

DEVELOPMENTS IN VOCATIONAL EDUCATION POLICY IN SERBIA

**Progress towards the medium-term deliverables
of the Riga Conclusions in the period 2015–19**

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PREFACE

This report presents vocational education and training (VET) policy developments in the Republic of Serbia (hereinafter Serbia) between 2015 and 2019. It covers all five Europe-wide priority areas or medium-term deliverables (MTDs) agreed at Riga in June 2015. The report has been drafted within the terms of the mandate given to the European Training Foundation (ETF) by the Riga Conclusions to monitor and analyse progress made by the EU candidate countries towards the MTDs. This document is based on the annual monitoring reports submitted by Serbia to the ETF.

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ASPECTS OF VOCATIONAL EDUCATION AND TRAINING CONTEXT AND POLICIES IN 2018–19

In March 2012, Serbia was granted EU candidate status. In June 2013, the European Council took a decision to open accession negotiations with Serbia. On 21 January 2014, the First Intergovernmental Conference took place, signalling the formal start of Serbia's accession negotiations.

At the beginning of the reporting period, the population of Serbia was some seven million (see Annex for key country statistics). The country had a service-oriented economy, with this sector accounting for 50% of gross domestic product (GDP) and industry accounting for 26%. The structure of employment followed the same pattern, with the majority of the country's workforce employed in services and a quarter employed in industry. The Serbian economy grew at an annual rate of 4.3% in 2018, up from 2% in 2017.

The labour market was characterised by rather high participation (72.5% in 2018) and a high degree of informality. The employment rate had increased to 63% in 2018 but a gender gap of 15 percentage points between men and women remained (70% vs 55%). Unemployment rates continued to fall (from 17.8% in 2015 to 12.8% in 2018) and long-term unemployment had also declined to only 6.5% in 2018. Young people continued to be affected to a lesser extent (only some 17% of those aged between 15 and 24 were not involved in employment, education or training (NEET)). Youth unemployment had also largely decreased (from 43.2% in 2015 to some 30% in 2018). The country had a relatively high-skilled workforce: 85% of the economically active population had at least a medium level of educational attainment and one-third of the population aged 30 to 34 had completed tertiary education. Although the proportion of the population aged 30 to 34 that had completed tertiary education was increasing, many tertiary education graduates took jobs below their formal education level due to weak employment demand. Recent ETF findings indicate that a quarter of tertiary graduates worked in semi-skilled jobs in 2017.

Serbia's performance with regard to the Education and Training 2020 (ET 2020) benchmarks has been mixed. The country progressed visibly in terms of two education-related headlines – reducing the rate of early leavers from education and training (from 7.5% in 2015 to 6.8% in 2018, thus scoring below the ET 2020 benchmark of 10%) and increasing tertiary attainment (from 28.9% in 2015 to 32.8% in 2018). Adult participation in training remains above average for the region (4% in 2018), although well below the EU average of 11%. Serbia did not take part in PISA 2015, but the PISA 2012 results showed that one-third of 15-year-olds in the country were functionally illiterate in each tested subject area – reading, mathematics and science – thus raising concerns regarding the quality of education in the country.

VET provision in Serbia was predominantly state-led and school- and theory-based. Initial VET (IVET) was part of upper secondary education. Approximately 75% of upper secondary students in Serbia were enrolled in VET in 2015 (197 500 students in total). Four-year programmes in upper secondary VET (providing certificates that allow learners to enter higher education institutions) accounted for approximately 80% of all VET students while the rest participated in three-year programmes. VET reforms in the previous decade had targeted mainly secondary VET, with much less consideration given to post-secondary, higher or continuing VET (CVET). The main driver behind the reform processes in VET, substantially supported by EU pre-accession assistance funds, had been the need

to develop VET systems that were more demand-driven and oriented towards a learning outcome-based logic.

The Strategy for Education Development (2012–2020), together with the action plan for its implementation adopted in 2015, focused on improving: 1) the quality of education; 2) the coverage of education, from pre-school to lifelong learning; 3) the relevance of education for individual and labour market needs; and 4) the efficiency of education resources. The strategy includes VET, and addresses key challenges such as stronger links with the labour market, permeability, qualifications that facilitate employment, lifelong learning and fostering innovation and entrepreneurship.

These priorities were all relevant to the Riga MTDs. The ETF suggested to Serbia that it prioritise its choices for MTD implementation and undertake an ex-ante impact assessment of the deliverable selected as the top priority. Based on the specificities of the national context and the challenges posed by the enlargement process, Serbia selected MTD 1 – work-based learning – as its top priority and conducted an ex-ante impact assessment, facilitated by the ETF.

In 2018–19, there were further developments, including new legislation, policy frameworks and actions¹.

The number of students attending gymnasiums (schools that place a strong emphasis on academic learning; comparable to British grammar schools) increased slightly, while the number attending art schools fell. In terms of vocational secondary education, the highest number of students attend four-year programmes in vocational secondary schools. Although secondary education is still not compulsory in Serbia, 89.3% of children participated at this level during the 2018/19 school year, and the secondary completion rate was 85.5% (estimate for 2017).

Serbia	2017	2018	2019
Education and skills			
Early leavers from education and training (% aged 18–24)	6.2	6.8	m
Youth not in employment, education / training (% aged 15–24)	17.2	16.5	m
Participation rates in centre-based ECEC of children under age 3	14.5	m	m
Individuals who have basic/above basic overall digital skills (% of population aged 16–74)	39	m	46
Employment			
Employment rate (% of population aged 20–64)	61.4	63.1	m
Unemployment rate (% of population aged 15–74)	13.6	12.8	m
Gender employment gap (percentage points)	14	14.7	m
Gross disposable household income (GDHI) per capita growth	m	m	m

Sources: Eurostat, Eurydice
m: missing

The mismatch between educational profiles and labour market supply, on the one hand, and labour market needs, on the other, constitutes a long-term and system-wide problem in Serbia. While the

¹ https://eacea.ec.europa.eu/national-policies/eurydice/content/legislation-58_en and National Report Framework(NRF) Serbia https://sharing.etf.europa.eu/sites/dms/ops/turin/Documents/TRP5%20reports%202018-2020/TRPreport_2019_Serbia_EN.docx

unemployment rate among young people aged between 15 and 24 (30.7% in Q1 2019 according to the labour force survey) is declining, it is still high, due in part to the inadequate education system. Over 50% of young people in the labour market with secondary education attainment perform jobs inconsistent with their formal education background. The vocational secondary education system should be sufficiently flexible to keep pace with the widespread changes in the labour market, which points to the need to establish a system for monitoring ongoing labour market changes.

An analysis of future of work business needs requires cooperation between key institutions to identify and plan qualifications to meet labour market needs. This is specified by the Law on the National Qualifications Framework of Serbia (hereinafter: the NQFS law), passed in early April 2018. The goals of the NQFS law include, inter alia, developing qualification standards based on the needs of the labour market and society as a whole and ensuring that the education system is focused on learning outcomes. The NQFS Council was established as an advisory body to provide recommendations on the planning and development of human capital in accordance with public policies in the areas of lifelong learning, employment, career guidance and counselling. The Qualifications Agency was established to perform professional and development tasks to ensure the quality of the qualifications system; provide professional support to the NQFS Council and other competent institutions in all aspects of development; and implement the NQFS law. Further to a number of government decisions, 12 sector skills councils were formed as social partnership-based bodies. In addition, Serbia referenced its national qualifications framework to the European Qualifications Framework (EQF), which is consistent with the European Commission Recommendation.

Further conditions for acquiring, improving and developing competences in line with labour market needs were created by adopting the by-laws foreseen by the Law on Dual Education in 2018. The master plan for implementation of the Law on Dual Education was developed in May 2019. It is envisaged that the law will be fully implemented during the 2019/20 school year.

At higher education level, a negative trend has been observed in student numbers in recent years; however, the number of students has been increasing in academic courses of study and decreasing in applied courses. The number of young people participating in the higher education system stood at 249 604 in the 2018/19 school year, a decrease of about 12 500 or 4.8% relative to 2016. The higher education coverage rate has been on the increase for years and is very high; in the 2018/19 school year, 54.4% of the population aged 19 to 24 were in higher education. Although the higher education coverage rate is high, it is concerning that the higher education completion rate is extremely low. Improving the quality assurance of higher education is the remit of the National Higher Education Council and the National Entity for Accreditation².

On 20 February 2020 the European Association for Quality Assurance in Higher Education (ENQA) Board announced that after a thorough consideration and discussion and although progress has been made, the overall level of compliance with the European Standards and Guidelines is not sufficient to renew the membership of Serbia National Entity for Accreditation and Quality Assurance (NEAQA) at this stage³.

Public expenditure on education⁴ accounted for 3.51% of GDP in the 2019 national budget. The level of expenditure on education has thus remained stable for the past decade but falls short of the

² Serbian Economic Reform Programme for the period 2020 to 2022.

³ https://enqa.eu/wp-content/uploads/2020/03/Board-letter_NEAQA.pdf

⁴ Funds for primary, secondary and higher education, as well as funds for the modernisation of infrastructure.

average EU 28 public spending in this area (around 5% of GDP). Expenditure on education accounted for 15.1% of total budget expenditure.

The following legal framework enables policy implementation.

1. The Law on the Foundations of the Education System (Official Gazette of the Republic of Serbia, Nos 88/2017 and 27/2018) determines the foundations of the education system in Serbia by defining the main principles, objectives, outcomes, education and upbringing standards and competences of the education system. The Law on Secondary Education (Official Gazette of the Republic of Serbia, Nos 55/2013, 101/2017 and 27/2018) regulates secondary education.
2. The Law on the National Qualifications Framework of Serbia (Official Gazette of the Republic of Serbia, No 27/2018) enables and supports the establishment of the Serbian national qualifications framework. Its aims are to integrate the qualifications available in the Serbian system into one overarching framework; to improve the quality of qualifications; to promote and provide systematic support for lifelong learning; to maximize national and international transparency and recognition; and to provide opportunities to all individuals in the community. This law also regulates the procedure for the adoption of qualification standards and contains references to the establishment of a quality assurance system to plan, develop, acquire, certify and evaluate qualifications. In February 2020, Serbia presented its NQF referencing report to the EQF Advisory Group. It concluded that Serbia met all the criteria and thus completed the referencing process. The European Commission will circulate the updated version on the latest developments in Serbia, which will mention that Serbia completed the referencing process. It will also be available in the Commission's Learning Opportunities and Qualifications in Europe portal as soon as Serbia finalises the report based on comments made during the meeting and uploads the report on the portal: <https://ec.europa.eu/ploteus/en/referencing-reports-and-contacts>.
3. The Law on Dual Education was adopted at the end of 2017. Work on its full implementation began in the 2019/20 school year. The master plan for implementation of the Law on Dual Education in Serbia⁵ was adapted in 2019. It is important to note that the Chamber of Commerce and Industry of Serbia (hereinafter: Chamber of Commerce and Industry), along with the Ministry of Education, Science and Technological Development (MESTD), plays a leading role in the implementation of dual education as a key area of cooperation between the education and the employment sector. Its responsibilities are in the area of employers' accreditation for work-based learning, instructors' training and licensing and the management of registries of employers and dual education contracts.

A number of rulebooks and by-laws were adopted in 2018–19 in order to set out some of the requirements specified by the Law on Dual Education: the rulebook on training programmes, detailed terms and other matters related to the licence examination for instructors (Official Gazette of the Republic of Serbia, No 70/2018); the rulebook on placements for students in dual education profiles who are engaged in work-based learning (Official Gazette of the Republic of Serbia, No 102/2018); and the rulebook on the work method, activities and composition of the career guidance and counselling team in secondary schools that implement dual education (Official Gazette of the Republic of Serbia, No 2/2019). In addition, the Chamber of Commerce and Industry also developed and

⁵ This publication was produced with the support of the Swiss government, the Centre for Education Policy in Belgrade, the Serbian Ministry of Education, Science and Technological Development, the Chamber of Commerce and Industry of Serbia and the KOF Swiss Economic Institute at ETH Zurich, www.research-collection.ethz.ch/handle/20.500.11850/391941

adopted a rulebook in relation to dual education (the rulebook on the organisation, composition and operation of the Committee for Verification of Fulfilment of Requirements for Delivery of Work-Based Learning (Official Gazette of the Republic of Serbia, No 46/2018)⁶. Two more rulebooks are yet to be adopted – a rulebook on the implementation of training, the composition of the committee on the exam for obtaining the instructor licence, the issuing of the licence and the registry of licences issued; and a rulebook on the costs of training and taking the instructor’s examination⁷. The rulebook on detailed conditions for the work, activities and composition of a career guidance and counselling team at a secondary school implementing educational profiles in dual education was approved in 2019⁸. The programme for the vocational Matura was also recently changed and defined by the rulebook on the vocational Matura and final exam programme (Official Gazette of the Republic of Serbia, No 1/18). Its implementation is expected in the 2019/20 school year for three-year programmes and in 2020/21 for four-year programmes. The vocational Matura examines whether, after completion of the fourth grade of secondary vocational education for a particular educational profile, the student has acquired the professional competences prescribed by the qualification standard.

The Serbian Ministry of Education, Science and Technological Development managed to create the conditions for the participation of Serbia in international studies such as PISA (Serbia did not take part in PISA 2015). However, participation has not been sustainable. Efforts were made to ensure Serbia’s participation in PISA 2018 and TIMSS 2019, and to create legal and financial conditions for continued participation in these studies and use them for monitoring the quality and equity of education in Serbia.

According to the Organisation for Economic Co-operation and Development (OECD), the education and training system is under-resourced. Lack of funding and insufficient human resources are seen as impediments to better quality and inclusion in the system. In addition to this structural inefficiency, other weaknesses identified by the OECD included: poor coordination between education and other policies; undervaluing of the teaching profession and limited CPD; and the sub-optimal capacity of the social partners.

Serbia has updated its key competences framework but digital competence has not been included among the key competences. The government is in fact preparing teachers to teach coding skills to students. In 2019, the plan was to involve compulsory and general secondary education, and omit secondary VET. Information and communications technologies are under-utilised in teaching and learning, while the absence of broadband in a number of geographical areas amplifies the problem.

In 2019, the Ministry of Education, Science and Technological Development began drafting a new education strategy for the period 2020–30. Within the Instrument for Pre-accession Assistance (IPA), the IPA 16 Technical Assistance Project has provided technical assistance to support this process of building a shared vision of the education system. Progress has been made in the establishment of an external evaluation system that assesses the quality of primary and secondary schools. Experiences from the first cycle of external evaluation have been evaluated and incorporated into the system to ensure better validity and reliability of external evaluation. The external evaluation and international studies have produced solid evidence that is relevant to the monitoring of education in Serbia. The ministry has been encouraged to continue their use to develop policy measures to improve the quality and equity of education.

⁶ www.mpn.gov.rs/wp-content/uploads/2020/01/Masterplan-2019-ENG.pdf

⁷ www.mpn.gov.rs/dokumenta-i-propisi/zakonski-okvir/

⁸ Ibid./

1. MTD 1 – Work-based learning with special focus on apprenticeships

1.1 Baseline situation in 2015

At the beginning of the reporting period, the legal basis for work-based learning consisted of some general provisions in the Law on Secondary Education (2013).

Work-based learning was conducted mainly within the framework of formal secondary VET. Practical learning was part of VET curricula but most of it took place in workshops in VET schools.

The work-based learning modalities treated the learner predominantly as a student and took the form of internships ('student practice' – a mandatory component of VET curricula but implemented in different modes, usually in school workshops) or simulated work-based learning (virtual enterprises in VET schools that focused on business as their main subject) or real school companies (producing real goods or services for the local market), which existed mainly in catering, tourism and agricultural schools.

No formal apprenticeship system was in place; pilot apprenticeships were implemented in a few international companies where students learned while working and received a financial contribution (usually a scholarship).

Employers lacked the willingness and/or capacity to engage with VET learners. The companies that offered work-based learning had to cover all costs, no incentives were provided by the state or other public entities to employers that cooperated with schools.

At the beginning of the reporting period, there was an increased understanding among VET stakeholders of the importance of work-based learning for learners, employers and society. This in turn prompted policy makers in Serbia to prioritise work-based learning in 2015 in the context of the follow-up to the Riga Conclusions. The policy option considered in that regard was related to the development of a common vision for work-based learning in IVET as stakeholders' views in Serbia differed significantly and the existing strategic and legal framework did not provide enough or clear direction. It was believed that a joint vision would create engagement, commitment and cooperation between different VET actors on this topic and subsequently result in the development of concrete actions.

1.2. Policy developments between 2015 and 2019

Since 2015, work-based learning developments in Serbia have aimed at preparing the ground for introducing a dual education model for VET in the country.

A national working group on work-based learning was established in 2016. The main stakeholders were represented in this group, i.e. the relevant ministries, the VET Council, employers (the Chamber of Commerce and the Serbian Association of Employers) and trade unions. The working group was tasked with developing a concept for the introduction of dual education. It was disbanded in early 2017 as the government moved forward with a rapid plan to introduce a new Law on Dual Education. Considerable funds were allocated for the promotion of dual education in the 2017 budget.

In 2016, certain changes were made in the way that practical work was arranged in vocational schools, and there was a perceived shift towards dual or cooperative education. These changes were

initiated and supported by the Chamber of Commerce and Industry. A memorandum of understanding was signed in 2016 between the Serbian Minister of Education and the presidents of the Chambers of Commerce of Serbia and Austria on the experimental introduction of dual education in Serbia.

Changes to the Law on the Foundations of the Education System and the Law on Secondary Education, containing stronger references to apprenticeship and dual VET, were prepared and expected to be adopted by the parliament in 2017. The Law on Dual Education was at a preparatory stage. Serbia joined the European Alliance for Apprenticeships in 2017. The basic precondition for a (private or state) school to start operating or implementing specific education programmes in pre-university education is that they must be verified by the Ministry of Education, Science and Technological Development. The ministry determines if the prescribed conditions have been fulfilled, initially in terms of space, equipment, staff and education programmes. In the case of dual education, it should be noted that, in accordance with recent regulations, the Chamber of Commerce and Industry is responsible for accrediting companies and workplaces where work-based learning is implemented⁹. This differs from the rest of the system, which is monitored and managed by the Ministry of Education, Science and Technological Development.

Supplying the economy with qualified labour remains one of the key challenges in Serbia (and beyond). The VET system is expected to play a major part in contributing to economic development and prosperity. However, VET is not only a functional measure for the promotion of economic goals, it also has the potential to improve the transition from school to working life and to offer young people a means of planning their career and thus finding their place in society. Innovations and investment in VET are therefore crucial prerequisites for preparing society for the future. Serbia embarked on reform of the VET system as a part of the country's overall political and economic transition. One ambition is to address the transformation from a school-based to a dual VET system. Such an ambition is both demanding and promising. It is demanding because there is no blueprint for making such changes and it is promising because there is great potential to advance the current VET system. Accelerated reform of the VET system would help to improve effectiveness and compliance with societal and economic needs.

Throughout 2018 and 2019, the Serbian government worked with key donors active in Serbia's education and training system, especially the Swiss Agency for Development and Cooperation (SDC), to fund and support the policy dialogue on the future VET system in Serbia with the key stakeholders. The aim of this cooperation was to: 1) support the development of by-laws and guidelines needed for better understanding and implementation of the Law on Dual Education; 2) develop a Monitoring and Evaluation (M&E) system of work-based learning and capacity building of the relevant actors to apply it; and 3) support promotional activities that would improve the image of dual education¹⁰.

Serbia launched the fully fledged Law on Dual Education during the 2019/20 school year. Serbia started to implement a dual education system as a new education model in secondary vocational education. The system combines school-based teaching with work-based learning in companies. Students acquire skills and competences in line with qualification standards and the relevant

⁹ Rulebook on the organisation, composition and manner of work of the Commission for determining compliance with the conditions for the realisation of work-based learning with an employer, RS Official Gazette, No 46 of 15 June 2018.

¹⁰ www.eda.admin.ch/countries/serbia/en/home/international-cooperation/projects.html/content/dezaprojects/SDC/en/2019/7F09785/phase1?oldPagePath=/content/countries/serbia/en/home/internationale-zusammenarbeit/projekte.htm

curriculum. The governance model of dual education relies on joint steering of the process by the Ministry of Education, Science and Technological Development and the Chamber of Commerce and Industry – an excellent example of close cooperation between the education system and the business community. The law, and the implementation of the agreed stages, has yielded results. The master plan for implementation of the Law on Dual Education in Serbia¹¹ was adapted in 2019.

In 2019, supported by the ETF, Serbia (like all the Western Balkan countries) looked into the issue of financing work-based learning as part of vocational education reform¹². The handbook for policy makers and social partners developed within this support, is being used as guidance for the various actors involved to work further on financing issues related to dual education.

Data on the 2018/19 school year shows that 32 dual profiles were offered in 84 schools (23% of all vocational schools) (Torino Process report on Serbia, 2019). In the 2018/19 school year, the number of companies interested in implementing work-based learning as part of a dual education system increased significantly – from 205 to 600 companies. The number of schools participating in dual education increased from 50 to 85 (about 23% of all secondary vocational schools) and the number of enrolment places in the first grade of secondary vocational schools with dual education profiles rose from 1 841 to 3 500. The total number of students in dual education in the 2018/19 school year was 4 500¹³.

It is important to mention that the Serbian government shows a strong commitment to the implementation of dual education. This guarantees continuing political support at national level, which is a necessary component in the success of such a system-wide education reform. For example, it is envisaged that the introduction of Industry 4.0 in the dual education system (procurement of programmes) will require funding in the amount of EUR 123 600 for 2020. Funds for the construction and reconstruction of regional training centres will be provided through the Public Investment Management Office in two stages – EUR 8 945 000 in 2020 and EUR 8 000 000 in 2021. The funds needed to equip the centres will be provided from donations¹⁴.

Efforts have been made to implement an Education Management Information System (EMIS) and integrate it with the Central Registry of Statutory Social Insurance, thus enabling the monitoring of graduates in the labour market. Analyses based on the data from this system will help to design education policies in line with labour market needs. The ETF has also suggested including an indicator to monitor the supply of and demand for workplace-based learning in the integrated system. Serbia has initiated major reforms in the dual system in recent years. In order to monitor progress, it would be beneficial to have data on the number of companies offering individual workplace learning opportunities for different occupational profiles. For example, it in the future, it would be very helpful to see how many students are interested in an opportunity in a certain IT occupation or profile when enrolled in a particular programme (e.g. a four-year VET programme for IT technicians). The indicator

¹¹ This publication was produced with the support of the Swiss government, the Centre for Education Policy in Belgrade, the Serbian Ministry of Education, Science and Technological Development, the Chamber of Commerce and Industry of Serbia and the KOF Swiss Economic Institute at ETH Zurich, www.research-collection.ethz.ch/handle/20.500.11850/391941

¹² www.etf.europa.eu/en/publications-and-resources/publications/financing-work-based-learning-part-vocational-education.

¹³ The progress report on the action plan for the implementation of the strategy for education development in Serbia for 2018–20 is available at: www.mpn.gov.rs/wp-content/uploads/2019/08/izvestaj.pdf

¹⁴ Serbian Economic Reform Programme for the period 2020–22

would not only show the economic demand for this IT profile but would also help to improve enrolment policies and/or educational planning in many of the profiles offered in the Serbian VET system.

2. MTD 2 – Quality assurance mechanisms in line with EQAVET and continuous information and feedback loops to initial and continuing VET

2.1. Baseline situation in 2015

As of 2015, VET schools in Serbia were subject to the quality assurance system that existed for primary and secondary education as a whole. They were also subject to additional VET quality standards and a pilot self-evaluation system. The European Quality Assurance in Vocational Education and Training (EQAVET) indicators as such were not yet in use, at least at system level. However, elements of these indicators were mentioned in several initiatives in the area of quality and quality assurance. Serbia did not participate in the EQAVET network but was informed through EU projects and used the EU tools in VET quality assurance.

No systematic tracer studies of VET graduates were conducted. There was no system in place to monitor their employability or their transition to the world of work; nor were state funds allocated to develop or launch such a system. The Statistical Office of the Republic of Serbia (hereinafter: State Statistical Office) collected data on employment and unemployment rates by level of education from labour force surveys.

2.2. Policy developments between 2015 and 2019

In 2015–2016, the country devised a national quality assurance approach that was compatible with the EQAVET framework. The approach was applicable to both IVET and CVET but did not address the work-based learning associated with either IVET or CVET. The quality assurance approach was formally agreed and its partial implementation began in 2016 (full implementation is expected in 2020). Three to four EQAVET indicators (out of a total of 17) are regularly applied to assess IVET quality. A National Reference Point was established.

An education information system (EIS) and a system for monitoring and evaluating vocational education were planned and are currently being prepared for introduction. The establishment of these information systems will not only facilitate the monitoring of students throughout the formal education system but will also serve as a precondition for monitoring labour market outcomes after graduation. A joint working group was established between the Ministry of Education, Science and Technological Development and the State Statistical Office to develop educational statistics and indicators for monitoring education outcomes (2016).

According to the Law on the Foundations of the Education System¹⁵, the overall quality of the education system in Serbia is based on the following standards:

- student/trainee achievement standards

¹⁵ The Law on the Foundations of the Education System (RS Official Gazette, Nos 88/2017, 27/2018 – other law and 10/2019).

- quality standards for institutional operations¹⁶
- textbook quality standards
- competence standards for teachers
- competence standards for head teachers.

The development of the NQF in Serbia is supported by the European Commission's sector budget support project – Sector Reform Contract: Education Reform in Serbia – Strengthening Links with Employment and Social Inclusion. Its overall objective is to assist the Serbian government in reforming the education system, based on the Strategy for Education Development in Serbia 2020. Among other things, it is focused on the establishment of the legal and institutional framework for the NQF, including the Law on the National Qualifications Framework, the Qualifications Agency, the NQFS Council and sector skills councils. This framework supports the development of social partnership at national level and creates a link between education and the labour market¹⁷.

The relevance of the education and training system to respond to the labour market needs is the key objective of a bigger programme: "From Education to Employment (E2E) – Youth Skills Development and Public-Private Partnership in Serbia". This Youth Employment Initiative supports the development of three sector profiles, the development of policy recommendations for the financing of sector skills councils and criteria for their establishment, and the development of a methodology to elaborate qualification standards¹⁸.

3. MTD 3 – Access to VET and qualifications for all through more flexible and permeable systems, guidance and validation of non-formal and informal learning

3.1. Baseline situation in 2015

The country traditionally has a high number of VET enrolments: in 2015, three-quarters of all upper secondary students followed VET programmes.

With the support of central and regional authorities, VET schools conducted regular promotional activities, such as local and regional education fairs, open days in VET schools and skills competitions, to attract students from primary education. Guidance and mentoring for IVET learners were provided as specialised services offered by school psychologists and pedagogues.

Two separate NQFs were developed – one for higher education (levels 6–8) and another for vocational education (levels 1–5). These needed to be merged into one comprehensive NQF. A working group was established with a formal two-year mandate (to the end of 2016) to develop the NQF, prepare legislation and reference the NQF to the European Qualifications Framework.

¹⁶ Rulebook on the quality standards for educational institutions, RS Official Gazette – Educational Gazette, No 14/18; Rulebook on the quality assessment of educational institutions, RS Official Gazette, No 10 of 15 February 2019.

¹⁷ <http://noks.mpn.gov.rs/en/sector-reform-contract-for-education-reform-in-serbia-strengthening-links-with-employment-and-social-inclusion/>

¹⁸ <http://sociojalnoukljucivanje.gov.rs/en/about-us-2/youth-employment-initiative/>

The validation of non-formal and informal learning was highlighted in the Law on Adult Education, which had been adopted in June 2013. However, concrete procedures for the validation of non-formal and informal learning were still not developed in 2015.

3.2. Policy developments between 2015 and 2019

The actions taken by Serbia during the reporting period concerned mainly the development of the NQF and the validation of non-formal and informal learning.

Starting in 2015, Serbia made progress in combining its two pre-existing NQFs (in higher education and vocational education) into one comprehensive NQF, which entered into its final stage of development. A new law on the NQF was in preparation, which will regulate implementation. During this period, the country established an expert group to develop the technical aspects of the NQF. Serbia joined the European Qualifications Framework Advisory Group in autumn 2015.

A draft concept for the recognition and validation of prior learning in accordance with the Law on Adult Education was developed. A dropout prevention model was developed and tested in 10 primary and secondary vocational schools in Serbia. The model is expected to be mainstreamed at system level (including VET).

Serbia presented its report on referencing its national qualifications framework to the European Higher Education Area's European Qualifications Framework for lifelong learning and self-certification on 4 and 5 February 2020 (see above). Following the adoption of the NQFS law, a legal basis was created for the formation of organisations and bodies responsible for its implementation. In 2018, members of the NQFS Council¹⁹ were appointed, a Qualifications Agency²⁰ was established and 12 sector skills councils were set up.

Funds for piloting the Recognition of Prior Learning Procedure were provided from IPA 2014, which began in February 2019. The Ministry of Education, Science and Technological Development is a beneficiary of consultancy services. The implementation of the self-evaluation procedure and the external evaluation of a publicly recognised organiser of adult education activities will be funded by the Qualifications Agency. It is envisaged that funding in the amount of EUR 966 666.67 will be required to run the Qualifications Agency (as part of the implementation of the NQFS law) in 2020; funding in the amount of EUR 291 666.67 is projected for each of the following years (2021 and 2022). Funding for the work of the sector skills councils, which will participate in the implementation of most of the activities described in this document, are included as part of the Qualifications Agency's resources.

The Serbian government's efforts are directed not only at formally establishing the NQF, but also at institutionalising more deeply the concept of learning outcomes and key competences as a starting point for the development of education and learning programmes, a coherent quality assurance system and dialogue between relevant actors inside and outside the education system, in particular the labour market and the economy in general. The integrated Serbian NQF, established by the NQFS law²¹, should enable greater flexibility and permeability within education, between the same but also

¹⁹ Serbian national qualifications framework, <http://noks.mpn.gov.rs/wp-content/uploads/2019/10/Национални-оквир-квалификација-у-Републици-Србији.pdf>

²⁰ Decision on the Appointment of the Members of the Council for the National Qualifications Framework of the Republic of Serbia (RS Official Gazette, No 66/18).

²¹ RS Official Gazette, No 27/2018, www.mpn.gov.rs/wp-content/uploads/2018/05/ZAKON-NOKS-18.pdf

between different types of qualifications. It should also facilitate inter-university and international mobility and the recognition of non-formal education and informal learning outcomes.

Quality assurance is a central element on which the achievement of all the goals and principles of the Serbian NQF is based. With the support of the EU, Serbia aims to establish a quality assurance system using the following processes, which are ongoing between 2018 and 2020:

- analysis of labour market needs
- development of qualification standards
- development of education and training programmes
- accreditation of the institutions implementing the education and training programmes
- realisation of education programmes
- certification

The inclusion of relevant and appropriate qualifications in the system is based on an analysis of the needs of the labour market, or of society as a whole. Within the NQF, quality assurance mechanisms are being developed to determine qualifications related to:

- the system for collecting information on current and future labour market needs and the qualifications needed
- mapping the qualifications by sector

Efforts are ongoing to research current needs and to forecast future trends in the demand for qualifications. Some experience has been gained in this area: the State Statistical Office has been conducting labour force surveys since 2003 and the National Employment Service has been carrying out employers' surveys since 2010. Data from these surveys is published²², but, to date, application of the data has been limited when it comes to deciding on new qualifications and planning and designing the school network. Despite piloting the sector skills councils in 2012 and the more dynamic commitment of individual sector organisations (e.g. the ICT Cluster Association), Serbia has not been able to fully establish an effective mechanism for assessing skills needs by sector and allocating the required funding²³.

In 2018, the Serbian government issued decisions on the establishment of 12 sector skills councils covering the sectors of education and business administration²⁴. Mandatory, institutionally delegated members of the sector skills councils include: representatives of the Chamber of Commerce and Industry and representative associations of employers (representatives of entrepreneurs), the Council for Vocational Education and Adult Education, the National Employment Service, the Conference of Universities of Serbia and the Conference of Academies of Applied Studies, associations of vocational schools, the Ministry of Education, Science and Technological Development, the ministry responsible for the area of work covered by the sector skills councils, trade unions and the Institute for the Improvement of Education. Sector skills councils report annually to the Qualifications Agency, the Ministry of Education, Science and Technological Development and the Serbian government itself.

²² www.stat.gov.rs/sr-latn/oblasti/trziste-rada/anketa-o-radnoj-snazi/ and www.nsz.gov.rs/live/dokumenti/anketa_poslodavaca_2015.cid25685

²³ *Institutional cooperation and coordination in skills development in Serbia*, Serbian version at: www.etf.europa.eu/sites/default/files/m/54F818BC4D016200C12582AA00345533_Institutional%20coop%20in%20skills%20dev%20Serbia_RS.pdf

²⁴ <http://noks.mpn.gov.rs/en/decisions-on-the-establishment-of-sector-skills-councils/>

Based on the ongoing and recent work, experiences and analyses, and with the support of European projects (supported by the ETF and using IPA funds) in implementing the NQF for the purpose of adopting new qualifications and work for the sector skills councils, a more innovative methodological approach, known as the sector profile model, is planned.

In its study, *Public-private partnerships for skills development – a comparative analysis from the governance perspective*²⁵, the ETF analysed some of the emerging cooperation experiences in Serbia. The partnerships in Serbia are quite innovative in their form of collaboration: the E2E project deals with a multi-level network to improve non-formal training; FACTS includes education providers in a sectoral business cluster; NS SEME is an unusual arrangement of training provided by the public sector to private service providers for quality assurance purposes.

The model should provide a sustainable system for collecting and presenting different types of objective data about the current situation and forecasts for the future (e.g. number of employed/unemployed persons, occupations in the sector, and qualification structure within a certain sector, availability of qualification programmes, economic parameters and strategic directions of sector development). By analysing and correlating the data at the sector skills council level, conclusions can be drawn about the required competences and how they are connected. In this way, qualifications can be mapped.

Against this backdrop, the sector skills councils, which are employer-led organisations based on the principle of social partnership, will make decisions about the qualifications required in a particular sector. It is expected that this data will also be used to establish a system of occupational standards and to update the existing list of occupations in accordance with the National Occupational Classification²⁶.

In 2019–20, the State Statistical Office began developing an integrated labour market and qualifications information system (LMQIS). This is supported by TAIEX (the Technical Assistance and Information Exchange instrument of the European Commission) and the ETF. The scope is to design and implement the first steps for the full deployment of the LMQIS that will operationalise sector skills councils and provide results-based decision making, policy design and evaluation. Key partners in this endeavour will be the ministries responsible for education and labour policies, the newly established Qualifications Agency and the National Employment Service. The LMQIS will be developed in a series of stages and the Statistical Office and the Serbian institutional partners will design and implement the first steps for its full deployment. EU Member States have been identified for knowledge sharing. The LMQIS will be closely correlated with existing initiatives or projects that focus on certain aspects or components of labour and skills information management.

Serbia's NQFS law stipulates that monitoring and measuring the effects of the implementation of new qualifications on employment and lifelong learning is the responsibility of the Qualifications Agency. This completes the quality assurance system for qualifications.

²⁵ ETF, *Public-private partnerships for skills development*, https://openspace.etf.europa.eu/sites/default/files/2019-12/PPP%20for%20Skills%20development_Final%20version%20for%20event%20of%204%205%20December%202019%20Brussels.pdf.

²⁶ <http://kodekssifara.minrzs.gov.rs>

4. MTD 4 – Key competences in both IVET and CVET

4.1. Baseline situation in 2015

Some of the key competences, especially those concerning basic skills such as mother tongue, foreign languages, mathematics and science, have always been part of the curriculum of secondary VET in Serbia and their place has been preserved or even strengthened in the process of developing new curricula.

Key competences were an integral part of the functional elementary education programmes for adults.

Opportunities to acquire previously underdeveloped key competences in CVET were offered to unemployed people and vulnerable groups (e.g. Roma) primarily through active labour market policies. Such policies helped them to catch up with functional literacy, ICT skills and foreign languages.

4.2. Policy developments between 2015 and 2019

The actions reported by Serbia since 2015 in the area of key competences concern mainly their promotion in IVET, with a special focus on entrepreneurship.

Entrepreneurship is an obligatory subject in all newly developed VET curricula. The National Curricula Framework (in the process of being published) contains references to entrepreneurship and innovation.

2016 was declared the year of entrepreneurship in Serbia and additional funds were made available for the implementation of the relevant policies, including those in the area of education. Activities related to entrepreneurship within the Action Plan for National Youth Strategy (2015–2025) were in the process of implementation.

Training was provided for VET teachers to promote key competences. The Institute for Evaluation of Education Quality began developing instruments to evaluate key competences with a special focus on cross-curricular competences.

Entrepreneurial learning in Serbia has adopted the cross-curricular, ‘integrated key competence’ approach. Entrepreneurship key competences are included in the curricula at several education levels. It has been embedded in both the lower secondary and VET curricula at system level ever since the Standards of General Cross-Curricular Competences for the End of Secondary Education, which include entrepreneurship as one of the competences, were adopted in 2013.

In accordance with the EU framework, key competences, as well as 11 cross-curricular competences, are part of the curricula of all modern VET profiles. The VET Centre developed a student evaluation methodology based on competences that are applicable to the final and Matura exam for the profiles that are based on qualification standards. However, in order to improve the quality framework in vocational education in Serbia, it is necessary to establish a time frame for the revision of the qualification standards and the education programmes.

Entrepreneurial learning is subject to monitoring under the Strategy for Education and Training 2017–19, and as part of the dual education legislation, SME strategy and specific programmes and initiatives. An entrepreneurial learning evaluation framework is being developed at system level as a feature of the new education quality framework. A working group has been tasked with developing

new standards, indicators and school self-evaluation procedures. This is prompting an entrepreneurial spirit and contributing to educators' awareness of the importance of the development of entrepreneurship competence among students from an early age. It will also be necessary to design specific measures to track graduates and evaluate the impact of entrepreneurship key competence development on their career satisfaction and pathways²⁷.

5. MTD 5 – Systematic initial and continuing professional development of VET teachers, trainers and mentors

5.1. Baseline situation in 2015

Public policies focused primarily on the competences, roles and professional development of teachers and trainers in IVET, and to a much lesser extent in CVET.

A major issue in pre-service teacher education in Serbia was the gap between theory and practice. Cooperation between teacher training faculties and schools was weak, which prevented student teachers from gaining satisfactory teaching practice and hands-on experience prior to their employment as teachers.

The in-service training of VET teachers in Serbia was underfunded and designed in a way that provided more opportunities for general education teachers than for VET teachers. On-the-job and in-company teacher training was minimal. Thus, the professional development opportunities for VET teachers were not only fewer in number, but the skills and competences that they offered had limited relevance and applicability to their vocational specialism.

There was a lack of commonly accepted specific requirements for becoming a trainer or mentor in a company; some criteria or standards existed but were developed and valid only within particular companies. There was no strategy in place for the initial or continuing professional development of instructors, trainers or mentors in enterprises.

5.2. Policy developments between 2015 and 2019

The Ministry of Education, Science and Technological Development is the main policy maker, although it does consult with the National Education Council and the Vocational Education and Training (VET) Council. The Centre for Professional Development of Employees in Education and the VET Centre act as both providers of CPD and regulators of other CPD providers. The VET Centre has particular responsibility for CPD for VET teachers but it is relatively small and it does not provide a large number of specialised CPD programmes. With the new legal amendments, social and institutional partners have fewer opportunities to voice their independent opinion when it comes to CPD policy making.

The requirements and procedures governing who can be employed and work as a teacher are defined by the Law on the Foundations of the Education System. Teachers' qualifications for specific VET programmes are regulated by by-laws within each of the VET curricula, but in general teaching candidates must have a BA (if employed before 2005) or an MA. Post-secondary education and five years of work experience are prescribed as a minimum requirement for practical subjects.

²⁷ OECD, ETF, EU, EBRD, 'Serbia: Small Business Act Profile', *SME Policy Index: Western Balkans and Turkey 2019*, 2019.

Unfortunately, there is still no strategic approach for attracting and retaining teachers in general. If teachers do not obtain any psychological, pedagogical or didactic training during their initial education, they are obliged to complete a master's programme or CPD programme dedicated to gaining and improving these competences.

Teachers' CPD is still the most important and most frequent way to improve teaching and learning methods. Holders of a teaching licence are required to engage in CPD; thus, every teacher must attend a minimum of 100 hours of accredited training every five years in order to retain their licence. CPD is a legal requirement for all teachers, whether or not they have a licence. A new feature of the system is the introduction and regulation of the procedure for licensing in-company instructors in companies involved in the implementation of dual education profiles. The first exams for the directors' licences were conducted in December 2018. CPD policy for teachers is articulated in several documents and is an integral part of the Serbian education policy, which is also reflected in the strategy for this policy area. Local authorities allocate funding to schools for teachers' CPD. CPD is also mentioned in school documents, such as the school development plan. Teachers compile their own CPD portfolio and plan their own CPD based on a self-evaluation of their teaching competences.

Policy developments relating to MTD 5 focused on designing models for teacher and trainer training: existing models for pre-service or in-service teacher development were revised and pilot activities were implemented as 'tasters' for designing a comprehensive and systematic approach to the initial and continuing professional development of instructors, trainers and mentors in enterprises.

A working group consisting of representatives of the six state universities in Serbia responsible for initial teacher education was established in July 2016. The group was tasked with developing a proposal for an improved model of initial teacher education.

A new rulebook on teacher professional development was introduced in 2015. Among other things, it provided companies with opportunities to develop programmes for VET teachers and gave them more flexibility in recognising and rewarding different forms of CPD.

Pilot activities for training instructors were implemented as part of the introduction of dual models in Serbian VET, a process supported by GIZ (a German agency for international cooperation). Awareness was raised that a systemic approach needed to be developed to strengthen the capacity (in particular, the pedagogical capacity) of students' mentors in enterprises.

At the end of 2018, after many years of postponement, a requirement was introduced whereby school directors had to pass an exam to obtain a licence. About 50 VET school directors were among those who already met the condition for taking the exam, i.e. they had achieved the highest grade as school managers in the previous external evaluation cycle.

However, as of today, there is no system in place in which participation in CPD activities and better performance is rewarded. Despite the legal framework, the reality in 2019 is that implementation is difficult. Teachers are sometimes not able to get the CPD that meets their real needs, due to insufficient or overly expensive VET CPD programmes. New VET teachers are not always able to bridge the gap between the initial university education that most of them have, and the requirement of a master's degree and 30+6 ECTS²⁸ credits in psychological, pedagogical and methodological

²⁸ European Credit Transfer and Accumulation System

disciplines. Furthermore, in practice, teachers do not lose their licence if they do not achieve 100 hours of CPD. More importantly, the licence requirement is a relatively blunt tool for incentivisation.

VET teachers differ in the extent of their connections with workplaces in the areas they teach but this development need is not well served by CPD. VET teachers are not recognised as a category of teachers with specific CPD needs and this trend is continued in the Strategy 2020+, which focuses mainly on teachers of general education subjects and teachers in primary schools.

Separate regulations for teaching licences for VET teachers are required. The issue of their initial education is addressed with an obligatory master's programme or CPD programme consisting of a package addressing five or six pedagogical, psychological and methodological competences (e.g. understanding the processes of learning and motivation, child development, planning, assessment, evaluation, interactive teaching), which should account for 30+6 ECTS credits as required by law.

The Law on the Budget for 2018 envisaged redefining and improving the structure of secondary schools in line with developments in science and technology, the needs of the economy and demographic challenges, while still respecting the educational needs of vulnerable groups. However, as teachers do not always participate in suitable CPD programmes, this has an effect on the quality of their work and this is reflected in the quality of the practical aspect of teaching in school and out of school.

The ETF conducted a survey on CPD for VET teachers in Serbia in the period 2018–19²⁹. Serbia's vocational teachers are mostly qualified graduates and 85% of them have more than five years of teaching experience. Some 34% are aged 50 or above and 85% have full-time contracts. On the other hand, 20% of them did not benefit from pedagogical training while 22% had no practical classroom practice as part of their initial training.

Participation in CPD for VET teachers increased between 2015 and 2018. Participation in out-of-school training rose from 66% to 81% whilst participation in school-based training rose from 84% to 86%. Only 6% of vocational teachers reported non-participation in CPD. Training in an identified vocational specialism was up from 53% to 64%. Visits to other schools were up from 39% to 44%. However, CPD in businesses was down from 33% to 26%. The majority of vocational teachers make regular use of IT to prepare materials and use modern pedagogical approaches regularly – to some degree. However, many vocational teachers have only limited contact with the workplace and do not organise much learning that connects directly to the workplace. Consequently, vocational teachers are less likely to judge themselves effective in relating VET to the workplace and to the needs of employers rather than achieving goals internal to their schools. Modern pedagogical approaches, e.g. group work and differentiation, are only partially adopted and the take-up of digital tools and resources by students is limited.

Modern forms of CPD appear to be increasing: 69% of vocational teachers had participated in online and video-based CPD – a remarkable figure. However, more than 50% of teachers had at best some participation in collaborative activities and around 25% had no participation in web communities or ICT-based CPD. Only around one-third of teachers participated in CPD involving mentoring, networks or research. Principals are better served: they participate more often than teachers in professional networks, mentoring or research activities.

²⁹ www.etf.europa.eu/sites/default/files/202001/serbia_cpd_survey_2018_executive_summary_en.pdf

There is a mix of CPD provision that should help Serbia to provide the CPD that is urgently required at a national level to all who need it and to encourage the development of high-quality, independent, specialist CPD. However, uncertainty and constraints in funding discourage universities and businesses from committing to the provision of CPD. The accreditation process operates in a three-year cycle, which deters independent providers from responding quickly to new training opportunities.

The ETF research³⁰ indicates that vocational teachers express training needs with respect to both vocational and pedagogical issues. Although teachers rate the impact of most of the CPD that they undertake relatively highly, there is a significant training gap in particular topics. There is also evidence that the process of matching teachers to the CPD offering is not very efficient – there is not a good match between the priority needs of individual teachers and the training provided. Different teachers have different training needs and it makes sense to target training well where training resources and time are scarce.

Of course, national and school development needs are important, as are an individual teacher's needs. However, there is scope to improve the process of identifying needs and the matching process in schools. There may not be enough relevant training in some areas, for example with respect to new technologies in the workplace, professional knowledge and skills in relation to current practices in the workplace, approaches to developing cross-occupational competences for future work, ICT and student career guidance and counselling.

There are currently inadequate incentive measures in place when it comes to teachers' participation in CPD. The licensing requirement sets a minimum but it does not reward participation and it does not reward teachers who make use of new competences to deliver a better or enhanced performance. A better connection between CPD and the career structure of vocational teachers could also help to ensure that CPD feeds into improved teaching and leadership. For example, a teacher who has a particular responsibility for mentoring or for subject leadership or for liaison with business could be prepared for that responsibility through dedicated CPD.

CONCLUSIONS

Since 2015, Serbia has further reformed its VET system. The focus of VET policy reform in Serbia has shifted in recent years to introducing a dual model in the country: amendments were made to the Law on the Foundations of the Education System and the Law on Secondary Education to include stronger references to apprenticeships and dual VET, and a Law on Dual Education was drafted; a memorandum of understanding was signed between the Serbian Minister of Education and the presidents of the Chambers of Commerce of Serbia and Austria on the experimental introduction of dual education in Serbia. Legislation pays more attention to accountability, determining in more detail the responsibility of all the actors involved in the education process.

An EQAVET-compatible national approach for quality assurance was devised and its partial implementation was launched. An education information system and a system for monitoring and evaluating vocational education are currently being prepared for introduction. Further progress has

³⁰ ETF, *Continuing professional development for vocational teachers and principals in Serbia 2018, 2020*, www.etf.europa.eu/en/publications-and-resources/publications/continuing-professional-development-vocational-teachers-8

been made with the development of the NQF: the two pre-existing NQFs (in higher education and VET) were combined to form one comprehensive NQF. A new law regulating implementation of the NQF was prepared. A draft concept for the recognition and validation of prior learning was developed in accordance with the Law on Adult Education. On 4 and 5 February 2020, the EQF Advisory Group concluded that Serbia met all the criteria of NQF referencing and thus completed the referencing process. The Serbian report on referencing its national qualifications framework to the European Higher Education Area's European Qualifications Framework for lifelong learning and self-certification will be uploaded to the Commission's Learning Opportunities and Qualifications in Europe portal (<https://ec.europa.eu/ploteus/en/referencing-reports-and-contacts>).

Training was provided for VET teachers to promote key competences. A new rulebook on teacher professional development was introduced (2015), providing more flexibility in organising, recognising and rewarding different forms of CPD for teachers. Pilot activities for teachers' CPD and training company instructors were carried out (mostly with donor support), helping to raise awareness of the need to develop a systemic approach. However, there is no overarching policy for CPD for VET teachers or instructors. The licensing requirement stipulates a minimum level of CPD but it does not reward participation. Nor does it reward teachers who use new competences to perform more effectively. A better connection between CPD and the career structure of vocational teachers could also help to ensure that CPD feeds into improved teaching and leadership.

In 2018, the government established the Commission for the Development and Implementation of Dual Education in order to improve the efficiency of the governance system. One of the principles of VET in Serbia involves establishing social partnership at national and local level, e.g. sectoral councils were formalised by the adoption of the Law on the National Qualifications Framework of Serbia; representatives of the Chamber of Commerce and Industry and representatives of associations of employers are members of sector skills councils; and the NQFS Council, Ministry of Education, Science and Technological Development, business representatives, local self-government and social partners work together to create enrolment policy. However, the civil society sector is still not seen as a permanent member in the governance process.

There are currently no subsidies for employers that support dual education. However, as of the 2019/20 school year, in accordance with the Law on Dual Education, employers engaged in dual education will be responsible for reimbursing various costs incurred by students and for paying students by the hour for the time spent on work-based learning. The net amount paid must not be lower than 70% of the statutory minimum wage.

Total public expenditure per student has risen in recent years at all levels of education, mostly as a consequence of the drop in student numbers. However, these funds have not been invested in the development of education but have been used for financing the existing number of employees.

In the period since the adoption of the Strategy for Education Development (which ends in 2020) and its action plan, no significant steps have been made to change the funding system for pre-university education. Even though both the strategy and the action plan envisage a new model of financing per student, financing is still input-based. The introduction of the Medium-term Expenditure Framework (MTEF) for the education sector in 2016 represents a major improvement in financial planning in education in Serbia. It serves as a tool for monitoring the implementation of reform measures in the sector by tracking and comparing the execution of planned allocations from year to year.

The Strategy for Education Development (which ends in 2020) focuses on the improvement of the education system in terms of quality, relevance, efficiency and coverage. The actions performed show that Serbia has been addressing the main themes of the Riga Conclusions. The country could make further progress along these lines for the remaining period up to 2020.

In 2019, the Serbian Government, Ministry of Education, Science and Technological Development launched the process of drafting a new education strategy for the period 2020–30. The ETF's 2019 assessment of the Torino Process report recommends paying close attention to three major areas in this new education strategy: a) improving the quality and quantity of continuing formal, non-formal and informal learning opportunities; b) accelerating change in initial vocational education to adapt to changes in the economy; c) preparing young people for the labour market by tailoring education, training and active labour market programmes to the needs of individuals. All these areas involve policy commitment, expertise and financing. Mobilising financial resources is necessary to reposition education and training in the area of lifelong learning and to develop human capital in a way that is consistent with the country's ambitions. It is also important to include all the relevant stakeholders at all stages of the strategy and action plan to ensure sustainable and engaged implementation over the next decade.

While doing so, a number of other ongoing developments need to be rolled out.

- Implement the master plan for implementation of the Law on Dual Education, which was approved in 2019. Adopt the work-based learning legislation that was drafted and put it into practice; build the capacities of both employers and VET schools for implementing apprenticeships.
- Implement the quality assurance approach that was devised; create mechanisms for the regular collection of data on the employability of VET graduates and their transition to work, and use this feedback when designing VET provision programmes. Target measures at groups facing barriers to VET and labour market entry; put in place the legal and institutional developments necessary to implement the NQF and introduce procedures for validating non-formal and informal learning.
- Increase the opportunities for CPD relevant to the vocational specialism of VET teachers and strengthen the pedagogical competences of mentors in companies that provide students with practical training. Reinforce the new role of the teacher as a facilitator to help students develop entrepreneurship skills as a key competence. Attention should be given to pre-service teacher training across the system, enabling teachers to become such facilitators and to apply new methods of active teaching and learning.
- Continue to promote key competences in VET curricula and provide more effective opportunities to acquire or develop those skills through CVET. Strengthen the co-ordination of government policy actions for lifelong entrepreneurial learning. Pay special attention to progress in developing key competences across different levels of education.
- The design and implementation of competence-based education programmes could be scaled up to cover all levels of formal education, and to systematically develop entrepreneurship as a key competence in primary and upper secondary education. The focus should be on teachers' capacity, teaching methods and the new role of the teacher.
- The activation and capacity development of sector skills councils has just started.
- Mapping existing qualifications and identifying the (most) needed qualifications is ongoing. In this regard, it is important to develop new qualifications and revise existing qualifications for inclusion in the framework, based on the relevance of the sector skills councils. Serbian sector skills councils can establish a peer learning platform to learn from the better functioning sector skills

councils that are engaged in knowledge-oriented, provision-oriented and resource-oriented public and private partnerships.

- The referencing of the NQF is an important milestone. It is important now to keep working on further implementation of the framework (e.g. adding and revising qualifications, implementing the accreditation process for Publicly Recognized Organizer of Adult Education Activities (PROAEA) and to enhance awareness raising around the NQF. In order to be able to support developments in education and the labour sector, in particular the operationalisation of sector skills councils, and results-based decision making, policy design and evaluation, the State Statistical Office is advised to develop an integrated labour market and qualifications information system. Key partners in this endeavour should be the ministries in charge of education and labour, the newly established Qualifications Agency, the National Employment Service and the sector skills councils. The development of the labour market and qualifications information system includes a series of stages and the State Statistical Office and its partners would need EU expertise, in particular from countries with relevant experience (e.g. feasible practices that are compatible with the Serbian context), with a view to raising awareness and increasing knowledge to design and implement the first steps in the full deployment of the system.
- Serbia has made a start on the preparations to recognise prior learning. It is important to continue this work to be able to offer recognition of prior learning opportunities in Serbia.
- Serbia is encouraged that European Education and Training Strategic Framework and Policies³¹ inspire its new strategic framework for 2030, including its financial resources for implementation.

³¹ Such as *Key actions and priorities for EU policy cooperation to support the realisation of a shared vision of VET 2030* and all the related EU documents/initiatives presented to the Meeting of the Directors-General for VET (DGVET) in Alba-Iulia, 17–19 March 2019.

ANNEX: SERBIA – LABOUR MARKET, EDUCATION AND CONTEXTUAL INDICATORS, 2018 OR MOST RECENT YEAR AVAILABLE

Total population		7 001 444
Relative size of youth population (15–24) [%]		13.5
Activity rate (20–64) [%]		72.5
Employment rate (20–64) [%]		63.1
Employment rate of recent graduates from ISCED levels 5–8 (20–34) [%]		64.3
Employment rate of recent graduates from ISCED levels 3–4 (20–34) [%]	Total	58.3
	General	41.8
	Vocational	59.3
Unemployment rate (15+) [%]		12.8
Unemployment rate (15+) by education [%]	Low	12.6
	Medium	13.8
	High	10.9
Youth unemployment rate (15–24) [%]		29.7
Expenditure on education as share of GDP [%]		3.9
Students in VET programmes in upper secondary [%]		74.4
Students in VET programmes in upper secondary		187 383
Participation in lifelong learning (25–64)[%]		4.1
Tertiary educational attainment (30–34) [%]		32.8
Underachievement (15 years) [%]	Reading	33.1 (2012)
	Mathematics	38.9 (2012)
	Science	35 (2012)
Early leavers from education (18–24) [%]		6.8
Persons not in employment, education or training (NEET) (15–24) [%]		16.5
Educational attainment of economically active population (15+) [%]	Low	16.2
	Medium	58
	High	25.9

Sources: State Statistical Office, Eurostat, OECD, UNESCO Institute for Statistics

Notes: n/a: not available. Low: ISCED 0–2; Medium: ISCED 3–4; High: ISCED 5–8.

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