



European Training Foundation

# TRACKING VOCATIONAL GRADUATES IN THE EU CANDIDATE COUNTRIES



This note has been drafted based on the annual reports of the candidate countries on their progress towards the Riga mid-term deliverables in the period 2015–18 and on information available from ETF’s work and support provided to these countries in recent years, including the findings of the 2016–17 Torino Process round.

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## INTRODUCTION

The economic situation in the five EU candidate countries<sup>1</sup> has improved in the recent years with stronger growth, higher investment and more jobs, albeit in a context of low labour productivity and competitiveness.

The candidate countries continue to experience low rates of labour market participation and employment, high informality and precarious and vulnerable employment, which disproportionately affect young people. Despite the increasing activity and employment rates in the 20-64 age group, all countries continue to lag far behind EU averages. Economic growth has stimulated job creation, but unemployment remains high in all countries except Turkey, ranging from 10.9% to 23.7% in 2016. Youth unemployment (15-24 age group) in the four Western Balkan candidate countries – Albania, the former Yugoslav Republic of Macedonia, Montenegro and Serbia – is also well above the EU average, reaching 28.9% to 48.2% in 2016. The unemployment rates of young people aged 15-24 with upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4 that include vocational training streams) in Montenegro and the former Yugoslav Republic of Macedonia reach nearly 36% and 47%, respectively, but remain lower than the unemployment rates of young people with less than primary, primary and lower secondary education (ISCED levels 0-2). The relevant rates in Turkey are much lower and comparable with those in the EU (see Figure 1 in Annex).

The employability of graduates leaving education and training is a matter of concern in the candidate countries. The employment rates of recent graduates from ISCED levels 3-8 aged 20-34 in four of the candidate countries – Montenegro, the former Yugoslav Republic of Macedonia, Serbia and Turkey – show upward trends but the gap against the EU average has persisted in the period 2010-16 (see Table 1 in the Annex). In 2016 the rates were in the range 46.9% - 61.1%, i.e. 17.1 to 31.3 percentage points below the EU average of 78.2% and the EU 2020 benchmark of 82%.



**The mismatch between labour market demand and supply is one of the biggest constraints to growth and employability in the candidate countries.**



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<sup>4</sup> Albania, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Turkey

Graduates from secondary VET show better employment prospects as compared to those of general secondary education streams in all countries with data available - the former Yugoslav Republic of Macedonia, Serbia (in 2015 and 2016) and Turkey (Table 2). These results become even more significant in the light of the fact that VET is a viable education option for a large number of young people in almost all candidate countries: as illustrated by Figure 2, VET enrolments as a proportion of upper secondary education are high in four of the countries (ranging from almost 50% in Turkey to nearly 75% in Serbia), while this share is lower in Albania only (around 20%).

The mismatch between labour market demand and supply is one of the biggest constraints to growth and employability in the candidate countries. Rigidities in education systems, continuously changing and/or low economic demand and insufficient policy response are responsible for the stubbornly high rates of youth unemployment and inactivity. Timely and relevant policy responses to the needs of young people are constrained by a lack of or insufficiently exploited data and information on transitions from school to work, on quality aspects of such transitions, and on vulnerable groups of young people.

All candidate countries have made efforts to harmonise their statistical instruments and practices with international and European standards. Apart from survey-based statistics such as labour force surveys, administrative data on education, employment and unemployment, etc. have also been collected and evolved over the years. The candidate countries have invested efforts in developing new processes of data collection, analysis and interpretation, and have strived to improve their interinstitutional cooperation to match supply and demand, assess effectiveness of education or employment policies etc. However, most candidate countries still need to consolidate their mechanisms of skills needs identification and matching.



**Tracking graduates is one of the fundamental tools for ensuring the quality of education, and of vocational training in particular, and the relevance of skills to socio-economic demands.**



## MEASURES FOR TRACKING VOCATIONAL GRADUATES IN THE CANDIDATE COUNTRIES

Tracking graduates is one of the fundamental tools for ensuring the quality of education, and of vocational training in particular, and the relevance of skills to socio-economic demands. The candidate countries are currently at different levels of development, usage and institutionalisation of tracking systems. Turkey was the first to start tracking the performance of its vocational graduates in the labour market when the Ministry of National Education introduced the E-graduate system in 2007, while the candidate countries in the Western Balkans – Albania, the former Yugoslav Republic of Macedonia, Montenegro and Serbia – have only recently made steps towards establishing mechanisms for the systematic collection of data.

### Preparations for introducing national VET tracer systems in the Western Balkans

Systematic tracer studies of vocational graduates were not conducted in the Western Balkan countries until 2016. Monitoring systems on transitions or state funds allocated to developing such systems were missing. The national statistical offices collected data on employment and unemployment rates by level of education through labour force surveys. The International Labour Organisation (ILO) carried out a number of surveys of youth labour market transition: in the former Yugoslav Republic of Macedonia (2012, published 2013), as well as in Serbia and Montenegro (both conducted in 2015 and published in 2016).

Confronted with chronic challenges of youth employability and becoming increasingly aware of the potential of good quality information on skills usage and the labour market performance of graduates to understand the causes of graduate employability problems as well as to identify solutions for those problems, the Western Balkan countries began contemplating the options for conducting tracer studies. The first steps were usually taken with the financial and expert support of donors and prioritised higher education graduates, as was the case with Montenegro that developed a relevant web-based software for higher education within a World Bank project and carried out its first tracer study in 2009 and another one in 2015. The tracing of VET graduates followed: in 2015-17 Albania, the former Yugoslav Republic of Macedonia and Montenegro initiated preparations for launching national tracer systems for vocational graduates.



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The former Yugoslav Republic of Macedonia conducted its first nation-wide tracer study for technical VET (TVET) and higher education graduates in 2016 (the final report was published in 2017<sup>3</sup>) as part of the World Bank Skills Development and Innovation Support project and with the methodological support of the European Training Foundation (ETF). The study was meant to be used as a capacity building opportunity to allow such activities to be carried out regularly in the future.

In addition to the tracer study, the World Bank Skills Development and Innovation Support project foresees the establishment of a Skills Observatory within the Ministry of Education and Science, which will act as a management information tool addressing the dynamics of labour market conditions and the supply of training programmes. Through the Skills Observatory, the Ministry of Education and Science will analyse whether the skills that students (at primary, secondary and tertiary level) acquire are in line with the needs of the labour market. This analysis will feed back into the revision of curricula. The Observatory is also expected to offer information on employability in specific occupational areas, the expected job waiting time and salary levels by qualification, as well as other statistical data as needed by the Ministry of Education and Science.

At the end of 2016 Albania set up - with the support of the German Technical Assistance Agency (GIZ) - an electronic tracer system to track graduates leaving public VET providers (ie vocational schools and vocational training centres) at national level. The first tracking survey was carried out in 2017 and was repeated in 2018 (report due in May 2018). The tracking is carried out by vocational training institutions and is supported by the local employment offices, with the National Employment Service in charge of managing the overall tracer system.

Montenegro also did its first nation-wide tracking survey in 2017 (the first results will be available by mid-2018). The tracer study was conducted by the vocational training institutions under the coordination and the methodological guidance of the Ministry of Education. The data from the tracer study will be complemented by information from the Central Fiscal Register that keeps evidence on compulsory social security contributions for all employed people, the National Employment Service that keeps a register of unemployed jobseekers and higher education institutions which have records on enrolled students. The combination of survey and administrative data is expected to contribute to improving the input for vocational enrolment planning, for the development of vocational standards and qualifications, adapting VET provision, and improving the career counselling and guidance.



**The Western Balkan candidate countries are still addressing issues related to the design and implementation modalities of the tracer studies**



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<sup>3</sup> ETF (European Training Foundation), 'Tracing secondary vocational and tertiary education graduates in the former Yugoslav Republic of Macedonia. 2016 tracer study results', ETF, Turin, 2017. Available at: <http://www.etf.europa.eu>

Unlike the rest of the Western Balkan candidate countries that have been making efforts to establish regular VET tracer systems at a national level, Serbia is still working on a pilot scheme with a more limited coverage. In 2017 the Ministry of Education, Science and Technological Development decided to collect certain data on the first generation of graduates who had been educated within the cooperative education model established with the support of the GIZ. These are students who enrolled in June 2014 in the educational profiles of locksmith - welder, electrician, and industrial mechanic in eight secondary schools and passed their final exams in June 2017. The questionnaire will be circulated among those graduates in the spring of 2018 to assess their employment status six months after they have finished school.

### Regular tracer surveys in Turkey

Tracking vocational graduates is a well-established practice in Turkey. The E-graduate system that was introduced by the Ministry of National Education in 2007 has become a web-based data management system<sup>4</sup> that continues to track graduates from vocational and technical education by storing data on their employment status, as well as data on student enrolments, attendance, examination entries, grades, report cards and information related to work-based learning. The E-graduate system monitors transitions from vocational training to work and includes data about graduates on school types, transition to higher education, work sectors and remuneration. The E-graduate system continues to be the main tool for the systematic collection of data that is used for monitoring and improving the quality of initial vocational training provision.

The E-graduate system combines survey and administrative data that concern both education and employment indicators, such as: a. school types of graduates; b. year of graduation; c. share of graduates going to higher education; d. sectors in which graduates work; e. legal status of enterprises where graduates work; f. connection/relation between graduation and work field; g. social insurance status of graduates; h. rate of use of educational background in current job; i. graduate remuneration.

### Main characteristics of the VET tracking measures in the candidate countries

The key features of the VET tracer surveys used in the candidate countries are summarised in Table 3 in Annex.

Apart from Turkey that has over 10 years of experience in graduate tracking measures, the other candidate countries have been taking their first steps in this field, often supported by donors and



**Most Western Balkan candidate countries have been making efforts to establish regular VET tracer systems at a national level**



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<sup>4</sup> <http://emezun.meb.gov.tr>

international organisations (e.g. GIZ, the World Bank, the ETF, etc.). While benefiting from the donors' interventions, the countries face the challenge to develop their own capacities and national resources to ensure the sustainability of the measures. Except Albania that has conducted two rounds of VET graduates tracing, the other Western Balkan countries have done so far only one tracer survey each and are yet to define the regularity of these exercises.

Currently, all tracking measures are focused on initial vocational graduates (in the former Yugoslav Republic of Macedonia the scope is even narrower – technical vocational graduates). Albania has designed its tracer system to cover graduates from both initial and continuing vocational training, while the Macedonian one covers higher education graduates as well. Public Employment Services (PES) in the region follow the employment outcomes of jobseekers participating in continuous training/retraining programmes, implemented within the framework of Active Labour Market Measures (ALMMs). Though done regularly, PES monitoring and evaluation systems cover the labour market performance of ALMM participants almost exclusively, while the relevance of skills, usage at workplace, missing competences etc. are covered much less frequently.

The Western Balkan candidate countries are still addressing issues related to the design and implementation modalities of the tracer studies (such as the modality of implementation, i.e. centralised, decentralised or hybrid, the roles and responsibilities of various actors and overall stakeholders' involvement). Tracer measures are implemented by vocational institutions under the coordination and methodological guidance of the national ministries responsible for education in all countries except Albania where the overall responsibility for the tracer system lies with the National Employment Service. Most countries use survey data only, while Turkey and Montenegro combine survey and administrative data.

All candidate countries claim in their recent Riga monitoring reports that they use/will use the data from tracking vocational graduates to feed back into the policy-making cycle (for the development of occupational profiles, reviewing vocational qualifications and vocational curricula and course design). Two countries (Albania and Montenegro) make use of the data for policy decision-making (funding of vocational training programmes), while three of the candidate countries (Montenegro, Serbia and Turkey) use the data for career guidance and providing advice to students and their parents.



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## CONCLUSIONS AND KEY MESSAGES

Driven by national demands for addressing issues related to the employability of young people, skills mismatches and labour market needs and by the commitments made to ensuring continuous information and feedback loops in the Riga Conclusions of 2015, the candidate countries have dedicated efforts to design and implement measures for tracking their vocational graduates. The Western Balkan candidate countries will need to ensure the resources and conditions to allow for the systematic use of the newly established tracer systems and conduct regular vocational graduate tracking, while Serbia should soon mainstream the pilot tracer study and apply it to the overall vocational training system. Regular tracking, on the other hand, will be more beneficial if made comprehensive to cover not only initial training, but also continuing training graduates in all candidate countries.

Another set of recommendations concerns the quality assurance of the methodological arrangements and their improvement and diversification over time, e.g. ensuring representative samples, making more extensive use of combined administrative and survey data, interfacing databases (e.g. education and employment information systems, social security, etc.) to exploit the wealth of information, as well as introducing - at a later stage - of longitudinal tracking measures. On top of the methodological aspects, countries need to ensure proper resources (expertise, financial), as well as real ownership over the process by embedding it in the national VET systems and building up institutional partnerships for tracking data collection, interpretation, analysis and dissemination (e.g. wider cooperation of ministries/agencies with statistical offices, other relevant public authorities, research community, academia, VET providers etc.).

Once the comprehensiveness and the quality of data received through the tracking measures are guaranteed, the candidate countries need to ensure that the results feed regularly back into their policy-making cycles in order to make their initial and continuing VET systems better serve the twin objectives of contributing to employability and economic growth, and responding to the needs and aspirations of individual learners.

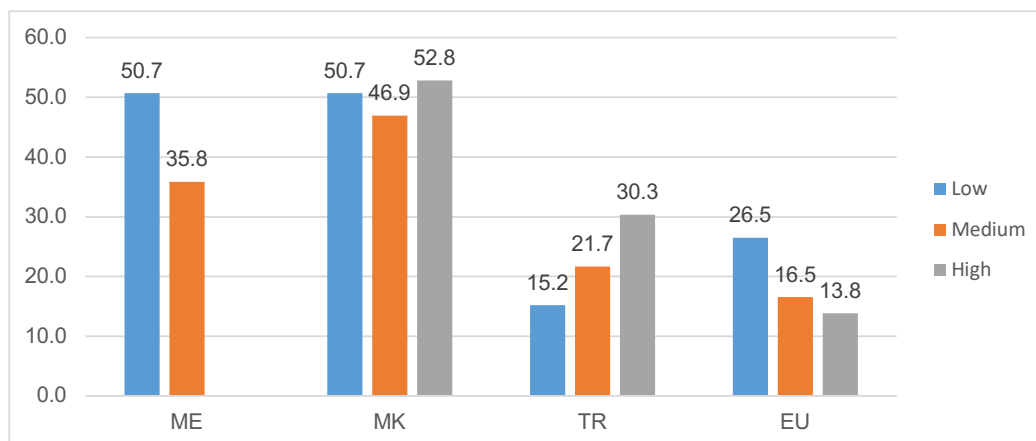


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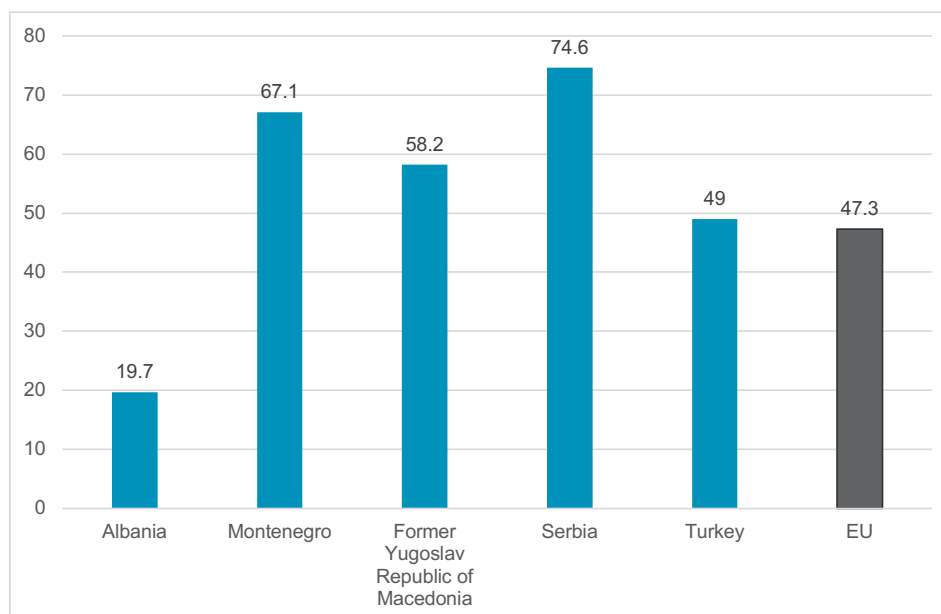
## ANNEX

**Figure 1. Youth unemployment rate by educational attainment (age group 15-24), 2016**



Source: Eurostat. Notes: Low- less than primary, primary and lower secondary education (ISCED levels 0-2), Medium- upper secondary and post-secondary non-tertiary education (ISCED levels 3 and 4), High- tertiary education (ISCED levels 5-8). ME, Montenegro; MK, former Yugoslav Republic of Macedonia; TR, Turkey. Missing data for Albania and Serbia.

**Figure 2. Share of VET students at upper secondary level (2016)**



Source: National Statistical Offices, Eurostat. EU, TR (2015), ETF calculations. AL, Albania; ME, Montenegro; MK, former Yugoslav Republic of Macedonia; RS, Serbia; TR, Turkey.

**Table 1. Employment rate of recent graduates from ISCED levels 3-8 (aged 20-34, no longer in education or training, 1-3 years after graduation)**

	2010	2011	2012	2013	2014	2015	2016
ME	m	57.4	53.5	62.3	54.8	61.3	58.7
MK	47.9	45.9	44.8	43.3	42.6	48.0	46.9
RS	39.1	42.2	44.5	40.1	46.8	46.7	51.5
TR	59.8	61.1	62.0	61.7	62.5	61.9	61.1
EU	77.4	77.0	75.9	75.4	76.0	76.9	78.2

Source: Eurostat (ME, MK, TR, EU), Statistical Office of the Republic of Serbia (data received)

Notes: m – missing data; 2014 break in time series. There was a significant change in the educational programmes in 2014 and data is not fully comparable with next years. ME, Montenegro; MK, former Yugoslav Republic of Macedonia; RS, Serbia; TR, Turkey. Missing data for Albania.

**Table 2. Employment rate of recent graduates from ISCED levels 3-4 (aged 20-34, no longer in education or training, 1-3 years after graduation) by programme orientation<sup>5</sup>**

General & Vocational	2014	2015	2016
ME	42.5	46.9	46.2
MK	33.8	36.4	39.9
RS	41.5	49.2	51.4
TR	49.4	53.3	50.7
EU	70.7	70.9	72.8

Source: Eurostat (ME, MK, TR, EU), Statistical Office of the Republic of Serbia (data received);

Notes: 2014 break in time series (see above). ME, Montenegro; MK, former Yugoslav Republic of Macedonia; RS, Serbia; TR, Turkey. Missing data for Albania.

General	2014	2015	2016
ME	m	m	m
MK	m	m	34.1
RS	58.5	23.9	45.2
TR	45.9	47.4	46.4
EU	59.8	61.2	63

Source: Eurostat (ME, MK, TR, EU), Statistical Office of the Republic of Serbia (data received);

Notes: m – missing data; 2014 break in time series (see above). ME, Montenegro; MK, former Yugoslav Republic of Macedonia; RS, Serbia; TR, Turkey. Missing data for Albania.

Vocational	2014	2015	2016
ME	40.1	48.9	45.6
MK	m	m	42.1
RS	40.8	42.2	49.5
TR	53.1	59.3	55.1
EU	73.1	73	75.2

Source: Eurostat (ME, MK, TR, EU), Statistical Office of the Republic of Serbia (data received);

Notes: m – missing data; 2014 break in time series (see above). ME, Montenegro; MK, former Yugoslav Republic of Macedonia; RS, Serbia; TR, Turkey. Missing data for Albania.

**Table 3. Key features of the VET tracer surveys in the candidate countries**

	Launched in	Level of implementation	Coverage	Responsible institution
AL	2017	Nation-wide	IVET&CVET graduates	National Employment Service
MK	2016	Nation-wide	TVET&HE graduates	MoES (Ministry of Education and Science)
ME	2017	Nation-wide	IVET graduates	Ministry of Education
RS	2018	Pilot	IVET graduates	MoESTD (Ministry of Education, Science and Technological Development)
TR	2007	Nation-wide	IVET graduates	MoNE (Ministry of National Education)

Note: AL, Albania; ME, Montenegro; MK, former Yugoslav Republic of Macedonia; RS, Serbia; TR, Turkey.

<sup>5</sup> Turkey is the only candidate country that has been carrying out regular tracer surveying of VET graduates since 2007, Albania has conducted two rounds (in 2017 and 2018), while the rest of the countries have only carried out one survey so far.