QUALITY ASSURANCE IN VOCATIONAL EDUCATION AND TRAINING IN BOSNIA AND HERZEGOVINA

ETF Forum Member Institution: Agency for Pre-Primary, Primary and Secondary Education

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1. INTRODUCTION

1.1 National context

Bosnia and Herzegovina is an upper-middle-income country. Its population is about 3.8 million inhabitants and has been slowly declining in recent years due to demographic changes and emigration.

Governance arrangements in the country are complex with highly decentralised responsibilities for the economy, education and employment to three regions: the Federation of Bosnia and Herzegovina, in turn decentralised to 10 cantons, Republika Srpska and Brčko District.

Bosnia and Herzegovina is a potential candidate country for European Union (EU) membership, with a Stabilisation and Association Agreement signed on 16 July 2008. EU accession has been identified as a strategic priority across all levels of government in the country.

While the economy had been showing signs of improvement up to the Covid-19 outbreak, this has not translated into improvements in employment. At 18%, unemployment is the highest in the region, with 39% of young people out of work. Almost one-third (30%) of those out of work are long-term unemployed (more than 12 months). Women are particularly disadvantaged in the labour market, with 36% in employment compared to 59% for men.

The employment rate of those with general secondary education at 56% surpasses those with vocational education at 46%. The employment rate of women who have followed vocational education and training (VET) is extremely low at 31% compared to those who have followed general education (54%). In addition to being less employable, women are less likely to take up further education and more likely to be discouraged in the labour market.

About a quarter of young people are not in education, training or employment.

1.2 Statistics

<table>
<thead>
<tr>
<th>TABLE 1. POPULATION</th>
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</thead>
<tbody>
<tr>
<td><strong>Size of population</strong></td>
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<tr>
<td><strong>(15–24, %)</strong></td>
</tr>
<tr>
<td><strong>2010</strong></td>
</tr>
<tr>
<td><strong>2014</strong></td>
</tr>
<tr>
<td><strong>2018</strong></td>
</tr>
</tbody>
</table>

Note: ETF calculations based on Agency for Statistics of Bosnia and Herzegovina and labour force survey data for youth population.
TABLE 2. EMPLOYMENT

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment rate (15+, %)</th>
<th>Employment rate of young people (15–24, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>32.5</td>
<td>14.0</td>
</tr>
<tr>
<td>2014</td>
<td>31.7</td>
<td>10.9</td>
</tr>
<tr>
<td>2018</td>
<td>34.3</td>
<td>19.7</td>
</tr>
</tbody>
</table>

Source: Agency for Statistics of Bosnia and Herzegovina

TABLE 3. EDUCATIONAL ATTAINMENT OF ACTIVE POPULATION (% AGED 15+)

<table>
<thead>
<tr>
<th>Year</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>20.5</td>
<td>66.2</td>
<td>13.3</td>
</tr>
<tr>
<td>2014</td>
<td>18.0</td>
<td>65</td>
<td>17.1</td>
</tr>
<tr>
<td>2018</td>
<td>14.8</td>
<td>68.9</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Note: Low – International Standard Classification of Education (ISCED) 0–2; Medium – ISCED 3–4; High – ISCED 5–8

Source: Agency for Statistics of Bosnia and Herzegovina

TABLE 4. PARTICIPATION IN VOCATIONAL EDUCATION AND TRAINING (STUDENTS IN VOCATIONAL PROGRAMMES AS A PERCENTAGE OF TOTAL UPPER SECONDARY STUDENTS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Upper secondary (ISCED 3) VET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>74.5</td>
</tr>
<tr>
<td>2014</td>
<td>74.4</td>
</tr>
<tr>
<td>2017</td>
<td>76.2</td>
</tr>
</tbody>
</table>

Source: Agency for Statistics of Bosnia and Herzegovina administrative data

1.3 The VET system

Governance and management

The education system in Bosnia and Herzegovina follows the country’s constitutional setup. It is governed by 14 education systems. The main institutions that deal with education and VET are listed below.

At the state level:
- Ministry of Civil Affairs with its Department for Education; and
- Agency for Pre-Primary, Primary and Secondary Education (APOSIO) with its VET Department.

At the entity/district level:
- Federation of Bosnia and Herzegovina: Ministry for Education and Science; and 10 cantonal ministries of education;
- Republika Srpska: Ministry for Education and Culture;
- Brčko District: Department for Education.
In addition, there are educational institutes established at the cantonal level in the Federation of Bosnia and Herzegovina, one in Republika Srpska and the Department for Education within the government of Brčko District. The relevant ministries of education are responsible for monitoring and evaluation of the progress and quality of the VET programmes within their jurisdiction level.

Two agencies have been established at state level to address higher education: the Agency for Development and Quality Assurance in Higher Education and the Centre for Information and Recognition of Qualifications in Higher Education.

APOSO was established in 2007. The agency is responsible for setting up learning standards, evaluating learning achievements, developing common core curricula in pre-primary, primary and secondary education, and carrying out further competent work concerning learning standards and evaluation of education quality as defined by special laws and other regulations.

Additional advisory bodies have also been formed, including the Conference of Ministers of Education of Bosnia and Herzegovina, as the highest advisory body, the Rectors’ Conference of Bosnia and Herzegovina and the Council for General Education.

**Financing**

Overall, 5% of gross domestic product goes to education compared to 4.6% in the EU.

Since the education system is highly decentralised, vocational schools are predominantly financed by the cantonal Ministry of Education and the separate Ministry of Education in Republika Srpska. Financial planning for the national education system is based on historical allocations. It is input based and supply driven. The public education institutions in the 10 cantons of the Federation of Bosnia and Herzegovina and in Brčko District submit their financial plans (annual budgets) based on the costs from the previous year. The communal cost component is mostly fixed and depends on the size of the school buildings and their condition.

The key variable component is the number of teachers and therefore their salaries. Several criteria are taken into consideration to determine the number of teachers, such as the number of classes and the number of hours in classes based on curricula.

Over 90% of the school budget is spent on salaries and other work-related costs (such as compensation and travel). No learning outcome, employability after school, or any other qualitative indicators are used to measure the result of VET education and to consequently affect the financing mechanisms.

**Regulatory frameworks**

At the state level, VET is primarily regulated by the Framework Law on Primary and Secondary Education and the Framework Law on VET.

While the Framework Law on Primary and Secondary Education defines the general provisions governing secondary education and the general principles, levels and structure of the education system, the Framework Law on Secondary VET provides specific rules and regulations related to secondary education and VET. Republika Srpska, seven cantons in the Federation of Bosnia and Herzegovina and Brčko District adopted or adjusted their legislation in accordance with the Framework Law on VET.
In 2018, following a wider public discussion, a new Law on Secondary Education was adopted in Republika Srpska. The changes in this legislation pertaining to technical VET are significant, both politically and technically.

**Main provider institution types**

Under the current legislative framework for education in Bosnia and Herzegovina, VET is provided at the secondary education level, with high schools titled as ‘secondary technical schools’ or ‘vocational secondary schools’.

VET is predominately provided by public schools and is school-based.

There are 311 secondary schools in the country: general schools (grammar schools), art schools, religious schools, schools for children with special needs, technical schools and vocational schools. Of these, 235 are vocational and technical schools, out of which 148 are in the Federation of Bosnia and Herzegovina, three are in Brčko District and 84 vocational and technical secondary schools are in Republika Srpska.

There were 124 148 students enrolled in secondary schools the country at the beginning of the 2017/18 school year. Within this cohort, 67 895 students were enrolled in secondary technical schools and 22 819 were enrolled in secondary vocational schools. Therefore, a total of 90 714 (73.06%) of enrolled secondary school students were in secondary vocational education while 29 591 students chose the general grammar schools (gymnasium).

**Main provision/programme types**

Upper secondary VET is provided in vocational schools and comprises three- and four-year programmes. Four-year programmes enable direct progression to higher education.

Three-year programmes include approximately 18% secondary education and 25% vocational education. According to the established standard, practical classes should be held for one day per week during the first year of studies up to three days per week in the third year of studies. In general, practical classes take place in school workshops or through a combination of classes in school workshops and in companies. For dual education, the practical classes take place exclusively in companies. Final examination takes place at the end of the study programme.

Four-year programmes include approximately 55% secondary education and 75% vocational education. Although the time for practical classes is lower than for three-year programmes, where dual-based profiles exist, in-company training is mandatory.

**Main qualifications according to ISCED levels**

While most of the technical and vocational programmes last for three or four years, there is also a possibility, in accordance with the Framework Law on Secondary VET, that vocational programmes last less than three years if they are based on the needs of the local labour market. Technical and vocational schools in Bosnia and Herzegovina provide programmes divided into the following categories:

1. secondary VET – ISCED level 3, skilled worker: these are vocational education programmes lasting three years, where the minimum entrance requirement is the completion of ISCED level 2;
2. secondary VET (special needs) – ISCED level 3, skilled worker: these vocational education programmes last three years, where the minimum entrance requirement is the completion of ISCED level 2;

3. secondary technical education – ISCED level 3, skilled worker, specialised qualified workers: these vocational education programmes last four years, where the minimum entrance requirement is the completion of ISCED level 2;

4. secondary technical education (special needs) – ISCED level 3, specialised qualified workers: these are ISCED level 3 vocational education programmes, lasting four years;

5. secondary vocational education, adult education – ISCED level 3, skilled worker: adult education is for people who have at least completed primary education;

6. secondary vocational education, adult education – ISCED level 3, specialised qualified worker: adult education is for people who have at least completed primary education;

7. ISCED level 4 programmes are not considered to be tertiary education and are typically vocational programmes that prepare graduates for the labour market.

2. QUALITY ASSURANCE IN VOCATIONAL EDUCATION AND TRAINING

2.1 Overview

The development of a robust quality assurance system is impeded by the nature of the system; education remains under the remit of the entities that constitute Bosnia and Herzegovina. There are many education systems and therefore the quality assurance measures supporting these systems are at different stages of development and implementation.

2.2 General information on quality assurance at VET system level

The ministries of education of Republika Srpska, Brčko District and the 10 cantons in the Federation of Bosnia and Herzegovina are responsible for all education, including establishing pedagogic standards, approving curricula and appointment of school boards. Since 2003, the Ministry of Civil Affairs has been coordinating activities in the country.

The role of APOSO in VET quality improvement is realised in partnership with the ministries of education and a network of pedagogical institutes. The APOSO VET and Adult Education Department has specific tasks relating to education standards/quality and the common core of curricula.

The pedagogical institutes of the various entities constituting Bosnia and Herzegovina have wide responsibilities for quality assurance in relation to curriculum development; new VET methodologies; teacher training; and monitoring and evaluation of teachers/schools. However, pedagogical institutes still lack an adequate, systematic approach to quality assurance.

Advisory councils in vocational schools have an indispensable role regarding the curriculum, and they also support links between the schools and the labour market.

As yet, no formal structures ensure an active role for the social partners in VET at national level. However, tripartite VET Councils are operational in four cantons and in Brčko District.
2.3 Quality assurance related to key VET areas

Evidence – statistics, and research and development

Addressing the mismatch between VET and the labour market demand is a high priority in Bosnia and Herzegovina. Activities to gather labour market data include/have included:

- annual surveys conducted by the Federal Employment Institute;
- cantons’ analysis of the VET enrolment policy to identify how it harmonises with labour market conditions;
- trend analyses and reports by entity-level employment bureaus (employers believe such reports are not adequately considered in policy making);
- Centre for Policy and Governance research on links between education policies and the labour market (2010);
- business-level surveys, e.g. a 2009 online survey of 933 companies.

The VET information system developed by APOSO aims to provide an evidence-based approach to VET development. Data is collected on the main indicators on schools, pupils, curricula and syllabuses. Nevertheless, data comparability and usefulness remains an issue, as some ministries do not provide data on a regular basis.

Quality assurance and the qualifications cycle

In Bosnia and Herzegovina, there is a common core for the general education parts of the curriculum; APOSO is responsible for that part as well as proposing modular curricula for the professional part. The entity Ministry of Education in Republika Srpska and the cantonal Ministry of Education in the Federation of Bosnia and Herzegovina alone have the authority to enact and implement curricula.

However, based on the process of differentiated curricula development, APOSO has been developing occupational standards since 2010, while the process of qualification standards started in 2018 through the two-year, EU-supported project Development of Qualifications Framework for Lifelong Learning.

The project results included guidelines for development of occupation standards, qualification standards and learning outcomes, as well as curricula, programmes and modules. The project also included guidelines to develop methodologies for evaluating non-formal and informal learning. So far, 37 occupational standards and 21 qualification standards covering different types and levels have been developed using these guidelines. They are based on learning outcomes, while the model of ECVET (the European credit system for VET) has also been introduced through the project. Representatives of the economy, employers and education institutions were included in the preparation, drafting and verification stages of the development of these standards.

In 2011, the Bosnia and Herzegovina Council of Ministers adopted a Baseline Qualifications Framework to cover qualifications based on learning outcomes for all levels of education within eight reference levels, as per the European Qualifications Framework. In 2013–14, APOSO coordinated key stakeholders in development of standards for 10 VET qualifications. Since then, APOSO has been continuously developing occupational and qualification standards, but work dynamics are conditioned solely by project funding. In 2015, the Council of Ministers adopted the Baseline Qualifications Framework Action Plan 2014–2020.
The Baseline Qualifications Framework has not been fully implemented. A functional register is lacking and the Inter-sectoral Committee, the Baseline Qualifications Framework’s policy-making body, has not sat since 2015.

Bosnia and Herzegovina is planning to present the referencing of the Baseline Qualifications Framework to the European Qualifications Framework later this year (2020).

**Quality assurance and VET provision/provider institutions**

A Manual for Quality Assurance in VET (with accompanying documentation for self-evaluation, external evaluation and evaluation at the system level) was developed under the EU project Development of the Qualifications Framework for Lifelong Learning.

The entity/cantonal ministries of education are the authorities for the accreditation of VET institutions and the process of external and internal evaluations in their corresponding level of jurisdiction.

In Republika Srpska, legal preconditions have been created for the establishment of a school self-evaluation system. The following areas are covered by the self-assessment: school management; teaching and learning; student achievement; support for students; organisation and content of curricula; human and material resources within the school; and systems and processes of quality assurance.

Standards are assessed through quality indicators, which implies that for each of the standards, quality indicators are defined.

In accordance with the constitutional framework of Bosnia and Herzegovina, the implementation and supervision of the final exams (Matura) in secondary vocational schools is within the jurisdiction of the ministries of education of the entities/cantons/Brčko District. There is no external final exam at the national or at the entity/cantonal level, with the exception of the Tuzla Canton, where the process of establishing an external final exam in VET has commenced.

**Quality assurance and VET teacher/trainer qualifications standards and continuing professional development**

The education of teachers is legally defined.

The profiles and qualifications of teachers are defined based on the requirements of the curricula for each module/subject. VET teachers must complete the first cycle of higher education with 240 European Credit Transfer and Accumulation System (ECTS) points or the second cycle of higher education for persons who were enrolled in 3+2+3 programmes of higher education. All teachers have to take the professional exam after one year of practice in a school under the supervision of a mentor.

There is no regulated procedure for trainers in companies.

In 2014, APOSO, in collaboration with all competent ministries and pedagogical institutes, prepared and published the Model for Improvement of Continuing Professional Development System for Preschool Teachers, Teachers and Professional Associates in Bosnia and Herzegovina. Further to that, in 2018 APOSO developed Guidelines for Development of Standards for the Accreditation of Training Programmes for VET Teachers in Bosnia and Herzegovina. This document provides the standards and procedures for the accreditation of training programmes for VET teachers.
While professional development of teachers has been regulated by by-laws in respective ministries of education, there are no strict requirements regarding either professional development or performance evaluations to be met in order to remain in the teaching profession.

In its report on the continuing professional development (CPD) of teachers, the ETF found out that while CPD is recognised and included throughout VET teachers’ career structures, and each teacher has to submit a list of training attended as part of CPD on an annual basis, there is a concern that innovation and design of CPD is too dependent on international initiatives and the sustainability of these initiatives is far from being ensured.

The evaluation of teachers’ performance is regulated by different legislation in different parts of the country. Each government entity has specific by-laws that regulate the evaluation, which is conducted by school directors, advisors and/or inspectors from the local pedagogical institute.

According to legislation, in general, teachers have to be visited once every two years in order to be evaluated. The score they receive can range from not satisfactory, through satisfactory and good, to excellent. However, evaluations are not based on common quality standards and teachers are not provided with sufficient guidance, feedback or support.

3. **STRENGTHS, DEVELOPMENTS, NEEDS**

**New developments – in progress/in the pipeline**

A national approach aimed at improving quality assurance systems at national level and making best use of the European Quality Assurance in Vocational Education and Training (EQAVET) Framework, in alignment with the EQAVET cycle, was scheduled for development in 2018 to cover both initial VET (IVET) and continuing VET (CVET). The proposed approach covers Baseline Qualifications Framework implementation; credit systems/validation of non-formal and informal learning; and qualification design and certification. The proposed approach included collecting information on IVET/CVET graduates at the responsible level of government (Republika Srpska, 10 cantons in the Federation of Bosnia and Herzegovina and Brčko District) to be made available and shared at state level on the APOSO and Ministry of Civil Affairs websites.

This approach has never been implemented.

**Needs and challenges**

Challenges in relation to improving quality assurance in VET include the need to:

- establish a framework to enable dialogue on VET quality assurance between the social partners and VET authorities;
- revise the legal basis for VET and VET quality assurance to include appropriate measures to support vocational schools’ development;
upskill VET authorities and personnel at all levels on legal and practical implications of VET quality assurance;

■ monitor and evaluate the implementation of the Strategy and Operational Guidelines for In-service Training of Teachers.

4. GOOD PRACTICE EXAMPLE

The Pedagogical Institute of Tuzla Canton carries out external evaluation of vocational schools. While the main evaluation focus is the teaching process, additional indicators for evaluation of quality are used. The Pedagogical Council, comprising all pedagogic advisors, decides on criteria and sub-criteria. Each criterion is measured according to an evaluation guide prepared on an annual basis. A list of schools with a scale or scores for each criterion is the output of external evaluations carried out by the Pedagogical Institute. The guide and the list of schools are published on the institute’s website. The quality criteria used in the external evaluation are listed in the box below.
### QUALITY CRITERIA USED IN THE EXTERNAL EVALUATION

1. **Curricula and syllabuses**
   1.1 Annual school plan (statutory form)
   1.2 Preparation of school plan (strategic document)

2. **Resources**
   2.1 Human resources
   2.2 Technical resources (premises, equipment, etc.)
   2.3 Financial resources
   2.4 Local community resources

3. **Management and quality assurance**
   3.1 School management
   3.2 Work organisation in school
   3.3 Quality assurance

4. **Educational work**
   4.1 Planning of modules, subjects and methods
   4.2 Monitoring of achievements
   4.3 Teaching and learning
   4.4 Education and research environment

5. **Support for development and outcomes of pupils' achievements**
   5.1 Support development of pupils as individuals
   5.2 Support development of pupils for extra-curricular activities
   5.3 Results in the field of educational work

6. **Communication and cooperation**
   6.1 Cooperation with parents
   6.2 Cooperation with local community
   6.3 Cooperation with colleagues and teamwork

7. **Professional development**
   7.1 Development of school management (principal, assistant principal)
   7.2 Development of teachers
## LIST OF ACRONYMS

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<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>APOSO</td>
<td>Agency for Pre-Primary, Primary and Secondary Education</td>
</tr>
<tr>
<td>CPD</td>
<td>Continuing professional development</td>
</tr>
<tr>
<td>CVET</td>
<td>Continuing vocational education and training</td>
</tr>
<tr>
<td>EQAVET</td>
<td>European Quality Assurance in Vocational Education and Training</td>
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<td>ETF</td>
<td>European Training Foundation</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>ISCED</td>
<td>International Standard Classification of Education</td>
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<tr>
<td>IVET</td>
<td>Initial vocational education and training</td>
</tr>
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<td>VET</td>
<td>Vocational education and training</td>
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E-mail
info@etf.europa.eu