

IMPROVEMENT OF QUALITY AND RELEVANCE OF VOCATIONAL EDUCATION AND TRAINING IN BOSNIA AND HERZEGOVINA

- IN THE LIGHT OF RIGA CONCLUSIONS - FOR THE PERIOD 2021–2030

The compilation of the document was supported by



IMPROVEMENT OF QUALITY AND RELEVANCE OF VOCATIONAL EDUCATION AND TRAINING IN BOSNIA AND HERZEGOVINA - IN THE LIGHT OF RIGA CONCLUSIONS - FOR THE PERIOD 2021-2030



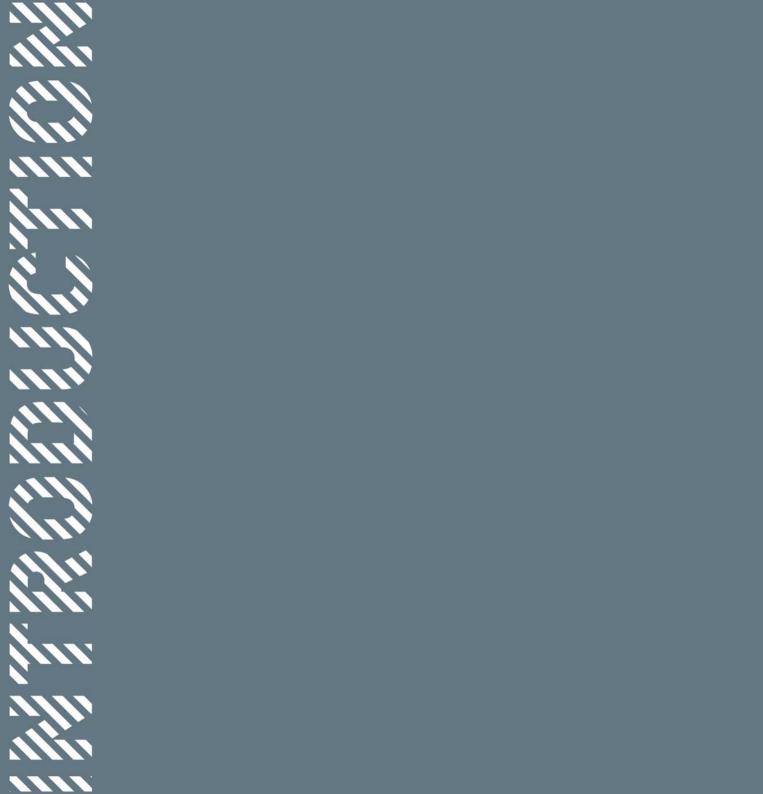
Agency for Education and Internationalisation

The compilation of the document was supported by KulturKontakt Austria/OeAD GmbH

The document "Improvement of Quality and Relevance of Vocational Education and Training in Bosnia and Herzegovina in the Light of Riga Conclusions (for the period 2021-2030)" was compiled by a working group with the support of regional and international experts and experts from the European Training Foundation (ETF). KulturKontakt Austria/OeAD GmbH provided professional, technical and financial support in the process of developing this document. The Ministry of Civil Affairs of Bosnia and Herzegovina extends its gratitude to KulturKontakt Austria/OeAD for the support they provided.

Content

Introduction	3
1. Objective 1 Work-based learning in all of its formats	12
2. Objective 2	
European Quality Assurance in Vocational E Framework (EQAVET)	-
3. Objective 3 Improvement of availability of VET and qual	
4. Objective 4	31
5. Objective 5 Professional training of teachers, trainers	
6. Literature	46
7. Annex	48



ince the adoption of the Copenhagen Declaration (2002), Bruges Communiqué (2010), Rethinking Education: Investing in Skills for Better Socioeconomic Outcomes (2012) and Riga Conclusions (2015), vocational education and training has continuously improved and developed. The Riga Conclusions also play an important role in defining the approach and strategic thinking about the future of VET after 2020.

The world is in the era of the fourth industrial revolution, in which it is necessary to inspire people to create, innovate and continuously improve their skills for the use of new technologies. In today's "smart world" of work, VET is becoming a "smart choice".

In the framework of the Copenhagen process, ministers in charge of VET development in EU Member States, EU candidate countries, countries of the European Economic Area (EEA), the European Commission and European social partners identified five medium-term results during a meeting in Riga in 2015, which constitute the basis of a VET modernisation plan by 2020.

The Riga Conclusions¹ from 2015 stress the role of VET in the context of smart growth and jobs within the Strategic Framework for European Cooperation in Education and Training (ET2020).

The need for setting priorities in the Riga Conclusions is the fact that Europe is still facing economic and social challenges, with a relatively high youth unemployment rate in many EU Member States, lack of basic skills in case of one fourth of adult labour force, a need for the improvement of labour force skills due to changes in the labour market demand and new technologies.

Vocational education and training has been recognised as an important factor in the overall economic growth strategy and creation of new jobs. The contribution of vocational education and training has been recognised in particular in the context of fight against youth unemployment, better harmonisation of education and labour market needs and facilitation of the market entry for youth.

¹ Declaration of Ministers of EU Member States and Candidate Countries Competent for Vocational Education and Training on Medium-Term VET Deliverables in the EU for the Period 2015-2020, Riga, Latvia, 2015, www.izm.gov.lv/images/RigaConclusions_2015.pdf..

THE RIGA CONCLUSIONS

5 OBJECTIVES FOR THE IMPROVEMENT OF VOCATIONAL EDUCATION AND TRAINING

1

Promote work-based learning in all of its formats², with a special focus on practice (apprenticeship), involvement of social partners, companies, chambers of commerce and VET providers, as well as support to innovations and entrepreneurship.

2

Further develop quality assurance mechanisms in VET in compliance with the recommendation made by EQAVET, and, as part of the quality assurance system. ensure continuous information and feedback in initial vocational education and training (I-VET) and continuing vocational education and training (C-VET) system based on learning outcomes.

3

Improve the availability of VET and qualifications for all through more flexible and permeable systems, by offering efficient and integrated orientation services and ensuring recognition of non-formal and informal learning.

4

Additionally support the development of key competences in VET programmes and offer more efficient possibilities for the acquisition and development of such skills through I-VET and C-VET.

5

Introduce systematic approaches and possibilities for initial and continuous professional training of teachers, trainers and mentors both at school and in workplace environment.

² According to Cedefop, work-based learning relates to the knowledge and skills that are acquired in the workplace or a vocational education institution. There are three types of work-based learning: 1) alternating practical training schemes that are usually called "dual system", 2) work-based learning that takes place at a vocational school, but includes training periods and work-based learning at companies, and 3) work-based learning that is integrated in the school programme, and includes the use of laboratories, workshops, kitchens, restaurants, virtual companies, simulations or real project tasks (2 and 3 are "school-based" practical trainings).

he Riga conclusions also recognise the role of cross-cutting areas (partnership, efficient financing and promotion of excellence and innovations in VET, consistent application of the learning outcome-based approach and jointly developed tools and principles) in the improvement of VET quality.

By investing in vocational education and training at all government levels, the authorities in Bosnia and Herzegovina will develop a high-quality and accessible initial education that both students, their parents and the society at large will recognise as attractive. Vocational education and training should ensure recognised and high-quality qualifications and key and specific technical competences recognised in the labour market that ensure progress and economic growth.

In order to achieve this goal, the Ministry of Civil Affairs of Bosnia and Herzegovina initiated the activities related to the development of the document "Improvement of Quality and Relevance of Vocational Education and Training in Bosnia and Herzegovina – in the Light of Riga Conclusions – for the Period 2021-2030" in cooperation with Kulturkontakt Austria/OeAD GmbH.

One of the objectives of this document is to develop a plan of priorities and activities based on the Riga Conclusions in Bosnia and Herzegovina for competitive and attractive vocational education and training in the period 2021-2030. Round table discussions about the following topics were organised in the framework of the development of the document: "Expanding the Scope and Quality of Work-Based Learning", "Quality Assurance in Vocational Education and Training", "Initial and Continuous Professional Development of Teachers and Mentors from Vocational Schools and in the

Workplace" and "Key Competences in Initial and Continuous VET".

The data about roundtable discussions and expert and participant lists are contained in annex. Roundtable recommendations, analyses of regulations and strategic documents in VET in Bosnia and Herzegovina, research conducted over the past period and an overview of the situation in this field were used to compile the document "Improvement of Quality and Relevance of Vocational Education and Training in Bosnia and Herzegovina – in the Light of Riga Conclusions – for the period 2021-2030".

An overview of the situation, challenges, priorities and relevant activities of the competent educational authorities and relevant partners in Bosnia and Herzegovina was prepared for every of the Riga conclusions. The purpose of setting priorities is for the competent educational authorities in Bosnia and Herzegovina to fully implement the Riga conclusions by 2030, which will contribute to the integration of VET in the European vocational education and training area and speed up the accession of Bosnia and Herzegovina to the EU.

Given the fact that the priorities were developed based on the Riga conclusions and discussions of all participants during round table events, this document includes separate short-term (2021-2023), medium-term (2024-2026) and long-term priorities (2026-2030), activities and institutions responsible for every objective. After every of these three periods, the competent educational authorities should conduct an evaluation of the implementation of priorities and actions.



OBJECTIVE 1WORK-BASED LEARNING IN ALL OF ITS FORMATS

1.1. Situation and challenges in VET and work-based learning

rovisions of the Framework Law on VET in Bosnia and Herzegovina³ stipulate that vocational education and training, among other things, should be harmonised with the needs, requirements and trends of the labour market and that the requirements for practical training at schools or companies should be defined by every competent authority. In particular, the law stipulates that a curriculum, which is adopted by the competent minister, specifies the duration and basic forms of curriculum implementation and the annual and weekly number of practical training hours.

Practical training in VET or work-based learning in Bosnia and Herzegovina is organised through: a) alternate learning at school and business company⁴; b) school workshops, laboratories, etc., and c) summer and winter holiday placements.⁵

a) The most prevalent form of practical training in the VET system in the entity Republika Srpska, in cantons in the entity Federation of Bosnia and Herzegovina and in Brčko District of Bosnia and Herzegovina is the one in case of which students spend between one and three days per week throughout the school year in practical training at companies. Schools and companies regulate their rights and obligations in a relevant document (contract). This format of work-based learning, in case of which theoretical lessons take place at school, and the whole practical training or part of the practical training that takes place at a company, constitutes a school-based practical training format, since the school is responsible for the overall learning content, including also monitoring of students' achievements during practical training, although it takes place at companies. The company provides its premises and equipment for the implementation of

practical training and employees/mentors at companies also provide learning support to students.

- b) At some VET schools in Bosnia and Herzegovina and in case of some programmes, practical training takes place at laboratories, workshops, kitchens, virtual companies, etc. Students develop their practical skills at school premises in learning situations that correspond to real life situations. They are thus prepared to work in real working environment.
- c) Summer and winter holiday work placements are a format of work-based learning in the framework of which students spend certain periods of time at companies (mostly between 10 and 15 days). Summer holiday placements prevail. The prevalence of summer and winter holiday placements as a work-based learning format varies at schools in Bosnia and Herzegovina, ranging from full absence of this form of work-based learning to partial presence in some cantons. In some cases, this format of practical training is obligatory, and in other cases it is only a voluntary choice of students and parents.

Work-based learning that implies alternate learning at the school and company and in case of which the *company assumes the obligation of providing practical training to students and assessing their achievements*, mostly referred to as "dual education", is present only in the form of pilot projects in a small number of schools in Republika Srpska and some cantons in the Federation of Bosnia and Herzegovina.

Having in mind the importance of work-based learning in real work environment for the development of skills and competences of

³ Framework Law on VET in Bosnia and Herzegovina, "Official Gazette of Bosnia and Herzegovina", No. 63/08.

⁴ The term used in the document is business company, which implies companies (small and medium enterprises), sole proprietorships and public companies and institutions.

⁵ Manual for the Implementation of Various Formats of Work-Based Learning, Project Prilika Plus, Swiss Development and Cooperation Agency, SDC, in cooperation with KulturKontakt Austria, 2017.

students, as well as the fact that work-based learning requires the involvement, cooperation and distribution of tasks to companies, their associations, chambers of commerce and educational institutions, it is necessary to create the conditions for various formats of work-based learning: alternating schemes of practical training at school and company, school-based format of work-based learning, practical trainings at virtual companies, workshops and summer and winter holiday work placements.

The applicable regulations on VET in Bosnia and Herzegovina make practical training and work-based learning at companies possible. The competent educational authorities are responsible for the organisation, implementation, monitoring and evaluation. However, in the opinion of employers, the applicable regulations do not allow sufficient room for their participation in the development of curricula and sufficient flexibility when it comes to organising work-based learning. The scope of practical training is not sufficient and curricula should be more flexible in order to meet labour market needs.

1.2 Fields of action (priority areas)

1.2.1. Promoting work-based learning and making it attractive for companies and students

One of the greatest challenges for the labour market is ensuring the necessary skills, i.e. making sure that the contents that students are learning at school meets the job requirements. A way to overcome this challenge is to use the workplace as the right learning environment. Work-based learning has been recognised as an approach to ensuring the relevant labour force and a high rate of students transitioning from the education sector to the labour market. It is a structured manner to increase the level of know-how, skills and competences of existing and future employees who are needed by business companies and who will contribute to the productivity, sustainability and long-term economic growth.

Work-based learning can be achieved only through close cooperation between schools and companies and their associations. A good partner relationship between schools and companies and their associations is crucial for work-based learning, irrespective of its format.

Practical training in the workplace helps students develop skills for duties relevant for their profession with the support of the mentor and other employees at the company. Students become confident and develop a routine in the performance of the work tasks and duties for their future profession in compliance with the established quality standards, develop practical skills and key competences (e.g. teamwork, innovation), which increases the chances for their employment following their graduation, either at the company, where they did their practical training, or another one. Students also become acquainted with state-of-art technologies that companies have at their disposal and are thus able to also develop their specific professional competences. During their practical training, students also develop specific occupational competences. In addition to this, students also develop entrepreneurial competences and cross-cutting skills that enable them to transition to the labour market faster and find employment more easily.

The manner of organisation and scope of work-based learning should be adapted to contexts that match the needs of specific companies, but also students, and the quality of training should be ensured.

Learning in the real work environment facilitates inclusion – students with special needs are able to find their place at a company that matches their abilities, with the relevant cooperation and support of the school and company.

Local communities should also be involved in the identification of needs of the labour market and business companies. Given the fact that local communities know the opportunities and challenges related to ensuring qualified labour, they are able to support companies and educational institutions in the implementation of the relevant agreed-upon policies that will ensure a faster response of the education sector to the needs of the economy.

1.2.2. Involvement of social partners in VET and VET policy making

As regards employers (the public and private sector and their associations), it is important to ensure an institutional impact on the process of planning and managing initial vocational education and training. An active involvement of business companies and their associations/chambers in policy making and defining of priorities in vocational education and training will enable employers, among other things, to understand work-based learning formats and other forms of cooperation between schools and companies.

In compliance with the established form of cooperation between the educational sector and companies and their associations, or sector-specific organisations, it is necessary to clearly regulate the roles and responsibilities of all partners. This form of cooperation requires providing well-structured support to companies in capacity building. As regards the development of practical training plans, it is necessary to ensure that the content, duration and expected learning outcomes of school-based and company-based learning constitute a coherent whole that makes it possible to implement such plans.

1.2.3. Pre-requisites and support to work-based learning implementation

Although the various work-based learning formats described above do have different pre-requisites and different roles/obligations/rights for schools and business companies⁶, advisory committees play a crucial role in ensuring a well-structured, permanent, transparent and efficient dialogue between partners in the education sector and labour and employment sector as well as coordination and decision-making on work-based learning. The establishment of tripartite advisory committees is provided by the Framework Law on Secondary Vocational Education and Training in Bosnia and Herzegovina.

Tripartite advisory committees can suggest modalities to decision makers regarding the involvement of partners in this learning format. The committees can help, among other things, in defining the occupational profiles and standards and determining the scope and manner of implementation of practical training, monitoring and evaluation of the implementation and determining criteria for the selection of companies that provide work-based learning opportunities (licencing of companies), which is particularly important in case of dual education training formats.

The basic principle of high-quality practical training of students at companies is ensuring that the time a student spends at a company is relevant for him/her, so that the student is able to acquire knowledge and skills he/she needs in his/her future profession in compliance with established standards. In order to achieve this, it is necessary to ensure mentor support measures before, during and after practical training at companies. Such support measures include support in mastering competences provided by the practical training plan and administrative and pedagogical support of the school.

Before the beginning of practical training of a student, it is necessary to establish whether a company is able to provide practical training to students and select an adequate work-based learning format, having in mind the content of the practical training plan and previously specified criteria of the competent educational authority. The process of specifying requirements for companies to provide practical training to students should be jointly implemented by schools and associations/chambers or by tripartite advisory committees, especially in case of the dual format or elements of dual education. The criteria and procedure for the licencing should be pre-defined through cooperation of all stakeholders, including also the competent educational authority. Students, their parents and companies should be informed about all aspects of work-based learning and their rights and obligations.

⁶ An overview of pre-requisites, obligations, rights and roles of schools and business companies in three key work-based learning formats that are implemented in Bosnia and Herzegovina is contained in the Manual for the Implementation of Various Work-Based Learning Formats. For more details, please see the Manual for the Implementation of Various Work-Based Learning Formats, Project Prilika plus, SDC in cooperation with KulturKontakt Austria, 2017.

In the process of selection of companies, it is necessary to verify whether a company possesses adequate equipment for the implementation of all practical training fields. If some parts of practical training cannot be implemented at a single company, it is important to implement that part of the curriculum at another company or at school.

Practical training at companies in case of the dual education or certain elements of dual education in VET should be implemented by a qualified practical training mentor. The requirements for a mentor are specified by the competent educational authority in its rulebooks on the implementation of practical training. However, a basic requirement for a mentor (especially in case of the dual education format, since the mentor trains the student and checks his/her achievements) should include: at least the same qualification as the student he/she is mentoring, an adequate profile and work experience in the profession (such as at least 3 or 5 years). A mentor should attend additional pedagogical and didactical training in order to be able to work with students, in compliance with the training plan accredited by the competent body or service.

Once conditions for the implementation of practical training that corresponds to dual education/certain elements of dual education are created, the association/chamber of commerce of the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District of Bosnia and Herzegovina should keep a register of all companies that offer work-based learning. Both in case of the alternating learning format at school and company and dual practical training, schools should keep a register of companies where their students do practical training for all curricula and years, in compliance with the contract.

Before the beginning of practical training at a company, students should be insured. In this respect, it is necessary to define who is obliged to provide insurance for students. Also, before the beginning of training at a business company, students should be informed and able to comply with regulations on occupational safety/health and

safety regarding youth.

During practical training or work-based training in the framework of dual education/elements of dual education, mentors at companies should receive administrative, pedagogical and technical support from the school, from practical training teacher and/or practical training coordinator. Mentors need a continuous cooperation with teachers and/or practical training coordinators, training for the implementation of a relevant subject/module curriculum and practical training plan or expected learning outcomes, the necessary forms for practical training planning, monitoring of student attendance, assessment of students' achievements, etc.

The practical training coordinator and/or practical training teacher should assist the mentor with the drafting of the operational plan for practical training for a certain class in compliance with the content of the practical training curriculum/module.

After practical training of a student at a *company*, it is necessary to organise a valid verification of work-based learning results and achievement of planned learning outcomes for every student. Mentors, practical training coordinators and/or practical training teachers should be trained regarding the assessment of student achievements, monitoring and evaluation of work-based learning and be able to manage the quality assurance process.

Certain assessment principles applied to classroom learning should also be applied to work-based learning. Learning outcomes that are assessed and assessment criteria as well as the conditions under which the assessment takes place should be as authentic as the real work process as possible. If there are external committees or examination committees involved in the assessment of student achievements, it is necessary to define the qualifications and professional experience of members of these committees who assess work-based learning outcomes.

1.2.4. Costs and benefits of work-based learning

The most frequent form of division of practical training costs at companies is the one in the framework of which competent authorities organise and finance the education and training at schools, whereas companies assume the financing, responsibility for the supervision and training of students during their stay at the company, regarding primarily that practical training format we call the dual format, in case of which students are entitled to an allowance. The inclusion of companies from the private and public sector in the division of costs implies a shared responsibility of all partners for the creation of qualified work force, which is a basis for economic growth.

Other schemes of practical training financing at companies are also possible, such as the establishment of funds using part of contributions paid by companies, irrespective of whether the companies offer students practical training or not. The funds would be used for structural support to companies that provide work-based learning, mentor trainings, student insurance, etc. The financing modalities for work-based learning should be defined jointly by employers and their associations and educational authorities. Tripartite advisory committees can also play an important role in this.

1.3. Priorities and activities (2021 – 2030)

Objective 1 of the Riga Conclusions

Priority	Activities	Institutions responsible	Indicators	Period
Promoting work- based learning (making it attractive for students,	Strengthen the cooperation between VET schools and companies	Competent educational authorities, ministries of entrepreneurship, chambers of commerce, associations of employers and chambers of craft trades	All work-based learning formats are being implemented	2021 – ongoing
companies, employers and social partners)	Strengthen the role of the local community through advisory committees at schools	Schools, business companies, local communities	Mutual visits of representatives of the local community and schools take place	2021 – ongoing
	Promote occupations needed in the labour market with a focus on apprenticeship	Competent educational authorities, ministries of entrepreneurship (economy), chambers of commerce, associations of employers, chambers of craft trades, companies	Number of students doing practical training at business companies as part of the dual education/elements of dual education in VET	2021 – ongoing
	Improve the flexibility of work-based learning for a more efficient response to the needs of students and companies	Competent educational authorities, educational institutions, business companies, chambers of commerce and chambers of craft trades, associations of employers	The number of enrolled students in VET	2021 – ongoing
Role of social partners in creating VET policies	Increase the impact on the process of planning and management in the initial vocational education and training through tripartite advisory committees	Competent educational authorities, business companies, chambers of commerce, associations of employers, chambers of trade crafts, tripartite advisory committees	An institutional framework for the involvement of business companies and/or their representatives in planning and management has been established	2021 – ongoing
	Implement contracts defining the rights and obligations of all participants in the process in compliance with the rulebooks of the competent educational authorities	Competent educational authorities, business companies	Roles and responsibilities of all stakeholders in the process of practical training at companies and schools have been defined	2021 – ongoing
	Modernise curricula in cooperation with social partners	Competent educational authorities, social partners	Curricula have been modernised and adapted to labour market needs	2021 – ongoing
	Ensure occupational safety measures for all students during practical training at companies	Competent educational authorities, business companies	Occupational safety measures have been introduced	2021 – ongoing
	Ensure the accreditation of companies that involves the employers	Competent ministries, chambers of commerce, associations of employers, chambers of trade crafts, educational institutions	The accreditation of companies is carried out together with employers	2025 – 2030

Priority	Activities	Institutions responsible	Indicators	Period
Development of high-quality practical training	Define criteria for the selection of companies based on the work-based learning format and occupational profile	Educational institutions, chamber of commerce and chambers of trade crafts	Criteria for the selection of companies based on the work- based learning format and occupational profile have been defined	2021 – ongoing
	Select companies that will provide the relevant practical training for a certain occupational profile	Educational institutions, business companies, chambers of commerce and chambers of trade crafts	The selected companies fully match the occupational profile	2021 – ongoing
	Organise training for mentors from all companies that provide practical training for students in the framework of dual education/elements of dual education in VET	Pedagogical institutes, business companies, chambers of commerce, competent educational authorities	Mentor training takes place	2021 – ongoing
	Organise training for coordinators and/or teachers of practical training and mentors from companies regarding the application of quality assurance mechanisms	Pedagogical institutes	Mentor trainings regarding the application of quality assurance mechanisms take place	2021 – 2025
	Ensure training for teachers for practical training and mentors regarding the assessment of student achievements (learning outcomes)	Pedagogical institutes	Trainings regarding the assessment of student achievements take place	2021 – 2025
	Implement work-based learning in compliance with the EQAVET Framework	Competent educational authorities, pedagogical institutes	The EQAVET Framework is fully implemented during practical trainings	2025 – 2030
Sustainable work- based learning financing mechanisms	Ensure permanent financing of practical trainings at companies	Competent educational authorities, business companies	Financing for practical training of students at companies has been ensured	2021 – 2030
	Define a mechanism for student allowances during practical training by adopting relevant regulations	Competent ministries, business companies	Contracts include a financial allowance for students	2021 – 2030



2.1. Situation and challenges in the field of quality assurance in Bosnia and Herzegovina

he establishment of a coherent VET quality assurance system in compliance with EQAVET recommendations is crucial for the relevance and reliability of VET for the labour market and individuals, and the development of skills and competences that will render possible employability and lifelong learning.

In the Economic Reform Programme for the period 2018 – 20207, the field of Education and Skills – it is stated that "the fundamental policy of Bosnia and Herzegovina is the work on further improvement of quality of all types and levels of education". The Framework Law on VET in Bosnia and Herzegovina provides that the competent educational authorities, pedagogical institutes and educational institutions are in charge of quality assurance in VET. The VET curriculum is adopted by the competent minister of education.

In Bosnia and Herzegovina, the competent educational authorities initiated the process of quality assurance in compliance with the European Quality Assurance in Vocational Education and Training (EQAVET) with the support of EU project "Lifelong Learning Qualification Framework Development". A "VET Quality Assurance Manual" was developed with the support of the project. The manual includes topics such as: VET quality assurance standards, self-evaluation manual for institutions, external evaluation manual for institutions, systemic evaluation manual, external evaluator training standards and Guidelines on the European Credit System for Vocational Education and Training (ECVET). The Action Plan for the Development and Implementation of the Qualification Framework in Bosnia and Herzegovina for the period 2014 – 2020 also defines

quality assurance: "Quality assurance is a system and a set of procedures applied in order to maintain the agreed standard of products and services, including their continuous improvement".

2.2. Fields of action (priority areas)

The quality of (VET) education can be viewed from two points: one is the functioning of the system as such and the other is the functioning of educational institutions (schools) or education providers. In case of the quality of the functioning of the system itself, there are various dimensions of education and training quality that reflect the strategic vision of VET and effectiveness and efficiency of the system as well as the focus on quantitative outcomes of educational work and the labour market. In case of the quality of the functioning of institutions, there are aspects regarding quality: is the quality assurance system adequate for the institution, does the institution implement the process of internal quality assurance in case of teaching and outcomes, employability of students after graduation, etc. These two levels of education quality are interrelated and complementary, because education quality indicators can be best seen based on the level of student achievements and are a result of educational work.

When we speak about a comprehensive and systemic quality assurance framework, basic factors should be kept in mind, which directly impact education quality at the entry in the education system, during the education process and at the end of education or evaluation of results.

2.2.1. Input information – quality assurance at the beginning of the educational process

All institutions that educate youth and adults and issue public education documents should be accredited in compliance with

⁷ Economic Reform Programme for the Period 2018 – 2020 (ERP BiH 2018-2020), http://www.dep.gov.ba/naslovna/?id=1881

⁸ EU IPA Programme for Bosnia and Herzegovina: Lifelong Learning Qualification Framework Development, EuropeAid/134310/DH (VET Quality Assurance Manual)

⁹ Ibid

clearly defined criteria regarding material, technical, personnel and other requirements. It is necessary to ensure procedures for the accreditation of institutions/schools, since these elements are not part of practice. The requirements for the establishment of public and private schools should be the same in order to ensure high-quality education for the students irrespective of the type of institution. The accreditation of institutions is a guarantee for the quality of educational process.

A systemic external evaluation of work of accredited VET institutions, which includes the relevant indicators and expert bodies conducting the external evaluation, is needed. The work of external bodies conducting the external evaluation should also be subject to audits by the competent educational authorities in compliance with defined procedures.

Teaching curricula implemented at accredited institutions should be in compliance with needs of the labour market and should be developed in compliance with the relevant occupational standards and based on learning outcomes and key competences. An evaluation of curricula is needed in order to establish whether their content and concept makes it possible to achieve the set goals and learning outcomes and plan their review in compliance with the findings of the evaluation.

Occupational standards based on which qualification standards, learning outcomes and curricula are prepared, should be developed together with the relevant partners (representatives of employers, chambers of commerce, sector-specific organisations, education sector, etc.).

In order to involve partners in the development of occupational standards and review of existing or development of new qualifications, systemic requirements need to be introduced in order to clearly define roles and responsibilities of individual partners. The process of identification of qualification needs and skill forecasts, training need forecasts and development of qualifications would thus become more transparent, qualifications would be more relevant, and the education

system would be more efficient in meeting labour market needs. The establishment of permanent or ad hoc sector-specific partner committees by educational authorities and/or in cooperation with associations/ chambers is a practice that has proven to be successful in different countries. The involvement of tripartite advisory committees in the identification of needs for qualifications can ensure added value for the process of qualifications development in the scope permitted by regulations.

Teaching should be done by teachers that have a relevant profile and education level and in compliance with the curriculum. Teachers should have permanent access to professional training.

2.2.2. Quality assurance in the process of education and training

A basis for efficient quality management in the education sector in general, and in VET specifically, is the so-called PDCA methodology, also known as Deming cycle. This methodology is used for management and continuous improvement of education quality. It is applied to all processes and is based on four steps/rules:

- 1. Plan: Identify and define objectives and processes needed to achieve the desired results
- 2. Do: Implement the plan, processes and activities
- 3. Check: Analyse results gathered and measured in the step "do" and compare them to expected results from the step "plan". For the next step, "act", it is necessary to analyse the differences between them.
- **4.** Act: Define corrective measures for overcoming the differences between the real and planned results and analysis of differences in order to establish an efficient and continuous process in the quality management system.

Also, when it comes to quality assurance and VET, self-evaluation and external valuation as well as an adequate analysis of their results play an extremely important role. Only an adequate analysis and use of the results obtained from all competent authorities, and

in particular from schools, will lead to improved quality.

In order to analyse the quality of teaching at an institution, it is necessary to analyse the conditions under which the institution operates, processes that take place and results or outcomes that the institution achieves. The above mentioned elements are a basis for defining key quality areas and quality standards. Quality standards, including defined indicators and descriptors, are a basis for an internal evaluation (self-evaluation) and external evaluation of an institution's work. Employees of the institution conduct self-evaluation in compliance with quality assurance standards and defined quality assurance indicators. Research has shown that the best results in quality improvement of institutions' performance and teaching process are achieved by combining external and internal evaluation, which is also a common practice in EU Member States. Such an approach results from the EQAVET framework.

The "VET Quality Assurance Manual" contains seven quality standards agreed upon by educational authorities and their partners that were involved in the development. These quality standards are as follows: management of an institution, learning and teaching, students' achievements, student support, organisation and content of curricula, human and material resources, quality assurance systems and processes. Indicators have been developed for every standard by gathering evidence for their achievement. The focus of the standards is on achieving quality regarding learning and teaching in VET, including learning environment and relevant links to the labour market. The standards for internal quality assurance include strategic planning and drawing up of school development plans for a 3-5 year period.

The "VET Quality Assurance Manual in Bosnia and Herzegovina" constitutes a good basis for assuring quality in VET and a manual for all competent educational and other authorities in order to incorporate the fundamental principles in rulebooks defining, among other things, quality assurance. This will make it possible to conduct internal and external evaluation processes in compliance

with EQAVET recommendations.

External evaluation is organised and implemented by pedagogical institutes or ministries, if there are no institutes. It should be conducted at least once every four years in compliance with the annual evaluation plan. If necessary, and depending on the assessment findings or at the proposal of a stakeholder, external evaluation can also be conducted more frequently. External evaluation can only be conducted by evaluators that, in addition to meeting the specified teacher requirements, have also completed a special external evaluator training programme.

During an external evaluation and for the purpose of the analysis of an institution's results, evaluators review data and reports from the data base on students' achievements by classification periods and during an external test, number of students or students with special educational needs and teachers or expert associates, number of student drop-outs and other data that can be relevant for a certain institution. In addition to this, information that can be obtained from the school development plan (with a special focus on the quality development aspect) and results of self-evaluation are important for an external evaluation.

Institutions should strengthen the capacities for the implementation of internal evaluations and capacities for internal school quality development. The establishment of school quality teams is the first step in this process.

Activities that contribute to the further quality assurance development include:

Ensuring an enabling environment for teaching and learning. Teachers should be trained to apply different teaching methods. Work-based learning, in all of its formats, should be the focus of education planning. Approaches to learning should differ (i.e. they should connect the practice and theory, stress key competences, boost independence and creativity of students, peer learning, promote work-based learning in all of its formats, etc.). A relevant infrastructure at schools in compliance with technological

¹⁰ Ibid

¹¹ Ihic

requirements, state-of-art teaching materials, ICT and available open educational resources are factors that impact the improvement of teaching and learning environment.

- Enabling all students to achieve learning outcomes, including students at risk of dropping out of school and students with special educational needs. It is particularly important to monitor the regular attendance of lessons in order to prevent students from dropping out. In order for an institution to meet a wide range of educational needs and other needs of students, it needs support from educational authorities and the environment in which it is located the local community and partners. Efficient partnerships and cooperation within the system and in local communities are crucial for achieving quality of work of an institution. Partners from the local community are other educational institutions, faculties, companies, associations of teachers, youth and other organisations, etc.
- In order to ensure the achievement of set learning outcomes, it is necessary to continuously *monitor the progress of students* in terms of their knowledge, skills and attitudes and identify factors that lead to an insufficient performance of students. An unbiased, evidence-based assessment of the work of teachers, continuous self-evaluation and cooperation with others, including external evaluation, give a teacher a clear picture of where he/she really stands and what he/she needs to improve in his/her work.

2.2.3. Information about education results – quality assurance at the end of education

Institutions possess a significant quantity of data. In addition to data about the achievement of students, institutions also have data on the socio-economic position of students, their absences, corrective measures, their success during previous education, etc., which will enable institutions/employees to identify potential challenges and prevention and intervention measures, if necessary. Particular attention should be devoted to student drop-out or hidden drop-out (in those cases when students have a large number of absences). An institution should continuously gather, monitor and analyse data on the achievement of students by subjects, departments and

classes throughout the academic year (classification periods, half-year, the end of academic year) as well as external tests, analyse them, plan and implement measures for the purpose of better student performance. The institution also supports students, among other things, by organising after-school classes for students that do not achieve sufficient progress at school and students that achieve extraordinary results and would like to learn more.

An institution should analyse the results of final exams and compare them with the results achieved during the period preceding it. If possible, representatives of companies should be involved in the assessment of students' achievements, especially in case of the assessment of practical skills of students.

It is necessary to define mechanisms for the purpose of gathering and analysing information and data about the transition and employability of students graduating from VET schools. Such information should be combined with information about student performance and used to create educational content and identify priorities in the development of qualifications, review of standards, contents and scope of curricula, strengthening career orientation and counselling services, assessing needs for teacher training, etc. The key role of vocational education and training is to enable students to acquire knowledge, skills and competences necessary for individuals, the economy and the society. In order to achieve this, education policy makers should specify indicators for objectives based on which an operational and functioning data and information management system will be built. Indicators make it possible to measure VET results and compare them to set goals. Data and information should be accurate, up to date, and their analysis should be the basis for setting new goals and improving (the efficiency and effectiveness) of vocational education. Quality assurance implies that the reliability of gathered data and information is verified.

2.3. Priorities and activities (2021 - 2030) Objective 2 of the Riga Conclusions

Priority	Activities	Institutions responsible	Indicators	Period
Institutional quality assurance	Accredit all institutions (schools) providing education services in the field of VET	Competent educational authorities	All institutions providing VET services have been accredited	2025 – 2030
	Develop efficient quality development systems in compliance with common quality indicators, descriptors and other indicators	Competent educational authorities	The quality assurance system has been established in compliance with EQAVET	2025 – 2030
	Capacity building for efficient quality assurance at schools – at the level of the school and competent authorities	Competent educational authorities, educational institutions	The capacities of educational institutions and competent educational authorities have been built	2021 – 2030
Quality assurance in the process of education	Implement external quality assurance verifications of institutions' performance	Competent educational authorities, pedagogical institutes	External performance quality evaluations are implemented	2025 – 2030
education	Define external evaluation in rulebooks	Competent educational authorities	Rulebooks have been developed	2025 – 2030
	Develop strategic plans of educational institutions (schools) for a 3-5 year period and annual quality development plans	Educational institutions	Strategic plans of institutions have been developed	2021 – 2023
	Carry out internal evaluations of institutions in compliance with defined standards and relevant indicators	Educational institutions	Internal evaluation takes place in cooperation with the quality assurance system	2021 – 2023
	Establish quality assurance and processes teams at schools	Educational institutions	Quality assurance teams at schools have been established	2021 – 2023
	Establish procedures for occupational and qualification standards development	Pedagogical institutes, competent educational authorities	Procedures have been defined	2021 – 2023
	Develop occupational standards in cooperation with representatives of employers, chambers, and sectorspecific committees and education sector	Pedagogical institutes, educational authorities, employers	Cooperation with partners for the development of occupational and qualification standards has been established	Continuously
	Develop curricula in compliance with occupational and qualification standards based on learning outcomes and key competences	Pedagogical institutes, competent educational authorities, employers	The curricula have been developed in compliance with occupational and qualification standards based on learning outcomes and key competences	Continuously

Priority	Activities	Institutions responsible	Indicators	Period
Quality assurance in the process of education	Monitor the work of institutions that implement curricula through the process of external evaluation	Competent educational authorities	External evaluations have been implemented	2025 – 2030
	Organise training for external evaluators	Competent educational authorities, pedagogical institutes	Trainings have been implemented	2021 – 2030
	Organise regular professional trainings for teachers, management of institutions and company mentors	Competent educational authorities, pedagogical institutes	Training of all VET stakeholders has been implemented	Continuously
	Render possible the achievement of learning outcomes	Competent educational authorities	Students achieve better results	Continuously
	Monitor students' presence	Competent educational authorities, educational institutions	The number of drop-out students has decreased	Continuously
	Monitor students' progress in terms of knowledge, skills and competences	Competent educational authorities, educational institutions	Knowledge, skills and competences have improved	Continuously
Assessment at the end of education	Analyse final exam results	Educational institutions, pedagogical institutes, competent educational authorities	Analysis findings are used to improve performance	Continuously
	Introduce intervention measures, if necessary (supplementary classes, corrective measures, etc.)	Educational institutions, pedagogical institutes	Intervention measures have been introduced	Continuously
	Involve representatives of companies in the assessment of student achievements	Educational institutions, pedagogical institutes, business companies	Representatives of companies are involved in the assessment of student achievements	2025 – 2030
	Establish committees for the assessment of student achievements	Educational institutions, pedagogical institutes, business companies	Committees for the assessment of student achievements have been established	2025 – 2030
	Define prerequisites to be met by committees for the assessment of student achievements	Educational institutions, pedagogical institutes, business companies	Requirements to be met by committees for the assessment of student achievements have been defined	2025 – 2030
	Define mechanisms for gathering data on the transition and employment of former students	Competent educational authorities in cooperation with relevant institutions	Data on transition and employment are gathered	2029 – 2030
	Analyse data on the transition and employment	Competent educational authorities in cooperation with relevant institutions	Analyses are used to adapt curricula to the needs of the labour market	2029 – 2030



OBJECTIVE 3
IMPROVEMENT
OF AVAILABILITY
OF VET AND
QUALIFICATIONS
FOR ALL

3.1. Situation and challenges in the field of improvement of availability of VET and qualifications for all

he reform of VET curricula in Bosnia and Herzegovina has been ongoing since 1998 with the support of various projects, the majority of which were financed by the EU. The curricula are increasingly modular, learning outcomes are being introduced. The document "List and Analysis of Existing Vocational Qualifications in Bosnia and Herzegovina¹¹² states: "There is a total of 1.155 vocational qualifications, out of which 836 are formal, acquired at VET schools, whereas 310 were acquired through lifelong learning programmes. Three-year and four-year VET qualifications are classified in 13 occupational families. 13 42.9% of acquired qualifications in the framework of three-year and four-year programmes are based on learning outcomes. Learning outcomes are an obligatory element and a requirement for all qualifications in order to be able to incorporate them in the qualification framework. Learning outcomes in the curricula of 419 mentioned qualifications exist only at the level of modules, but not as an exit profile of the whole qualification". 14

A significant breakthrough in the overall VET reform in Bosnia and Herzegovina was achieved in 2011, when the Council of Ministers of Bosnia and Herzegovina adopted the Qualification Framework Baseline in Bosnia and Herzegovina. The "Qualification Framework Baseline in Bosnia and Herzegovina" creates the pre-requisite for the development of the Qualification Framework in Bosnia and Herzegovina, which should connect the previous, current and future results of learning, set them into a mutual perspective in Bosnia

and Herzegovina, but also the European Qualification Framework and European Education Area. 16 An Action Plan for the Development and Implementation of the Qualification Framework in Bosnia and Herzegovina for the Period 2014 – 2020 was also adopted. 17

3.2. Fields of action (priority areas)

In order to build a flexible and learning outcome-based VET system adapted to the needs of the labour market and individuals, it is necessary to improve the mechanisms of labour market needs research. Labour market needs research could use methods such as structured interviews, questionnaires, focus groups, as well as analyses and recommendations of tripartite advisory committees and data on demographic trends, unemployment, including also tracer studies of graduate VET students. Analyses of trends and labour market need forecasts prepared by the relevant international organisations and bodies (ILO, European Commission, CEDEFOP, ETF, etc.) could be used for labour market research and forecasting.

Research findings constitute a basis for a review of existing and preparation of new qualifications, different levels and types of qualifications, in order for the educational offer to meet the needs of the labour market and various target groups.

The procedure is conducted by the competent educational authorities in cooperation with associations of employers, chambers, sector-specific associations, employment services, educational agencies and other interested partners. The procedures and guidelines are contained in the document VET Qualification Improvement Manual. It is necessary to organise training for members of working groups participating in the preparation of occupational standards,

¹² List and analysis of existing occupational qualifications in Bosnia and Herzegovina, ETF, 2017.

¹³ The classification of groups of professions relates to the classification of qualifications into 13 qualification areas. The document includes a total of 100 three-year and four-year occupational qualifications. It was developed in 2004 and has not been updated.

¹⁵ Decision on the Adoption of Qualification Framework Baseline in Bosnia and Herzegovina, "Official Gazette of Bosnia and Herzegovina", No. 31/11 and 39/12.

¹⁷ Action Plan for the Development and Implementation of the Qualification Framework in Bosnia and Herzegovina for the Period 2014-2020, "Official Gazette of Bosnia and Herzegovina", No. 28/15.

¹⁸ EU IPA Programme for Bosnia and Herzegovina "Lifelong Learning Qualification Framework Development", EuropeAid/134310/DH, VET Qualification Improvement Manual.

qualification standards and curricula.

When preparing VET curricula, it should be kept in mind that they should be prepared in such a manner that students with special needs are able to gradually acquire qualifications, and, as needed, adapt them to the individual needs of students in compliance with pre-defined procedures.

It is necessary to conduct awareness raising and promotion campaigns about the educational offer, requirements for the acquisition of qualifications, programmes that support the personal development of an individual and lifelong learning, institutions implementing curricula and training programmes, informal learning curricula, employment opportunities of individual professions and other issues in order for all interested persons to be able to become acquainted with the possibilities of the educational system. It is necessary to strengthen the services of efficient career orientation and counselling with a special focus on the transition from primary education to VET and from VET to the labour market.

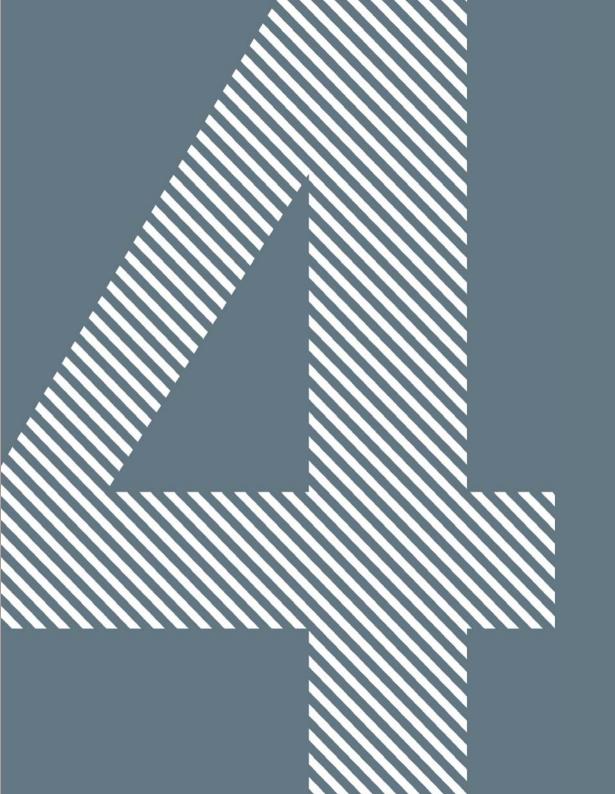
Development of learning outcome-based qualifications and grouping learning outcomes into units, as well as grouping units and qualifications, opens up the possibility of gradual acquisition of qualifications and recognising non-formal, informal and self-directed learning. For the purpose of recognising previous learning, depending on the context of the acquisition, it is necessary to define the competences of partners in the process, procedures for recognition, requirements for examiners and requirements for the institution implementing the process of recognition. The document (catalogue of exams) based on which the examination is conducted and which defines the learning outcomes for a certain qualification or its part and examination criteria, should be approved by the competent educational institution.

Everyone wishing to have their non-formal and informal knowledge recognised do not have to attend adult education programmes. If training is needed, they can also attend a programme developed based on an occupation and qualification standard. The duration of training should be adapted to the previous experience of participants, which should be tested at the beginning of the programme. If quality assurance principles were complied with in the process of

recognition of non-formal and informal learning, the document that an individual acquired should be taken into account in the continuation of education and acquisition of full qualification.

3.3. Priorities and activities (2021 - 2030) Objective 3 of the Riga Conclusions

Priority	Activities	Institutions responsible	Indicators	Period
Availability of VET	Regularly analyse labour market needs	Chambers of commerce, unions (associations) of employers, ministries of labour, employment services	Analyses of needs are available	Continuously
	Organise campaigns for students, parents and other target groups regarding the application of new technologies, digitalisation, and key competences in VET	Educational institutions, pedagogical institutes, competent educational authorities, local communities	Campaigns have been organised	Continuously
	Ensure career guidance and counselling services at primary and secondary schools	Educational institutions, employment services, pedagogical institutes	Career counselling is being implemented	2025 – 2030
Qualifications for all	Review existing qualifications and develop new qualifications in compliance with EQAVET	Competent educational authorities in cooperation with social partners	The number of new qualifications adapted to labour market needs	2030
	Ensure a balance between skills needed for a certain job and key competences	Pedagogical institutes, educational institutions	Relevant qualifications have been ensured	Continuously
	Develop modular and flexible curricula	Educational institutions, pedagogical institutes, competent educational authorities, social partners	Modular and flexible curricula have been developed	Continuously
	Adapt curricula to students with special needs	Educational institutions, pedagogical institutes, competent educational authorities, social partners	Curricula for students with special needs have been adapted	Continuously
	Implement recognition procedures for non-formal, informal and self-directed learning	Competent educational authorities	Procedures for the recognition of non-formal, informal and self- directed learning are being implemented	2030
	Define competences in the process of recognition to be met by examiners and institutions	Competent educational authorities	Competences in the process of recognition have been defined	2030



OBJECTIVE 4KEY COMPETENCES IN I-VET AND C-VET

4.1. Situation and challenges in the field of key competences in VET

ey competences were included in the EU Education Policy Framework in 2006 with the adoption of the European Reference Framework for Key Lifelong Learning Competences, which was adopted in the form of a recommendation by the EU Parliament and the Council. The EU Reference Framework identified eight key competences, 19 which are a combination of knowledge, skills and attitudes, needed for the education of all individuals for the purpose of professional and personal development, active involvement in the economy and society, social inclusion, employability and employment. Following the evaluation of a twelve-year implementation of key competence policies in the European Education Area, the EU adopted the Reviewed Key Lifelong Learning Competences Framework in 2018.20

Eight key competences identified in the European Reference Framework are the following ones:

- 1. Communication in the mother tongue (2006) literacy competence (2018),
- 2. Communication in foreign languages (2006) multilingualism competence (2018),
- Mathematical competence and basic competences in science and technology (2006) – mathematical competence and competence in natural sciences, technology and engineering – STEM (2018),
- 4. Digital competence,
- 5. Learning to learn (2006) personal and social competences and learning to learn competence (2018),
- 6. Social and civic competences,
- 7. Sense of initiative and entrepreneurship (2006) -

- entrepreneurship competence (2018)
- 8. Cultural awareness and expression (2006) cultural awareness and expression competence (2018).

Key competences and basic skills are needed for inclusive education and lifelong learning, personal fulfilment and development, employability, social inclusion and active citizenship.

The Agency for Pre-School, Primary and Secondary Education of Bosnia and Herzegovina (APOSO) has defined 10 key competences and life skills in cooperation with the competent educational authorities and in compliance with the EU Key Lifelong Learning Competences Framework (two were added to the EU Framework: bodily and health and creative and productive competence).

Bosnia and Herzegovina has achieved significant progress regarding the integration of key competences, in particular entrepreneurial and civic key competences. However, there is a need for further improvements as a result of the fast technological development and development of the society as a whole. The importance of key competences has been recognised in the Economic Reforms Programme²¹, which states that "an important element in further improvement of quality of all types and levels of education is further development and implementation of the Lifelong Learning Qualification Framework, which implies qualifications based on learning outcomes and key competences that are relevant for the labour market.

In this context, one of the priorities is the development and introduction of key competences for lifelong learning at all education levels focusing on entrepreneurial and digital competences". The basis for the improvement of key competences in VET in Bosnia and Herzegovina does exist. The Framework Law on Primary and Secondary Education in Bosnia and Herzegovina²², Article 3, includes, among other things, the support to lifelong learning. The

¹⁹ Recommendation of the European Parliament and of the Council of 18. December 2006, on key competences for lifelong learning [2006/962/EC]

²⁰ COM(2018)24 EUe – Recommendation Key Competences for Lifelong Learning, https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN.

²¹ Program ekonomskih reformi za 2018.-2020. godinu (ERP BiH 2018.-2020), http://www.dep.gov.ba/naslovna/?id=1881

²² Framework Law on Primary and Secondary Education in Bosnia and Herzegovina, "Official Gazette of Bosnia and Herzegovina", No. 63/08

Qualification Framework Baseline in Bosnia and Herzegovina and the Action Plan for the Development and Implementation of the Qualification Framework in Bosnia and Herzegovina for the Period 2014 – 2020 have been adopted. The Agency for Pre-School, Primary and Secondary Education has also developed a document entitled "Common Curricula Core for Cross-Curricular and Inter-Subject Areas Based on Learning Outcomes" in cooperation with the competent educational authorities²³. Common curriculum cores have been adopted for primary and secondary education in Bosnia and Herzegovina based on learning outcomes. Learning results are included in modules of curricula. Working groups established by the Department for VET of the Agency for Pre-School, Primary and Secondary Education are developing new occupational and qualification standards in cooperation with the competent educational authorities and pedagogical institutes.

4.2. Fields of action (priority areas)

For the purpose of proper understanding of key competences in compliance with Recommendations on Key Lifelong Learning Competences²⁴, it is important to take into account the following:

- ➤ All key competences are considered equally important, and every one of them contributes to a successful life in the society and labour market mobility.
- Key competences can be applied in different contexts and combinations.
- ► Key competences overlap and intertwine; aspects that are crucial for one area strengthen the competence in another area.
- Skills such as critical thinking, problem solving, team work, communication and negotiation skills, analytical skills, creativity and intercultural skills, are part of key competences.

Part of VET support, which should enable students to develop and

acquire key competences can be implemented as follows: by recognising the role and importance of key competences in regulations and strategic documents, by promoting the importance and development of key competences in VET, by recognising key competences in qualifications standards, by integrating key competences in education curricula, planning and implementation of lessons, by supporting teachers and by assessing and evaluating key competences.

4.2.1. Recognising the role and importance of key competences in regulations and key documents

It is necessary to include key competences in the relevant laws and regulations as well as education strategies at all relevant levels that such legislation relates to. This will speed up the integration of key competences in the educational process at institutions.

4.2.2. Promotion of the role and importance of key competences in VET

Activities promoting the importance of key competences for students should be supported by educational authorities and planned and implemented by institutions. The promotion can take place through various forms of activities – student competition, cooperation with employers, expert support to teachers, selection and promotion of teachers whose students achieve significant results, exchange of positive experiences and practices between teachers and institutions, online platforms for the exchange of best practices, various trade fairs, exchange and mobility of students, celebration of the European Day of Entrepreneurship, European Skills Week, etc.

 $^{^{23}}$ ''Official Gazette of Bosnia and Herzegovina'', No. 87/15

²⁴ COM(2018)24 EUe - Recommendation Key Competences for Lifelong Learning, https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN.

4.2.3. Key competences in qualification standards and integration of key competences in new curricula, planning of teachers' work and implementation of lessons

One or more key competences can be part of a relevant curriculum or module, as long as a student achieves every of them through the curriculum as a whole. The descriptions of key competences in subject or module curricula should be connected to learning outcomes and contextualised taking into account the specific content of tasks of a certain profession defined in occupational and qualification standards. The flexibility of the curriculum should make it possible to take into account changes in the environment and technological requirements for the purpose of connecting them to the didactic content.

When planning the lessons, selecting the working method, teachers also plan how to help students in developing key competences. Planning of lessons should be focused on the process and students' activities, in compliance with their development potentials. Students play a key role through activities they implement and tasks they solve, as a result of which they acquire permanent and applicable knowledge, develop skills and competences. A teacher should plan multi-way communication, teacher – student, student – teacher, student – student.

Teachers should be prepared for new roles in the context of the innovative, competence-based approach to teaching.

Digital competences in an era of growing digitalisation is the most dominant one. When it comes to teaching, the competence-based approach stresses processes: understanding and connecting content, constructing a system of theoretical knowledge, their use through development of skills and forming of attitudes. The approach to teaching and learning should be interdisciplinary and include linkage and correlation between different subjects and areas.

Promoting peer learning and encouraging students to actively participate in the construction of a system of knowledge, independence, being open for new things, curiosity and critical thinking constitute support for the development of competences.

In case of curricula that do not contain learning outcomes and explicitly stated key competences, teachers should be enabled to understand the concept of key competences, identify them in subject/module curricula and apply methods and formats of work that will help students to acquire them during their education.

Learning that takes place in different environments, including the working environment, participation in research, experiments and projects and use of digital technologies, stimulates the development of competences of students. Partnerships with companies and best practices are necessary for the development of the entrepreneurial competence, which is accompanied by the development of creativity, initiative, teamwork, etc. Extracurricular activities, including those in sports, culture and art, have a positive impact on strengthening the social inclusion and active participation of students in the civic and social life.

Work-based learning is of particular importance for the development of key and professional competences. When students participate in practical training at companies, in a real work environment, they are trained for independent work in their profession. In addition to this, practical training does not only develop manual or practical skills of students, but they also become able to work in a team, handle new and previously unknown situations, show initiative and solve problems. During practical training, students also acquire entrepreneurial competences and cross-cutting skills that enable them to get employment faster and be more employable.

Key competences should also be integrated in adult education programmes. The cooperation between institutions at all education levels, including also the organisers of adult education, makes possible a comprehensive approach to education and creates a good basis for lifelong learning of individuals.

4.2.4. Teacher support

It is necessary to introduce key competences as a subject in initial education curricula for teachers at higher education institutions. An adequate initial education and professional training of a teacher is crucial for the acquisition and progress regarding the development

of key competences of students. It is necessary that teachers understand, accept and are able to apply the concept of integration of key competences and not see key competences as a separate issue (as a separate subject), which may result in a situation in which they are not including them sufficiently in their work and do not value them.

It is therefore necessary to prepare training curricula and manuals for teachers, which contain examples on how they can integrate key competences in their teaching. Knowing concepts of key competences has an impact on the application of various approaches to learning and integration of key competences in the curriculum.

Adequate material and technical equipment of schools, availability of textbooks and other materials for teachers, their ability to apply digital technologies and information management constitute a form of support for teachers in the implementation of innovative approaches to teaching and learning.

After the development of a training curriculum, it is necessary to develop a training plan for teachers, train the trainers, ensure resources and implement teacher trainings, including also mentors at companies.

The support for teachers is provided by advisors of pedagogical institutes, experienced professors from pedagogical faculties and school management. Mutual and peer learning, exchange among teachers from different institutions, participation in research, networking among teachers and best practices also improve competences and the autonomy of teachers when planning lessons that will enable students to acquire key competences.

4.2.5. Assessment of key competences

The level of achievement of key competences can be measured in case of some competences. It depends on their peculiarity and manner of acquisition (through all subjects, modules, project approaches, extracurricular activities, work-based learning, etc.). The 2018 Reviewed European Reference Framework encourages "supplementing them by means of adequate tools for a diagnostic,

formative and summative assessment and evaluation at relevant levels".

The basic steps in competence assessment are the following ones:

- Analysis as to which key competences are included in national tests and other forms of summative assessment
- Analysis and recommendations on how key competences can be translated into more detailed learning outcomes, which can be assessed more accurately and meaningfully
- Analysis and recommendations on how it is possible to determine the level of development of multiple competences by expanding the scope of assessment
- Analysis and recommendations on how manners of assessment can be implemented and what is needed to support the implementation.

When assessing key competences, it is possible to use standardised tests in which questions or topics relate to aspects of key competences, are related to subjects or modules, or standardised tests referring to social and civic competences, e-assessment, etc.

The assessment of the level of achievement of key competences in case of students makes it necessary that teachers possess relevant competences.

4.3. Priorities and activities (2021 – 2030)

Objective 4 of the Riga Conclusions

Priority	Activities	Institutions responsible	Indicators	Period
Promotion of the role and importance of key competences in VET	Include key competences in the relevant laws and/or secondary legislation of the competent authorities	Competent educational authorities	The role of key competences has been recognised in laws and secondary legislation	2023 – 2027
	Organise exchanges of practices through an on-line platform for teachers	Competent educational authorities in cooperation with educational institutions	On-line platforms are functioning	Continuously
	Organise competitions for students and teachers	Competent educational authorities, pedagogical institutes, educational institutions	Trade fairs and competitions take place regularly	Continuously
	Participate in EU programmes for student exchange in relation to certain competences	Educational institutions, competent ministries	Students and teachers participate in EU exchange programmes	Continuously
Key competences in qualification standards and curricula in planning	Ensure that one or more key competences are included in a module or programme	Competent educational authorities, pedagogical institutes, educational institutions	Key competences have been included	Continuously
and implementing lessons	Connect the descriptions of key competences in curricula and modules and learning outcomes	Competent educational authorities, pedagogical institutes	Key competences are connected to learning outcomes	Continuously
	Organise training for teachers in order for them to understand and include key competences in curricula and modules	Competent educational authorities, pedagogical institutes, educational institutions	Trainings/a number of trainings have been organised	Continuously
	Develop teacher manuals	Competent educational authorities, pedagogical institutes, educational institutions	Manuals have been developed	2030
	Improve the process of teaching by means of new technological achievements/digitalisation	Competent educational authorities, pedagogical institutes, educational institutions	Equipment is available at schools	Continuously
	Include key competences in adult education curricula	Competent educational authorities, pedagogical institutes, relevant adult education institutions	Key competences have been included in adult education curricula	Continuously
	Introduce key competences in study curricula of initial education for teachers	Higher education institutions with the consent of the competent ministries	Key competences are part of study curricula of teachers	Continuously

Priority	Activities	Institutions responsible	Indicators	Period
Assessment of key competences	Include measuring of the level of key competences in the summative and formative assessment	Competent educational authorities, pedagogical institutes, educational institutions	The assessment of key competences is included in the assessment of knowledge	2025 – 2030
	Introduce standardised assessment tests related to aspects of key competences	Competent educational authorities, pedagogical institutes, educational institutions	Standardised assessment tests are being used	2025 – 2030
	Organise trainings for teachers in relation to the assessment of key competences	Competent educational authorities, pedagogical institutes, higher education institutions	Trainings have been organised	2023 – 2030



OBJECTIVE 5

PROFESSIONAL
TRAINING OF
TEACHERS,
TRAINERS AND
MENTORS IN VET

5.1. Initial education of teachers

5.1.1. Situation and challenges in the initial education of teachers

nitial education of teachers takes place at eight public and several private higher-education institutions in Bosnia and Herzegovina. The Framework Law on Higher Education²⁵ specifies the organisation, responsibility of competent authorities, bodies responsible for complying with law and international obligations of Bosnia and Herzegovina and quality assurance in higher education. Qualifications of teachers or adequate profiles and educational background needed for work at secondary schools are defined by secondary education legislation or relevant rulebooks in cantons in the Federation of Bosnia and Herzegovina, entity Republika Srpska and Brčko District of Bosnia and Herzegovina.

Over the past period, higher education institutions changed study programme curricula in the framework of Tempus and Erasmus projects. However, initial education programmes for teachers are still focused on academic knowledge from the relevant areas.²⁶

The improvement of initial education and professional training of teachers have been identified as strategic goals in strategic documents in the field of higher education. A Higher Education Qualifications Framework²⁷ has been developed in Bosnia and Herzegovina. Its main purpose is to support the improvement of quality and recognition of qualifications and promote reform processes in higher education or the Bologna process in Bosnia and Herzegovina.

5.1.2. Fields of action (priority areas)

It is necessary to continue modernising outcome and competence-based study programmes for teachers, which should be structured

in such a manner that they make it possible to adapt them on time to the needs of the education system, with a special focus on didactic and methodological competences, development of digital skills and use of ICT in teaching as well as foreign language competences, in order for graduates that start working in schools to be fully or better prepared for their work with students in real working conditions.

Subjects or modules, or approaches that render possible the acquisition of knowledge of inclusive practices, which would enable future teachers to acquire skills necessary for working with students that have physical, mental or sensory disabilities and thus create an inclusive learning environment, should be part of study programmes.

It is necessary to strengthen the partnership between higher education institutions that implement initial education of teachers, schools, pedagogical institutes and agencies, in order to adopt and implement relevant policies in the field of planning, implementation and evaluation of teacher education, implementation of high-quality teacher internships and monitoring of teaching practice based on research findings about the quality, education and work of teachers, and in order for schools to become places of practical work of students, future teachers.

5.2. Continuous professional development of teachers

5.2.1. Situation and challenges in continuous professional development of teachers

Professional training of teachers from VET schools in Bosnia and Herzegovina is regulated by laws applicable to secondary education and VET and a series of regulations. According to these laws,

²⁵ Framework Law on Higher Education in Bosnia and Herzegovina ("Official Gazette of Bosnia and Herzegovina", No. 59/07 and 59/09)

²⁶ Draft Report on the Situation in Initial Education and Professional Training of Teachers and Recommendations for Improvement, Bosnia and Herzegovina, IPA Project "General Education Qualification Framework Development Project"

²⁷ http://hea.gov.ba/Dokumenti/bolonja_bih/?id=441, EU Project "Strengthening Higher Education in Bosnia and Herzegovina"

teachers have the right, but also the obligation to attend professional trainings. These laws mostly define the general framework related to decision making procedures, the role of the competent educational authorities, higher education institutions, pedagogical institutes and schools in the development of obligatory professional training curricula, assessment of teachers' work and their career advancement. Procedures and implementation of professional training of teachers in practice are regulated by regulations adopted by the competent educational authorities. Regulations also regulate the responsibilities of teachers and the assessment of their work. Records about professional training of teachers are kept by schools, and almost all existing rulebooks also provide for a certain number of scores for their professional training, which are taken into account in teacher assessment. Regulations significantly differ in terms of their names, structure and content. In some cases, obligations of teachers in the field of continuous professional training are included in rulebooks on the assessment of teachers' work and promotion. Rulebooks do not clearly specify the obligations of teachers regarding the number of hours of obligatory training in a certain period of time and there is no diversification in terms of the number of scores received for certain trainings in the context of advancement of teachers. Almost all rulebooks state that the institutions in charge of professional training are higher education institutions and pedagogical institutes.²⁸

It is necessary to ensure procedures for the accreditation of training programmes for teachers and development of a professional training catalogue, since these elements are not part of practice. However, there are positive examples and practices in Bosnia and Herzegovina, just as secondary legislation regulating the professional training of teachers, which opens up possibilities for the improvement of procedures through their amendments.

The developed occupational standards for teachers of primary and secondary schools, which were prepared by representatives of the competent ministries, pedagogical institutes, higher education institutions and teachers from all cantons of the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District, constitutes a good basis for further development of the teaching profession.

5.2.2. Introducing teachers to their profession after the initial education

Fields of action (priority areas)

Internships are obligatory in Bosnia and Herzegovina for all teachers that have not passed the state exam. Practices in different parts of Bosnia and Herzegovina differ significantly in terms of the duration of internships, status of interns and their obligation during the mentioned period. Interns with a degree from a non-pedagogical faculty have to attend lectures and pass exams related to the pedagogical group of subjects during their internship. Interns receive permanent jobs or temporary jobs in compliance with a series of laws and regulations.³⁰

It is necessary to analyse the possibility for harmonising the duration of teacher internships in the entity Republika Srpska, in cantons in the Federation of Bosnia and Herzegovina and Brčko District of Bosnia and Herzegovina as well as tasks and obligations of teachers who are doing an internship in relation to their participation in teaching and other activities that give them the possibility to acquire relevant professional experience. Also, it is necessary to analyse the possibility of harmonising the acquisition of professional experience of volunteers and interns that have a regulated status. The occupational standard for teachers is the

²⁸ Report on the Situation in Initial Education and Professional Training of Teachers and Recommendations for Improvement, Bosnia and Herzegovina, IPA project "General Education Qualification Framework Development"

²⁹ Occupational Standard for Primary and Secondary School Teachers, General Education Qualification Framework Development, Component 3: Education and Professional Training of Teachers, EU-supported project

³⁰ Draft Report on the Situation in Initial Education and Professional Training of Teachers and Recommendations for Improvement, Bosnia and Herzegovina, IPA project "General Education Qualification Framework Development"

basis for harmonising the duration and complexity of internships, taking the state exam and defining indicators for the assessment of acquired competences of candidates.

An intern should receive a systematic support and mentorship. The teacher who is a mentor should have the relevant skills and knowledge in order to introduce the intern to the profession and prepare himself/herself in the best possible manner for the work in the classroom. It is therefore necessary to organise continuous trainings for teachers who will be future mentors, in compliance with the existing work programmes and a relevant manual should be developed. The role of the mentor should be adequately valued and mentors should have the possibility to advance, receive financial support and their rights should be defined by relevant regulations.

A teacher doing an internship should keep his/her portfolio, which will help him/her to monitor his/her own progress regarding the specified tasks and obligations, but it will also enable him/her to assess his/her quality of work during the internship in an unbiased manner.

5.2.3. Training programmes for teachers

Professional training curricula are adopted by pedagogical institutes or ministries and/or schools themselves as part of their annual work programme. Rulebooks and other relevant regulations prescribe models and formats of vocational education, which belong to two categories: individual and group (collective) formats. Other organisational models are mentioned only in one canton (schoolbased model, training centres, partnerships, etc.), division based on the manner of implementation (seminars, courses, workshops, symposia, etc.) and the level of obligation (obligatory, elective and free).³¹

The establishment of an efficient and continuous system of professional development of teachers requires the existence of

accredited professional training programmes for teachers, which include defined training models, length of professional training programme, methods, etc. In this respect, the Guidelines for Developing Accreditation Standards for VET Teacher Education Curricula³² can be a good basis. Continuous professional training of teachers is part of the strategy of lifelong learning of teachers.

Fields of action (priority areas)

The role of pedagogical institutes is important for the promotion of the professional development of teachers as a basis for the improvement of student achievements, ensuring student achievements and quality assurance of training and exchange of best practices in Bosnia and Herzegovina. Pedagogical institutes should promote and make the changed role of teachers at schools more visible and reiterate the focus on learning, school and teacher autonomy.

When it comes to professional training of teachers, it is important to enable teachers to choose training programmes, which is a starting point for the quality of training itself.

Research, monitoring the application of lessons from teaching practice and research on the effects of professional training of teachers through monitoring of students' achievements should be the basis for designing professional training programmes for teachers and a catalogue of professional training for teachers.

Accredited programmes should be part of the professional training catalogue for teachers and available online.

It is necessary to specify the pre-requisites and standards for the accreditation of organisers (providers) of training services for teachers. Trainers who hold professional trainings and seminars for teachers should be their peers – practitioners who can suggest solutions for problems and respond to practical questions. Learning methods at seminars/trainings should be chosen in such

³¹ Ibid

³² Guidelines for Developing Accreditation Standards for VET Teacher Education Curricula, Agency for Pre-School, Primary and Secondary Education, with the support of ETF, 2017.

a manner that they enable teachers to actively participate. The focus should be on the application of theory in practice, critical thinking and solution of practical problems through cooperation, discussion and innovative approaches and solutions.

VET teachers should be offered several alternative possibilities for professional training, including online platforms, mentorship, webinars, magazines and literature on professional development, drafting of their professional development plan and portfolio, participation and implementation of development projects, as well as new approaches to contemporary teaching. Schools should become places of teaching and learning. The role of pedagogical institutes is to support the professional development of teachers in cooperation with higher education institutions and other VET schools.

Rulebooks should define standards and procedures for monitoring, scores and evaluation of the quality of professional training programmes for teachers and their effects in practice.

Ensuring systemic financial support for the continuous professional development of teachers is necessary. The funds for the continuous professional development of teachers should be planned in the budgets of competent bodies and institutions based on identified needs for trainings.

5.2.4. Monitoring of teachers and their career advancement

Monitoring of the quality of work of teachers in Bosnia and Herzegovina is conducted at schools by headmasters and advisors from pedagogical institutes. Advisors are thus able to identify certain trends related to teachers' need for further professional training or monitor the situation in practice in order to take systemic measures.

Fields of action (priority areas)

It is necessary to define assessment criteria and measurable performance indicators for every element in rulebooks and other regulations for the purpose of monitoring, assessment and advancement of teachers. The adopted occupational standard for teachers creates conditions for defining a transparent framework for monitoring or evaluating the work of teachers.

At schools it is necessary to work on the development of a mechanism of internal quality verification and enable teachers to do self-evaluations of their work based on indicators of high-quality teaching practice.

One of the most important elements in the professional development of teachers is monitoring and support to teachers in applying the contents of training programmes. In this context, schools and their management should assume part of the responsibility for the introduction of changes in practice, since the support to the introduction of novelties will encourage and motivate teachers to improve their teaching practices.

Training programmes for school headmasters and creating practical conditions for their professional development is necessary in order for them to adequately fulfil their tasks as pedagogical managers responsible for the quality of teaching and learning at school, who, among other things, also supports the professional development of teachers.

5.2.5. Licencing of teachers

Licencing of teachers is an important element for professional development of teachers and change in teaching practice. During the potential process of licencing of teachers, it is necessary to ensure a balance between the licencing requirements (obtaining scores) and motivating teachers to change teaching practices and engage in personal professional development. The monitoring of the quality of teachers' work, monitoring and evaluation of their work following professional trainings and effects of trainings on the teaching practice and monitoring and evaluation of work constitute one of the pre-requisites for obtaining or renewing a licence. Systemic and sustainable financing mechanisms should be ensured prior to initiating the process of licencing and licence renewal.

5.2.6. Training of teachers at companies

Part of professional development of teachers and their advancement should also be the training of teachers from VET schools at companies. Teacher training in a real work environment is important due to the fact that it enables teachers to improve their professional competences and quality of work.

A company-based training curriculum for teachers should be accredited by the competent body (school, ministry) and recognised in the framework of professional advancement of teachers.

A company-based training for teachers from vocational schools should be part of the professional development of teachers and their advancement. A training in real work environment is an opportunity to improve the professional competences and quality of work.

Company-based trainings for teachers should be accredited by the competent body (school, ministry) and recognised for the purpose of the professional advancement of teachers.

An efficient company-based training requires a good coordination of all partners (school, company, teachers). The roles and responsibilities of teachers and companies must be clearly defined, so that training can offer an adequate scope of practical experience and possibilities for learning for teachers.

5.3. Training of mentors at business companies

The role of mentors at companies has been mostly regulated by existing legislation. Having in mind the necessity and importance of practical training of students in a real work environment and work-based learning, particular attention should be devoted to the training of mentors in charge of practical training of students at companies.

It is necessary to define the entry requirements for company mentors. Mentors should receive professional support. Training programmes for mentors should be accredited or approved by the competent institution. Mentors should have a licence in order to work with students. Mentors should be acquainted with the legislative framework for the implementation of practical training, be able to plan the implementation of training, monitor and assess students' performance.

Relevant funds should be allocated to mentor training. It is necessary to encourage companies and their associations to support mentor training and acknowledge their additional work on student training.

5.4. Priorities and activities (2021 - 2030) Objective 5 of the Riga Conclusions

Priority	Activities	Institutions responsible	Indicators	Period
Initial education of teachers	Develop study programmes based on learning outcomes and key competences	Higher-education institutions	New programmes with learning outcomes and key competences have been developed	Continuously
	Include new methodological and didactic approaches, digital skills, ICT and foreign languages in study programmes	Higher-education institutions	New study programmes with state-of-art methodological and didactical approaches, digital and ICT skills, foreign language skills are being implemented	Continuously
	Create modules in study programmes to enable the application of an inclusive practice	Higher-education institutions	Modules for inclusive practices have been developed	Continuously
	Strengthen partnerships between highereducation institutions, pedagogical institutes, educational agencies and schools	Competent educational authorities, higher-education institutions, pedagogical institutes, educational institutions, the Agency for Pre-Primary, Primary and Secondary Education	Partnerships have been improved	Continuously
	Do more research about teacher practice	Higher-education institutions, pedagogical institutes, educational institutions	Research is being implemented	Continuously
Continuous professional development of teachers and mentors	Conduct an analysis of training needs and ensure training funds	Competent educational authorities, pedagogical institutes, educational institutions	Analyses are being carried out and training funds have been ensured	Continuously
	Define procedures for the accreditation of teacher training programmes	Competent educational authorities, pedagogical institutes	Training programmes have been accredited	2025 – 2028
	Create and regularly update catalogues of professional trainings for teachers	Competent educational authorities, pedagogical institutes	Professional training catalogues have been developed	2025 – 2028
	Define obligatory training areas for teachers	Competent educational authorities, pedagogical institutes	Obligatory training programmes have been defined	Continuously
	Define the number of obligatory hours and number of scores that certain trainings entail	Competent educational authorities, pedagogical institutes	All trainings entail certain hours and scores	Continuously
	Monitor the professional development of teachers	Competent educational authorities, pedagogical institutes	Evaluations of teachers' work are being carried out	Continuously

Priority	Activities	Institutions responsible	Indicators	Period
Continuous professional development of teachers and mentors	Define teacher licencing procedures and criteria	Competent educational authorities, pedagogical institutes	Licencing has been introduced	2030
	Ensure funds and human resources for teacher licencing	Competent educational authorities, competent governments	Teacher licencing funds have been ensured	2030
	Implement teacher trainings at companies	Competent educational authorities, pedagogical institutes, chambers of commerce, educational institutions, business companies	Trainings are being implemented	Continuously
	Implement training for company mentors	Competent educational authorities, pedagogical institutes, chambers of commerce, educational institutions, business companies	Mentor trainings are being implemented	Continuously
	Organise train-the-trainer trainings in the process of professional training of teachers and mentors at companies	Competent educational authorities, pedagogical institutes, chambers of commerce, educational institutions, business companies	Train-the-trainer trainings have been organised	Continuously
	Accredit teacher programmes at companies	Competent educational authorities, pedagogical institutes, business companies	All programmes have been accredited	2025 – 2030
Introducing teachers to their profession following initial education	Define indicators for the assessment of competences acquired by teacher interns based on occupational standards	Competent educational authorities, pedagogical institutes, higher-education institutions	Indicators for teachers have been defined based on occupational standards	2023 – 2025
	Define criteria for teacher mentors	Competent educational authorities, pedagogical institutes	Criteria have been defined in rulebooks	Continuously
	Ensure a system for monitoring the work of teacher interns	Competent educational authorities, pedagogical institutes	A system for monitoring the work of interns has been established	Continuously
	Ensure training of teacher mentors at higher-education institutions or with experienced trainers	Competent educational authorities, pedagogical institutes, higher-education institutions	Trainings take place	Continuously
	Ensure teacher internships at companies	Competent educational authorities, pedagogical institutes, business companies, competent ministries	Trainings take place	Continuously



- Okvirni zakon o osnovnom i srednjem obrazovanju u Bosni i Hercegovini (Framework Law on Primary and Secondary Education in Bosnia and Herzegovina), "Official Gazette of Bosnia and Herzegovina", No. 18/03.
- ▶ Okvirni zakon o srednjem stručnom obrazovanju i obuci u Bosni i Hercegovini (Framework Law on Vocational Education and Training of Bosnia and Herzegovina), "Official Gazette of Bosnia and Herzegovina", No. 63/08.
- Odluka o usvajanju osnova kvalifikacijskog okvira u Bosni i Hercegovini (Decision on the Adoption of Qualification Framework Baseline of Bosnia and Herzegovina), "Official Gazette of Bosnia and Herzegovina", No. 31/11 and 39/12. http://sllist.ba/glasnik/2011/broj031.pdf.
- ▶ Popis i analiza postojećih strukovnih kvalifikacija u Bosni i Hercegovini (List and analysis of existing vocational qualifications in Bosnia and Herzegovina), ETF, 2017.
- Akcioni plan za izradu i provođenje kvalifikacijskog okvira u Bosni i Hercegovini za period 2014. 2020. (Action Plan for the Development and Implementation of the Qualification Framework in Bosnia and Herzegovina for the Period 2014-2020), "Official Gazette of Bosnia and Herzegovina", No. 28/15.
- ► IPA EU Programme for Bosnia and Herzegovina Lifelong Learning Qualifications Framework Development – VET Qualification Improvement Manual.
- Curriculum data base, www.vetis.vetbih.org.
- ▶ Modularni nastavni planovi i programi u srednjem stručnom obrazovanju u Bosni i Hercegovini u periodu 2010.-2016. (Modular Curricula in Vocational Education and Training in Bosnia and Herzegovina in the period 2010-2016), Agency for Pre-School, Primary and Secondary Education, 2017.
- ▶ Recommendation of the European Parliament and of the Council of 18 December 2006 on Key Competences for Lifelong Learning (2006/962/EC).
- ➤ COM(2018)24 EU Recommendation on Key Competences for Lifelong Learning, https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:32018H0604(01)&from=EN.
- ▶ Deklaracija ministara EU i država kandidata nadležnih za stručno obrazovanje i obuku o srednjoročnim ciljevima obrazovanja i obuke u EU za razdoblje 2015. 2020. godina (Declaration of Ministers of EU Member States and Candidate Countries Competent for Vocational Education and Training on Medium-Term VET Deliverables in the EU for the Period 2015-2020), Riga, Latvia, 2015,

- https://www.izm.gov.lv/images/RigaConclusions_2015.pdf.
- ► Europe Aid/123679/C/SER/baEU VET-3, Smjernice za razvijanje VET modularnih nastavnih planova i programa u BiH (Guidelines for Development of VET Modular Curricula in Bosnia and Herzegovina), 2009.
- Evropski referentni okvir za osiguranje kvaliteta stručnog obrazovanja i obuke (European Quality Assurance Reference Framework for VET) (EQAVET).
 - https://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=0J:C:2009:155:001:0010:EN:PDF.
- Zajedničke jezgre nastavnih planova i programa definiranu na ishodima učenja (Common Outcome-Based Curricula Cores), https://aposo.gov.ba/hr/publikacije/zajednicka-jezgra-npp/.
- ➤ Strateški pravci razvoja obrazovanja u Bosni i Hercegovini sa planom implementiranja, 2008.–2015. (Strategic Education Development Trends in Bosnia and Herzegovina and Implementation Plan for the Period 2008-2015), Council of Ministers of Bosnia and Herzegovina, 2008.
- ► Izvještaj o stanju u oblasti inicijalnog obrazovanja i stručnog usavršavanja nastavnika sa preporukama za unapređenje (Report on the Situation in Initial Education and Professional Training of Teachers and Recommendations for Improvements), Bosnia and Herzegovina, IPA Project, General Education Qualification Framework Development.
- ▶ Inicijalno obrazovanje predmetnih nastavnika u BiH (Initial Education of Specialist Subject Teachers in Bosnia and Herzegovina), Centar za politike i upravljanje, July 2015, http://www.cpu.org.ba/media/30657/Inicijalne-kompetencijenastavnika.pdf.
- Standard zanimanja za nastavnika osnovne i srednje škole; Projekat IPA Razvoj kvalifikacijskog okvira za opšte /opće obrazovanje, Komponenta 3: Obrazovanje i profesionalni razvoj nastavnika (Occupational Standard for Primary and Secondary School Teachers; IPA Project, General Education Qualification Framework Development, Component 3: Education and Professional Training of Teachers).
- ➤ Smjernice za izradu standarda za akreditaciju programa izobrazbe nastavnika u srednjem strukovnom obrazovanju (Guidelines for Developing Standards for the Accreditation of Teacher Training in VET), Agency for Pre-School, Primary and Secondary Education with the support of ETF, 2017.
- ▶ Draft Report on Continuing Professional Development (CPD) in Bosnia and Hercegovina, ETF, 2017.



ANNEX Members of the working

group tasked with the development of the document

Jahorina, December 18 - 19, 2017 (in alphabetical order)

Puhalić Aleksandra – Pedagogical Institute of Republika Srpska Bandelj Elido – KKA Expert

Bašić Ślavoljub – Education Department of the Government of Brčko District Dedić Zlatan – Association of Employers of the Federation of Bosnia and Herzegovina

Dražić Jovanka – PI Agricultural and Food Industry School Prijedor Duilović Daria – Ministry of Civil Affairs of Bosnia and Herzegovina Ibrišimović Zlatko – Pedagogical Institute of Tuzla Canton Kresić Boris – Pedagogical Institute of Herzegovina-Neretva Canton Kuprešanin Slavica – Ministry of Education and Culture of Republika Srpska Leko Mladen – Combined Secondary School Grude

Malešević Dane – Ministry of Education and Culture of Republika Srpska Marković Ljubinka – Association of Employers of Brčko District

Mott Monika – KulturKontakt Austria

Pašić Emir – Chamber of Commerce of the Federation of Bosnia and Herzegovina Puratić Vesna – Ministry of Civil Affairs of Bosnia and Herzegovina Saračević Muharem – Combined Secondary School Tešanj Schmid Kurt – IBW Austria

Schille Kurt – IDW Austria

Vinka Mihić – Istočno Sarajevo District Chamber of Commerce of Republika Srpska

Sarajevo, April 19 - 20, 2018 (in alphabetical order)

Krešić Boris – Pedagogical Institute of Herzegovina-Neretva Canton Bandelj Elido – KKA Expert

Bašić Slavoljub – Education Department of the Government of Brčko District **Dedić Zlatan** – Association of Employers of the Federation of Bosnia and Herzegovina

Drakovac Emira – Ministry of Education, Science, Culture and Sport of Bosnia Podrinje Canton

Dražić Jovanka – Pl Agriculture and Food Industry School Prijedor
Duilović Daria – Ministry of Civil Affairs of Bosnia and Herzegovina
Kuprešanin Slavica – Ministry of Education and Culture of Republika Srpska
Leko Mladen – Combined Secondary School Grude
Marković Ljubinka – Association of Employers of Brčko District
Mikulić Mario – Ministry of Education, Science, Culture and sport of West
Herzegovina Canton

Morris Ian - KKA Expert

Mott Monika - KulturKontakt Austria

Mounir Baati - ETF Expert

Education - VET

Pašić Emir – Chamber of Commerce of the Federation of Bosnia and Herzegovina

Pezo Edina – Ministry of Education and Science of the Federation of Bosnia and Herzegovina

Puratić Vesna – Ministry of Civil Affairs of Bosnia and Herzegovina

Radović Nataša – Istočno Sarajevo District Chamber of Commerce of Republika Srpska

Saračević Muharem – Combined Secondary School Tešanj Sarajlić Dušan – Agency for Pre-School, Primary and Secondary

Sirbubalo Lejla – KulturKontakt Austria

Slinić Nusreta – Ministry of Education, Science and Youth of Sarajevo Canton

Trebinje, November 29 - 30, 2018 (in alphabetical order)

Aćić Saša – Union of Employers' Associations of Republika Srpska

Bogićević Zora – KKA Expert

Bošković Ljiljana – Agency for Pre-School, Primary and Secondary Education

Bošnjak Viktorija – Ministry of Education, Science, Culture and Sport of West Herzegovina Canton

Duilović Daria – Ministry of Civil Affairs of Bosnia and Herzegovina

Hadžagić Esma – KKA Expert

Ibrišimović Zlatko – Pedagogical Institute of Tuzla Canton

Krešić Boris – Pedagogical Institute Mostar

Leko Mladen - Combined Secondary School Grude

Pašić Emir – Chamber of Commerce of the Federation of Bosnia and Herzegovina

Pezo Edina – Ministry of Education and Science of the Federation of Bosnia and Herzegovina

Puratić Vesna – Ministry of Civil Affairs of Bosnia and Herzegovina

Saračević Muharem – Combined Secondary School Tešanj

Sarajlić Dušan – Agency for Pre-School, Primary and Secondary Education

Savić Veselin – Trebinje District Chamber of Commerce of Republika Srpska

Sirbubalo Lejla – KulturKontakt Austria

Slinić Nusreta – Ministry of Education, Science and Youth of Sarajevo Canton

Škrivan Vasiljko – Pedagogical Institute of Republika Srpska **Vasić Mira** – Ministry of Labour, War Veterans and Disabled Persons' Protection of Republika Srpska

Mostar, May 23 - 24, 2019 (in alphabetical order)

Bašić Slavoljub – Education Department of the Government of Brčko District

Bogićević Zora – KKA Expert

Bošković Ljiljana – Agency for Pre-School, Primary and Secondary Education

Buha Senka – Ministry of Education and Culture of Republika Srpska

Ćurković Boris – KKA Expert

Damjanović Predrag – Pedagogical Institute of Republika Srpska **Dedić Zlatan** – Association of Employers of the Federation of Bosnia and Herzegovina

Dražić Jovanka – PI Agriculture and Food Industry School Prijedor

Duilović Daria – Ministry of Civil Affairs of Bosnia and Herzegovina

Džaferović Aida – Ministry of Civil Affairs of Bosnia and Herzegovina

Ibrahimagić Asim – Labour and Employment Agency of Bosnia and Herzegovina

Ibrišimović Zlatko – Pedagogical Institute of Tuzla Canton Leko Mladen – Combined Secondary School Grude

Marković Liubinka – Union of Employers' Association of Brčko

District

Mihajlović Bijelić Aleksandra – Chamber of Commerce of Republika Srpska

Mikulić Mario – Ministry of Education, Science, Culture and Sport of West Herzegovina Canton

Njuhović Azemina – Ministry of Education, Science and Youth of Sarajevo Canton

Pezo Edina – Ministry of Education and Science of the Federation of Bosnia and Herzegovina

Piegazki David – Chamber of Commerce of Republika Srpska Saračević Muharem – Combined Secondary School Tešanj Sirbubalo Lejla – KulturKontakt Austria (KKA)

Spasojević Boris – Catering, Trade and Tourism School Banja Luka

Trebinje, October 24 - 25, 2019 (in alphabetical order)

Bašić Slavoljub – Education Department of the Government of Brčko District

Ćibo Almina – Ministry of Civil Affairs of Bosnia and Herzegovina **Duhović Amir** – Ministry of Education, Youth, Science, Culture and Sport of Bosnian Podrinje Canton

Duilović Daria – Ministry of Civil Affairs of Bosnia and Herzegovina

Garača Zorica – Ministry of Education and Culture of Republika Srpska

Ibrišimović Zlatko – Pedagogical Institute of Tuzla Canton

Krešić Boris – Pedagogical Institute Mostar

Marković Ljubinka – Union of Employers' Associations of Brčko District

Mičić Nemanja – Labour and Employment Agency of Bosnia and Herzegovina

Mihajlović-Bijelić Aleksandra – Chamber of Commerce of Republika Srpska

Mladen Leko – Combined Secondary School Grude

Mott Monika – KulturKontakt Austria (KKA)

Pezo Edina – Ministry of Education and Science of the Federation of Bosnia and Herzegovina

Sirbubalo Lejla – KulturKontakt Austria (KKA)

Vasić Mira – Ministry of Labour, War Veterans and Disabled Persons' Protection of Republika Srpska

Zora Bogićević – KKA Expert

Trebinje, February 27 - 28, 2020 (in alphabetical order)

Bašić Slavoljub – Education Department of the Government of Brčko District

Bogdanović Zoran – Pedagogical Institute of Republika Srpska **Bošković Ljiljana** – Agency for Pre-School, Primary and Secondary Education

Duhović Amir – Ministry of Education, Youth, Science, Culture and Sport of Bosnian Podrinje Canton

Duilović Daria – Ministry of Civil Affairs of Bosnia and Herzegovina

Džaferović Aida – Ministry of Civil Affairs of Bosnia and Herzegovina

Galijašević Bernadeta – Ministry of Education, Science, Culture and Sport of Zenica Doboj Canton

Gološ Enisa – Pedagogical Institute of Herzegovina Neretva Canton

Husić Ahmed – Pedagogical Institute of Herzegovina Neretva Canton

Ibrišimović Zlatko – Pedagogical Institute of Tuzla Canton Kopić Adel – Ministry of Education, Science and Youth of Sarajevo Canton

Krešić Boris – Pedagogical Institute Mostar

Leko Mladen – Combined Secondary School Grude

Marković Ljubinka – Union of Employers' Associations of Brčko District

Mičić Nemanja – Labour and Employment Agency of Bosnia and Herzegovina

Mikulić Mario - Ministry of Education, Science, Culture and Sport of West Herzegovina Canton

Pezo Edina – Ministry of Education and Science of the Federation of Bosnia and Herzegovina

Puratić Vesna – OeAD GmbH Expert

Sirbubalo Lejla – OeAD GmbH

Zorica Garača – Ministry of Education and Culture of Republika Srpska

Zvjezdana Jelić – Labour and Employment Agency of Bosnia and Herzegovina