technologies, equipment and product innovation, working with clients and business activities were also to be conducted.

3.2. List of professions

VET qualifications are classified in the list of professions by education field, vocational area, occupation and speciality (**Error! Reference source not found.**).

Table 14. **Structural elements in the list of professions for VET**

Structural elements
Education field (example: management and administration)
Vocational area (example: accountancy and taxation)
Occupation (example: accountant)
Speciality (example: operative accountancy, third level VET qualification)

Source: NAVET.

There are four VET qualification levels:

- (a) first (EQF level 2);
- (b) second (EQF level 3);
- (c) third (EQF level 4);
- (d) fourth (EQF level 5).

There are about 500 qualifications (specialities of professions) included in the list; two-three new ones are usually added every year, depending on the labour market needs. Branch ministries and employers' organisations can propose changes to the expert committees and the Managing board of NAVET.

3.3. State educational standards for VET qualifications

According to the Pre-school and school education act and the VET act, the acquisition of vocational qualifications is regulated by the State educational standards. The National Agency for VET designs the standards in coordination with the relevant ministries and departments, and the Education Minister endorses them. The standards are by occupation (profession) and comprise:

- (a) requirements for the candidates;
- (b) description of the profession;
- (c) units of learning outcomes;
- (d) requirements for training facilities;
- (e) requirements for trainers.

The new approach implements the ECVET recommendation since 2015⁽¹⁴⁾. The standards are mandatory for VET programmes leading to nationally recognised qualifications, also for adults.

3.4. VET curricula

The education ministry develops VET curricula for new occupations or forms of learning in schools. Vocational training centres develop training programmes and experts of the National Agency for VET evaluate them through a licencing process. The curricula are based on the framework programmes (Table 9, 10 and 11) and on the State educational standards. They comprise a training schedule, subject distribution between general and vocational parts, graduation requirements, explanatory notes, etc. to ensure the achievement of the learning outcomes.

3.5. National Qualifications Framework (NQF)

The national qualifications framework (NQF) of Bulgaria (2012) ⁽¹⁵⁾ covers the entire education system and all qualifications. It defines nine levels, including level 0 (preparatory). Upper secondary and post-secondary (college) VET qualifications refer to NQF levels 2-5. Levels 6-8 relate to qualifications obtained in higher education - degrees 'bachelor', 'master' and 'doctor'. Higher education

⁽¹⁴⁾ Table 40 of Annex 1 presents a model of learning outcomes' units; Table 41 presents an example of a hairdresser qualification.

⁽¹⁵⁾ See Annex 2 of the report.

levels are also linked to the Framework for Qualifications of the European Higher Education Area.

3.6. Validation of non-formal and informal learning

Validation is an alternative way to acquire a professional qualification for those who have not completed a formal VET programme.

The validation of knowledge, skills and competences acquired in informal and non-formal learning is an integral part of the lifelong learning policy, including the:

- (a) National lifelong learning strategy 2014-20;
- (b) Employment strategy 2013-20;
- (c) VET development strategy 2015-20;
- (d) National reform programme (updated in 2016).

These policy documents identify the validation as an effective instrument to support the employability of groups with traditionally low participation in lifelong learning (people with no education and qualification, aged 50+, long-term unemployed and others). Validation is also seen as promoting volunteering.

In 2014, the validation of informal and non-formal learning outcomes has been introduced by the amendments to the VET act. Before that the validation was only available to employees with at least six-months' working experience in the occupation. Following the changes in the VET act at the end of 2014, a validation procedure (regulated by Ordinance No 2) has been approved (in force since 2015). VET providers organise the validation for professions and specialities that are included in the list of professions for VET.

The introduction of the new approach for developing State educational standards, based on units of learning outcomes in 2015, made the validation process more transparent. Applicants present the evidence for the learning outcomes they possess in order to acquire a qualification or a part of it, that provides access to vocational training and to the labour market.

The methods for assessing the learning outcomes are essentially identical to those for assessing knowledge, skills and competences applied in formal education and training. Two types of certificates can be issued as a result of the validation ⁽¹⁶⁾:

- (a) a certificate for validating a vocational level (full qualification). It certifies through an examination that all units of learning outcomes defined in the State educational standard have been achieved;
- (b) a certificate for validating a vocational qualification in a part of a profession (partial qualification). It certifies through an examination that

⁽¹⁶⁾ According to the 2015 amendment to the Ordinance (No. 4, 2013).

one or several units of learning outcomes included in the State educational standard have been achieved.

Holders of these certificates have the same rights as those who have attained corresponding certificates through the formal education system.

Validation procedures are monitored by the regional education authorities and the National Agency for VET. They also consult and guide providers methodologically.

Validation procedures can be funded by beneficiaries (users), legal entities, programmes/projects financed through national and regional funds, the European Social Fund or the European Economic Area resources. A validation price for individuals cannot exceed the real expenditure, made by its provider.

In 2015, according to the administrative statistics of the National Agency for VET, 186 people acquired full qualifications through validation (1.5% of all qualifications in 2015) and 533 people acquired partial qualifications through validation (8.4% of all partial qualifications in 2015).

3.7. Quality assurance of the VET system

The Pre-school and school education act (2015, in force since August 2016) establishes the process of quality management, including VET. The quality management is a continuous process of organisational development based on its analysis, planning, implementation and evaluation. The evaluation is performed through self-assessment and inspection ⁽¹⁷⁾. It aims at preparing the internal evaluation of the quality of provided education through operations, procedures and criteria set by schools. It is carried out under terms and conditions determined by the State educational standard for quality management in the institutions.

The inspection is a process of preparing an overall independent expert evaluation of the education quality in schools at a given moment and guidelines for improvement. At least one inspection should be carried out in each school every five years.

Ordinance (No. 2, 2015) regulates the internal evaluation of the quality of VET. It sets criteria and indicators for measuring VET provider quality, including:

- (a) access to VET (publicity, infrastructure and equipment, qualifications matching the regional labour market demand);
- (b) provision of qualifications (quality assurance system, risk-detecting mechanisms);

⁽¹⁷⁾ By internal and external experts of the National Education Inspectorate.

- (c) graduate transition to the labour market (one year after graduation) and satisfaction rate of graduates with the training.

All VET providers have to introduce an internal system for quality assurance to meet the requirement of the standards. This system comprises:

- (a) policy and goals for quality assurance;
- (a) quality management responsibilities;
- (b) rules for the system's implementation;
- (c) annual schedule for self-assessment;
- (d) rules and procedures for measuring the quality achieved through self-assessment.

A significant role is given to the improvement of the working environment, learning outcomes, interaction with the local community stakeholders, social partners, employers' organisations and universities, and staff training. The education ministry supports and monitors the implementation of quality assurance in VET schools and the National Agency for VET – in vocational training centres.

CHAPTER 4.

Promoting participation in VET

4.1. Incentives for learners

The participation in VET is encouraged by information campaigns. Since 2009, the 'National VET panorama' event (18) promotes VET, enhances learner motivation and prepares a transition to work. It presents examples for acquiring vocational qualifications and provides a platform for VET providers, companies, students and parents to meet. The event comprises VET learner competitions. The 8th National panorama event in 2016 gathered learners from 161 vocational gymnasiums from all (28) regions around 11 skills' competitions. Companies and higher education institutions support it. Representatives of employers' and branch organisations participate in committees for assessing the knowledge, skills and competences demonstrated and for the ranking of the participants. The business representatives ensure the logistic support and awards for members and winners. The higher education institutions offer the winners places in their programmes and the companies - jobs to the best VET learners.

Information about VET may be obtained through the public register of the education ministry (19), including State, municipal and private providers (20).

A national VET portal (21) also provides information on initial and continuing VET providers, State educational standards, curricula, legislation and more.

The information system of the National Agency for VET (22) provides access to information on licensed vocational training centres (and upcoming courses) and on centres for information and vocational guidance. After the 2015 amendments in the VET act, all qualification certificates issued by the vocational training centres are uploaded in an online public register that allows their authenticity check.

VET learners may earn scholarships similar to learners in general education. VET is attractive because after graduation learners receive both a diploma for secondary education (giving access to higher education) and a certificate for vocational qualification.

The government decree (No. 280, October 2015) determines the terms and conditions for provision of training vouchers for unemployed and employees, co-

(18) An annual event that promotes VET and provides information to learners about occupations.

(19) <http://www2.mon.bg/adminmon/schools/> [accessed 16.2.2017].

(20) <http://www.mon.bg/?go=page&pagelid=8&subpagelid=78> [accessed 16.2.2017].

(21) <http://www.vet-bg.com> [accessed 16.2.2017].

(22) <https://is.navet.government.bg/test> [accessed 16.2.2017].

financed by ESF. The decree regulates different types of training, target groups and requirements to training providers. A person (employed or unemployed) may have only one training voucher for key competences and one for VET training during the implementation of the programme:

- (a) at EQF level 2 – EUR 300;
- (b) at EQF level 3 – EUR 600;
- (c) at EQF level 4 – EUR 900.

4.2. Incentives for enterprises

In 2015-19, dual VET is piloted in the Domino project, implemented within the Bulgarian-Swiss cooperation programme by the education, labour and economics ministries. The project aims at creating a national model and capacity building for the successful introduction of dual VET for the following programmes: machine technician (CNC), milk technologist, cook, gas technician, electrician, electronic equipment technician, transport vehicles technician (automotive mechatronics) and wood technologist (furniture). The project is open for companies to join it.

The Austrian Chamber of Commerce also supports the implementation of the dual training in Bulgaria with a project that includes economist and mechatronics qualifications. The German-Bulgarian Industrial Chamber of Commerce implements a dual training for a company manager qualification.

Another project financed by companies in the Panagyurishte municipality supports dual training in the qualifications machine technician, mining technician, textile clothing designer and laser, and optical equipment technician.

These projects provide support for the development of curricula for schools and companies and also for the special trainings of the mentors but learners' salaries are paid by the companies.

According to the Commercial Act, the provision of training for companies is free of value added tax.

4.3. Guidance and counselling

Vocational guidance services for job seekers (employees and unemployed persons) are provided by the labour offices ⁽²³⁾ and include:

- (a) vocational counselling (individual and in groups) that helps choosing the right VET qualification and provider;

⁽²³⁾
19.11.2015].

<http://www.az.government.bg/pages/profesionalno-orientirane/>

[accessed

- (b) information on the main characteristics of occupations (requirements, demand and trends) and the relevant VET programmes (providers, forms of training, admission requirements; diplomas).

The education ministry and the National Erasmus+ Agency are developing national registers that will comprise all VET and higher education qualifications and pathways to them by 2016-17. The register will be connected to the learning opportunities and qualifications portal of the European Commission.

An ESF co-financed national portal for student's career guidance (<http://orientirane.mon.bg/>) has tools for searching VET providers by qualification and city.

4.4. Challenges and development opportunities

The VET Act has changed 27 times since its adoption in 1999. Many key concepts (quality assurance, work-based learning and validation of non-formal and informal learning) are fully implemented. The concept of a national credit system needs to be further developed.

The Pre-school and school education act (2015) introduces a reform in primary and secondary education, including VET. The recent legislative changes have increased the responsibility of local and regional authorities. They are involved in planning the VET admission, defining occupations, paying staff salaries in municipal schools, offering vocational training for unemployed and equipping VET schools.

Early leaving from VET is higher than from secondary education in general. To make mobility and lifelong learning a reality, a comprehensive approach is needed. VET policies need to become better linked to the employment and social policies, so the VET act regulates for the State to be responsible for the list of specialities of professions, including qualifications that are important for the economic development of the country or that of a region.

Dual training is a reality in some VET schools but the numbers are low. Measures for the promotion of dual VET and the attracting of employers and learners are being put in place.

Creating a system for career development for VET teachers and trainers is expected to motivate more young people to choose a teacher or trainer career. It should allow for the acquiring of new competences related to technological innovation and the modern teaching methods. The system will also improve the image of VET and make it more attractive for learners. The Pre-school and School Education Act (2015) regulates career development of teaching staff in general secondary education and in VET.

List of abbreviations

EQF	European qualifications framework
ESF	European Social Fund
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
NAVET	National Agency for Vocational Education and Training
NQF	National qualifications framework
NSI	National Statistical Institute
VET	vocational education and training
VTC	vocational training centre

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ANNEX 1. Detailed data

Table 15. Population by age group in 2013-16 (as of 1 January)

Year	Population	% by age groups				
		0 - 14	15 - 24	25 - 49	50 - 64	65 +
2013	7 284 552	13.6	10.9	35.1	21.2	19.2
2014	7 245 677	13.7	10.4	35.2	21.1	19.6
2015	7 202 198	13.9	10.0	35.3	20.9	20.0
2016	7 153 784	14.0	9.6	35.4	20.6	20.4

Source: Eurostat

Table 16. Share of population under, of and over(as of 31 December) (%)

	2012	2013	2014	2015
Total	100	100	100	100
Under working age	14.4	14.6	14.8	14.9
Working age	61.8	61.7	61.1	60.8
Over working age	23.8	23.7	24.1	24.3
In urban areas	100	100	100	100
Under working age	14.4	14,7	14.9	15.1
Working age	64.4	64,1	63.4	62.9
Over working age	21.2	21,2	21.7	22.0
In rural areas	100	100	100	100
Under working age	14.2	14.4	14.5	14.3
Working age	55.0	55.1	54.9	55.2
Over working age	30.8	30.5	30.7	30.5

NB: The age limits for distribution of population among the categories below, in and above working age are defined according to the Regulation for pensions and contribution period, adopted by the Council of Ministers (SG, issue 21/17.03.2000).

Source: National Statistical Institute

Table 17. Active population in 2012-15 (thousands)

	2012	2013	2014	2015
Total	3 344.3	3 371.2	3 365.9	3 337.0
Males	1 782.8	1 796.6	1 798.6	1 781.7
Females	1 561.5	1 574.6	1 567.3	1 555.2

Source: Eurostat

Table 18. Economic activity rate in 2012-15 (age group 15-64) (thousands)

	2012	2013	2014	2015
Total	67.1	68.4	69	69.3
Males	71	72.2	72.9	73.2
Females	63.2	64,5	65	65.4
age				
15 - 19	8.3	6.8	6.3	5.7
20 - 24	46.9	46.3	42.8	42.1
25 - 29	75.8	74.4	75	74.6
30 - 34	81.7	82.8	81.5	81.9
35 - 39	84.7	86.3	86.6	85.3
40 - 44	86.2	87	88.2	87.7
45 - 49	84.3	85	85.6	85.8
50 - 54	81	82	81.8	82.8
55 - 59	69.7	71.4	73.4	74.7
60 - 64	32.6	37.1	40	41.3

Source: Eurostat

Table 19. **Employees in 2012-15 (thousands)**

	2012	2013	2014	2015
Total 15+	2 934.0	2 934.9	2 981.4	3 031.9
Age group 15-64	2 894.9	2 889.4	2 927.4	2 973.5
Males	1 541.7	1 546.9	1 577.1	1 607.5
Females	1 392.3	1 388.1	1 404.3	1 424.3

Source: Eurostat

Table 20. **Employment rate by age group (%)**

	2012	2013	2014	2015
15 - 64	58.8	59.5	61.0	62.9
15 - 24	21.9	21.2	20.7	20.3
25 - 54	73.1	73.3	74.5	76.1
55 - 64	45.7	47.4	50.0	53.0

Source: Eurostat

Table 21. **Employment rate by age and highest level of education attained (%)**

	2012	2013	2014	2015
age 15 - 64				
Less than, primary and lower secondary education: levels 0-2	27.4	27.8	29.7	29.6
Upper secondary and post-secondary non-tertiary education: levels 3-4	63.4	63.6	65.2	67.2
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	81.1	80.7	81.7	84.0
age 20 - 24				
Less than, primary and lower secondary education: levels 0-2	22.5	22.6	20.9	22.9
Upper secondary and post-secondary non-tertiary education: levels 3-4	35.4	34.3	33.7	33.8
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	62.0	58.5	53.1	54.1
age 25 - 29				
Less than, primary and lower secondary education: levels 0-2	29.0	29.4	34.5	34.4
Upper secondary and post-secondary non-tertiary education: levels 3-4	66.9	64.5	67.7	68.7
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	77	73.6	75.7	81.1
age 30 - 34				
Less than, primary and lower secondary education: levels 0-2	36.9	39.7	37	39.1
Upper secondary and post-secondary non-tertiary education: levels 3-4	77	75.5	77	79
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	85.7	84.2	84.5	86.8
age 35 - 39				
Less than, primary and lower secondary education: levels 0-2	45.3	48	48.7	47.4
Upper secondary and post-secondary non-tertiary education: levels 3-4	79	79.3	80.6	82.8
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	89.6	88.1	89	89.9
age 40 - 44				
Less than, primary and lower secondary education: levels 0-2	47	48.2	52.4	49.1
Upper secondary and post-secondary non-tertiary education: levels 3-4	80.2	80.7	82	84.1
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	92.4	91.2	91.7	91.5
age 45 - 49				
Less than, primary and lower secondary education: levels 0-2	45.4	45.2	44.2	45.1
Upper secondary and post-secondary non-tertiary education: levels 3-4	77.7	79.6	81.3	82.0

Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	92.1	91.9	92.3	93.8
age 50 – 54				
Less than, primary and lower secondary education: levels 0-2	45.1	45.8	47.7	50.2
Upper secondary and post-secondary non-tertiary education: levels 3-4	75	75	76	78.2
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	89.4	88.7	88.6	90.4
age 55 – 59				
Less than, primary and lower secondary education: levels 0-2	41.8	38.5	41.5	41.6
Upper secondary and post-secondary non-tertiary education: levels 3-4	63.6	64.3	66.3	69.8
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	80	80.8	83.9	86.6
age 60 - 64				
Less than, primary and lower secondary education: levels 0-2	18.6	20.4	23.2	22.5
Upper secondary and post-secondary non-tertiary education: levels 3-4	29.8	32.6	34.8	37.4
Tertiary education, bachelor, master and doctor or equivalent: levels 5-8	42.4	47.3	50.7	54.1

Source: Eurostat

Table 22. Unemployed in 2012-15 (thousands)

	2012	2013	2014	2015
Total	410.3	436.3	384.5	305.1
Males	241.1	249.8	221.4	174.2
Females	169.3	186.5	163.1	130.9
Less than 25 years old	69.7	65.1	47.6	39.6
25 – 74 years old	340.7	371.1	336.9	265.5

Source: Eurostat

Table 23. Unemployment rate in 2012-15 (%)

	2012	2013	2014	2015
Total	12.3	13	11.4	9.2
Males	13.5	13,9	12.3	9.8
Females	10.8	11.8	10.4	8.4
Less than 25 years old	28.1	28.4	23.8	21.6
25 – 74 years old	11	11.8	10.7	8.4

Source: Eurostat

Table 24. Long-term unemployment in 2012-15 (LTU, %)

	2012	2013	2014	2015
LTU				
Total	55.2	57.3	60.4	61.2
By gender				
Males	56.7	58.3	62.4	62.4
Females	53	55.9	57.6	59.6
LTU of active population				
Total	6.8	7.4	6.9	5.6
By gender				
Males	7.7	8.1	7.7	6.1
Very LTU of active population				
Total	4.1	4.6	4.4	3.7
By gender				
Males	4.6	5.2	4.9	4.0
Females	3.5	4.0	3.8	3.3

Source: Eurostat

Table 25. Occupied jobs by occupation in 2012-15

	2012	2013	2014	2015
Total	2 250 306	2 255 141	2 185 906	2 201 479
Managers	133 123	131 551	130 082	134 237
Professionals	374 006	385 557	384 624	389 017
Technicians and associate professionals	238 974	228 503	217 876	221 844
Clerical support workers	218 668	220 675	206 728	213 065
Service and sales workers	406 458	404 866	394 934	393 036
Skilled agricultural, forestry and fishery workers	15 711	15 369	13 962	13 991
Craft and related trades workers	257 459	249 795	243 587	244 557
Plant and machine operators and assemblers	284 785	288 901	282 480	286 407
Elementary occupations	321 122	329 924	311 633	305 325
(Structure, %)				
Managers	5,9	5,8	6,0	6,1
Professionals	16,6	17,1	17,6	17,7
Technicians and associate professionals	10,6	10,1	10,0	10,1
Clerical support workers	9,7	9,8	9,5	9,7
Service and sales workers	18,1	18,0	18,1	17,9
Skilled agricultural, forestry and fishery workers	0,7	0,7	0,6	0,6
Craft and related trades workers	11,4	11,1	11,1	11,1
Plant and machine operators and assemblers	12,7	12,8	12,9	13,0
Elementary occupations	14,3	14,6	14,3	13,9

Source: Eurostat

Table 26. Share of job vacancies by occupation (%)

	2012	2013	2014	2015
Total	0.7	0.7	0.7	0.8
Managers	0.8	0.7	0.7	0.7
Professionals	1.4	1.3	1.3	1.3
Technicians and associate professionals	0.8	0.6	0.7	0.7
Clerical support workers	0.4	0.4	0.4	0.4
Service and sales workers	0.7	0.5	0.7	0.7
Skilled agricultural, forestry and fishery workers	0.5	0.7	0.6	0.6
Craft and related trades workers	0.7	0.6	0.6	0.6
Plant and machine operators and assemblers	0.6	0.7	0.8	1.0
Elementary occupations	0.4	0.4	0.4	0.5

Source: Eurostat

Table 27. Enrolled students by ISCED 2011 level in 2010-11-2014/15

	2010/11		2011/12		2012/13		2013/14		2014/15	
	total	incl. private	total	incl. private	total	incl. private	total	incl. private	total	incl. private
Total	1 307 705	84 263	1 293 961	83 145	1 294 682	83 200	1 303 836	80 915	1 284 910	67 705
Pre-primary education (ISCED - 0)	223 186	1 784	227 971	1 821	235 015	2 357	240 622	2 718	241 123	3 292
Primary education (I-IV grade, ISCED - 1)	255 086	1 882	252 372	1 905	253 675	2 011	258 840	2 061	261 793	2 399
Lower-secondary education (V-VIII grade, ISCED - 2)	219 980	1 464	221 274	1 517	221 839	1 693	220 934	1 603	217 155	1 734
Adult vocational training – I level of vocational qualification (ISCED – 2)*	8 403	7 359	11 219	10 389	13 637	12 551	11 176	9 732	6 509	5 478
Vocational training after completion of VIII grade - I level of vocational qualification (ISCED – 3)	691	-	841	-	1 011	-	831	-	988	-
Secondary education (IX-XII grade, ISCED – 3)	302 684	3 829	281 671	3 673	272 487	3 526	268 395	3 450	267 540	3 461
Adult vocational training – II level of vocational qualification (ISCED – 3)*	4 737	4 160	4 062	3 420	4 272	3 683	7 300	6 336	3 789	2 789
Adult vocational training – III level of vocational qualification (ISCED – 3)*	4 353	3 357	6 660	5 229	6 323	5 393	10 278	6 829	5 417	4 291
Vocational education after secondary education (ISCED – 4)	3 224	3 048	2 804	2 461	2 381	2 137	2 001	1 830	1 618	1 452

Adult vocational training - IV level of vocational qualification (ISCED – 4)*	96	36	92	1	83	-	165	-	25	-
Higher education (ISCED – 6, 7, 8)	285 265	57 344	284 995	52 729	283 959	49 849	283 294	46 356	278 953	42 809
Educational-qualification degree 'Professional bachelor' (ISCED - 6)	25 511	16 962**	16 210**	7727	14 688	7076	15 072	7 153	15 244	7 097
Educational-qualification degree 'Bachelor' (ISCED - 6)	178 728	31 052	184 069	34 720	180 949	3 1359	176 344	27 535	171 458	25 143
Educational-qualification degree 'Master' (ISCED - 7)	76 931	9 290	80 013	10 139	82 951	11 306	85 823	11 532	85 634	10 418
Educational and scientific degree 'Doctor' (ISCED - 8)	4 095	40	4 703	143	5 371	108	6 055	136	6 617	151

* Including trainees in vocational gymnasiums and colleges and vocational training centres.

** The number of the students declines significantly because of the restructuring of an autonomous private college into a university and the transfer of the enrolled students from educational qualification degree (EQD) 'Professional bachelor' to EQD 'Bachelor'.

Source: Statistical reference 2014, issued by NSI.

Table 28. Number of students in vocational schools in 2010/11-2014/15

	2010/11	2011/12	2012/13	2013/14	2014/15
Total	161 536	145 728	142 733	140 882	141 035
In arts and sports schools (third level of vocational qualification)	3 784	3 816	6 450	7 045	7 802
In vocational gymnasiums (third level of vocational qualification)	108 482	96 080	95 443	95 834	96 100
In vocational colleges after graduation of secondary education (fourth level of vocational qualification)	3 224	2 804	2 381	2 001	1 618
In vocational gymnasiums and schools (second level of vocational qualification)	43 225	40 285	35 469	32 785	32 095
In vocational schools after VI and VII grade (first level of vocational qualification)	2 130	1 902	1 979	2 386	2 432
In vocational schools after VIII grade (first level of vocational qualification)	691	841	1 011	831	988
From the total number in private schools	4 044	3 299	2 857	2 493	2 029

Source: NSI.

Table 29. Students following vocational syllabi after grades 6 and 7 for acquiring level 1 VET qualification

Specialized areas of education	2010/11	2011/12	2012/13	2013/14	2014/15
Total	2 130	1 902	1 979	2 386	2432

Technical sciences and technical professions	479	440	323	426	406
Mining and production technologies	1 110	1 011	1 056	1 205	1242
Architecture and construction	28	23	138	203	299
Agriculture, forestry and fisheries	151	150	188	296	274
Services for individuals	362	278	274	244	205
Other undefined areas	-	-	-	12	6

Source: Statistical reference 2014, issued by NSI.

Table 30. **Students following vocational syllabi after grade 8 for acquiring level 1 VET qualification in specialised areas of education**

Specialized areas of education	2010/11	2011/12	2012/13	2013/14	2014/15
Total	691	841	1 011	831	988
Technical sciences and technical professions	76	99	189	94	105
Mining and production technologies	254	246	256	245	288
Architecture and construction	-	-	41	7	-
Agriculture, forestry and fisheries	79	174	157	135	203
Services for individuals	256	295	349	329	354
Other undefined areas	26	27	19	21	38

Source: Statistical reference 2014, issued by NSI

Table 31. **Students following vocational syllabi for acquiring level 2 VET qualification in specialised areas of education**

Specialised areas of education	2010/11	2011/12	2012/13	2013/14	2014/15
Total	43 225	40 285	35 469	32 785	32095
Arts	102	94	90	74	99
Business and administration studies	7 611	6 037	4 523	2 884	2 515
Physiques and chemistry studies	19	19	19	-	-
Information technologies studies	1 194	998	1 004	950	1 015
Technical sciences and technical professions	13 369	12 528	9 665	9 209	9 136
Mining and production technologies	4 648	4 573	4 322	4 208	4 133
Architecture and construction	1 530	1 243	1 024	1 303	1 450
Agriculture, forestry and fisheries	6 844	7 026	7 495	6 917	6 496
Social services	-	11	10	-	-
Services for individuals	7 908	7 756	7 317	7 240	7 158
Transport services	-	-	-	-	93

Source: Statistical reference 2014, issued by NSI

Table 32. Students following vocational syllabi for acquiring level 3 VET qualification in specialised areas of education

Specialised areas of education	2010/11	2011/12	2012/13	2013/14	2014/15
Total	112 266	99 896	101 893	102 879	103902
Arts	6 109	6 147	6 344	6 525	6 435
Humanities	360	380	371	386	425
Journalism, mass communication and information	-	-	18	29	41
Business and administration studies	18 896	16 857	17 991	18 510	18 248
Physiques and chemistry studies	-	-	-	16	-
Information technologies studies	5 405	5 992	6 891	7 373	7532
Technical sciences and technical professions	37 096	32 442	31 484	31 126	30 848
Mining and production technologies	8 813	6 699	5 964	5 984	6 066
Architecture and construction	9 367	8 002	7 123	6 378	5 833
Agriculture, forestry and fisheries	7 270	6 397	6 428	6 962	7 534
Veterinary medicine	1 504	903	944	891	929
Healthcare	-	-	-	-	28
Social services	87	121	187	266	285
Services for individuals	14 701	13 941	16 439	16 922	18 050
Transport services	1 558	1 137	1 024	903	937
Environmental studies	1 056	806	664	592	695
Security and safety	20	-	-	16	16
Other undefined specialized	-	52	-	-	-

Source: Statistical reference 2014, issued by NSI

Table 33. Students following vocational syllabi after completing secondary education for acquiring level 4 VET qualification in specialised areas of education

Specialized areas of education	2010/11	2011/12	2012/13	2013/14	2014/15
Total	3 224	2 804	2 381	2 001	1618
Arts	232	172	146	115	108
Humanities	55	55	51	55	57
Business and administration studies	2 112	1 318	1 064	836	721
Technical sciences and technical professions	187	187	173	201	143
Mining and production technologies	-	-	-	-	-
Architecture and construction	39	80	-	-	-
Agriculture, forestry and fishery	-	-	-	-	-
Healthcare	-	-	-	-	26
Services for individuals	289	565	564	497	335
Transport services	5	-	-	-	-
Security and safety	305	426	383	276	228

Source: Statistical reference 2014, issued by NSI.

Table 34. Vocational training centres, courses and certificates in 2008-15

	2008	2009	2010	2011	2012	2014	2015
Number of active vocational training centres							
	678	808	814	840	886	908	1 005
Total number of delivered courses							
	6 199	5 092	9 861	6 960	8 990	11 815	13 223
Courses on part of the profession							
	4 482	3 984	7 265	4 713	5 910	7 276	10 743
Courses for acquiring a degree of vocational qualification							
	1 717	1 108	2 596	2 247	3 080	4 539	2 750
Issued documents for vocational qualification							
Total	79 329	89 498	86 486	100 481	106 405	84 741	79 386
Vocational training certificates	50 915	55 125	54 709	56 149	70 340	50 907	63 285
Certificates for vocational qualification	11 759	11 074	13 665	19 731	27 049	29 260	12 382
Competence certificates	16 655	23 299	18 112	24 601	9 016	4 574	3 719
Funding (in %)							
Trainees	31.4	31.1	20.2	20.5	10.6	41.3	49.1
Employers	49.6	49.0	17.8	23.0	15.6	20.4	26.6
Employment Agency	14.1	14.1	24.4	14.5	20.0	9.8	24.3
EU programmes*	4.9	5.8	37.6	42.0	64.4	28.5	

* Funding by various European programmes predominantly by ESF via OP HRD
Source: National Agency for Vocational Education and Training, annual reports

Table 35. Students in higher education

	2010/11	2011/12	2012/13	2013/14	2014/15
Total	281 170	280 292	278 588	277 239	272 336
In universities and specialised higher education institutions	255 659	264 082	263 900	262 167	257 092
In colleges	25 511	16 210	14 688	15 072	15 244

Source: Statistical reference 2014, issued by NSI

Table 36. Early leavers from education and training by sex and labour status – age group 18-24

	2011	2012	2013	2014	2015
% of population	11.8	12.5	12.5	12.9	13.4
By gender					
Males	11.2	12.1	12.3	12.8	13.3
Females	12.6	13.0	12.7	12.9	13.4
Employees					
Total	2.2	2.7	2.5	2.4	2.9
By gender					
Males	2.8	3.2	3.1	3.5	3.9
Females	1.7	2.1	1.9	1.3	1.7
Unemployed					
Total	9.6	9.9	10.0	10.4	10.5
By gender					
Males	8.4	8.9	9.3	9.4	9.4
Females	10.9	10.9	10.8	11.5	11.7
People who would like to work (seeking employment or not)					
Total	4.8	5.3	5.4	5.1	4.4
Males	5.5	6.5	6.7	6.2	5.0
Females	4.1	4.0	4.0	4.0	3.7
People who do not want to work					
Total	4.8	4.6	4.6	5.3	6.1
By gender					
Males	2.9	2.4	2.6	3.2	4.4
Females	6.8	6.9	6.8	7.5	8.0

Source: Eurostat

Table 37. Teachers by ISCED 2011 level

	2011/12	2012/13	2013/14	2014/15
Total	102 925	102 488	101 828	102 799
Pre-school education (ISCED- 0)	19 729	20 015	20 269	20 542
Primary education (I-IV grade, ISCED -1)	14 666	14 565	14 767	14 940
Lower secondary education (V-VIII grade, ISCED - 2)	19 504	19 315	19 277	19 179
Secondary education (IX-XIII grade, ISCED - 3)	25 539	⁽¹⁾ 24 684	⁽¹⁾ 24 121	⁽¹⁾ 23 968
Vocational training after secondary education (ISCED - 4)	532	453	382	427
Higher education (ISCED – 6, 7)	22 955	23 456	23 012	23 743
Colleges (ISCED - 6)	1 079	1 091	1 070	1 018
Universities and specialized higher education schools (ISCED – 6,7)	21 876	22 365	21 942	22 725
including teachers in private educational establishments				
Total	5 204	5 519	5 089	4 919
Pre-school education (ISCED-0)	5 204	5 519	424	516
Basic education (I-IV grade, ISCED - 1)	284	373	277	354
Lower secondary education (V-VIII grade, ISCED - 2)	269	256	450	488
Secondary education (IX-XIII grade, ISCED – 3)	440	458	894	849
Vocational training after secondary education (ISCED - 4)	1 054	1 005	347	330
Higher education (ISCED – 6,7)	498	409	2 697	2282
Colleges (ISCED - 5)	2 659	3 018	340	125
Universities and specialized higher education schools (ISCED – 6,7)	353	363	2 357	2 257

Source: NSI.

Table 38. Teaching staff in vocational schools, vocational secondary schools and vocational colleges

	2011/12	2012/13	2013/14	2014/15
Total	13 056	13 063	12 598	12 482
In arts and sports schools (III level of vocational qualification)	1 063	1 653	1 705	1 724
In vocational secondary schools (III level of vocational qualification)	9 780	9 302	8 958	8 949
In vocational colleges enrolling people after secondary education (IV level of vocational qualification)	532	453	382	427
In vocational secondary schools and schools (II level of vocational qualification)	1 579	1 567	1 464	1 283
In vocational schools enrolling students after VI th and VII th grade (I level of vocational qualification)	48	52	42	51
In vocational schools enrolling students VIII th grade (I level of vocational qualification)	54	36	47	48
From the total number in private schools	924	798	640	No information

Source: NSI

Table 39. Documents for vocational qualification, issued by VTCs as a result of a procedure for recognition/validation of results acquired by non-formal and informal learning (according to article 40 of VETA)

Indicators by years	2009		2010		2011		2012	
	CVQ	VTC	CVQ	VTC	CVQ	VTC	CVQ	VTC
Total number	11 074	55 125	13 665	54 709	45 077	95 167	18 559	55 007
Acc. to article. 40	691	1 537	502	798	1 172	1 142	1 172	1 142
%	6.2	2.9	3.6	1.5	2.6	1.2	6.3	2.1
Indicators by years	2013		2014		2015		CVQ – Certificate of vocational qualification VTC – Vocational training certificate <i>Source:</i> Administrative statistics of	
	CVQ	VTC	CVQ	VTC	CVQ	VTC		
Total number	29 260	50 907	18 510	52 110	12 382	63 285		
Acc. to article. 40	534	648	313	603	186	533		
%	2.9	1.2	1.7	1.2	1.5	8.4		

Table 40. Model of unit of learning outcomes

Name of the unit:	
Code:	
NQF level:	
EQF level:	
Name of the qualification:	
NQF level:	
EQF level:	
Learning outcome 1:	
Knowledge	
Skills	
Competences	
Learning outcome 2:	
Knowledge	
Skills	
Competences	
Learning outcome 2:	
Knowledge	
Skills	
Competences	
Assessment tools:	
Conditions during the assessment:	
Assessment criteria:	

Table 41. **Example of unit of learning outcomes**

Name of the unit:	Daytime and evening hairstyles
Code:	8150101-6
NQF level:	3
EQF level:	3
Name of the qualification:	Hairdresser
NQF level:	3
EQF level:	3
Learning outcome 1:	Dries hair with a hairdryer and a brush
Knowledge	<ul style="list-style-type: none"> Knows the basic tools and supplies for drying a hair Knows the sequence of work with basic tools, materials and supplies for drying a hair (brush, hairdryer, etc.), the
Skills	<ul style="list-style-type: none"> Applies a product for thermal protection Use relevant tools and supplies for drying a hair Applies different types of stylizing and finalizing cosmetic
Competences	<ul style="list-style-type: none"> Applies different techniques for drying the hair taking into account the individual structure of the client's hair and his preferences
Learning outcome 2:	Shapes a hairstyle with curling tongs and a hair pressing
Knowledge	<ul style="list-style-type: none"> Knows the technological sequence in the work with curling tongs and hair pressing machine Is familiar with the expected result from the use of different electrical devices Knows the basic tools, materials and supplies for shaping with thermal protection a hairstyle, as well as their impact on the hair
Skills	<ul style="list-style-type: none"> Applies a product for thermal protection Straightens hair with a hair pressing machine Curls a hair by using a hair pressing machine or curling tongs Applies different types of stylizing and finalizing cosmetic products
Competences	<ul style="list-style-type: none"> Shows creativity and proposes original solutions when shaping a hairstyle with curling tongs and a hair pressing machine as he/she uses properly and safely the appropriate tools and supplies and also comply with the individual wishes of the client
Learning outcome 3:	Creates a bun hairstyle
Knowledge	<ul style="list-style-type: none"> Knows the different evening bun hairstyles Knows the technological sequence for the shaping of different evening bun hairstyles
Skills	<ul style="list-style-type: none"> Raises a hair and clamp it Uses a construction in a hair Decorates a hair in according to a case
Competences	<ul style="list-style-type: none"> Assesses the condition of a client's hair and skin around it and proposes stylish and elegant bun according to the event for which the hairstyle is meant for and takes into account the clients' personal preferences
Assessment tools:	Tool 1: <ul style="list-style-type: none"> Solving a test
Conditions during the assessment:	For tools 1 and 2: <ul style="list-style-type: none"> Classroom
Assessment criteria:	For tool 1: <ul style="list-style-type: none"> Correctly defines basic theoretical notions related to the technology at work in providing the hairdressing service "daytime and evening hairstyles"

ANNEX 2.

National qualifications framework

National qualifications framework (NQF)

DESCRIPTION: The Education Minister is the competent authority for maintaining and updating the NQF (with decision of the government). NQF is published on the website of the Educational Ministry (<http://www.mon.bg/?h=downloadFile&fileId=1980>):

- (a) NQF Level 0 labelled as a preparatory level refers to pre-primary education. This level corresponds to ISCED-P 020.
- (b) NQF Level 1 refers to the primary stage of basic general education, i.e. from grades I to IV. This level corresponds to the EQF level 1 and ISCED-P 100.
- (c) NQF Level 2 applies to (lower secondary) education in general education and for the VET qualification level 1. This level corresponds to the EQF level 2 and ISCED-P 244 and 351.
- (d) NQF Level 3 refers to the Second level of proficiency. This level corresponds to the EQF level 3 and ISCED-P 351 and 354.
- (e) NQF Level 4 applies to secondary education in general education and third level of proficiency. This level corresponds to the EQF level 4 and ISCED-P 354.
- (f) NQF Level 5 refers to the fourth level of proficiency. This level corresponds to level 5 of the EQF and ISCED-P 453.
- (g) NQF level 6 is divided into two levels:
 - a. sublevel 6A applies to professional bachelor (180 credit ECTS). This subsection corresponds to level 6 of the EQF and ISCED-P 655;
 - b. sublevel 6B applies to bachelor (240 credit ECTS). This subsection corresponds to level 6 of the EQF and ISCED-P 645.
- (h) NQF level 7 includes:
 - a. Master after 'Professional Bachelor in ...' in the same professional field (120 credit ECTS). This subsection corresponds to the EQF level 7 and ISCED-P 767;
 - b. Master after Bachelor degree (60 credit ECTS). This subsection corresponds to the EQF level 7 and ISCED-P 767;
 - c. Master after Bachelor in different field (120 credit ECTS). This subsection corresponds to the EQF level 7 and ISCED-P 767;
 - d. Master degree, which provides specific training only in that field (300 credit ECTS). This subsection corresponds to the EQF level 7 and ISCED-P 766.

- (i) NQF level 8 refers to doctor's degree (without ECTS credits). This level corresponds to level 8 of the EQF and ISCED-P 864.