Developments in vocational education policy in 2015–17 in Serbia

Progress towards the medium-term deliverables of the Riga Conclusions
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This report presents vocational education and training (VET) policy developments in Serbia in the period 2015–17. 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 of the EU candidate countries towards the MTDs. This document is based on the annual monitoring reports of Serbia submitted to the ETF.

Aspects of vocational education and training context and policies in 2015

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 7 114 000 (see Annex for key country statistics). The country had a service-oriented economy, with this sector accounting for 60% of gross domestic product (GDP) and industry accounting for 31%. The structure of employment did not follow the same pattern: the majority of the country’s workforce was employed in services (56.1%, 2015) while the agriculture sector employed 19.4% of the workforce but only generated 8.2% of GDP. Following negative GDP growth of -1.8% in 2014, the Serbian economy grew at an annual rate of 0.8% in 2015.

The labour market was characterised by low participation and a high degree of informality. The employment rate had increased since 2013 but was still low (55.9%, 2015) and a gender divide remained. Unemployment rates continued to decrease (from 22.1% in 2013 to 17.7% in 2015) and long-term unemployment had also declined. Young people were particularly affected (almost 20% of those aged 15 to 24 years were not in employment, education or training (NEET). Youth unemployment had decreased (from 49.4% in 2013 to 43.2% in 2015) but remained at a high level. The country’s workforce was relatively low skilled, with three-quarters of the economically active population having a low or medium level of educational attainment, although the proportion of the population aged 30 to 34 that had completed tertiary education had been increasing.

Serbia’s performance with regard to the Education and Training 2020 (ET 2020) benchmarks had been mixed. The country progressed visibly in terms of two education-related headlines – reducing the rate of early leavers from education and training (from 8.7% in 2013 to 7.4% in 2015, thus scoring below the ET 2020 benchmark of 10%) and increasing tertiary attainment (from 25.3% in 2013 to 28.9% in 2015). The figures for adult participation in training had improved slightly in recent years (from 4% in 2013 to 4.8% in 2015) but were still lagging significantly below the EU average of 10.7%. The NEET rate had been on the rise since 2013 and remained very high (19.9% in 2015 compared to 12% in the EU 28). 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 IVET 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 Development of Education (2012–2020) 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.

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 available 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 vocational schools’ workshops.

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 vocational 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 Riga Conclusions follow-up. 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. A joint vision was believed to 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 2017

Work-based learning developments in Serbia since 2015 have been aiming to prepare 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. 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 for the promotion of dual education were allocated in the budget for 2017.

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 Serbian Chamber of Industry and Commerce. 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 in 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.

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 vocational 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 quality standards for VET 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 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 2017

In 2015–16 the country devised a national quality assurance approach 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 17 in total) are regularly applied to assess IVET quality. A National Reference Point has been established.

An education information system and a system for monitoring and evaluating vocational education were planned and 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 and the State Statistical Office to develop educational statistics and indicators for monitoring education outcomes (2016).

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.

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

Two separate national qualifications frameworks (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.

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

3.2 Policy developments between 2015 and 2017

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 VET) 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 the level of the whole system (including VET).
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 of 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 2017

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.

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 2017

The 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 or 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 more flexibility in recognising and rewarding different forms of continuing professional development.

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.

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 apprenticeship 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. 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 were being prepared for introduction. Further progress has been made with the development of the NQF: the two pre-existing NQFs (in higher education and VET) have been combined to form one comprehensive NQF. A new law that will regulate 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. 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 continuing professional development for teachers. Pilot activities for training company instructors were carried out, helping to raise awareness of the need to develop a systemic approach.
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 if – in the remaining period up to 2020 – it takes into consideration the following issues:

- adopt the work-based learning legislation that has been drafted and put it into practice; build the capacities of both employers and vocational schools for implementing apprenticeships;

- implement the quality assurance approach 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;

- further strengthen the promotion of key competences in VET curricula and provide more effective opportunities to acquire or develop those skills through CVET;

- increase the opportunities for continuing professional development relevant to the vocational specialism of VET teachers and strengthen the pedagogical competences of mentors in companies that provide students with practical training.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Total population</td>
<td>7 114 000</td>
</tr>
<tr>
<td>Relative size of youth population (15–24) [%]</td>
<td>16.5</td>
</tr>
<tr>
<td>Activity rate (20–64) [%]</td>
<td>68</td>
</tr>
<tr>
<td>Employment rate (20–64) [%]</td>
<td>55.9</td>
</tr>
<tr>
<td>Employment rate of recent graduates (20–34) [%]</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46.7</td>
</tr>
<tr>
<td>General</td>
<td>n/a</td>
</tr>
<tr>
<td>Vocational</td>
<td>n/a</td>
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<tr>
<td>Employment rate of recent graduates (20–34) [%]</td>
<td></td>
</tr>
<tr>
<td>Unemployment rate (15+) [%]</td>
<td>17.7</td>
</tr>
<tr>
<td>Unemployment rate (15+) by education [%]</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>15</td>
</tr>
<tr>
<td>Medium</td>
<td>19.4</td>
</tr>
<tr>
<td>High</td>
<td>15.3</td>
</tr>
<tr>
<td>Youth unemployment rate (15–24) [%]</td>
<td>43.2</td>
</tr>
<tr>
<td>Expenditure on education as share of GDP [%]</td>
<td>4</td>
</tr>
<tr>
<td>Students in VET programmes in upper secondary [%]</td>
<td>75.1</td>
</tr>
<tr>
<td>Students in VET programmes in upper secondary</td>
<td>197 500</td>
</tr>
<tr>
<td>Participation in lifelong learning (25–64) [%]</td>
<td>4.8</td>
</tr>
<tr>
<td>Tertiary educational attainment (30–34) [%]</td>
<td>28.9</td>
</tr>
<tr>
<td>Underachievement (15 years) [%]</td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>33.1 (2012)</td>
</tr>
<tr>
<td>Maths</td>
<td>38.9 (2012)</td>
</tr>
<tr>
<td>Science</td>
<td>35 (2012)</td>
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<tr>
<td>Early leavers from education (18–24) [%]</td>
<td>7.4</td>
</tr>
<tr>
<td>Persons not in employment, education or training (NEETs) (15–24) [%]</td>
<td>19.9</td>
</tr>
<tr>
<td>Educational attainment of economically active population (15+) [%]</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>17</td>
</tr>
<tr>
<td>Medium</td>
<td>58.7</td>
</tr>
<tr>
<td>High</td>
<td>24.2</td>
</tr>
</tbody>
</table>

**Notes:** n/a – not available. Low: no formal education, incomplete primary, primary; Medium: secondary; High: higher school, university.

**Sources:** State Statistical Office, Eurostat, OECD, UNESCO Institute for Statistics.
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CVET</td>
<td>Continuing VET</td>
</tr>
<tr>
<td>EQAVET</td>
<td>European Quality Assurance in VET</td>
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<tr>
<td>ET 2020</td>
<td>Education and Training 2020</td>
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<tr>
<td>ETF</td>
<td>European Training Foundation</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
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<tr>
<td>ICT</td>
<td>Information and communication technology</td>
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<tr>
<td>IVET</td>
<td>Initial VET</td>
</tr>
<tr>
<td>MTD</td>
<td>Medium-term deliverable</td>
</tr>
<tr>
<td>NEET</td>
<td>Not in employment, education or training</td>
</tr>
<tr>
<td>NQF</td>
<td>National qualifications framework</td>
</tr>
<tr>
<td>PISA</td>
<td>Programme for International Student Assessment (OECD)</td>
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<tr>
<td>VET</td>
<td>Vocational education and training</td>
</tr>
</tbody>
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LinkedIn
linkedin.com/company/european-training-foundation

E-mail
info@etf.europa.eu