

## ***New Models in Work-based Learning***

### **REPORT**

#### ***SWOT Analysis of the WBL system in Bulgaria***

**Work package:** 2. Collecting evidence from industry

**Deliverable:** 2.2

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## **Abstract**

The current Report summarizes the results of activities implemented by the project partners from Bulgaria under project WP2 for collecting information and statistical data about the current situation of WBL in initial VET in the country.

The objective of the report is to provide analysis of strengths and weaknesses of WBL based on review of existing legislative framework of VET and published plans for its improvement, projects for piloting new models, national reports on VET developments, published on the web site of Cedefop, and the opinion of main stakeholders as provided during the discussions at a national conference, organized in the frames of the WP.

The report is structured in 5 parts.

First part. Economic situation provides statistical data and brief analysis in two directions:

- Development of economic sectors and activities as grouped by the National Statistical Institute according to the Volume indices of GDP to previous year during the past 5 years, their contribution of in Gross Value Added (in 2014) and their structure with respect to enterprises' size (micro, small and medium) in 2014.
- Unemployment rate for the last 3 years with focus on the group of persons below the age of 25.

The content of Part 2. Current situation in WBL is structured in 3 items considering the national specifics:

- 2.1. WBL as a part of the curriculum in the school VET system – contains critical review of legislative framework and its development, summarized information about projects for piloting dual training supported by Switzerland and Austria, information about financial sources is also presented.
- 2.2. WBL for adults (employed and unemployed persons above the age of 16) – here is underlined that it is a specific characteristics of the Bulgarian VET system that the legal regulations and requirements concerning training for acquiring qualification in professions are identical for the school system and vocational training of adults; information about legally regulated incentives for employers to provide places for practical training and dual training of school students and adults, and funding is provided, as well as critical remarks about lack of specialized control and focus on quality assurance measures of practical training in enterprises.
- 2.3 Stakeholders cooperation in VET – includes summarized presentation of recently developed Model for partnership VET school – enterprise, results of survey among employers and directors of VET schools about dual training, carried out by Bulgarian Industrial Association (one of the nationally representative employers' organizations) which outline some problems and necessity of additional specification of issues related to funding and implementation of active information campaign among employers and VET schools.

In Part 3 summary of stakeholders' opinions shared during the discussions at the national conference is provided.

Part 4. Contains conclusions with respect to the current situation of WBL in the country which outline the main strengths – relatively good legislative framework and actions for its improvement, as well as some problems that need further intensive efforts related to quality assurance and control of the training in enterprises, preparation of mentors, career guidance system functioning.

In part 5 SWOT analysis table is presented developed on the basis of all information collected and analysed.

Referencing list of documents and publications reviewed and analysed is also provided.

## ***Introduction***

Analysis of strengths and weaknesses of WBL in initial VET at national level is of crucial importance for further work on the project in several directions. Supporting identification of problems that need solution at system level will allow more focused collection and exchange of information and experience during info days, staff exchange and discussions at partners' meetings considering national specific situation. The results of this analysis will be utilized in the work on new models of WBL planned to be developed in the frames of the project.

Development of initial and continuous VET stands high on the political agenda in Bulgaria. Actions for its improvement have been implemented during last years in response to the demand of employers' organizations to improve practical preparation of VET graduates. That is why dual training was recently regulated (2014, implementation will start in August 2016) as a form for vocational training and two projects for piloting this form were initiated with the support of Switzerland and Austria. So, it is early for analysis of results and conclusions.

The report is focused on the practical training in enterprise, called officially production practice, which is included in the curricula for initial vocational training of students in VET schools and adults (employed and unemployed persons above the age of 16) in vocational training centres.

The Bulgarian team prepared the SWOT analysis report mainly based on analysis of existing legislative framework in the field of VET concerning practical training in enterprise and opinions of representatives of main stakeholders shared at the national conference and at other events and occasions members of the team were involved, as well as on personal professional expertise in VET sphere. It should be pointed out that there is not a research institute in the field of VET and there are not available in-depth analyses of practice in implementation of the legislative framework. Systematized information and data about real practical training of VET students and adults in enterprises is also lacking. That is why such type of information was not included in the report.

## **Methodology**

The procedure for collecting information for SWOT analysis was in compliance with the Guidelines provided by the WP2 leader. The team fulfilled the following steps:

- Search and collection of official information about economic sectors in National Statistical Institute web site and publications for the past 5 years;
- Search and collection of information about national unemployment rate in Eurostat with focus on youth unemployment;
- Search of information about unemployment rate of age group 15 – 24 by educational level – only in number not in %, so it was decided not to include such information in the report;
- Review of national reports and articles on VET in the web site Cedefop;
- Review and analysis of existing legislative basis in the field of VET with focus on recent developments related to practical training of VET students and adults in enterprise (production practice);
- Search for reliable publications on issues related to implementation of practical training in enterprises – only publications on VET schools web sites, lack of systematized overall information at national level;
- Search for results of researches and surveys on quality of training in enterprises – only one survey found on awareness of employers and VET schools directors found (not statistically representative) identifying problems, defining proposals for future actions and due to this the team took decision to present it in the report;
- Search of publications on different issues related to practical training in enterprises – lack of worth mentioning publications that could provide basis for SWOT analysis;
- Search for national pilot projects – 2 projects with external support identified and information included in the report;
- Organization of national conference with participation of representatives of main stakeholders – 40 participants in total representing Regional Inspectorates of Education, Regional and Municipal administration, VET schools and vocational training centres for adults and employers. Summary and analysis of results form group discussions;
- Asking for official information from colleagues working in different institution related to VET;
- Regular discussions among team members for clarifying different issues.

The collected information was systematized, analysed and presented in the Report following the required structure.

## **1. Economic situation**

### **1.1. Main business / economic sectors in Bulgaria**

The situation of the main economic sectors in Bulgaria could be outlined on the basis of official statistical data published by National Statistical Institute about:

- the volume indices of Gross domestic product (GDP) by economic sectors and activities;
- the number of enterprises in the economic sectors and their structure (micro, small and medium companies).

The volume indices of GDP by economic sector and activity groupings are presented in Table 1.

**Table 1. Volume indices of GDP to previous year by economic sector and economic activity groupings (previous year = 100%)**

<b>Economic sector and economic activity grouping</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Agriculture, forestry and fishing	98,4	92,7	103,2	105,2	98,6
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	109,1	102,5	100,0	101,7	103,1
Construction	95,9	94,1	101,1	97,4	101,4
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	100,6	100,4	104,1	101,2	101,0
Information and communication	102,9	97,3	101,9	101,1	101,9
Financial and insurance activities	101,7	93,6	98,6	99,7	101,5
Real estate activities	99,0	102,2	98,0	100,7	103,5
Professional, scientific and technical activities, administrative and support service activities	105,6	97,1	102,7	102,4	100,3
Public administration and defence; compulsory social security; education; human health and social work activities	98,9	100,5	100,7	105,1	100,1
Arts, entertainment and recreation, repair of household goods and other services	95,7	95,1	101,2	102,7	100,2
<b>Total GDP</b>	<b>101,6</b>	<b>100,2</b>	<b>101,3</b>	<b>101,6</b>	<b>103,0</b>

Source: National Statistical Institute

It is obvious that during 2015 in all economic sectors and activities, except Agriculture, forestry and fishing, an increase of volume indices of GDP has been registered. In the previous two years, with respect to this indicator, Agriculture, forestry and fishing was the leader among all economic sectors and activities.

The highest increase in 2015 was identified in Real estate activities (3.5%), followed by Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities (3.1%), where at the same time there is improvement compared to the previous year. Third come Information and communication (1.9%).

Progress demonstrated Financial and insurance activities (in the period 2012 – 2015), Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities (last 3 years), Real estate activities (last 3 years).

Decrease in volume indices of GDP in the period 2013 - 2015 was identified in Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities, Professional, scientific and technical activities, administrative and support service activities.

Data about the contribution of economic sectors and activities (in %) to the Gross value added (GVA) in 2014 (the latest officially published data) is provided in Table 2.

**Table 2. Structure of Gross value added (GVA) by economic sector and economic activity groupings in 2014**

<b>Economic sector and economic activity grouping</b>	<b>% of GVA</b>
Agriculture, forestry and fishing	5.3%
Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities	23.5%
Construction	4.8%
Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities	21.3%
Information and communication	5.6%
Financial and insurance activities	7.7%
Real estate activities	10.6%
Professional, scientific and technical activities, administrative and support service activities	5.5 %
Public administration and defence; compulsory social security; education; human health and social work activities	13.2%
Arts, entertainment and recreation, repair of household goods and other services	2.5%

Source: *Statistical Reference Book 2015, National Statistical Institute, Sofia, 2015*

The share of GVA generated by Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities is the highest one, followed by Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities. Third place is occupied by Public administration and defence; compulsory social security; education; human health and social work activities with substantially lower share compared to the previous two groups. Next come Real estate activities, followed by Professional, scientific and technical activities, administrative and support service activities and Construction having almost equal contribution to GVA. The group of Arts, entertainment and recreation, repair of household goods and other services has the lowest share of 2.5%.

Data about the number of enterprises by economic sectors and according to their size in 2014 is presented in Table 3.

**Table 3. Number of enterprises by economic sectors and according to their size (number of employees) in 2014**

<b>Economic sectors and groups of economic activities</b>	<b>Total number</b>	<b>Number according to the number of employees</b>			
		<b>Micro (0 – 9)</b>	<b>Small (10–49)</b>	<b>Medium (50–249)</b>	<b>Big (250+)</b>
Mining industry	359	276	84	30	17
Processing industry	30 374	22 785	5 553	1 747	289
Production and distribution of electricity and heat and gas	1 743	1 614	87	24	18
Water supply; sewerage, waste management and recovery	745	501	141	61	42
Construction	18 908	16 054	2 305	498	51
Trade; repair of motor vehicles and motorcycles	137 975	130 300	6 840	761	74
Accommodation and food service activities (hotels and	26 312	23 682	2 328	279	23

restaurants)					
Transportation and storage	20 304	18 496	1 518	243	47
Information and communication	10 739	9 731	801	173	34
Real estate activities	20 162	19 665	497	-	-
Professional activities and scientific research	38 622	37 768	765	89	-
Administrative and support service activities	9 742	8 554	886	229	73
Repair of computers and personal and household goods	3 503	3 474	29	-	-

Source: National Statistical Institute

The number of enterprises active in Trade; repair of motor vehicles and motorcycles is largest among all economic sectors and activities in 2014, about which the National Statistical Institute publishes information. Second is the group of Professional activities and scientific research with 3,5 times lower number of enterprises, followed by Processing industry, Accommodation and food service activities (hotels and restaurants), Transportation and storage and Real estate activities. In Mining industry that had the highest contribution to GVA, during the same year the number of active enterprises was the lowest one - 359, of which 276 are micro companies.

Micro enterprises in all economic sectors and activities prevail substantially (representing over 90% of all economic subjects) over small, medium and big ones, the last being the smallest part of all enterprises.

The ranking of sectors according the number of micro enterprises is as follows:

- Trade; repair of motor vehicles and motorcycles;
- Professional activities and scientific research;
- Accommodation and food service activities (hotels and restaurants);
- Processing industry;
- Transportation and storage.

The top sectors in number of small enterprises (ranging from 6 840 to 1 518) are the following:

- Trade; repair of motor vehicles and motorcycles;
- Processing industry;
- Construction;
- Accommodation and food service activities (hotels and restaurants);
- Transportation and storage.

The group of economic activities Repair of computers and personal and household goods is with the lowest number of small enterprises.

Processing industry is a leader in the number of medium and big enterprises among all sectors.

The number of employees by economic sectors and activities

## 1.2. Unemployment

According to Eurostat data there is a tendency of decrease of the total unemployment rate in the country during the past three years. In 2013 it was 13.2, fell to 11.4 in 2014 and reached 9.2 in 2015.



The unemployment rate by age groups and sex for is presented in Table 4.

**Table 4. Unemployment rate by age groups and sex (%)**

	2013	2014	2015
<b>Less than 25 years</b>			
<b>Total</b>	28.4	23.8	21.6
<b>By gender</b>			
<b>Males</b>	30.2	23.8	21.2
<b>Females</b>	25.7	23.7	22.3
<b>25 – 74 years</b>			
<b>Total</b>	11.8	10.7	8.4
<b>By gender</b>			
<b>Males</b>	12.6	11.5	9.0
<b>Females</b>	11.0	9.7	7.7

*Source: Eurostat*

During the reviewed period a positive tendency of decrease in unemployment rate in both age groups was registered. It is necessary to point out that at the same time the unemployment among the persons less than 25 years the indicator's value was substantially higher compared to that of the older population.

In this situation it is interesting to see what is the educational structure of unemployed persons, especially of the group 15 -24 years. Unfortunately it was impossible to find reliable data for this group, only data about the educational level of all unemployed in the age range 15 – 64 years is published by the National Statistical Institute, presented in Table 5.

**Table 5. Unemployment rate of persons aged 15 – 64 years by educational level of (in %)**

Educational level	2013	2014	2015
Higher	6.4	5.1	4.0
Secondary general	12.3	10.6	8.3
Secondary and acquired vocational qualification	11.5	10.2	8.1
Basic	26.6	25.7	21.8
Primary and lower	47.5	42.7	43.1

*Source: National Statistical Institute*

According to data provided in the table above, the unemployment rate is inversely proportional to the educational level the people – the lowest values have been registered among persons with higher education and the highest in the group with primary and lower education. The unemployment rate of the group that had acquired a vocational qualification at secondary education level was slightly below that of persons with general secondary education.

## 2. Current situation in WBL

### 2.1. WBL as a part of the curriculum in the school VET system

Vocational education and training (VET) in the country is regulated by the Law for the Vocational Education and Training (LVET), adopted in 1999, last amendment in 2015. According to it:

- vocational education ensures acquisition of both – general secondary education and vocational qualification in a profession;

- vocational training, initial and continuous, ensures acquisition of qualification in a profession or part of profession and/ or its upgrading.

Vocational education is provided by vocational gymnasiums. Vocational training, initial and continuous, is provided by vocational schools and vocational training centres (VTC) for adults. Practically VTC are the main provider of continuous vocational training. They are licensed by the National Agency for Vocational Education and Training (NAVET).

Vocational qualification levels are 4:

- I – corresponding to EQF level 2;
- II – corresponding to EQF level 3;
- III - corresponding to EQF level 4;
- IV - corresponding to EQF level 5.

Vocational gymnasiums, vocational schools and VTC provide training for acquisition of vocational qualifications at EQF levels 2 - 4. Vocational qualifications at EQF level 5 are acquired in vocational colleges after completion of secondary education.

According to LVET the main documents that regulate the training for acquisition of vocational qualification are – List of Professions for VET and State Educational Requirements (SER) for acquisition of qualifications in professions. Both documents are developed and updated by the National Agency for Vocational Education and Training (NAVET) and approved by the Minister of Education and Science after consultation with branch ministries and nationally representative organizations of employers’ and employees. SER for acquisition of vocational qualifications in professions define:

- requirements for candidates;
- description of profession;
- units of learning outcomes;
- requirements for training facilities;
- requirements for trainers.

Curricula are developed in compliance with SER. The procedure for elaboration of SER ensures participation of employers in the author team, as well as involvement of representatives of employers’ and employees organizations in the Expert Committees which discuss their content. This way the needs of the respective branches with respect

According to LVET vocational training includes theoretical training and practical training. The practical training should be at least 40% of the total number of compulsory vocational preparation classes.

The curricula for the acquisition of the third level of vocational qualification (EQF level 4), which is acquired by more than 70% of the trainees in the VET system, includes a total of 122 work practice lessons, distributed equally within the last two grades of upper secondary education, i.e. 60 lessons in 11-th grade and 62 lessons in 12-th grade. The number of lessons is insufficient in order to acquire vocational competences in a real work environment.

According to LVET places where practical training can take place can be of the following types - training facilities, training and workshop facilities of schools and enterprises of legal and physical entities. Training practice takes place in school environment (training rooms in vocational schools, workshops, laboratories, etc.), as well as in real work environment, provided by companies on the basis of a contract signed between the vocational school and the respective employer. Production practice is in fact placement in a real work environment. In order to provide such placements the vocational school signs a contract with one or a number of employer organizations, according to which the employer should secure the necessary conditions for the production practice of the

students. Neither trainees, nor mentors, who are provided by the employers, receive remuneration for their work.

Production practice is carried out according to a curricula and time schedule, approved by the school director and corresponds to the particular conditions for its organization. The curricula and the time schedule are agreed with the enterprise where the production training will be carried out. The number of training hours for this type curriculum is specified in the syllabus for the particular profession. In the explanation notes to the syllabus it is defined that the production practice is carried out according to a curricula and time schedule approved by the school director depending on the conditions for its provision.

Years of experience show that the existing legislative framework does not encourage the participation of employers in the process of organizing practical training. However, the dialogue between the two parties has become more active in recent years, the vocational schools being the more active part. In order to provide production placements for students in the 11-th and 12-th grades, school managements are actively seeking partnerships with companies.

On the other hand the opinion of the business sector is that students acquire a very good theoretical practice in vocational schools, whereas their practical skills are inadequate. This requires additional training at the work place in order the employees to perform the activities they have been hired for. This fact hinders the quick entrance and full participation of the young people in the labour market and makes it difficult for employers to find opportunely suitable workforce. In current conditions vocational schools find it impossible to provide modern equipment, machinery, raw materials and supplies, which companies use. The position of the business is that the number of the training hours for practical training should be greater.

Bulgarian business is still not convinced that it should participate actively in the process of education and is critical in most cases with respect to the quality of vocational training in the VET system.

This situation was the reason for undertaking the following measures:

1. Ministry of Education and Science initiated and implemented Student Placement Project (2012 – 2015) under the Human Resources Development Operational Programme financed by the European Social Fund. The practices are open to school students at the age of 16 to 21, studying in all forms of training in vocational schools, from general education schools with classes for training in professions and from vocational colleges in case they are not involved in labour contract during the practice period. The contact between students and enterprises is carried out in a web-based platform ([praktiki.mon.bg](http://praktiki.mon.bg)). From the project start until the end of 2014, 403 schools have registered, 13 510 students applied for participation. The registered employers are 15 568, of them 4 687 have published 10 401 offers for totally 59 210 placements. Practices are offered to university students, as well. The training corresponds to the specialty studied in the university/ higher education school. The duration of practice for both groups is 240 astronomical hours. The project provides conditions for systemic and effective approach for cooperation between vocational schools and local business, for bigger autonomy of educational institutions, for new opportunities for the development and implementation of independent school policies. Conditions are also created for more flexibility of placement organization within the VET system on the basis of local and regional business and it improves the whole VET system and the field of students' placements in particular. The main objective is the enhancement of the quality of vocational education by improving the vocational training of students in accordance with the labour market needs. All students who wish to have additional 240 hours of quality vocational preparation in real work environment (not included in the curricula) can do so. That provides a

smooth transition towards the work place and enhances the possibility for successful realization on the labour market and builds stable partnerships between educational institutions and the business sector.

2. Legislative basis of VET was improved:

- A new form of vocational training was recently regulated with amendment of LVET in July 2014 and will enter into force in August 2016. The new regulation stipulates that vocational training could be carried out through dual training. It is defined as a form of partnership between vocational school, vocational gymnasium, vocational college or VTC and 1 or several employers which includes practical training in real working environment and training in the respective vocational training provider.
- Labour Code was amended in 2014 in order to ensure basis for concluding labour contract between the trainee and the respective employer participating in dual training.
- The amendments of the VETA, adopted in July 2014 increase the functions of the branch and sectorial employers' organizations. Article 56 stipulates that they participate in the development and updating of the syllabi and curricula for VET; participate in ensuring school and production practice of students and propose improvements of their organization; ensure conditions for establishing partnerships between employers and the institutions providing work based training (dual training); participate in the elaboration of the Regulations for quality assurance in VET; participate in the development of the national examination programmes; ensure conditions for provision of training in the enterprises; participate in teachers' training; participate in the evaluation of quality of VET.
- Amendment of LVET (2014) was adopted related to ensuring quality of VET. It stipulates that the VET providers are obliged to introduce internal quality assurance system. This amendment is in a process of implementation at school level. The internal systems should start functioning since August 2016. It is expected to include measures for theoretical and practical training. In order to support implementation of the new requirement for the VET providers a Regulation for VET quality assurance was adopted (2015). The Regulation gives special attention to the process of self-assessment of VET providers, providing detailed description of the self-assessment procedure. It defines also the basic qualitative and quantitative indicators of the monitoring over improvement of training results, for example: improvement of trainee's motivation; increase of the share of students who have successfully acquired qualification; decrease of the share of early school leavers; increase of the share of trainees involved in practical training in real working environment. No specific indicators were included with respect to quality of the practical training in the company. There is no available data about the share of students who passed their practical training in enterprises.
- A Regulation of terms and conditions for provision of dual vocational training was adopted in 2015 which defines the responsibilities of the employer, the training provider, the trainee, the teachers and the procedures for training provision. It is important that the Regulation ensures active and productive cooperation between the training provider and the respective employer in improvement of training contents and quality of training. The duration of training depends of the requirements defined for each level of qualification.
- Draft for amendment of LVET was prepared by Ministry of Education and Science in 2016 and was published for public consultation until 09.05.2019. It includes proposal for increasing the number of hours for practical training, namely: at least 70% of the total number of training hours for branch and specific training for professions at qualification level I, 50% for level II, 60% for level III and IV.

3. Project "DOMINO" was initiated. Project "DOMINO": Dual Education for the Contemporary Requirements and Needs of the Society (2015 - 2019) - a project of the Bulgarian-Swiss

Cooperation Programme with a budget of CHF 3 530 000. The other partner is the Federal Swiss Institute for Vocational Education and Training. The Bulgarian Ministry of Education and Science, Ministry of Labour and Social Policy and Ministry of Economy are also involved in the implementation of the project. The main goal of “DOMINO” is the creation and development of capacity for implementation of principles for learning by working (dual training) in the Bulgarian VET. The core activities for achieving this goal will be the development of new learning plans and programmes, training of teachers and tutors and training of experts for dual education. The planned results are the project to reach a range of 1 200 school students, 10 professions and 15 vocational schools.

4. The Trade Chamber of Austria provides support to Bulgaria in successful introduction of dual training in the country through Austrian Embassy in Bulgaria. The support is in implementation of Austrian pilot project “Dual Training in Bulgaria”. It started in last school year 2015/2016. Austria coordinates the whole process of selection of participating regions, companies, schools, takes the responsibility of organization and communication between participating parties and Bulgarian Ministry of Education and Science and other related institutions. For participation in the project 3 Bulgarian towns were selected: Sofia (training in the profession “Economist”, specialty “Trade”), Gabrovo (Training in profession “Mechatronics”) and Yambol (training in professions “Mechatronics” and “Machine Technician”). Among companies that will be involved are: dm, Billa, Kaufland and Lidl.

Training for acquiring vocational qualifications is completed by state exams on theory and practice of the profession in national examination programs in accordance with SERs for acquiring qualification in the relevant professions. The national examination programmes are approved by the Minister of Education and Science; for art schools by the Minister of Culture and for sports schools by the Minister of Physical Education and Sports. The examinations for the acquisition of vocational qualifications are conducted by committees appointed by the Head of the educational institution. Members of the committees include representatives of educational institutions, employers and employees; and for the art schools representatives of the art universities; for schools for sports representatives of the National Sports Academy and licensed sports organizations with equal quotas. It should be pointed out that the assessment in practice assesses the skills acquired during practical training no matter where it was conducted – in school workshop or enterprise. Also, there are no specific regulations about assessment of students’ achievements at the end of the practical training in the enterprise.

Financing of VET formal system is legislatively regulated. The cost per year per student in state and municipal schools is determined by the Ministry of Education and Science, in coordination with the Ministry of Finance, in accordance with the state standards. The so-called delegated budgets are introduced to schools and are determined as a function of the standard for cost per student and the number of students. The financial resources to support and develop school facilities are provided from the national budget, from the budgets of the municipalities, from other sources and since 2002 also from own income (collected from rental of public and municipal property; rental of school machines; agricultural land and forests; encashment of registered compensatory bonds and notes; conversion of production and services from practical training; qualification and creative activity, education and other services defined by an Ordinance of the Minister of Education and Science; donations, testaments, fees and other sources).

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

There are no special regulations concerning practical training in companies.

Requirements to the educational level of teachers in practical vocational training are defined in SER for acquisition of vocational qualifications. Depending on the qualification level of the profession the teacher provides training in the required level is in the range between IV level vocational qualifications to Bachelor in particular group of science.

There are still no specific regulated requirements for the educational level of mentors in enterprises. The only requirement is the mentor to have appropriate qualification and experience in the respective area.

The training of teachers in practical vocational training is carried out by specialized training institutions and departments of universities active in postgraduate studies.

## **2.2. WBL for adults (employed and unemployed persons above the age of 16)**

It is a specific characteristics of the Bulgarian VET system that the legal regulations and requirements concerning training for acquiring qualification in professions are identical for the school system and vocational training of adults. The form is a qualification course which includes theoretical training and practical training in enterprise. The practical training should be at least 40% of the total training hours. The content of the course is developed in compliance with all documents that regulate vocational training in schools, so there are unified requirements to training of students and adults for acquisition of vocational qualification. According to LEP right to provide vocational training for adults have the licensed VTC. Examination programmes are also identical with those for the students in the school system.

The requirement related to introduction of internal quality assurance system applies to the licensed VTC, too.

The organization of vocational training of adults for acquisition of vocational qualification, qualification improvement and requalification is regulated by the Law for Employment Promotion (LEP). The responsible body is the Employment Agency. According to LEP the organization of qualification courses, funded by the state budget through funds for active labour market policy is planned on annual basis in the National Employment Plan. Employers' and Employees' organizations propose projects and measures for labour force qualification improvement. Qualification measures are planned and funded also under Operational Programme Human Resources Development. The last measures include training for acquisition of qualification and ensuring employment of persons up to 29 years of age. Usually the requirement is the applicants for funds to be a consortium of employer and a training organization and the practical training to be carried out in the respective enterprise.

The sources of funding of vocational training of adults are:

- self-financing by the trainees;
- financing from the employer;
- funding within the state budget for active policy on the labour market measures implemented by the Employment Agency.
- funding under the EU programmes, mainly by ESF through Operational Programme Human Resources Development.

It should be pointed out that all qualification measures planned include requirement for provision of practical training in enterprise. Employment Agency controls the theoretical and practical training and final examination processes according to the LVET and especially developed for the purpose for internal rules. In the contacts with experts from the Agency they share that they do not have enough staff and funds to implement their control functions over all courses and with the necessary

frequency. Recently an amendment of LEP was introduced that allows using funds allocated for active labour market policy for implementation of control functions over qualification courses. According to LVET, NAVET also has responsibilities for follow up control of the licenced VTC. It implements its control function according to a procedure that is published on its web site ([www.navet.government.bg](http://www.navet.government.bg)). The review of criteria and indicators defined shows that they are related to keeping the legislative requirements. The issue of quality is monitored through review of evidences for availability of internal quality assurance system (availability of the required documents), review of actions implemented for updating the curricula according to the needs of the respective branch, review of evidences for contacts with branch organization, review of data about trainees' satisfaction with the training provided. There are not any specific indicators related to quality of practical training in enterprises. NAVET also has limited financial and staff resources to control all centres on the site on regular basis. It tried to resolve this problem by establishing and maintaining of Information system where all VTC publish information about completed and current courses but again no specific information is required with respect to practical training provision.

The LEP defines incentives for employers (they can receive funds) in the following directions:

- to implement actions for maintaining and improvement of their employees' qualification;
- to provide places for stages with duration 6 months for persons who have acquired qualification in a profession during the last 24 months and do not have work experience;
- to provide places for dual training, organized according to LVET for period no longer than 36 months. The training institution, partner of employer for provision of dual training also receives funds for the time of training;
- to provide places for on the job training to unemployed person with basic and lower education and without qualification;

In all above cases the employers are obliged to ensure a mentor (worker from the same enterprise, having minimum 5 years work experience in the respective profession or a qualification in the profession and 3 years work experience), for whom the employer receives funds.

### **2.3 Stakeholders cooperation in VET**

According to VET legislative basis and the practice during 15 years all policy and programme documents, as well as elaboration and updating of legislation have been developed on tripartite principle. All working groups and consultative bodies at national level are composed of representatives of the state (Ministry of education and Science, Ministry of Labour and Social Policy, Ministry of Economy and branch ministries, NAVET and other government agencies), nationally representative employers' and employees' organizations.

The Managing Board of NAVET also is formed on tripartite principle, as well as the Expert Committees in vocational areas. All updates of already mentioned List of Professions are discussed by the Expert Committees and the Managing Board of NAVET and before submission to the Minister of Education and Science for approval. The procedure for elaboration of SER for acquisition of vocational qualifications in professions requires participation of representatives of employers and workers in the respective branch in the author group formed for drafting the document. The drafts are discussed, too in the NAVET's Committees and Board.

As already pointed out, representatives of employers and workers in the respective branch are invited for members of the examination committees for the provision of state exams in theory and practice. There is no official data whether employers and workers really participate in these committees but the truth is that many VET schools directors share that this happens very rarely.

At regional level employers participate in the councils that take decision about enrolment plans for the VET schools in the respective region, as well as in development of regional plans for development of VET.

More problematic is the involvement of employers in providing places for practical training of students studying in VET schools.

In order to solve it the Ministry of Education and Science (MES) developed a Model of partnership between VET school and enterprise. The Model is based on LVET. The partnership VET school – enterprise is established with a contract between the school and the respective enterprise and Memorandums of Understanding between MES and the interested branch employers' organization and between MES and the respective municipality. It was planned the Model to be piloted in 2013/2014 school year. The enterprise makes prognosis about its needs of professionals at the beginning of the school year and the school plans its enrolment based on this. The number of students to be enrolled is agreed with the municipality. The curriculum for vocational training is developed jointly by the school and the enterprise in compliance with the learning outcomes defined in the SER for acquisition of qualification in the respective profession. In the last two grades (11 and 12) of the VET school:

- the practical training is realised in the respective enterprise;
- as teachers in practical training workers from the enterprise are contracted;
- engineers or other appropriate professionals from the enterprise are contracted to teach theory.

Financing of the model:

- students' training is funded according to financial programme that is part of the partnership contract.
- the funds provided by MES are in compliance with expenditures standard for professions in one professional area;
- the enterprise provides additional funds for training; modernisation of school workshops and laboratories, which would be used in the training of agreed professions, as well as for teachers' and workers' preparation who will teach in theory and practice.

Unfortunately there is not available official information about practical implementation of the Model.

The comments of employers about implementation of dual training which in fact is partnership VET school – enterprise, published in e-edition *Investor.bg* of 2013 of 26.06.2015 states that the business is not ready to implement dual training. In the publication data about survey carried out by one of the nationally representative employers' organization (Bulgarian Industrial Association) is provided. The survey involved 207 employers and directors of 120 VET schools in 11 regions. Only 19% of employers 32% of VET schools know about dual training but for them the issue of financing was not clear. 2/3 of pedagogues are sceptical about dual training sharing that the employers are not interested and this is a serious obstacle. Some specialists think that the VET students' motivation is low. 23% of employers think that the business is interested in implementation of dual training. The survey results outline deficits of workers in 200 professions and occupations. These are low qualified and qualified workers, technicians, assemblers, machine operators etc. The highest deficits were identified in construction, chemical industry, machine building, information technologies, energetics, transport, food and drinks production, furniture production, trade and tourism.

Bulgarian Industrial Association (BIA) concludes that introduction of dual training requires serious preparation in enterprises and ensuring conditions for training through work. The most important according to the opinion of 82% of employers is ensuring of qualified mentors. The employers (97%) and pedagogues (92%) share the common opinion that enterprises should participate in the



development of syllabi and curricula for dual training. Employers expect the state to stimulate the start by financing of the main remuneration of trainees in the enterprise (73 %); expenditures for insurance of trainees (41%), as well as to provide tax deductions for enterprises involved in dual training (41%).

Another conclusion BIA draws is that information campaign should be organized aimed at awareness rising about benefits of dual training. Preliminary information should be provided to parents and students for the situation and perspectives of enterprises, involved in the system, as well as lists of professions demanded in them to be published in internet.

It would be useful to be established regional and national portals containing information about the active companies and prognosis about their needs of staff with particular qualification in 5 years perspective. It is also important to provide career guidance from the first school grade. The need of establishing effective career guidance system is stressed aimed at improvement of VET students' motivation.

Employers and pedagogues think that implementation of dual training should be piloted with professions for which there are conditions in the respective region.

### 3. Issues and problems raised

The opinion of the 3 discussion groups at the national conference, conducted in April 2015, about the strengths and weaknesses of the current VET system is as follows:

#### 1. Policy makers

- *Strengths:* The existing legislative framework in the field of VET is relatively good. At present only few projects for dual training are implemented. They pointed out 3 projects – Bulgarian-Swiss project (Domino), Austrian project (both of them described under previous item) and a project of Municipality of Panaguriste and Asarel-Medet, JSC (specialized in copper mining).

The conclusion drawn was that dual system works when there is funding from other countries. There are attempts to involve Bulgarian companies and employers' organizations. Examples: Contracts for dual training were concluded between Albena JSC (specialized in tourism) and the Vocational school in tourism, Chamber of furniture production companies and 3 vocational schools in Varna.

- *Weaknesses:*

- ✓ Lack of motivated students/ parents;
- ✓ Lack of mid- and long term prognoses about needs of specialists with particular qualification provided by the business;
- ✓ Not enough information provided by the career guidance centres;
- ✓ Not enough control over the quality of training provided by the Vocational training centres for adults.

#### 2. VET schools and Vocational training centres:

- *Strengths:*

- ✓ Good legislative basis;
- ✓ Relatively good material basis for training;
- ✓ Availability of qualified teachers.

- *Weaknesses:*

- ✓ Lack of enough regulations and rules for practical implementation;

- ✓ Continuous decrease in the number of students (demographic crisis);
  - ✓ Lack of clarity about funding;
  - ✓ Existing career guidance system is not enough effective.
  - *Threats:*
  - ✓ Feeling of uncertainty during training;
  - ✓ Demographic crisis;
  - ✓ Outflow of teachers due to low level of payment.
  - *Opportunities:*
  - ✓ Introduction of modules for career guidance in the obligatory preparation from the first grade;
  - ✓ Targeted funding for companies and schools for dual training;
  - ✓ Participation of the business in the development of syllabi and curricula for vocational training.
3. **Employers**
- *Weaknesses:*
  - ✓ Lack of format for declaration of work force needs and of planning mechanism for training of specialists in IT sector;
  - ✓ The principle “Money follows the student” does not work in favour of VET schools, language schools and general secondary schools – additional regulation is necessary, which to answer questions like who receives trainees, what is the statute of trainees, what should be the training methodology; a monitoring mechanism should be introduced allowing to provide funding for results achieved; motivation mechanisms for employers and mentors is also necessary.
  - ✓ There is a lack of overall information about the development of the separate branches and their needs of specialists with particular qualification – in the country remain a small number of workers who are mainly not trained well and are uncompetitive, which reflects on the quality and prices of products produced.
  - ✓ The labour market is characterised by high demand and low supply with qualified labour force.

## 4. Summary / Conclusion

- WBL in Bulgaria is implemented in the VET system as a part of the vocational training in schools and vocational training centres for adults. It is included in the curricula and is organized as a production practice or training through work - dual training (the last form will enter into force in August 2016). Adequate improvements were introduced in the labour Coded for implementation of dual training (regulating the possibility of concluding labour contract with a condition for training between enterprises and students).
- The legislative basis defines identical requirements for provision of vocational training in VET schools and in the vocational training centres for adults.
- The requirement at least 40% of the compulsory vocational training to be practical does not make differentiation what part of it should be realized in the school/centre and what – in an enterprise. In response to the opinion of employers that the volume of practical training is not enough Ministry of Education and Science prepared an amendment of LVET that envisages increase of the share of practical training to 70% of the total number of training hours for branch and specific training for professions at qualification level I, 50% for level II, 60% for level III and IV.
- The relatively well developed legislative framework of VET does not contain specific regulations with respect to quality assurance and monitoring of practical training in enterprises to students

and adults. This refers also to dual training recently regulated as a new form of vocational training, too.

- The legislation defines incentives for employers to provide places for practice of students and adults. But the lack of reliable systematized data about implementation of these incentives makes it difficult to conclude whether these incentives are adequate.
- There is no available information about students and adults involved in practical training in enterprises, as well as assessments about quality achieved.
- The information provided about dual training and the channels of provision are not enough effective since small part of employers and pedagogues knows about dual training.
- Efforts for piloting dual training have been recently initiated with the support of Switzerland and Austrian but the information about activities implemented and results achieved is too general. At the same time it is too early to discuss results of the two projects since they have not finished yet. However one thing considering also the third local project of Municipality of Panaguriste could be pointed out related to the New WBL project – enterprises participating are big ones. It is important to point out that the majority of enterprises in the country are micro companies and the share of big is not enough to provide places and mentors for dual training.
- Involvement in VET is not enough effectively supported by existing career guidance system and career information included in the training content preceding the decision about choice of school.
- No reliable and systematized data about future development and qualification needs of different branches could be found which could be a serious problem in planning VET in compliance with business needs and implementation of new WBL models.
- Stakeholders’ cooperation with respect to elaboration of policy documents and legislation is regulated and is at relatively good level. Further efforts are needed for the improvement of cooperation between VET schools and enterprises. The necessary measures should be discussed with employers in order to find adequate solutions to the problems that exist.

## 5. SWOT table

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>• Relatively well developed legislative basis;</li> <li>• Regulation of the share of practical training in enterprise and concrete plans for increasing by amendment of LVET;</li> <li>• Regulation of dual training as a new form for vocational training;</li> <li>• Regulation of quality assurance of vocational training in VET schools and vocational training centres;</li> <li>• Projects initiated aimed at piloting Swiss and Austrian model of dual training;</li> <li>• Tripartite principle in management and development of VET policies and practices;</li> <li>• Model for partnership VET school – enterprise developed and in process of testing and some examples of cooperation;</li> <li>• Relatively good material basis for training;</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of motivated students/ parents;</li> <li>• Lack of mid- and long term prognoses about needs of specialists with particular qualification provided by the business;</li> <li>• Lack of clarity about funding; The principle “Money follows the student” does not work in favour of VET schools;</li> <li>• Not enough information provided by the career guidance centres;</li> <li>• Not enough control over the quality of training provided by the Vocational training centres for adults;</li> <li>• Not enough activity from the side of the business for ensuring opportunities for WBL</li> <li>• Lack of incentives, especially targeted at support of SMEs to provide WBL;</li> <li>• Outflow of teachers due to low level of</li> </ul>

<ul style="list-style-type: none"> <li>• Good qualification level of teachers in VET</li> </ul>	<ul style="list-style-type: none"> <li>• payment;</li> <li>• Lack of methodology for provision of WBL;</li> <li>• Lack of system activities for training of mentors and instructors;</li> <li>• Not enough actions for promotion of incentives and projects;</li> <li>• Lack of integrated approach to WBL considering all aspects of ensuring conditions for its implementation at the desired quality level</li> <li>•</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Continuation of the growth registered in 2015 in the economic sectors;</li> <li>• Continuation of high political support for development of VET and implementation of WBL at EU level;</li> <li>• Implementation of effective measures at national level for overcoming negative demographic tendency.</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Continuation of the negative demographic situation;</li> <li>• Continuation of the tendency at the labour market - high demand and low supply with qualified labour force;</li> <li>• Negative economic situation;</li> <li>• Limited financial resources - public and private</li> <li>• Political changes.</li> </ul>

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