



# POLICIES FOR HUMAN CAPITAL DEVELOPMENT

## EASTERN PARTNERSHIP

AN ETF **TORINO** PROCESS  
ASSESSMENT

## Disclaimer

This report was prepared in the framework of the Torino Process 2018-20 by Arjen Deij, ETF and finalised in February 2020.

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# PREAMBLE

Economic, social, demographic and technological trends call for agile education systems that are fit to reflect changes in learning content, education provision and the assessment of skills acquisition. Such complex environments also call for regular analysis of information, data, facts and even perceptions aimed at providing decision-makers and practitioners with a good basis for taking steps forward in education reforms or consolidation of promising practices.

The partner countries of the European Training Foundation (ETF), most of them transition and developing countries, are particularly exposed to rapid and deep structural changes. Many are in a catch-up phase of economic development and at the same time are faced with serious challenges such as migration, aging populations or technology-driven inequalities. Within a lifelong learning context that brings together initial and continuous skills development, Vocational Education and Training (VET) is a cornerstone of socio-economic transformation. Most changes in technology, services and production influence the demand and supply of medium- and high-level skills, particularly those generated by VET.

To capture and document such changes and VET transformation across countries, since 2010 the ETF has been implementing the Torino Process: a periodical review of VET systems in the wider context of human capital development and inclusive economic growth. In this context, human capital is defined as providing opportunities and incentives for people to develop their knowledge, skills, competences and attitudes throughout their lives to help them find employment, realise their potential and contribute to prosperous, innovative and inclusive societies. While providing a quality assessment of VET policy from a lifelong learning perspective, the Torino Process builds on four key principles: ownership, participation, a holistic approach and evidence-based analysis.

The present regional report for the Eastern Partnership is the result of the fifth round of the Torino Process (2018–2020). It is designed to support medium- to longer-term strategic thinking in VET, looks into the regional aspects of education outcomes, and discusses commonalities while respecting the differences between the countries of the region. Therefore, the purpose of the regional report is to inform the planning, implementation and monitoring of country policies and regional initiatives for human capital development with a focus on education and training. At the same time, its findings and recommendations are available to inform the European Union and donor programming in support of these policies and regional cooperation processes. The regional report was prepared by Arjen Deij, Senior Specialist in Qualifications Systems at the ETF. Valuable input was provided by Stelios Karagiannis, ETF statistician and data analyst. The paper was peer reviewed by Ummuhan Bardak, Iwona Ganko, Didier Gelibert, Abdelaziz Jaouani, Timo Kuusela, Mihaylo Milovanovitch, and Margareta Nikolovska. The ETF thanks the Eastern Partnership countries for their engagement in the Torino Process 2018–2020, extensive contributions to the collection of policy updates and relevant statistics, and participation in the workshops organised at country level.



# CONTENTS

EXECUTIVE SUMMARY	7
Summary of findings on human capital	7
Summary of policy responses, achievements and remaining challenges	9
Summary of EU and other donors' support	9
Summary of recommended priorities for action	10
1. INTRODUCTION	11
2. REGIONAL CONTEXT	13
2.1 The situation in the Eastern Partnership in relation to its neighbours	13
2.2 Eastern Partnership policy framework	17
3. HUMAN CAPITAL CHALLENGES	19
3.1 Shrinking supply of skills and poor use of labour resources	19
3.2 The changing job market: from transition to transformation	29
3.3 Education, training & skills development systems no longer fit for purpose	37
4. VET POLICY RESPONSES, ACHIEVEMENTS AND CHALLENGES	53
4.1 New national strategies and modern approaches to VET	54
4.2 Active employment policies for better use of labour resources	62
4.3 Pro-business policies	63
4.4 Redistribution of policy and implementation responsibilities	65
5. EU AND OTHER DONORS' SUPPORT TO HUMAN CAPITAL DEVELOPMENT IN THE REGION	69
6. CONCLUSIONS AND PRIORITIES FOR ACTION	73
6.1 Support the strengthening and optimisation of providers	74
6.2 Support the changing role of teachers and trainers	76
6.3 Increase the stake of the private sector in lifelong learning	76
6.4 Monitor and support increased capacities and opportunities for lifelong learning	77
ANNEX	81
LIST OF ACRONYMS	83
BIBLIOGRAPHY	87



# EXECUTIVE SUMMARY

The Eastern Partnership regional report (2018-2020) is part of the fifth cycle of the Torino Process, during which special efforts were made to look beyond the education systems and consider vocational education and training (VET) in the context of lifelong learning and human capital development to support sustainable growth. The report coincides with the planning for the Eastern Partnership post-2020 policy framework and aims to provide a solid basis for regional policy dialogue between the EU and Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine on human capital development issues.

The report provides a summary of key policy updates, data and information, including an overview of countries' progress against key European Union (EU) benchmarks and donor contributions to human capital in the region. Finally, the paper proposes several priorities for action at national and regional level. Given the large variation of socio-economic contexts, developments and policies across the Eastern Partnership countries, the regional analysis focuses on common denominators only.

## Summary of findings on human capital

In spite of their differences, the six countries of the Eastern Partnership face many common challenges and share a common legacy. Under the influence of global drivers, all countries have entered change processes that affect their economies, labour markets and education and training systems, taking them beyond the 'transition' phase to one of 'transformation'. The relationships of the countries with their neighbours are changing quickly, links with the EU are strengthening especially through trade and migration, while the links with Russia are weakening. Benchmarking the education, labour market and economic performance of the Eastern partnership countries and the EU (2018 figures) gives a first impression that the labour force is well-educated and that employment levels are comparable or higher than those in the EU, albeit that earnings are lower. However, a deeper analysis reveals that looking at this data in isolation can be misleading.

Informed by the findings of the Torino Process country reports, ETF assessments and other sources we have identified three major common challenges that the countries need to address for a successful transformation.

## Shrinking supply of skills and poor use of labour resources

Four out of the six countries now have negative population growth, with falling birth rates exacerbated by migration. The labour force is already shrinking in five countries, and this trend is expected to begin in the remaining country: Azerbaijan. The UN predicts that across the region by 2050 the youth population under 15 will be halved compared to 2005 figures, while the population over 65 will have increased by almost 80%, making pension reforms and active aging inevitable. Over the past five years (based on statistics for 2013/2014-2018/2019) students in VET and higher education have fallen by 25% in the region in absolute numbers. With skilled workers leaving the countries, employers have started to complain of skills shortages.

Demography aside, the labour force is for a large part underutilised. Too many people are inactive, in vulnerable jobs or unemployed, while others are overqualified for the jobs they are performing. There is a lack of stable and fulfilling jobs. Self-employment in most cases is vulnerable employment. The

future for many people is uncertain and the problems are most serious for the young entering the labour force, as well as workers approaching retirement. Educational attainment is below EU benchmarks across the region. Those with less education and living in areas further away from the capitals have fewer employment and lifelong learning opportunities than those in the capitals. There are huge variations between the countries, but the general trend is that labour is getting scarcer and the countries need to make better use of the human capital they have.

## The changing job market: from transition to transformation

The economies are witnessing profound changes. As elsewhere, agriculture and industry are losing importance while more jobs are created in services. However, this has not been reflected in the sector's contribution to GDP. Job growth in services is faster for low-skilled jobs that do not generate much income than for higher-skilled jobs. In Moldova, the only predominantly rural country, we have seen a similar development in agriculture in the past five years, where more jobs were created without resulting in growth.

Economic integration with the EU has increased through trade opportunities and global value chains, but there is not enough investment in added-value goods and services, which could bring better jobs. SMEs are often cut off from these new markets. The countries have adopted favourable legislation and credit conditions to stimulate SME growth.

The most promising development so far seems to be the growth of the ICT sector and online platform work, where some countries in the region are global leaders and earnings are often much higher than in other sectors. Online platform work can offer an alternative to migration. Clusters, such as the Hi-Tech Park in Belarus, stimulate SME growth in the sector. Further expansion, however, is at risk as the number of young people graduating from technical faculties reduces. Immediate expansion depends, therefore, on the ability to retrain adults working in other sectors. Private training providers have emerged that are supported by companies, in some cases offering free training (paid by the companies) to recruit people into their sector.

## Education, training and skills development services no longer fit for purpose

Across the region, there is a mismatch between the education and training offer and skills demands. Initial VET in most of the countries was traditionally focused on training blue-collar workers, but jobs in industry are constantly decreasing. Underfunding and a lack of relevance have caused a decline in VET schools and a surplus of graduates in theoretical subjects who lack competences, though the number of students in higher education has also recently dropped due to demographic changes. There are few opportunities for lifelong learning. Equipping populations for 21<sup>st</sup>-century economic realities requires more capacity and flexibility from providers and a more learner-focused approach.

Lack of investment and lack of good management of human and financial resources inhibits the emergence of more versatile VET institutions that could better address a variety of training and education needs, although each of the countries now has a limited number of newly equipped Centres of Excellence. Mergers and network optimisation has started slowly but is not keeping up with the drop in students. The status and quality of teachers and trainers is cause for concern. Although countries are moving towards competence-based flexible and individualised learning, this is still in the early stages.

Adults have been integrated into VET in Belarus and Georgia, but the numbers are still low. As a result, year after year, fewer skilled workers come onto the labour market. Vacancies are often filled by



higher education graduates that are being trained on-the-job. There is no real cooperation between VET institutions and between VET and higher education sectors to find more integrated solutions, with the exception of the Resource Centres in Belarus. Adult learning is underreported and remains underdeveloped. The few indicators that are available show low levels of participation.

## Summary of policy responses, achievements and remaining challenges

In 2017 the ETF noted that national policies were largely focused on initial VET and the youth demographic. It recommended paying greater attention to continuing VET and involving the private sector. Today, with new and emerging economic realities influenced by global challenges, VET and wider education, training and skills development systems are at a crossroads. 2020 marks the completion of policy cycles and the beginning of new strategies for individual countries and the region. In this context, the UN Sustainable Development Goals and the EU Eastern Partnership Strategy 2020 are influencing educational, lifelong learning and VET strategies with an emphasis on human capital development.

Of the main progress made, achievements and remaining challenges, we note the following:

- Acknowledgment of the need to shift from traditional to modern, student-centred, flexible VET systems is reflected in new VET concepts and laws, such as Azerbaijan's VET Road Map, the VET Law in Georgia, the New Ukrainian School and Modern VET Concept in Ukraine.
- The main challenges for these new policies are the implementation capacities at the grassroots level and the available resources.
- New quality-assurance systems are being established across the region.
- Improvements to content include new curricula, the introduction of modular programmes (especially in Georgia) and greater involvement of the private sector in devising occupational standards.
- Key competences, or 21<sup>st</sup>-century skills, have gained in importance, but there is a lack of systematic approaches to integrating them into education and training.
- Career guidance is being strengthened. Armenia has career guidance units in 95 VET schools. Azerbaijan, Armenia, Moldova and Ukraine all developed concepts for work-based learning. In Ukraine dual education is being piloted in 100 VET schools and many universities.
- Teachers are the focus of many donor projects and countries are planning more systematic approaches to continuing professional development, but this is an area for improvement.
- The countries are developing strategies, policies and mechanisms to improve employment opportunities. There is a developing focus on encouraging would-be migrants to stay in the country, e.g. through Belarus Hi-Tech Park cluster.
- Private-sector cooperation has been stimulated by innovations at a national, sectoral and local level. New entities have been created in which social partners play a leading role, supported by government.
- Countries are stimulating the growth of SMEs and entrepreneurial learning.
- A redistribution of policy and implementation responsibilities includes public administration reforms, and agencies playing a larger role.

## Summary of EU and other donors' support

All countries benefit from EU support for vocational education and training and higher education. The EU is the most important donor in the region, and EU policies have informed national reforms. The cooperation between EU and bilateral donors is improving but there often isn't a joint-programming

mechanism in place (only an example in Georgia), and sometimes donor projects have alternative methodologies that complicate national reforms. The policy dialogue mechanisms (bilateral and regional) and EU interventions are not sufficiently linked.

## Summary of recommended priorities for action

The ETF supports the priorities for 2021-2027 identified by the European Commission, which offer more opportunity for bottom-up initiatives, teacher and youth-centred initiatives including Erasmus+ and an emphasis on digital skills and the green economy. While reforms are ongoing and take time, we nevertheless would like to emphasise the urgent need to create more systemic capacities for lifelong learning, and in particular adult learning, to enable populations to contribute to sustainable growth in the context of global challenges.

The report therefore offers four recommendations for regional cooperation, exchange of experiences and peer learning based on the analysis of human capital challenges and policy progress so far:

- **Support the strengthening and optimisation of providers**, not only through merging them, but through making VET systems more flexible to respond to the changing needs of a diverse group of learners and companies. Countries can learn from each other on how to strengthen their networks and map and evaluate existing provision, about gradually extending institutional autonomy to manage their resources more efficiently and cooperating closer with local authorities and companies. This can include an active role of stakeholders and experiences with smart specialisation and clusters of SMEs.
- **Support the changing role of teachers and trainers** through bottom-up programmes such as targeted Erasmus+ projects, and also through addressing new roles including coaching, more individualised learning, more use of new technologies, teaching and learning in modules, experimenting with integration of roles, allowing teachers to mix theory and practice, and mentoring of students across different locations beyond the classroom. We also plead for a more structured regional cooperation initiative in this area, focused on defining new standards for teachers and the status and motivation of teachers.
- **Increase the stake of the private sector in lifelong learning**, not only through consultation, cooperation and sharing, but also by transferring responsibilities to the private sector. Although the vast majority of private companies are SMEs, there is a need for more intensive work with actors from the private sector to explore how their capacities to contribute to lifelong learning could be strengthened. This could be based on exchanging best practices in the countries.
- **Monitor and support increased opportunities for lifelong learning** through a Human Capital Development Review that will help to map provision, capacities, needs and demand, and funding for lifelong learning, considering formal, non-formal and informal learning. Beyond existing demand and supply it would look at the emerging needs considering the global challenges, how countries are integrating lifelong learning strategies into National Development Strategies, and could also be used to harvest best practices.

# 1. INTRODUCTION

For ETF, **human capital development** is defined as ‘the creation of lifelong learning systems that provide opportunities and incentives for people to develop their skills, competences, knowledge and attitudes throughout their lives for the sake of employment and realisation of their potential, and as a contribution to prosperous, innovative and inclusive societies’. In the Eastern Partnership countries human resources are the most important driver for socio-economic development. Making best use of the human capital is therefore essential for sustainable and inclusive development and growth.

The Regional Report of the Torino Process in the Eastern Partnership countries provides an overview of the main human capital development issues in the region and an assessment of the related VET policy reactions. It is the final step in a highly participatory process that started in the six countries of the Eastern Partnership: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine, at the beginning of 2019. This report builds on the evidence and analysis generated and compiled in six national reports by country stakeholders, and 24 in-country regional reports in Ukraine where the process was implemented at a sub-national level.

ETF prepared independent country assessments that focused on the main human capital development challenges in the countries and looked at how successfully they are being addressed in order to define recommendations for consideration for future developments. The Regional Report is thus based on numerous information sources from ETF and other organisations as well as an analysis of quantitative indicators, bringing together different challenges, trends, developments and responses from governments and stakeholders in the countries.

Although the situation in each of the countries is different, they still have many issues and developments in common. The report therefore can provide a reference for regional peer learning and exchanges. The aim of the analysis is not to compare countries’ performances to determine which have been most successful over the past two years, but rather to examine the trends and identify lessons learned in a forward-looking analysis that can inform future policies.

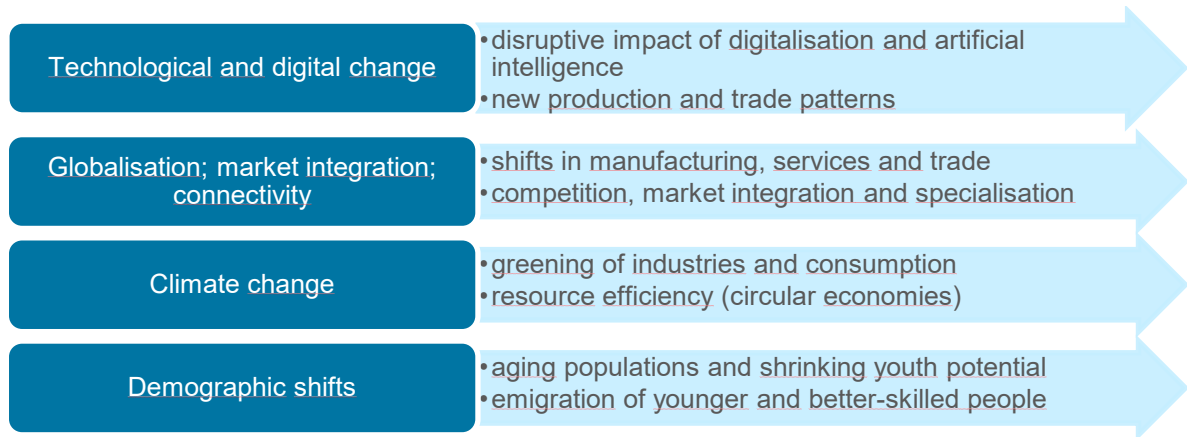
The timing of this report coincides with the planning of the Eastern Partnership post-2020 policy framework, which can facilitate a reflection on the human capital development initiatives under the Eastern Partnership. The report aims to provide a solid basis for regional policy dialogue between the EU and the six countries on human capital issues and a reliable source of information for EU regional programming. It also aims to inform the regional co-operation and intervention agenda of the ETF.



## 2. REGIONAL CONTEXT

Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine differ from each other in size, political systems, demography, and in social and economic terms, yet they face many similar challenges and share a common legacy. Over the past 25 years we have been using the term ‘transition’ to describe the economic and political processes in the countries of the Eastern Partnership. Today this term is no longer appropriate as these countries face the same global challenges as EU member states.

**FIGURE 1: KEY DRIVERS OF CHANGE WORLDWIDE**



Source: ETF 2019a, ETF 2019a

Under the influences of global drivers, all six countries have entered change processes that affect their economies, labour markets and education and training systems. The relationships of the countries with their neighbours are evolving quickly, links with the EU are strengthening, especially through trade and migration, while the links with Russia are weakening.

In the next chapter we will address the human capital challenges in each of the countries and the region as a whole. In the countries of the Eastern Partnership the problems associated with global challenges are often much more profound than in EU member states, however, which makes it more difficult to address them effectively, particularly because the capacities and available resources of the countries are more limited than in the EU.

### 2.1 The situation in the Eastern Partnership in relation to its neighbours

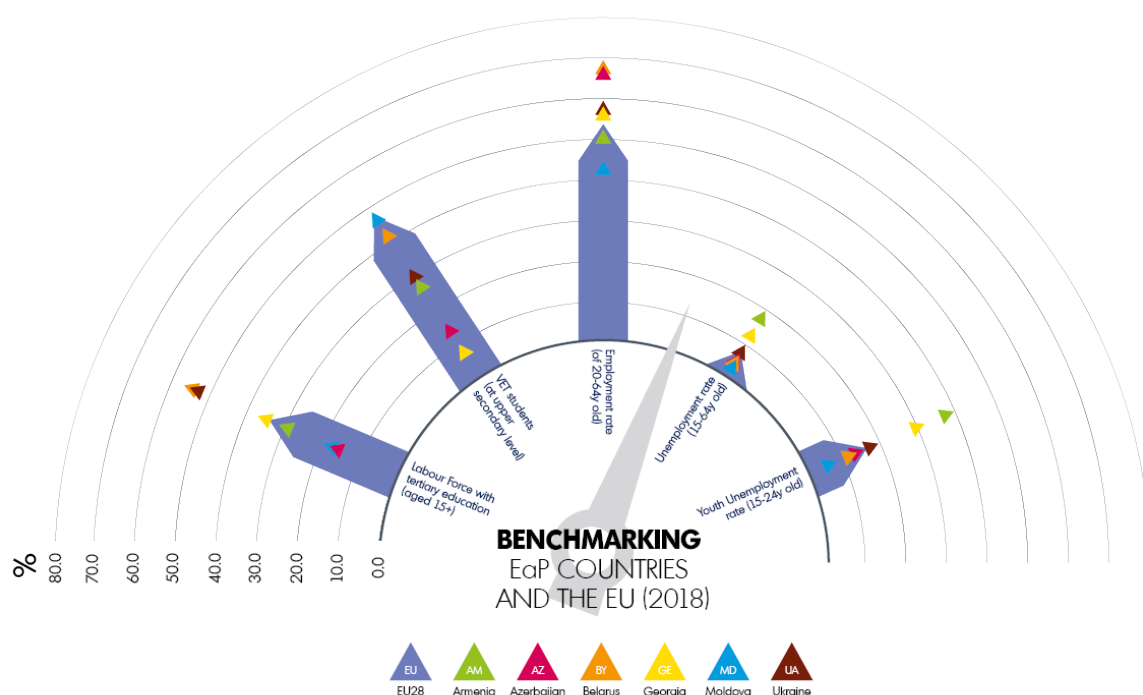
Benchmarking the education, labour market and economic performance of the Eastern partnership countries and the EU28 (see Figure 2, below), as well as their neighbours in the South Eastern Europe and Turkey region (SEET; previously known as the Western Balkans and Turkey), in 2018 gives an initially favourable impression. The workforce in the region is on average well-educated, and attainment levels are higher than in the SEET countries. In Belarus and Ukraine more than 50% of the labour force has received higher education (54.3% and 52.9%, respectively), which is far above the EU average of one-third of the labour force. Georgia is just above EU levels, but in Azerbaijan and Moldova tertiary education is still at less than 20% (16.5% and 18% respectively), though these indicators are improving.

Participation in secondary VET, however, is below the EU average in all countries. It varies significantly within the EaP countries, ranging from more than 40% in Moldova and Belarus to around

30% in Ukraine and Armenia, with lower levels in Azerbaijan and Georgia (14.5% and 8.8%, respectively). In contrast, the workforce in most of the countries of the SEET region have VET attainment levels that are close to or above the EU average.

The employment indicators of the countries appear comparable or even better than the EU average. Belarus (67.5%), Azerbaijan (67%), Ukraine (57.1%) and Georgia (55.8%) outperform the EU28 member-states (average employment level 54.1%). Armenia and Moldova present rates slightly below the EU average with 50% or less of the working population employed (50.1% and 42%, respectively).

**FIGURE 2: BENCHMARKING EAP COUNTRIES AND THE EU (2018)**



Unemployment rates vary around the EU average. In detail, Armenia, Georgia and Ukraine (17.8%<sup>1</sup>, 12.7% and 8.8%, respectively) present unemployment rates higher than those of the EU (6.6%), while considerably lower rates exist in Azerbaijan, Belarus and Moldova (4.9%, 4.8% and 3%, respectively). The same pattern exists for youth unemployment, where these two groups of countries are comparable to those at the higher or lower end of the EU28 average.

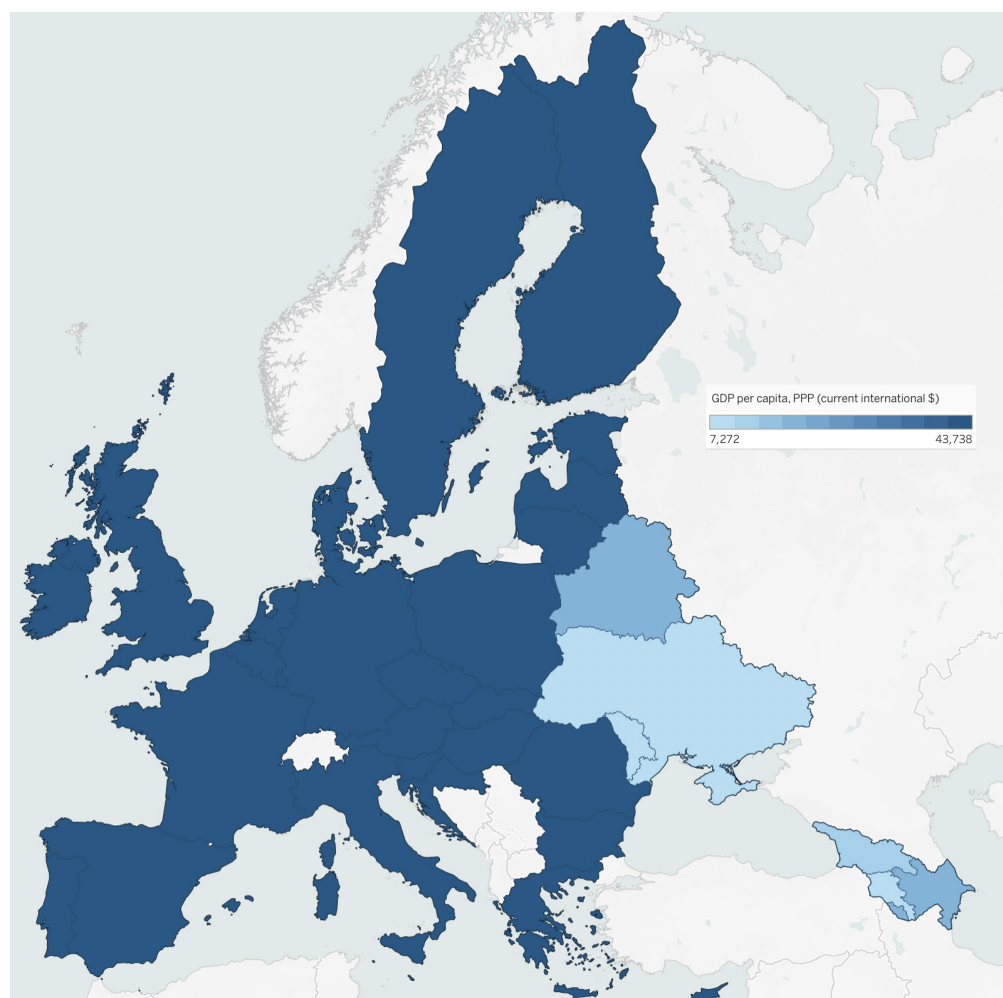
The truly distinguishing indicator, however, is GDP per capita, which can offer a comparison of average living standards and economic wellbeing, as shown in Figure 3. In 2018, GDP per capita for the EU was \$43,000, which is more than double that of Belarus (\$19,995) and Azerbaijan (\$18,044). At the lower end, Ukraine and Moldova present per capita output under \$10,000 (\$9,233 and \$7,272, respectively), while Georgia and Armenia exhibit slightly higher values (\$12,005 and \$10,343, respectively).

<sup>1</sup> Data refer to 2017

Average incomes are considerably below EU levels, and even below the levels of most of the SEET countries, which is one of the main reasons for migration to the EU, Turkey and Russia (GDP per capita in PPP around \$43,000, \$28,000 and 29,200, respectively). Income distribution is often more uneven than in the EU. Poverty is still significant and in most of the countries large numbers of people are dependent on informal jobs and subsistence agriculture. Inactivity is also high in some of the EaP countries. This is particularly evident in rural areas and the remoter regions. The areas around capital cities have much higher incomes and more job opportunities than in the provinces.

As in the EU, jobs in services are growing, while jobs in agriculture and industry are generally in decline. Azerbaijan has an important oil and gas sector, but it does not provide many jobs<sup>2</sup>. In most of the EaP countries large enterprises closed their doors in the 1990s, although in Belarus and Ukraine many continue to function, either as state-owned enterprises in Belarus or private conglomerates owned by oligarchs in Ukraine. The favourable education indicators may help explain why the strategically important information and communication technology (ICT) sector is developing well in some EaP countries in comparison to most EU member states.

**FIGURE 3: GDP PER CAPITA IN EAP AND THE EU (2018; IN PPP CURRENT INTERNATIONAL \$)**



Source: ETF Database

<sup>2</sup> 1.37% of total employment (2018), Statistical Committee of the Republic of Azerbaijan



The gap with the EU is still significant. Although countries such as Georgia and Ukraine have aspirations to join the EU, their accession is far from imminent, and the countries are therefore developing their own policies autonomously, balancing the relationships with EU and with their powerful neighbour Russia. In contrast, the Western Balkan countries tend to be following an EU-centred accession agenda.

All EaP countries are looking at strengthening their links with the European Union and the EU is an important economic partner for these countries, although the relationship is not reciprocal. This is well demonstrated by trade, migration and investment flows, as we will see in the next chapter. Trade with the EU28 is growing in importance and is larger than trade with Russia for all countries except Belarus. Migration flows to the EU are also increasing, while flows to Russia are decreasing.

The Russian Federation has a strong influence in the region. There are many historic links and Russia contains more residents originating from the EaP countries than does the EU, with the exception of Moldova. More people are able to speak Russian than EU languages. Russia and the Eastern Partnership countries share a common system of education and labour market regulation. The common education legacy is strong, and this probably also explains the importance of education and knowledge acquisition in the EaP countries. VET has been in decline for a long time and higher education today is much more popular than VET. In the field of vocational education and continuing education, labour market regulation traditions have led to rigidities and fragmented and overregulated systems.

The EU has become an important source of inspiration in education policies. It has supported the growth of higher education over a long period through the Tempus and Erasmus+ programmes. The countries are participating in the Bologna Process (a series of ministerial meetings and agreements between European countries to ensure comparability in the standards and quality of higher-education qualifications) and have started to develop and implement National Qualifications Frameworks (NQFs) inspired by the European Qualifications Framework (EQF). Many students have studied abroad and alumni from EU universities form part of national administrations. The EU is the biggest donor to the EaP countries and is investing considerably in education, VET and employment creation in all the Eastern Partnership countries through the Eastern Partnership initiative, technical assistance projects and sector budget support. This shows the growing importance of human capital development reforms in the region.

Contact with the EU appears to be an important stimulus in rethinking existing education systems. Currently, all countries are developing, adopting and implementing new concepts, strategies and legislation for modernised, competence-based vocational education, training and lifelong learning systems that are better linked with society. This means gradually breaking with traditions of separated sub-systems for qualified workers, technicians, specialists and engineers and the glorification of knowledge over skills. There is a lot of interest in European solutions in the Eastern Partnership countries and longing for European values. Education and training systems are an important tool for integration. These can take the form of structural measures aimed at governments with the involvement of national and sectoral stakeholders, such as accreditation systems, the development of occupational standards, NQFs, national career guidance services or systems for work-based learning, as well as bottom-up measures strengthening people-to-people and inter-institutional relationships.



## 2.2 Eastern Partnership policy framework

The Eastern Partnership (EaP) is a joint policy initiative that aims to deepen and strengthen relations between the European Union (EU), its member states and its six eastern neighbours: Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine. It is guided by the EU's Global Strategy and the revised European Neighbourhood Policy, which focuses on increasing the stabilisation and resilience of the EU's eastern neighbours.

In support of a more results-oriented approach towards the Eastern Partnership, the European Commission and European External Action Service identified 20 Deliverables for 2020 in 2017, covering four priority areas: (1) a stronger economy; (2) a stronger governance; (3) a stronger connectivity (including energy efficiency and environmental measures) and (4) a stronger society (mobility and people-to-people contacts). The European Neighbourhood Instrument is the key EU financial instrument for cooperation with the EaP countries. This is supported through the relevant dialogues, at bilateral level as well as at multilateral level through thematic platforms.

Human capital development is at the core of these deliverables and is seen as a priority for creating stronger societies, through mobility and people-to-people contacts and in particular through investment in developing young people's skills. Human capital development actions are required for most of the 20 Deliverables, including support for the environment and enhancing energy efficiency, more engagement with civil society, good governance with the involvement of stakeholders beyond governmental institutions, the development of SMEs and entrepreneurship, and creating job opportunities at the local level. These ambitions require more integrated lifelong learning solutions, going beyond education systems and building structural capacities for adult learning, rather than fragmented training initiatives.

As mentioned above, this report aims to inform the Post-2020 preparations for the Eastern Partnership. On 18 March 2020 the European Commission adopted a Joint Communication on the Eastern Partnership policy beyond 2020 entitled 'Reinforcing Resilience – an Eastern Partnership that Delivers for All'. At the time of writing the new set of Deliverables and policy measures were set to be adopted at the June 2020 EaP summit in Brussels<sup>3</sup>. In terms of the Post-2020 proposals with the most relevance to education and training as outlined in the Joint Communication, the priority on Youth is to be maintained through a youth and education package. Reforms at system level will get further support under country programmes, as reforms take time, but in order to hasten more tangible results for citizens the Commission proposes to increase the mobility and capacity-building opportunities for youth and teachers through Erasmus+. A 'new deal for youth' is proposed, with an emphasis on 21<sup>st</sup>-century skills, innovation and entrepreneurship as well as more green skills, in line with the Commission's Green Deal. Both higher education and vocational education will be able to benefit from this, building on existing networks, as well as youth organisations. There should be a focus on innovative teaching and learning, and on quality. Measures to support returning migrants and a Youth Guarantee are also put forward. Education systems are considered pivotal for managing change and building sustainable, resilient and fair societies.

In the Donor Support and Conclusions sections of this report we will review these proposals in the light of the human capital challenges in the region. We believe that, given the changes in technology,

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<sup>3</sup> <https://www.europarl.europa.eu/legislative-train/theme-a-stronger-europe-in-the-world/file-eastern-partnership-post-2020>

global economic developments, work patterns, migration and demography and their impact on the labour force in the Eastern Partnership, there is a need to go beyond these priorities, and beyond education systems and youth, and strengthen capacities for lifelong learning to address adults. This is particularly important because lifelong learning opportunities are currently very limited in the region. In the Recommendations section a number of suggestions for how to address this are included.

In addition to the multilateral cooperation framework, the European Union has specific bilateral agreements and cooperation with each of the Eastern Partnership countries. A short overview of these bilateral agreements is provided in annex.

### 3. HUMAN CAPITAL CHALLENGES

As we have seen, the major employment and labour-market indicators for the Eastern Partnership countries are not so dissimilar from those in the EU. But looking at this data in isolation is misleading. The national reference reports and the ETF assessments identify a range of human capital development challenges for the six countries that will be further investigated in this chapter.

The form these challenges take differs widely between countries. Although this report is informed by these findings, it concentrates on the common challenges and policy responses, and at recommendations for shared solutions and peer learning that can support regional cooperation.

The three common human capital challenges across the Eastern Partnership region, which will be explored in detail below are:

**FIGURE 4: SNAPSHOT OF HUMAN CAPITAL CHALLENGES IN EAP COUNTRIES**

1. Shrinking supply of skills and poor use of labour resources	2. The changing job market: from transition to transformation	3. Education and skills development systems no longer fit for purpose
<ul style="list-style-type: none"><li>• Diminishing youth demographic, aging workforce</li><li>• Emigration of fertile population</li><li>• Many people inactive or in unproductive jobs</li><li>• Population unable to afford E&amp;T</li><li>• Low participation in VET due to underfunding of systems</li></ul>	<ul style="list-style-type: none"><li>• Fall in subsidised employment, growth in services</li><li>• Disparity between cities and regions with fragile jobs in rural areas</li><li>• New trading partners, calling for investment in value-added production</li><li>• Growth of the IT sector, outsourcing</li><li>• The integrated platform economy and virtual migration</li><li>• Growth of clusters, SMEs and self-employment</li></ul>	<ul style="list-style-type: none"><li>• Focus on declining youth, no systematic adult learning</li><li>• Fragmented E&amp;T systems</li><li>• Poorly equipped and inefficient training providers</li><li>• Inflexible &amp; outdated content</li><li>• Need for competence-based E&amp;T</li><li>• Low involvement of the private sector</li><li>• Overeducated graduates, skills mismatch</li></ul>

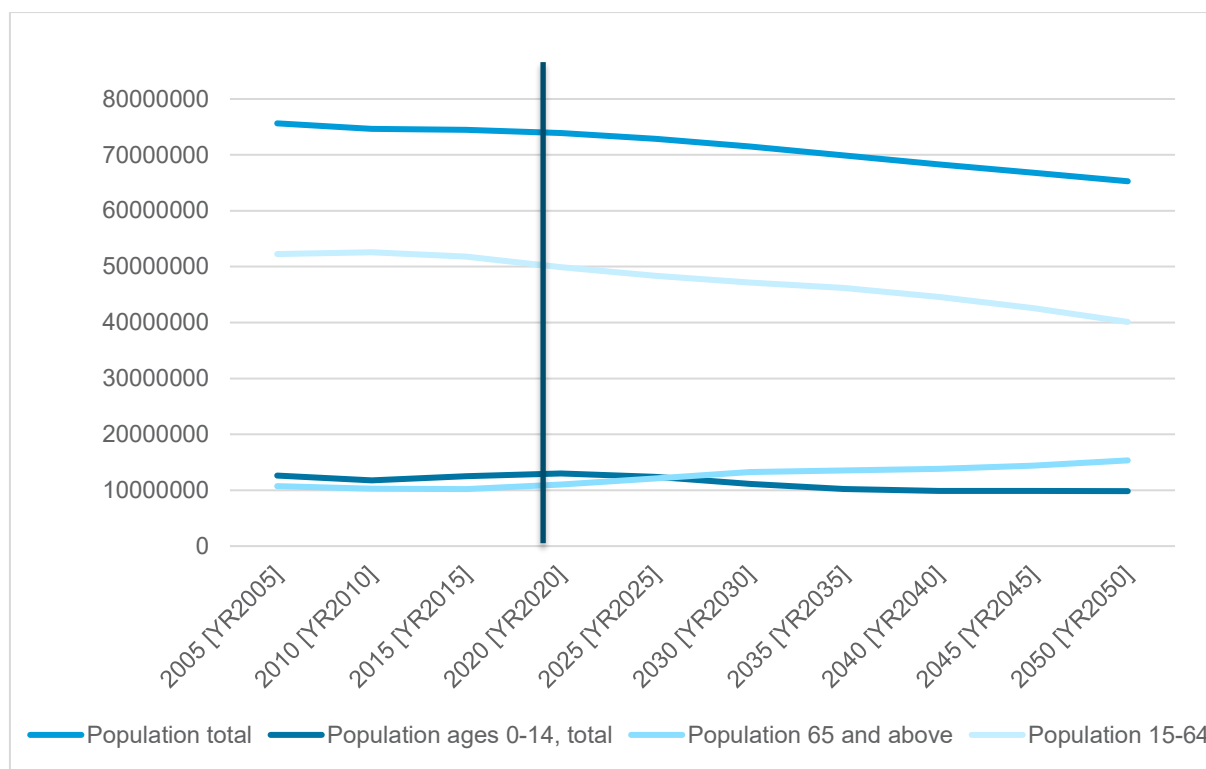
#### 3.1 Shrinking supply of skills and poor use of labour resources

After the collapse of the Soviet Union and independence most countries faced great uncertainty. The first years were especially hard; many people decided to leave home and the birth rates dropped. A recovery took place when situations stabilised in the late 1990s and early 2000s, but this recovery was temporary for most countries. The recent demographic changes are expected to continue and accelerate in the years to come. In four out of the six countries there is negative population growth and the numbers of primary school pupils have dropped from 2010 onwards in almost all countries. Azerbaijan is the only country that still witnesses a significant influx of young people onto the labour market, but even here the percentage of youth in the working-age population is dropping, which suggests that the number of people available for work is at its peak and will go down in the coming years. In the other five countries the size and share of the workforce as part of the total population has started to go down over the past few years.

If UN population projections for 2050 can be relied on, the region as a whole will have lost 20% of its population compared to 2005, the working age population will have reduced by 25%, and the youth

population under 15 will be halved compared to 2005 figures, while the population over 65 will have increased by almost 80%, making pension reforms and active aging inevitable.

**FIGURE 5: DEMOGRAPHIC DEVELOPMENTS IN EAP COUNTRIES**



Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). *World Population Prospects 2019: Volume I: Comprehensive Tables*

In Belarus, the decline is due mainly to a low birth rate but can also be partially attributed to the fact that only 16% of Belarusian men live to pension age (61.5 years, Think tanks, 2017), although the health situation is improving. Across the region, aging populations are putting pressure on pensions and health expenditures and governments are expected to gradually increase the pension age. Current pension ages vary between 58 and 62 for women and 60 and 65 for men. Most countries have already announced measures to increase the pension age. This development also requires policies for active aging.

### Migration is aggravating the situation...

Migration from the six countries has been a constant factor since they became independent. Russia was initially the destination of preference, continuing trends of internal migration from the Soviet era, especially in the 1990s. Russia has an aging population and needs immigration for its sustainable development. In 2019, the country hosted around 11.6 million international migrants. Millions of them come from the six countries. Immigrants from Ukraine comprise the largest foreign-born population in the Russian Federation (over 3 million people)<sup>4</sup>. Since the start of the conflict in East Ukraine in 2014, an estimated 400,000 people moved to the Russian Federation, with a large number gaining refugee status or temporary asylum. Today, however, EU member states have superseded Russia as the

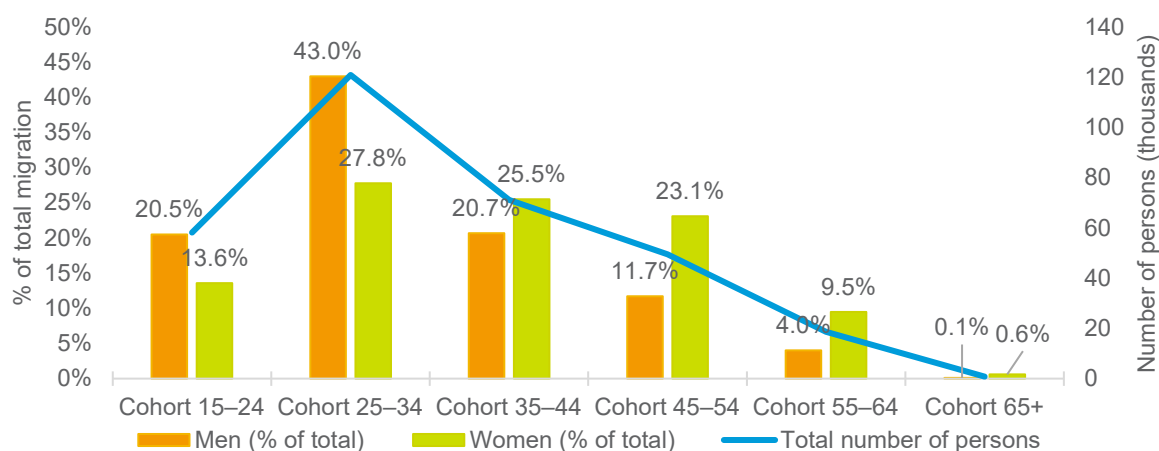
<sup>4</sup> World Migration Report 2020, p. 93 [https://publications.iom.int/system/files/pdf/wmr\\_2020.pdf](https://publications.iom.int/system/files/pdf/wmr_2020.pdf)

destination of choice. In 2017, Poland issued more than 660,000 residence permits to foreigners, with the majority (more than 85%) going to Ukrainians (World Migration Report 2020). In addition, large numbers of Belarusians have also migrated to the EU.

Migration to the EU has been facilitated by visa-free travel for citizens from Georgia, Moldova and Ukraine. Citizens from five countries from the Western Balkans and from Georgia, Moldova and Ukraine can travel to the EU without a visa for a maximum of 90 days. According to Eurostat data, the total number of first residence permits issued to nationals of the visa-free countries has more than doubled since 2008 and nationals from these countries represented a gradually increasing share of all third-country newcomers in the EU and Norway, from 14% in 2008 to a peak of 26% in 2017. This would suggest a relation between visa liberalisation and emigration. A closer examination of the reasons for which residence permits were issued showed that, increasingly, nationals from the visa liberalisation countries came for employment reasons. While these represented generally half of all residence permits until 2015, since then this share has exceeded 60% and reached 77% in 2017. A majority of residence permits for remunerated reasons were issued to Ukrainian nationals<sup>5</sup>.

Moldova is losing about 1% of its population to emigration annually<sup>6</sup>, exacerbating the problem of an aging population. In 2018 alone, up to 50,000 people left the country, while it welcomed only 4,267 immigrants<sup>7</sup>. Most of those who emigrate do so in the pursuit of economic opportunity. Emigration brings remittances to the economy but is leading to an unprecedented loss of workforce potential. There is also often a negative effect on the birth rate in the sending country as many migrants are of fertile age.

**FIGURE 6: MOLDOVANS WORKING ABROAD OR SEEKING WORK ABROAD (2016)**



Source: ETF 2020 and NR Moldova 2019 (section B.1.6) and Statbank Moldova (<http://statbank.statistica.md>)

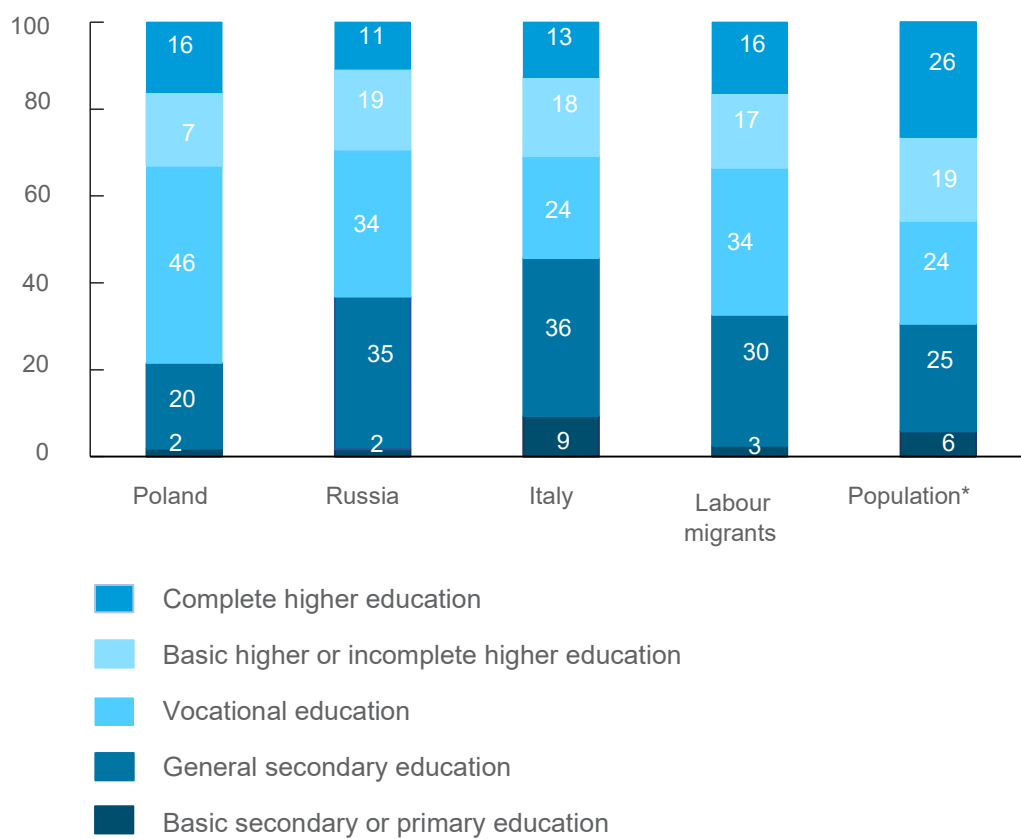
What do we know about the educational background of migrants from the EaP countries? Are mainly low-educated nationals migrating in pursuit of jobs that EU citizens don't want to do themselves? Or are the best-educated leaving, tempted by well-paid specialised jobs and depriving the sending countries of their best talent? An overview is difficult to obtain, but there are some data available that can give us an indication (Figure 7).

<sup>5</sup> [https://ec.europa.eu/home-affairs/sites/homeaffairs/files/00\\_eu\\_visa\\_liberalisation\\_2019\\_synthesis\\_report\\_en\\_0.pdf](https://ec.europa.eu/home-affairs/sites/homeaffairs/files/00_eu_visa_liberalisation_2019_synthesis_report_en_0.pdf)

<sup>6</sup> Ibid.

<sup>7</sup> NRF A.3.2.

**FIGURE 7: MIGRANTS FROM UKRAINE BY LEVEL OF EDUCATION**



In 2016, the highest number of migrants from Ukraine moved to Poland; among them 46% had vocational qualifications (which is twice the share of VET graduates in the Ukrainian population), while 33% had higher education. Poland is clearly attractive for skilled labour. Migrants to Russia, on the other hand, are less specialised: 34% had a VET background and 30% higher education. In Italy, 45% of Ukrainians that migrated to the country had only general education without a specialisation. With a decreasing number of VET graduates available in Ukraine due to lower levels of participation, aging of the workforce and growing numbers of skilled workers migrating, employers are complaining about the loss of manpower through migration.

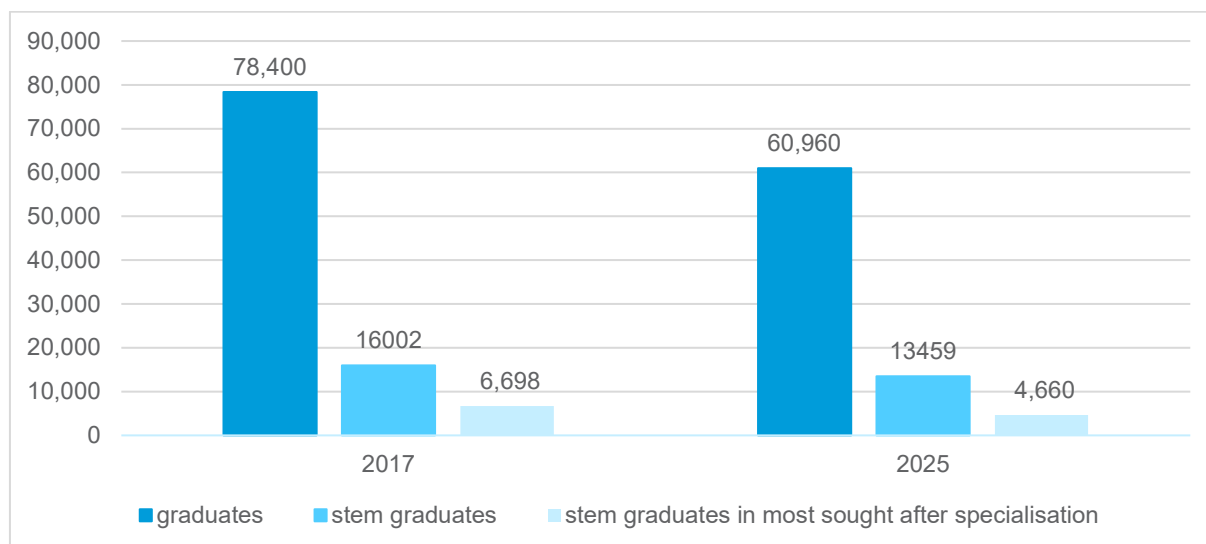
Moldova is also witnessing increased skills shortages and no longer has the resources to attract foreign investment. It needs to compensate for the loss of labour by upskilling the labour force, but additional investments in human capital development are a challenge. Most migrants were trained from the public budget, therefore migration often represents a net loss of human capital.

### ...while existing human resources are underutilised

The demographic developments have a clear impact on participation in VET and higher education. Across the board, over the past five years the total number of VET students (ISCED level 3) in the EaP countries dropped by 25%, while the drop in participation in colleges and technikums (training schools for technical occupations, of which some have been renamed as colleges) was approximately 16%. In higher education, participation dropped by 25% at bachelor level and 11% at master's level. According to UNESCO data, Georgia and Azerbaijan managed to improve participation in higher VET

and higher education over the five-year period, but not in initial VET (source: UNESCO-Institute of Statistics). The demographic downturn has an impact on the skills supply at all levels and affects critical sectors such as ICT. Below are figures from the ETF assessment in Belarus.

**FIGURE 8: BELARUS EDUCATION SYSTEM GRADUATE FORECAST (BASED ON EXISTING TRENDS)**

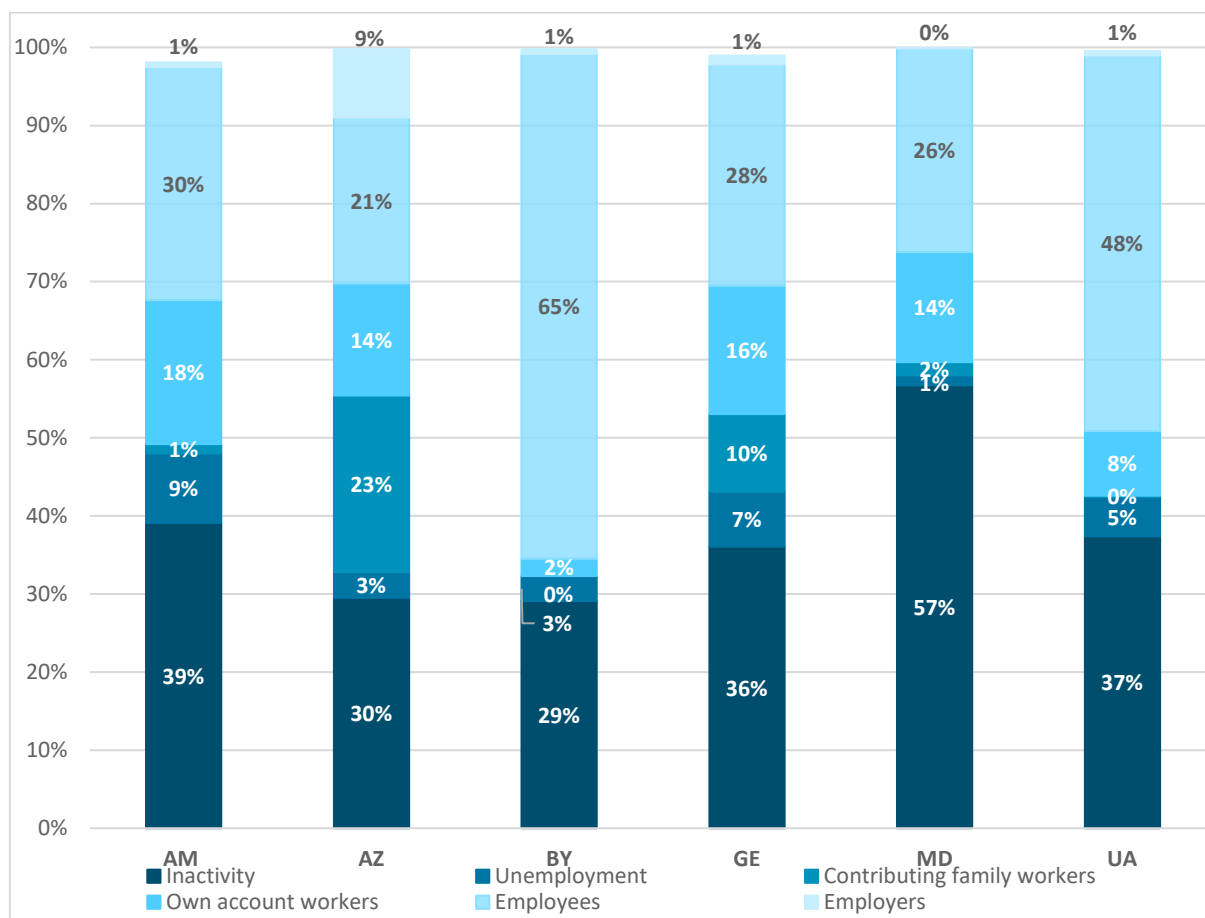


Source: Policies for Human Capital Development, Belarus, ETF, 2020 p.33

On the surface, the countries in the Eastern Partnership have good labour-market and education indicators. Currently, most countries are still in a more or less favourable situation because the labour force has only just started to shrink. However, as we have already seen, demographic developments are affecting the supply of skills through the education system, and this is further aggravated by migration. It is now time to take a closer look at the labour force in each of the countries.

In ETF, human capital is understood as the skills, competences, knowledge and attitudes of people. So, how are the six countries using their human capital? In the table below we have tried to reflect the division of the labour force aged 15-64, based on official statistics. The first thing to observe is inactivity, which varies from 29% to 57% depending on the country (the EU average in 2018 was 26.3%). In addition, it is important to consider how many people are in vulnerable jobs, in particular the self-employed and contributing (and often unpaid) family members. This gives us a very different picture than the employment rates seen in Figure 2.

**FIGURE 9: LABOUR FORCE PARTICIPATION IN THE EASTERN PARTNERSHIP COUNTRIES (2018)**



Source: ETF Database Note: Data for Armenia refer to 2017

The indicators for Belarus look the best as Belarus has opted for a policy of full employment facilitated by compulsory job assignments for graduates and a high level of employment in the public sector and state-owned enterprises. 66% of the working age population in Belarus is either in wage employment or is an employer. Almost half of them are employees in state-owned enterprises. Private employment is growing in Belarus and accounted for 1.16 million workers, or 31% of total employed population, in 2018, but this is predominantly in microenterprises, with a growing share of people self-employed. It is not clear how long Belarus can afford to maintain its government-sponsored full employment policy as economic growth stagnates. Among the six countries, Belarus has the lowest level of youth not in employment, education or training (NEETs), at 6.3%.

In Armenia, Azerbaijan, Georgia and Moldova, between 38% and 55% of people are in vulnerable employment. Many people work in the informal sector, which is much larger than in the EU. If we add to this the unemployed and the inactive, the deployment of the majority of the working-age population in these countries is problematic. According to the International Labour Organization (ILO, World Employment Report 2020), one-third of all informal employment in Eastern Europe comprises wage and salaried workers in companies from the formal sector; this means that close to one-fifth of all employees are not (or are insufficiently) protected by social-security schemes, let alone those without steady wage employment. Moreover, this cross-section does not take the long-term sustainability of public employment into account (see the next section). We can conclude that human capital is



underutilised and, although social indicators have shown gradual improvements in most countries, the future is uncertain.

The problems are most serious for those entering and exiting the labour force, but they affect the work force at all ages. Among the young age group, early leavers from the education system find it particularly hard to gain suitable employment, and often end up as NEETs, in informal jobs, or unemployed. They are unlikely to return to the education system to improve their skills and they have their whole working lives in front of them with poor prospects. However, there is a growing problem for people closer to retirement. In Belarus, people over 50 comprise 30% of the registered unemployed, while Armenia, Belarus and Georgia have large groups of discouraged job seekers over 55. When retirement ages are increased these concerns will certainly intensify.

In Armenia, youth unemployment is a serious challenge. Unemployment has increased because companies lack growth capacity. Long-term unemployment is also high, and indicators do not show much improvement in spite of efforts to activate the unemployed through active labour-market policies, entrepreneurship and career counselling. There is a high level of inactivity and a large informal sector. 28.7% of the youth are NEETs – the highest percentage in the Eastern Partnership countries – and among young women this rises to 37.5%. There are strong geographic imbalances, and big differences between population groups. Women and people in rural areas and small towns have fewer chances of finding quality jobs. Poverty is high, although gradually decreasing. Some families, according to the ETF assessment report, cannot afford to send their children to school.

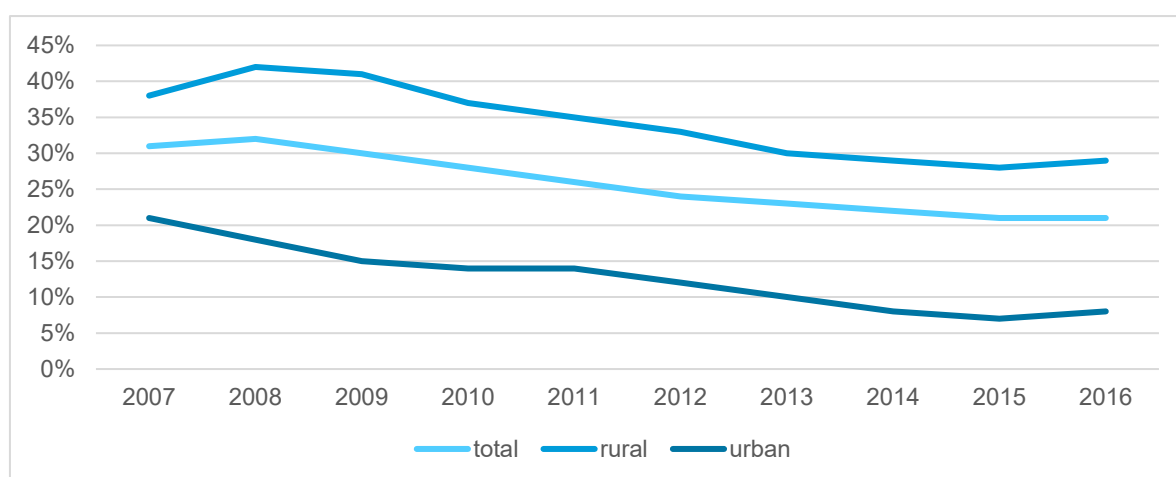
In Azerbaijan many young people leave the education system with only general education and without a specialisation. This has been happening for a long time and, as a consequence, only 32% of the labour force is qualified. With an average of 100,000 young people entering the labour market every year, a lack of private-sector jobs leaves young people with few pathways to decent employment. Many are trapped in a vicious cycle where it is hard to get a job with no experience, while it is hard to gain any experience if you have never worked. The youth unemployment rate is 2.6 times higher than the total unemployment rate, 55.2% of the employed population are in vulnerable employment (females 63.1%), and 23% of the youth was not in education, employment or training (NEET) in 2017. In addition, more than 25 years after the conflict with Armenia over Nagorno-Karabakh, many internally displaced persons (IDPs) still depend on remittances, informal work and subsidies to survive. At the same time, Azerbaijan is recruiting skilled foreign labour. Many Azerbaijani have migrated, especially to Russia, and although the economic situation in the country has improved, few of them have returned.

The employment rate in Georgia is slightly higher than in the EU, and Georgia has seen a gradual improvement in labour-market indicators, but only one out of two workers is in steady wage employment. Within six months of completing their studies only 41% of young women and 52% of young men are able to find a job, rising to 49% of women and 61% of men after a year. After five years, 78% of women and 87% of men are employed. Initial VET graduates do much worse than HE graduates, with only 38% finding a job after six months, in contrast to 56% of Masters' graduates from higher education. More education generally facilitates a better transition, but IVET graduates are doing worse than people with only general secondary education. As the most liberal of the six economies, Georgia also has the highest level of inequality: 12% of the population live below the national poverty line (receive Targeted Social Assistance), while 20.6% lived in relative poverty in 2017. The children of poor families are getting a lower quality of education. The PISA 2015 results showed that students from the poorest 20% of households have three-year gap in learning compared to the wealthiest 20%. Financing education can be a burden, and there is a high share of low-educated people among the

poor and ethnic minorities. The level of youth NEETs is 26.9%. There is little social mobility as most students end up having the same level of education as their parents. Wages for the highly educated are more than six times those of the poorly educated, with the medium-educated earning 2.5 times more than the latter.

In Moldova, 57% of the working age population is inactive, 42% is employed, and about 15% informally employed (self-employed and contributing family members), while 25% is in formal employment. Inactivity is to a large extent supported by remittances from migrants abroad. Two-thirds of the population lives in rural areas and their employment, education and economic opportunities are far fewer than for the inhabitants of the cities. Moldova is among the poorest countries in Europe but has made significant progress in reducing poverty and promoting inclusive growth since the early 2000s, as demonstrated in the graph below.

**FIGURE 10: POVERTY REDUCTION IN MOLDOVA**



Source: Moldova poverty and shared prosperity update 2018 (World Bank)  
<http://documents1.worldbank.org/curated/en/282921536159970883/pdf/129758-MDA-Poverty-SP-Update-2018-revised.pdf> World Bank staff calculations based on Moldova HBS

Poverty in rural areas is nevertheless four times as high as in cities and the divide in income between cities and the countryside is growing. 31.1% of the youth in rural areas are NEETs, against 17.3% as a national average. There is also a clear correlation between educational attainment and employment opportunities. Among the NEETs, those with general education (almost 50%) and VET (close to 46%) comprise a much larger share than those with higher education. Almost all people of working age with only primary education are inactive. Indicators improve in line with educational attainment levels, and 65% of higher education graduates are employed.

In spite of the conflict in East Ukraine and the number of migrants and refugees who left the country, employment indicators for Ukraine are relatively stable. Younger IDPs have moved to urban centres in the centre and west of the country to look for work, while elderly IDPs have remained closer to the conflict zone. Employment is above the EU average, though approximately 15% of the employed are in vulnerable employment. Unemployment is higher than in the EU at 8.8%. At 6% youth unemployment, on the contrary, is far below the EU level of 15%. The level of NEETs is 14.5% – still above the EU average though it has dropped in recent years. Poverty also fell to 4% in 2018, compared to 4.9% in 2017 and 6.4% in 2016, according to World Bank estimates. Poverty is relatively high for the lowest educated, of whom one-third live under poverty line and 80% are not well off. With better educational attainment, earnings and job opportunities increase, but not by much. Close to 50%

of the higher educated cohort still earn less than the national average income and their salaries are on average only slightly higher than those for workers with lower educational attainment.

## Overeducated graduates and the skills mismatch

As we will see in Human Capital Challenge 3, the university sector boomed in the 1990s, fuelled by a poor perception of VET institutions, whose educational offer was out of date. Employers started to massively employ university graduates, where they would have hired VET graduates in the past. With fewer people going to VET, the quality of VET graduates on average dropped. Employers preferred to train university graduates on the job to hiring VET graduates, who were less autonomous. The employment prospects of university graduates have remained better than those of VET graduates in all countries.

Is university education better suited for the labour markets in the Eastern Partnership countries? This question is not easy to answer, but many countries show evidence of overqualification. In Georgia, for example, 36% of workers with tertiary education worked in semi-skilled occupations and there are more women than men in higher education, while less-educated men do better in the labour market. Georgia has a growing economy and a competitive advantage in services (tourism, transport), but this does not mean the creation of high-skilled jobs<sup>8</sup>. This is very similar to Ukraine<sup>9</sup>, where, according to an ILO transition survey in 2016, 31.7% of young workers were overeducated and 40.2% of young people employed in elementary occupations held a tertiary degree. Azerbaijan still has a relatively low level of higher education but is catching up with the other countries. The country is trying to diversify its economy, but students tend to prefer courses that prepare for public-sector employment than for private-sector jobs.

Mismatches can cause unemployment and long periods of transition. The highest level of education does not guarantee finding a job. A large number of highly educated workers in Ukraine are unemployed (452,000 persons in 2017, or nearly 27% of the total unemployed population).<sup>10</sup> Youth unemployment in Georgia is on average 30% and is highest in the 20-24 age group (MoESD 2018a) – typically when graduates with VET and/or higher education are looking for their first job. Even in Belarus we can observe mismatches as the result of both overqualification and underqualification. Belarus has a centrally planned education and training provision based on predefined needs that aims to ensure full employment. However, while in regulated professions, such as in the health and financial sphere, graduates are working in fields for which they have studied, in all other areas, including ICT, one-third of the workforce does not have a relevant background while only 4% received training to adapt themselves for their job.<sup>11</sup> In Belarus many graduates are placed in employment after graduation as a result of compulsory job placement. Although finding the right job by yourself takes time, the earnings after a longer transition are often better than after a short one.

In order to avoid mismatch, education needs to be fit for purpose. In its review of the education sector in Ukraine in 2019, the World Bank compared the performance of adults having undergone higher education in Ukraine, Armenia and Georgia (based on the World Bank STEP survey 2012-13 on adult literacy) with the results of the PIAAC study of the OECD. The adult literacy proficiency score among

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<sup>8</sup> Skills mismatch measurement, Georgia, ETF 2019, p.37

<sup>9</sup> Libanova, et al, Labour market transitions of young women and men in Ukraine, 2016

<sup>10</sup> Review of the Education Sector in Ukraine. Moving toward Effectiveness, Equity and Efficiency (RESUME3) World Bank 2019 <http://documents.worldbank.org/curated/en/884261568662566134/pdf/Review-of-the-Education-Sector-in-Ukraine-Moving-toward-Effectiveness-Equity-and-Efficiency-RESUME3.pdf>

<sup>11</sup> <https://jobs.tut.by/article/13579>.

Ukrainians, Armenians and Georgians of all education levels proved to be lower than that seen in many other countries with significantly lower shares of highly educated people. Workers in these countries often lack technical competences and problem-solving skills, as well as creative and critical-thinking skills. These non-cognitive skills do not appear to be affected by educational attainment. In other words, higher education focuses too much on the accumulation of knowledge and does not seem to provide significant opportunities to develop non-cognitive skills through the application of knowledge, skills and competences.

Lack of educative quality is not just a problem in higher education but should be seen in the context of education systems as a whole. Although Georgians have on average 12.8 years of schooling, and 15 years of expected schooling on average, they only have 8.9 years of schooling after adjusting the learning outcomes. More than 60% of 15-year-olds achieved only the lowest level in PISA 2018 (Reading: 64%, Science: 61%, Mathematics: 64%). Below are the scores from the five countries that participated in PISA – Armenia has not participated so far. All the countries are above the EU average on the low performance PISA results. Poor performance at school has long-term consequences, both for the individual and for society as a whole.

**FIGURE 11: PISA RESULTS FOR EAP COUNTRIES 2009-2018**

		2009	2012	2015	2018
<b>AZERBAIJAN</b>	Reading	-	-	-	60.4**
	Mathematics	-	-	-	50.7**
	Science	-	-	-	57.8**
<b>BELARUS</b>	Reading	-	-	-	23.4
	Mathematics	-	-	-	29.4
	Science	-	-	-	24.2
<b>GEORGIA</b>	Reading	62.0	-	51.7	64.4
	Mathematics	68.7	-	57.1	61.1
	Science	65.6	-	50.8	64.4
<b>MOLDOVA</b>	Reading	57.2	-	45.8	43.0
	Mathematics	60.7	-	50.3	50.3
	Science	47.3	-	42.2	42.6
<b>UKRAINE</b>	Reading	-	-	-	25.9
	Mathematics	-	-	-	35.9
	Science	-	-	-	26.4
<b>EU-average</b>	Reading	19.7	17.8	19.7	21.7
	Mathematics	22.3	22.1	22.2	22.4
	Science	17.8	16.6	20.6	21.6

Source: OECD Pisa Results. Notes: (\*) These results are no longer valid and deleted by the OECD in the last publication – due to methodological issues. (\*\*) The results only represent Baku.

Poor learning outcomes can have a negative impact on integration in labour markets. In Moldova, learning and training outcomes of VET are considerably below expectations and VET graduates therefore have a higher risk of inactivity, as can be seen in the table below.

**FIGURE 12: INACTIVE YOUTH IN MOLDOVA BY HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT AND PLACE OF RESIDENCE (%), 2018**

By educational attainment (1)	Share
General school	88.3
Secondary VET	84.8
Post-secondary VET	60.7
Higher education	57.6

Place by residence (2)	Share
Urban areas	62.0
Rural areas	76.0
National average	69.0

People who live outside the national capitals and largest cities tend to have poorer employment and education opportunities. In Belarus, the most educated young people live in the capital, Minsk. 67.7%<sup>12</sup> of young people in the capital had completed higher education and 18.8% secondary specialised education, while only 13.5% had initial VET or general education. In rural areas only 49% of young people had been to university, 29.1% had secondary specialised education and 21.9% had completed IVET or general education. On average 57.2% of the urban workforce completed university, while 25.6% completed secondary specialised education and 17.2% IVET or secondary education. For the rural workforce these numbers are respectively 37.8%, 30.3% and 31.9%. As a consequence, the capital outperforms the regions by far in terms of income, competitiveness and innovation.

Demography has caught up with the higher education boom and in most countries both university and VET higher education are in decline (see section 3). With fewer graduates entering the labour market, skills shortages are growing. In Belarus there are 25.8 applicants for each job from people without working experience. Depending on the sector, the number of applicants from experienced workers varies between 1 and 7 applicants on average, which leaves very little choice for employers. There are increasing skills shortages for medical personnel, veterinarians, engineers, accountants, managers and teachers, which has an impact on salaries. Unemployment, which is already very low in Belarus, is decreasing, and the number of vacancies is rapidly increasing. In Moldova, a quarter of jobs could not be filled in 2016. The reasons were lack of qualified staff (5,143 cases) and lack of applicants (2,259 cases), with other reasons accounting for 1,529 cases. Only in 69 cases were salaries considered to be below the average.

### 3.2 The changing job market: from transition to transformation

After independence each of the Eastern Partnership countries started their path of transition towards a market economy. In these pages we do not want to look back at what changed in each country, but rather to look forward at the transformation of their economies that has already begun under the influence of the global changes outlined in Figure 1.

<sup>12</sup> Novak, Аналитический отчет по результатам исследования «переход от школы к работе» (Analytical report on results of the study “transition from school to work”), 2019.

## Growing urban employment in services, but limited economic growth

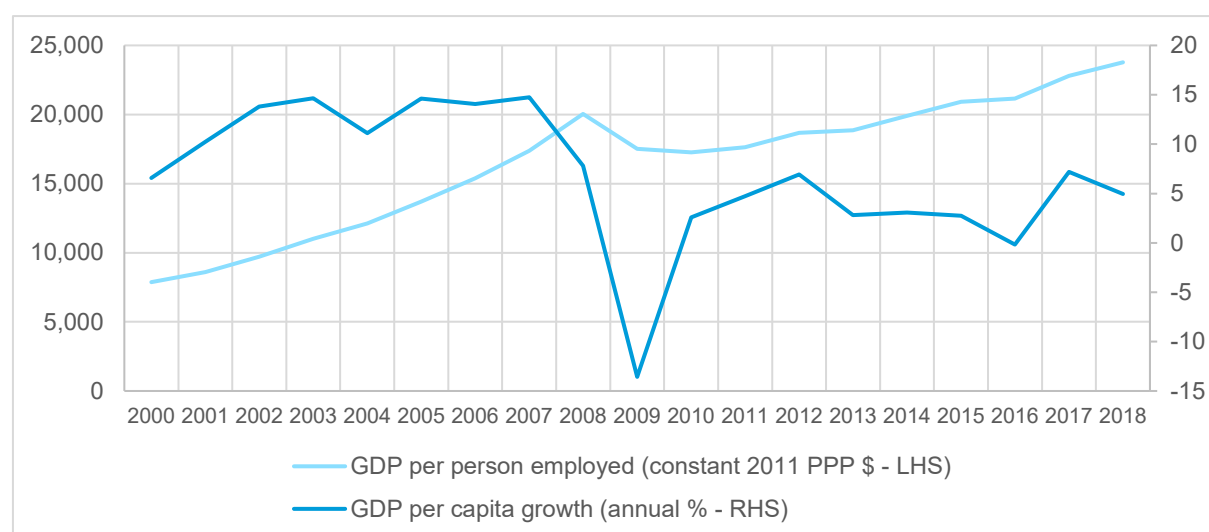
Looking at the employment data by broad sector, services is the largest sector in most of the countries, representing 50%-60% of their economies in terms of employment and contribution to GDP. Exceptions are found in Azerbaijan, where the oil and gas sector distorts the picture, and in Armenia, where agriculture holds the largest share in both GDP and employment (13.7% and 31.3% respectively; TRP 2019, Labour Market in RA, Statistical Committees of RA, 2018). The service sector covers a wide spectrum of jobs, including those in public administration, banking and finance, ICT, transport and logistics, to mention just a few, and of course the retail and the hospitality sectors. In the past ten years, employment in services has, on average, increased more than its contribution to the countries' economies, suggesting that services is perhaps a new buffer for absorbing surplus labour in cities as urbanisation grows.

When industrial decline started in the 1990s and early 2000s many people moved from cities to subsistence agriculture in the countryside, but this no longer the case. In Moldova, however, which is the only country more rural than urban, employment in agriculture has grown substantially since 2010 in spite of a decrease in the contribution of agriculture to GDP. The majority of Moldovans employed in agriculture are contract employees. Their salaries are 33.5% below the national average and they are more likely to be poor than workers from non-agricultural sectors. In Armenia, Georgia and Ukraine employment in agriculture has reduced significantly over the past decade, resulting in 20%-25% fewer workers in agriculture. Productivity in agriculture remains low.

Employment in industry fell in most countries over the same period, with the exception of Georgia and Azerbaijan where there was a small increase. Employment now varies between 8% and 29%, with one in four workers still employed in industry in Ukraine and Belarus.

Sectoral changes in general show bigger shifts in employment than in the contribution of the sector to GDP. It may appear from these figures that labour productivity is not improving. However, focusing on wage-earners we can observe a long-term growth in productivity per worker. The GDP per person employed (in PPP) has improved constantly in all countries and outperforms the trend of GDP per capita, testifying to the importance of human capital.

**FIGURE 13: PRODUCTIVITY GROWTH IN ARMENIA 2000-2018**



Source: ILO



## New trading opportunities call for investment to create more skilled jobs

The past years have seen an increase in trade, investment and migration flows with the EU. Trade links with Russia are still very significant but reducing, with the exception of Belarus. The EU has signed Association Agreements with Moldova, Georgia and Ukraine, allowing these countries to benefit from a Deep and Comprehensive Free Trade Area with the EU.

These trade agreements unlock many new opportunities for generating skilled employment and economic growth. Because of the requirements in the EU, products will need to meet global standards. Research shows that deep trade agreements can increase the domestic value-added content of exports, mainly through global value chains (Centre for Economic Policy Research, 2018). But the main export products to the EU still have limited added value. All EaP countries have a smaller range of export products and fewer export partners than comparable economies in the EU. This makes them vulnerable to changes in demand from their main trading partners and to fluctuating commodity prices (OECD SBA 2020).

It is too early to assess the impact of these developments in the years to come, but with the increasing importance of global value chains the cooperation and integration of the countries is likely to increase much more. There needs to be a stronger emphasis on innovation, development of new products and services, e-commerce, and the green and circular economy in the coming years. Diversification is not only important for Azerbaijan, which is so dependent on its oil and gas sector, but should be a priority for all countries. The list of global challenges in Figure 1 offer a clear agenda for more cooperation and economic integration with the EU.

## SMEs need support for innovation and growth

Small and medium-sized enterprises (SMEs) are risk-takers and tend to be owners of innovative assets, with a large potential to grow, but they are also flexible enough to respond efficiently to changes in global demand. According to the Organisation for Economic Cooperation and Development (OECD et al., 2020), allowing SMEs to start, grow and better integrate into global value chains, and thus to reap productivity gains from organisational and technological improvements, would result in greater diversification and higher-quality job creation in EaP countries.

SMEs play a significant role in the economies of the six EaP countries, but their potential remains largely untapped, the OECD's report says. Even though all EaP countries have recognised the importance of improving the business environment for SMEs and are striving to simplify business-related legislation and to provide SMEs with targeted support, they must still do more to improve the general conditions under which SMEs operate, creating a more level playing field with other public and private actors.

The EaP countries score very highly on ease of starting a business. In the 2019 Global Innovation Index Georgia has 2nd place in the world, Azerbaijan and Armenia 8th and 9th places and Moldova 12th place, while Belarus and Ukraine are also in the top 50. Access to credit is easy in Azerbaijan and Georgia.

Across the region, governments have made considerable progress in designing strategies for SME development and building strong institutions that can help deliver tangible results and translate policies into action. Economic development tends to be concentrated in the national capitals and bigger cities, however, leaving rural areas behind. The best learning and career opportunities are concentrated in and around the capital cities. Georgia, for example, has made impressive strides in

entrepreneurial learning and in the operational environment for SMEs, rewarding it with 6th place in the 2019 World Bank Doing Business ranking. Since 2010 private and foreign investment has been an important growth factor for SMEs in Georgia. This has resulted in a very high concentration of quality jobs in the capital, with almost half of total value added created in Tbilisi (MoESD 2018a).

Although SMEs are a promising driver for the economies of the EaP, so far they have been on average less productive than other companies. While in Armenia 66% of all employed people work for SMEs, they contribute only 60% of the GDP. Georgia is doing slightly better with 65% of employed people contributing 62% of the GDP, and in Moldova and Ukraine SMEs employ more than 60% of workers, but contribute less (in Ukraine, only 47% of GDP). In Belarus SMEs employ 32.5% of the working population while contributing 28.5% of GDP and in Azerbaijan only 20.4% of the employed work for SMEs, contributing only 6.4% of the country's GDP. Government support for entrepreneurs has targeted employment through micro-enterprises, often in agriculture, with a social development agenda. The focus should be more on innovative start-ups and productive, and growth-oriented SMEs.

Regional clusters of SMEs cooperating together in and around an economic sector and addressing common interests such as technical solutions, market access, recruitment and training, are emerging as a relatively new phenomenon in a number of countries. In Moldova the CREATIVE Regional Cluster in Cahul, which focuses on the creative industry, has been established with 12 members representing the business environment, vocational schools and local public authorities, while the SORINTEX Textile Cluster in Soroca brings together 38 members. Other examples of SME clusters are the regional construction industry cluster in Lviv, Ukraine, and the ICT cluster in the High-Tech Park in Minsk, Belarus.

Skills and innovation are critical for companies of all sizes. The challenge, however, is particularly evident for SMEs, which confront specific obstacles in accessing information and advanced training and consulting, as well as innovation inputs such as new technologies, R&D, and knowledge-based capital. Understanding the determinants of SMEs' skills needs and providing support for improving their skills base is important. Knowledge about current and future skills needs and financial support for training are hence essential to build up small business employment. The public education system in Belarus is still mainly informed by planning for public employment and does not take sufficient account of the needs of SMEs. In Azerbaijan, SMEs often encounter difficulties in finding qualified staff as well as providing them with adequate training and education. The Armenian education system is still unable to meet the needs of SMEs.<sup>13</sup> There is also a mentality problem that inhibits many from choosing entrepreneurship. According to the Torino Process national report of Ukraine, a major challenge for the development of entrepreneurship in the country is the persistence of the post-Soviet mentality where entrepreneurship is not seen as a virtue. Although starting a business is getting easier in Azerbaijan, more people still prefer to look for secure full-time jobs with public or private companies.

These issues are not only important to support the domestic development of SMEs, but also a big concern for foreign investors. According to the 2019 EU Business Climate Survey, education and training system reform is among the top three priority reforms for Azerbaijan suggested by foreign companies, and skills and qualifications are the second most relevant factor for investment

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<sup>13</sup> Cited by Armenian Business Coalition, 2018. Armenia: Small Business Act Country profile SME policy index: Eastern Partner countries 2020, assessing the implementation of the Small Business Act for Europe © OECD 2019



## Harnessing the potential of ICT sectors & platform economies

Digital labour platforms have transformed modes of working and changed how work is viewed by both businesses and skills providers. Eastern Europe is on the rise as a hub of tech and ICT start-ups, and is becoming an attractive target for venture capital investment in ICT and digital technology development. Many of the companies considered leading in this field are in the region<sup>14</sup>. Coders from Eastern Europe have also won 10 of the 17 annual Google Code Jam programming competitions since 2003.<sup>15</sup> Platform economies are taking off in the countries of the Eastern Partnership as in other parts of the world, and the ICT sectors are steadily growing, facilitated by the well-educated workforce.

According to global statistics on the numbers of online workers (Kassi & Lehdonvirta, 2018)<sup>16</sup>, Ukraine takes the 8th place worldwide, ahead of all the EU member states and many much larger countries, including Russia. The other EaP countries are much smaller and therefore have fewer workers but are still well placed. Armenia is 41st, Moldova 43rd, Georgia 46th, Belarus 59<sup>th</sup> and Azerbaijan 64th. The countries are doing even better on rankings for numbers of software developers and developers of creative and multimedia software. The Global Innovation Index covers 126 countries. Of these, Ukraine is in 1st place for utility model applications (a simpler and cheaper alternative for patents) filed by residents at the national office. Ukraine and Moldova also rank highly for trademark applications (6th and 7th place).

In the same index, Belarus is the 6th country in the world for developing mobile applications. Belarus has been called the 'Silicon Valley of Eastern Europe' by *The New York Times* and *The Wall Street Journal*. The country had about 85,000 IT workers in 2017 and their number is growing. The Belarusian government has been very aware and supportive of the opportunities offered by the IT sector and platform economies and has created the Hi-Tech Park in Minsk as a unique hub and cluster where start-ups can benefit from special conditions in terms of taxation, infrastructure, flexible renting of the newest technologies, training opportunities, etc. The Hi-Tech Park started its activities in 2005, and in its first 10 years of operation increased its computer services exports by 85%. According to the Hi-Tech Park website (park.by) 91.9% of computing services are for export, 49.1% for the European market, 44% for the US market, and 4.1% for Russia and New Independent States (NIS) countries. The EY consultancy report 'The IT Industry in Belarus: 2017 and Beyond' mentioned that there were 181 resident companies in the Hi-Tech Park. In the meantime their number has grown to 684, including 129 foreign-owned companies from Canada, Austria, the UK, the Netherlands and the USA. Salaries for workers in ICT in Belarus are almost double those of people working in finance and insurance, and more than three times the level of people working in education.

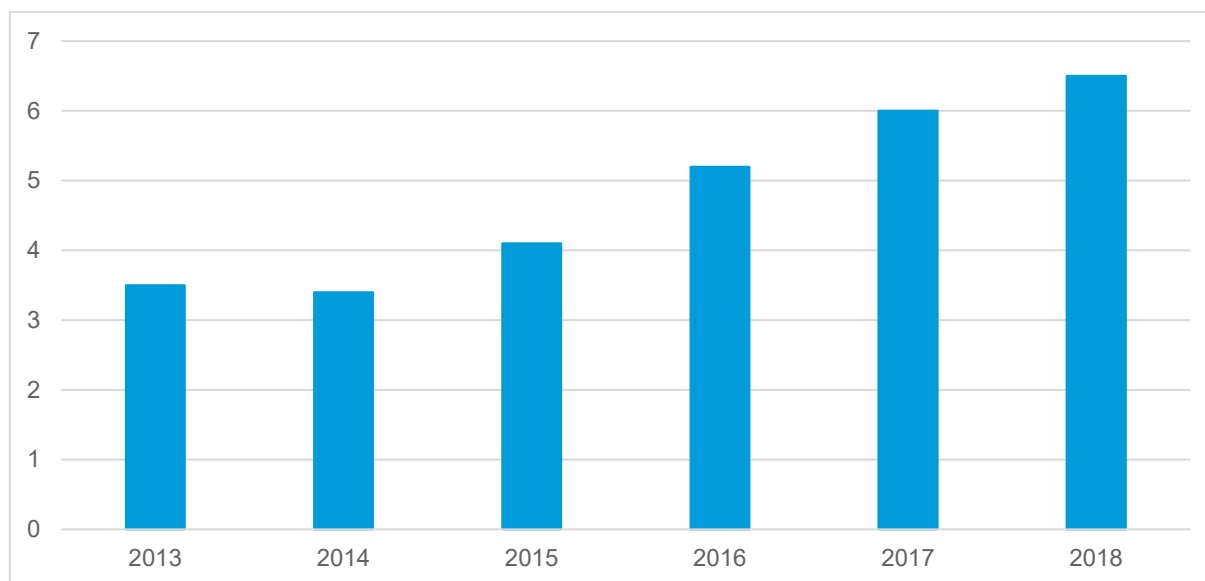
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<sup>14</sup> For example, see <https://www.softwaredevelopmentcompany.co/software-development-companies-eastern-europe/>.

<sup>15</sup> For a full list see <https://codingcompetitions.withgoogle.com/codejam/archive>

<sup>16</sup> <https://ilabour.oii.ox.ac.uk/online-labour-index/>

**FIGURE 14: CONTRIBUTION OF THE ICT SECTOR (% OF TOTAL GDP) IN BELARUS 2013-2018**



Source: EY 2017

The ICT cluster in Minsk is a response by the Belarusian government and local ICT companies to the migration of ICT graduates. It aims to reduce migration by providing favourable conditions for innovation in the Hi-Tech Park in Minsk. Start-ups and established companies have access to infrastructure, workspace, and benefit from favourable tax regimes. In 2013-2014 the ICT sector pioneered developing occupational standards in ICT. In one profile it defined the need for testers, developers and project managers, allowing people to switch jobs flexibly between assignments. This has been used for the recruitment of staff and also for training. EPAM, a training company, provides free training for people working in the Hi-Tech Park. Belarus does not produce enough graduates, particularly in STEM, to keep up with the growing demand. The ICT sector therefore needs to train people who are outside the education system. In principle anyone can request such training, regardless of their education. After interviewing and testing, EPAM offers free-of-charge personalised training that is very flexible in order to train individuals for different jobs in the ICT sector. EPAM has extended this approach to other countries, including Armenia, Ukraine and Kazakhstan. [www.epam.com](http://www.epam.com)

Ukraine ranks 1st in the world in 'IT freelance'<sup>17</sup>, meaning that Ukraine has the 5th largest number of IT Freelancers but the highest percentage of IT workers among freelancers. It is estimated that at least 3% of the Ukrainian workforce is involved in online work. There are 40 platforms in Ukraine that provide online work for the Ukrainian market and for Russian and English-speaking clients abroad. Social networks are also used to find jobs. The International Labour Organization (ILO) made a study of platform workers in Ukraine ('Work on digital labour platforms in Ukraine', ILO, 2018), surveying

<sup>17</sup> Work on digital labour platforms in Ukraine, ILO 2018 ([https://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---travail/documents/publication/wcms\\_635370.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_635370.pdf))

people working for 40 platforms. Ukraine has a very prominent place in platform work globally. The survey showed that 26% of online workers considered online platforms as their main source of income. For most people online work provides additional income that is better paid than the offline world and compensates for a lack of job opportunities elsewhere. One-third worked exclusively for Ukrainian clients, but most had international clients. The most popular form of work was with texts, translations, editing and copywriting (23%). 12% did IT jobs and in particular website management and web programming. The majority of respondents (80%) receive project-based pay, while 12% receive hourly pay.

As in Belarus, pay is higher for online than offline work, but does not include social-security contributions or paid leave. Those working full time for foreign clients have the highest earnings. Three-quarters of online workers are informal. There are fewer women involved in online work and they earn on average 2.2 times less than men. Online workers pay a commission to the platform, and many workers suspect that much of the work comes through these platforms from freelancers in Western countries, who simply subcontract it and present the results as their own work. There are considerable risks of non-payment: one in three workers has experienced this. However, most respondents to the survey were satisfied with their work, believe that they will be working online in five years' time and expect the market for online work to grow. Unlike in Belarus, the platform boom in Ukraine has grown organically and there is no specific government policy to support digital work. Beyond online workers there is also a growth of work in food-processing and delivery, transport and e-commerce and other sectors in Ukraine as part of the platform economy. Ukrainians also make use of foreign online vacancy job platforms to find work abroad, in particularly in Poland and Slovakia, as was mentioned in a recent Cedefop study on online job vacancy platforms in the EU.

**STEP IT Academy** was founded in Ukraine in 1999. It has been providing students with high-quality computer education in line with world standards, responding to the contemporary demands of the labour market. Today the Academy is a well-known international education establishment that is rapidly expanding its activities worldwide and has 43 branches in 15 countries. At the moment, STEP IT Academy is the biggest Microsoft, Cisco and Autodesk authorised learning centre.

<https://itstep.org/en>

Armenia's ICT sector has been steadily growing over the past decade. The Enterprise Incubator Foundation, a technology business incubator and IT development agency based in Yerevan, reported in 2019 that the total revenue from the industry (which consists of the software and services sector and internet service provision), reached \$922.3 million in 2018 – a 20.5% increase from 2017. The revenue generated by this sector represents 7.4% of Armenia's GDP (\$12.4 billion), according to the report.

In Armenia, there is a growing demand for IT specialists and VET institutions are approached by different companies with proposals for cooperation. Moreover, students are becoming more demanding in terms of learning new IT skills that are directly or indirectly related to their professions. Working with digital technologies is becoming increasingly popular among VET students, although mostly beyond the formal curricula. For example, in Syunik Regional State College students have developed digital animation films advertising their institution, while in the Yerevan State College of Informatics, 'digital creativity' by students (for instance, the development of their own media resources) is a common practice.

E-governance is quickly expanding in Georgia and Azerbaijan. Georgia is doing particularly well in cybersecurity. Azerbaijan is rapidly expanding its e-governance platforms, including the new DOST applications for social-security and pension services. Poor ICT infrastructure and relatively high costs used to be a key obstacle to improving internet access and service quality across Azerbaijan. ICT infrastructure has now expanded, and internet use among the population is relatively high. However, this new infrastructure could be better exploited, according to the Asian Development Bank (ADB), and VET can be a key instrument in developing specialised support skills for the digital economy. The Bank proposes that developing basic expertise in areas such as computer networking, database management and coding can be taught through VET.

Moldova could become a destination for outsourcing as it offers some 2,500 IT graduates per year, 23,000 active ICT professionals, widespread high-speed Internet penetration and an IT market growth rate of close to 7%.<sup>18</sup> But there are significant problems with the availability and quality of IT specialists needed to sustain its expansion. The education system produces annually more than 800 graduates in the ICT field, but not all with the necessary qualifications. Every year the 750 ICT companies lack 1,000 specialists.<sup>19</sup> This hampers the capacity to launch new ICT start-ups and points to the importance of flexible adult-learning solutions. The authorities are promoting IT as a career choice and have pledged to provide lifelong learning opportunities for IT specialists and investment in physical education infrastructure on the basis of ICT innovation.<sup>20</sup>

Moldova is not an exception and already has quite a high number of ICT graduates as a share of all graduates from tertiary education. Figure 12 below shows the four most significant countries in ICT studies in the EU compared to the six EaP countries. All countries will need to ensure that the number of ICT graduates keeps up with demand, but the demographics in the region work against this. This is not only about addressing education and training at tertiary level, but actually affects education systems as a whole. It means, too, that ways must be found to work with the IT industries to increase flexible lifelong learning solutions and recruit adults into the platform economies to keep up with growing demand.

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<sup>18</sup> See, for example, <https://www.indrivo.com/latest-thinking/discover-moldova-and-see-why-country-becoming-new-it-outsourcing-destination>.

<sup>19</sup> NRF B.1.4.

<sup>20</sup> NRF D.2.3.

**FIGURE 15: TRENDS IN ICT GRADUATES 2013-2018 (IN %)**

	2013	2014	2015	2016	2017	2018
<b>Estonia</b>	5.26	5.20	4.92	6.35	7.44	..
<b>Germany</b>	..	..	4.54	4.55	4.70	..
<b>Ukraine</b>	..	..	2.63	2.97	2.66	4.66
<b>Moldova</b>	..	1.83	1.69	..	..	4.52
<b>Belarus</b>	..	..	4.28	4.12	4.51	..
<b>Poland</b>	2.87	2.91	3.05	3.12	3.53	..
<b>Georgia</b>	..	..	..	5.02	3.60	3.19
<b>France</b>	3.07	3.00	3.06	3.03	..	..
<b>Azerbaijan</b>	..	..	4.31	4.61	4.56	2.75
<b>Armenia</b>	..	..	2.03	1.41	3.20	2.54

Source: Data extracted on 18 Dec 2019 15:01 UTC (GMT) from UIS.Stat

For all their advantages, platform economies also bring new challenges. They can lead to fragile jobs, in which people are more vulnerable to fluctuations in demand, deprived of social security and paid holidays, and may have to work more irregular hours than in the offline world. Repetitive and low-level work may lead to deskilling of online workers. At the same time they offer opportunities for workers to gain additional income or increased rates of pay, and for the economies of the six countries to integrate into the global economy. Platform economies offer good growth prospects as the digital transformation continues and the countries have made a good start with these developments. The rise of platform economies in the countries could also be a response to the migration of a young labour force looking for better salaries and opportunities abroad; this way people can virtually migrate but remain at home. Following the example of Belarus, governments could do more to support the development of this strategically important sector. This includes finding more appropriate lifelong learning solutions, integrating digital and online learning into their education systems and working towards much more flexible and tailored learning solutions.

### 3.3 Education, training & skills development systems no longer fit for purpose

#### Are existing education systems too rigid to change?

Human capital development is important to ensure the right people are in the right place at the right time. Reforming education systems and planning education is hard and takes time. After new training needs are identified, standards, curricula and a new programme and teaching materials need to be developed, teachers need to be retrained, learners recruited, trained and assessed before they graduate. Education systems are therefore slow to adapt to changing needs in labour markets, with a timeframe of at least four-to-five years from the moment skills needs are first signalled until new graduates come on the market. When it comes to cutting-edge skills anticipating and predicting these changing needs involves risks.

Making VET institutions more efficient is a challenge. The institutions may not have the right type of staff, or too many staff in certain areas who cannot be made redundant but need to be redeployed. Equipment is often outdated. Funding mechanisms are based on maintaining existing provision, and licensing and accreditation processes limit what changes can be made. Smaller institutions should in

theory be the most agile; conversely, enlarging them can make them more versatile. More autonomous institutions that can adapt their offer to what is needed locally can be more useful to the community than those running standardised courses. Programmes that vary in length and scope are important to address the needs of young and adult learners, for the training of job seekers, people that want to upgrade their skills and for local companies. The smaller VET providers that exist in most countries cannot accommodate such requests. They normally offer only 4 to 10 standardised programmes for youth aged 15 to 19.

Training providers in most of the countries are based on the Soviet legacy of VET schools (*professionalno-tehnicheskoye uchilische* or PTUs) providing initial VET. These PTUs used to have many more students as they were training blue-collar workers for state-owned companies or collective farms. PTUs were linked to base enterprises. Students were trained on the basis of national standards but also did practice in the base enterprise. After independence the links with the base enterprises were lost in many cases as large companies collapsed. Belarus and, to some extent, Ukraine, where the companies survived, have been an exception. The PTU network declined, with dropping student numbers and outdated equipment. Some PTUs were renamed or transformed into vocational lyceums providing initial VET and a secondary education diploma. Technikums or colleges could be entered after lower secondary (after 9th grade) or after completing secondary education (11th grade). They trained technicians or junior specialists (in Ukraine) who assisted engineers in managing the production, acted as head of a brigade of workers, and/or took on board more specialist tasks. At the higher end there were institutes – specialised higher education institutions that trained professionals for a specific sector. The number of classical universities used to be much lower than the number of institutes. Engineers or teachers were trained at these institutes, which were an integral part of what was called ‘higher professional education’ – a term that is still used in Russia to describe the whole higher education sector. Today the divisions are not as clear cut. The higher education sector grew substantially in the late 1990s and early 2000s but interest in VET decreased until it was seen as a last resort for those students that couldn’t make it to higher education.

In all countries there are processes ongoing to optimise the networks of providers. Schools are being merged and there are a few VET providers in each country that now have close to 1,000 students. Centres of excellence have been set up that are either restructured and reequipped or completely new establishments. They operate outside the framework for the ‘normal’ VET providers and introduce new approaches (see example below).

The [Baku State Vocational Training Centre on Industry and Innovation](#) in Azerbaijan was established in 2016 with financial support from the Korea Economic Development Cooperation Fund and started its activities in September 2019. This centre applies international educational standards to train highly qualified and competitive specialists and showcases an effective VET model. Teachers at the centre were trained in Korea. The centre is equipped with the most up-to-date material and technical resources and delivers training to more than 1,000 students in eight fields: ICT, automotive, mechanics, industrial installations, electronics, electrical engineering, automation and construction. The centre cooperates closely with industry. 60% to 70% of courses are flexible training programmes including e-vocational training developed with Korean experts. Regular programmes last between one and three years. In addition, there are short-term professional development courses.

Bringing providers of different types in the same locality together can be a way of ensuring local access to different programmes. In most countries these mergers follow existing fault lines, with vocational schools merging with vocational lyceums and colleges with technikums, or sometimes colleges integrating into universities. Processes often start in cities, where there are more providers, which means that providers in regions and rural locations seldom benefit from upgrades. Merging general secondary schools with VET schools, or VET schools with colleges, could bring the maintenance costs down while retaining local access.

Azerbaijan has ambitious plans for its VET sector (see next chapter). Its existing school network is not able to offer sound quality levels in cost-intensive professional areas of VET. The infrastructure and equipment is either scarce or completely outdated (for training in welding, car mechanics, electronics, etc.). A VET roadmap aims to optimise the network of VET institutions and improve their material and technical base. The process of refurbishing old vocational school facilities to house new centres has begun but many schools still lack up-to-date management skills, infrastructure, equipment and learning materials. The problems are especially acute in rural areas.

Many countries exhibit strong resistance to the merging of colleges and VET schools. This often comes from the college sector, which wants to preserve a superior status. Both types of VET institutions could benefit from sharing resources. Moldova is the only country that has systematically integrated existing VET providers of both kinds, resulting in much larger institutions than in the other countries. In Armenia initial and post-secondary VET are administered by one department and investment has been focused on creating fewer institutions. In Ukraine, Belarus and Azerbaijan integration of the two networks exists on paper as a plan supported by laws and strategic documents, but in reality there is no progress and few signs that things may change. In Ukraine the college lobby managed to get its own law through parliament to ensure a separate status in spite of the fact that the laws on Education, on Higher Education, the New Ukrainian School and Modern VET Concepts all foresaw integration. The country retains a model where one type of VET provider offers only one type of programme to one type of learner.

Georgia is an exception. There are many small providers, and a not-negligible private offer does not facilitate integration. VET is concentrated in three cities where 70% of VET students study: 38% of total VET students are in Tbilisi; 21% in Batumi; 11% in Imereti. In 2018/2019 63% of all students studied in publicly funded VET institutions. Dropout rates from VET are high: 27% of students dropped out in 2018 (21% in private, 30% in public VET). The offer for publicly financed VET has been diversified and expanded outside the traditional VET college network to widen access and participation in VET. VET can now be offered by secondary schools (offering higher levels of VET and liberal arts programmes), and even some higher education institutions are also offering VET courses alongside bachelor and master's programmes. A large share of the provision is still private, although this share is reducing.

Optimisation is an imperative. Participation in VET is in decline across the region, mainly due to demographic changes. The table below shows the evolution over the past five years. Georgia is not typical of the overall trend as it has taken a lot of steps to resurrect its collapsed VET system. This has resulted in more students, the opening up of new institutions and the involvement of many more teachers. In all the other countries student numbers for all type of programmes and providers taken together (including adult learners in VET) dropped between 7% and 32%. The numbers of schools also dropped between 2% and 25%. Teacher numbers have shrunk by 1% to 18%. The average size of schools reduced, with the exception of Moldova, which indicates no real redistribution of VET



providers. On average, both the size of schools and teacher-student ratios seem to point to lower efficiencies than five years ago.

**FIGURE 16: CHANGES IN VET PROVISION OVER THE PAST 5 YEARS**

	School year	Students	Providers	Students/ provider	Teachers	Student/ teacher ratio
<b>Armenia</b>	2013-2014	36,617	144	254	5,150	7.1
	2018-2019	29,141	139	210	5,112	5.7
	difference	-20%	-3%	-18%	-1%	-20%
<b>Azerbaijan</b>	2013-2014	93,937	170	553	7,900	11.9
	2018-2019	75,765	167	454	7,370	10.3
	difference	-19%	-2%	-18%	-7%	-14%
<b>Belarus</b>	2013-2014	214,499	450	477	20,621	10.4
	2018-2019	181,605	406	447	16,891	10.8
	difference	-15%	-10%	-6%	-18%	3%
<b>Georgia</b>	2013-2014	23,446	83	282	1,105	21.2
	2018-2019	25,179	93	271	4,807 <sup>21</sup>	5.2
	difference	7%	12%	-4%	335%	-75%
<b>Moldova</b>	2012-2013	83,087	114	729	7,765	10.7
	2017-2018	77,387	86	900	7,100	10.9
	difference	-7%	-25%	23%	-9%	2%
<b>Ukraine</b>	2012-2013	423,279	992	427	48,880	8.7
	2017-2018	285,820	778	367	35,166	8.1
	difference	-32%	-22%	-14%	-28%	-6%

Source: ETF calculations based on administrative data from the countries. The number of students, institutions and teachers are based on the sum of all types of programmes and VET providers.

VET providers are gradually extending their portfolio of education services. In Belarus and Georgia VET schools provide adult learning as well as initial VET. In Georgia, 36% of VET students are over 25 years old, including 20% over 30 years old. We do not have precise figures for Belarus, but we know the private sector shows little interest in providing funding to VET institutions to train qualified workers. Belarus is concentrating its investment in equipment in the VET sector to the so-called Resource Centres in leading colleges that can be used for training learners of all ages.

<sup>21</sup> In Georgia most VET teachers are parttime and we lack number by full-time equivalent. The figures can therefore not be used to obtain reliable statistics on efficiency.



By 2019, 48 Resource Centres had been established in seven regions in Belarus with the support of the state programme 'Education and Youth Policy' (2016-2020). As structural units of selected leading colleges they are equipped with innovative high-tech equipment and technologies. The Resource Centres are specialised in specific fields and provide practical training for learners of different levels. Training in Resource Centres is carried out through interactive networks of providers and companies, allowing to maximise the number of students (both youth, adults and even schoolchildren) training for advanced industry technologies. They contribute to the optimal use of equipment. One of the most modern in terms of equipment is the Resource Centre of the Pinsk Construction Lyceum, which was modernised in 2018. About 700,000 roubles from the republican and regional budgets were spent on welding and metalworking equipment and the repair of training workshops. In the state of Brest the regional department of education has decreed that all practical trainers or production masters of vocational training must train in the Resource Centres with the innovative technologies of the region. Living expenses for trainees and consumables are covered from the regional budget.



The decline in VET participation goes back to the 1990s, when VET was no longer relevant for the new economic realities and a large part of the young population started to leave school earlier without any specialisation. Those who could tried to postpone entrance into the labour market and went to university. The VET sector was left with those students that had few other alternatives. These were often the academic underachievers, and this was one of the reasons why the general education part of VET curricula became more prominent, moving VET away from daily realities. The university sector boomed and participation reached levels beyond those of EU member states, with the exception of Azerbaijan, where entrance was strictly regulated. Many new institutions have been established in all countries, including private universities. Indicators now show that the workforce in the countries is very well-educated by international standards. Belarus has the most women with advanced degrees in the world, followed by Ukraine in 2nd place. But more education is not always better education, as we have seen in section 1.

**FIGURE 17: OVERVIEW OF THE NUMBER OF HIGHER EDUCATION INSTITUTIONS IN 2018/2019**

	Armenia	Azerbaijan	Belarus	Georgia	Moldova	Ukraine	Total
<b>Public</b>	28	40	145	19	19	529	780
<b>Private</b>	28	12	12	44	10	123	229
<b>Total</b>	56	52	157	63	29	652 <sup>22</sup>	1009

<sup>22</sup> These numbers include colleges and technikums in Ukraine which were part of higher education but provide secondary and post-secondary VET. Without them there are 209 public and 73 private HEIS in 2018/2019

The average size of universities in the region varies between 2,500 and 7,000 students per higher education institution. Private institutions are generally much smaller than public ones. Faculty staff data are difficult to obtain. Some indicative data from 2016-2018 show a student/staff ratio of 9 in Ukraine and Azerbaijan, against 13 for OECD countries. In the other countries the ratio is still in line with OECD countries: 12.7 in Armenia, 13.5 in Moldova (17 in 2010-211), 14.5 in Georgia, 14.9 in Belarus. Universities are competing for students now that their numbers are going down. University teachers risk losing their jobs. A number of institutions have recently closed their doors. More strict quality assurance requirements after the introduction of internal and external processes based on the European Standards and Guidelines is accelerating this process. In Armenia, Moldova, Georgia and Ukraine independent quality assurance agencies have been established that are reviewing the quality of higher education (and often also VET) providers.

**FIGURE 18: ENROLMENT IN TERTIARY EDUCATION, ALL PROGRAMMES, 2013-2018**

	2013	2014	2015	2016	2017	2018	Difference
<b>Armenia</b>	115,207	113,090	105,865	109,330	104,838	102,891	-11%
<b>Azerbaijan</b>	187,590	195,401	204,152	207,604	206,196	200,609	7%
<b>Belarus</b>	562,168	517,578	477,221	443,997	418,745	389,327	-31%
<b>Georgia</b>	112,746	120,923	127,633	136,709	144,337	147,785	31%
<b>Moldova</b>	122,464	116,325	109,395	102,655	95,967	87,277	-29%
<b>Ukraine</b>	2,205,595	2,146,028	1,776,190	1,689,724	1,667,288	1,614,636	-27%

Source: Data extracted on 24 Jan 2020 19:43 UTC (GMT) from UIS Statistics

## Teacher training and innovative approaches to learning

Introducing outcome-based approaches and alternative pathways in education and training systems is very important, especially when so many people are sidelined by the current systems and end up in poor jobs or become discouraged, inactive or unemployed because they do not see any opportunities for themselves. The education systems in EaP countries have historically been one-way systems, where it is very difficult to change track or return once you failed. But learning is not limited to schools and universities. People often develop their skills and competences informally, on the job or in society. In Eastern Partnership countries most people learned Russian in school as the main foreign language, but many have learned English since, and most of these skills have been developed informally. Education and training systems that can value skills obtained outside the formal system can play a role in adult learning.

Societies value education, but they are also innately conservative, making it difficult to pass the reforms that are necessary to allow for innovation. The Ukrainian New School concept is promising in terms of emphasising the development of competences rather than the reproduction of knowledge (see chapter 4). It is in line with best practices in other countries, but it did not get a very warm welcome from parents.

How does one go about defining learning outcomes in VET? In the Eastern Partnership countries this often begins with letting representatives from the world of work develop occupational standards describing the competences needed for the workplace. These are then used to develop standards for training and assessment. This process takes time and none of the countries has made significant

progress in developing and applying occupational standards. There is scope for peer learning and exchanges of experience and information on occupational standards.

One of the biggest challenges is to rethink the curriculum in a more integrated way, and to migrate from a subject-based to a modular approach. All the countries are working on modular curricula. Armenia and Georgia have modularised vocational education curricula based on learning outcomes, but this has not yet led to the use of modules for other purposes than formal VET. In Ukraine different regions are working on different methodologies, but many have difficulty to switch from the subject-based approach to modules based on competences.

Teachers and trainers are essential for the quality of education and training as the shapers and deliverers of the learning. Having teachers on board is therefore very important for successful reforms. Teachers are also important for moving from current education systems to lifelong learning as they are the most likely pool for trainers and coaches that are needed to support the expansion of adult learning. But teachers are not in a good place currently. They have lost status and are often poorly paid, especially in VET. Aware that decreasing student numbers is threatening jobs, many of them are demotivated. They are more likely to be defensive of how they work and can therefore be resistant to change. In many of the countries the teaching workforce is aging, as salaries are insufficient to attract quality teachers. Women are the vast majority of teachers, but school directors are often men. In VET there is a shortage of production masters who provide practical training, and this part of the workforce is aging even faster. In Armenia many VET teachers are on limited duration contracts. Because the teaching occupation has lost its appeal, many are unqualified.

Teacher training and retraining is therefore critical to keep teachers up to date and to meet with colleagues to exchange experiences. Not all the countries have specific teacher-training institutions for VET. Retraining once in five years is often an obligation for teachers, but not always implemented due to a lack of resources. Donor projects can offer interesting retraining opportunities, but only cover a fraction of the teachers that could benefit from retraining. A lot of innovation is actually developed and implemented by enthusiastic teachers and methodologists. In many of the countries, teachers are experimenting with new approaches for student-centred learning and in Ukraine, for example, e-learning applications have been developed and applied by teachers in VET across the country. Outside the formal education sector, many companies and adult training centres are developing new approaches to training. The quality of this work is often good and worth disseminating but there are few mechanisms to harvest these gems and make them available across systems.

In the countries in the region there is still a bias in favour of knowledge over practical skills, even within VET. This is reflected in a hierarchy in the different categories of teachers. Teachers of general subjects and vocational theoretical subjects normally require higher education degrees. Teachers of vocational theoretical subjects are often graduates of technical faculties, with or without specific pedagogical training. Practical instructors in school workshops often do not have higher education. They themselves are often graduates of VET schools with some practical experience. Because they do not have higher education, practical instructors in schools are often poorly paid in comparison to their colleagues that deal with the theoretical training. Trainers in companies often lack any specific training to be a trainer. They often developed their training skills on the job, supervising, tutoring or mentoring new colleagues, apprentices or stagiaires.

ETF carried out a survey on VET teachers in Belarus<sup>23</sup> and the findings show that teacher quality was considered the most positive factor in the quality of VET, but appreciation was lower in rural areas than in cities. 37% of specialist VET teachers said they have no working experience in the industry for which they are preparing recruits. 50% of school principals said their effectiveness was constrained by the lack of 'a career-based teachers' wage system'. Approximately 80% of VET teachers believed the continuing professional development programmes are relevant. Two-thirds of classes have access to reliable and appropriate computer hardware and software; nevertheless 51% of teachers lacked the necessary quantity of computers for training and internet access, and 44% of teachers said that digital technologies are used only occasionally by students in class.

## Underfinancing and inefficient use of budgets

From teachers it is a small step to budgets, as teacher salaries make up the bulk of budget expenses in the EaP countries. The EU average level of funding for education is 4.7%. The countries can be divided in two groups. Those who spend more than the EU average on education, i.e. Belarus, Moldova and Ukraine. For these countries we are going to look how they allocate and spend these resources. And those that spend a much lower share of GDP on education; i.e. Armenia, Azerbaijan and Georgia, for which we try to understand the consequences of investing less money in education. VET in the EU member states is normally more expensive than general and academic higher education because of the equipment, consumables and tutoring required, as well as a more personalised approach to acquiring skills.

Moldova spent 5.5% of GDP on education in 2018 so more than the EU average, of which 0.6% on VET. There are, however, problems with the efficiency of resource allocation and the effectiveness of investment in VET, which could prevent VET from delivering to stakeholder expectations. The first concern is the level of capital investment, which in VET is usually earmarked for important and costly expenditure items such as equipment. In Moldova in 2015 (the latest year for which there is data), capital investment was only 2% of the total spending on VET, compared to 10% in general education and 18% in pre-school education (World Bank, 2018). Another concern is the professional training of VET teachers, which the national report describes as sporadic and of limited relevance because of resource shortages. Unlike general education providers, which have been funded on the basis of per capita allocation since 2013, VET institutions are subject to an incremental budgeting method, which is known to promote inefficiencies in the administration and use of financial resources.

Ukraine is the biggest spender on education. It spends approximately 6% of GDP (we only have data up to 2016), of which 1% comes from families and 5% from the public budget. Spending in Ukraine on higher education has been higher than spending on other educational levels. It fell from 2.1% in 2012 to 1.6% of GDP in 2018, but this share is still higher than in neighbouring countries and above the OECD average of 1.1%. A very large share – 34% – comes from private sources, mostly families, compared to 22% in the EU. Although they are based on labour market information collected by ministries, financial allocations seem to be traditionally more focused on provision than changes in labour market needs. At least half of potential higher education students are always funded by the state, regardless of overall demand or level of performance. Funding mechanisms became more transparent in 2016 when the number of applicants was a decisive factor in allocating resources through an algorithm. One year later additional data were entered to take account of the academic

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<sup>23</sup> Continuing Professional Development of teachers, production masters and VET School managers in Belarus 2018 ([https://openspace.etf.europa.eu/sites/default/files/2020-01/Belarus%20CPD%20survey%202018\\_RU\\_rev.pdf](https://openspace.etf.europa.eu/sites/default/files/2020-01/Belarus%20CPD%20survey%202018_RU_rev.pdf))

performance of universities. This system has most benefited the established higher education institutions, which receive a disproportionate share of state funding. The remaining public and private universities try to get as many fee-paying students as possible. Public allocations for higher education depend on the number of students, but do not take into account the profiles of students. There are well-researched proposals for changing funding mechanisms based on a performance system, but these have been delayed by vested interests so far (World Bank 2019).

VET institutions in Ukraine rarely have fee-paying students, and almost completely depend on public funding. Regions have become responsible for funding VET institutions. Allocation of the state budget subventions for each region for VET is approved annually in the State Budget Law<sup>24</sup>. In 2018, the largest subventions for modernisation of VET institutions were transferred to Kyiv region and to Vinnytsia, Dnipropetrovsk, Lviv, Mykolaiv, Kharkiv regions. This shift of VET funding caused many problems. Although financial decentralisation aimed to increase the resource base, local funds cover only about 60% of needs. For VET institutions located outside regional centres the local funding is even less and covers only 45% of their needs<sup>25</sup>. Over the past three years, although capital expenditure on the VET sector increased in absolute terms, it was only 1-2% of total public spending<sup>26</sup>. Colleges have also been subject to regional funding since 2019, and it is too early to evaluate the effect. Regions are motivated to make VET systems more effective and have started to optimise the local networks, creating larger VET providers.

Belarus spends 4.9% of its GDP on education – slightly more than the EU average – and it aims to raise this to 5.2% of GDP. We lack exact data for VET funding and it is difficult to get indications of its efficiency. The financing of public VET comes primarily from regional budgets and is part financed from the national budget. Extra-budgetary activities undertaken by VET providers, regulated by the government, compensate for the lack of budgetary funds. The Ministry of Education has adopted regulations that provide for fee-based education services at all levels of VET: providers may receive funding from citizens for advanced learning and in-depth studies of subjects; training at the secondary special-education level; and training, retraining and further training of employees.

The three countries with the lowest budgets for vocational education are also the countries with the lowest participation in VET. The question here is whether lower participation represents a lower demand for VET – thus requiring less public investment – or whether access is limited because of the lower funding. In the case of Armenia the ETF assessment mentions that there are families who cannot afford to educate their children. Both Azerbaijan and Georgia have mapped out policies to raise participation in VET.

In Armenia the education system is underfunded. Public expenditure on education is 2.8% of GDP.<sup>27</sup> In 2018, 8.68% of the annual state budget was spent on education, but only 0.72% on initial and post-secondary VET. The Medium Term Expenditure Framework (MTEF) foresaw a rise of 20.33% for the VET sector between 2017 and 2019, or approximately €3.429 million<sup>28</sup>, but there was no indication in the 2018 budget of an increase.

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<sup>24</sup> <https://zakon.rada.gov.ua/laws/show/2696-19>

<sup>25</sup> Office of financial and economic analysis of Verkhovna Rada of Ukraine, Current status of VET financing in Ukraine, 2019. Available at: <https://feao.org.ua/wp-content/uploads/2019/01/profesijno-tehnichna-osvita.pdf>

<sup>26</sup> NRF E 4.1.

<sup>27</sup> ETF KIESE Indicators, 2019

<sup>28</sup> Republic of Armenia Ministry of Education and Science Self-Assessment Report on Implementation of Conditions of The EU Budget Support Programme 'Better Qualifications for Better Jobs'

Improving the  
quality,  
efficiency and  
attractiveness  
of the VET system



Better links with  
business and  
the labour market



2010



Social  
dialogue  
and effective  
social partner  
participation



Enhancement of  
public  
employment  
services

2012

Regular  
involvement of  
social  
partners  
in VET development



Design and  
implementation of  
national  
qualifications  
frameworks



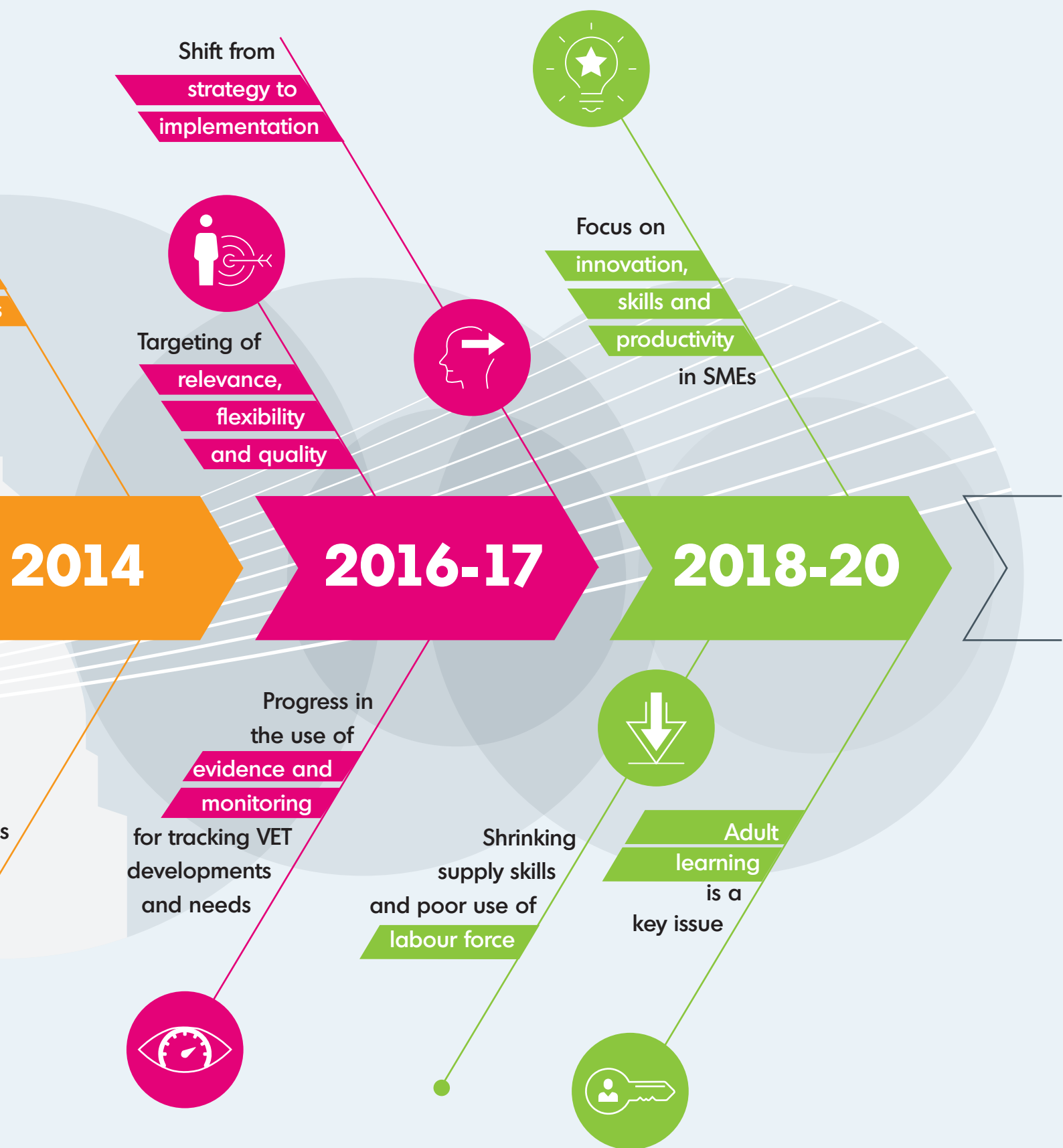
Quality  
assurance  
mechanisms



Issue  
related to  
social  
inclusion







Georgia has ambitious plans to invest more in VET and has already increased the number of institutions and teachers and, to a lesser extent, students. It is currently spending 3.8% of GDP on education. VET accounted for 2.8% of the total education budget in 2018, a slight decrease on the preceding year. There are many donors in the education sector and Georgia continues to rely heavily on their interventions for its education reforms. In order to implement its new VET Law, Georgia will need to raise public funding for VET, especially if it wants to improve access for disadvantaged groups and the rural population. The size of VET providers is quite small and 70% of them are concentrated in the three largest cities. This might be an opportunity to rationalise provision. Closure of smaller providers in rural areas would risk making access more difficult, especially as many learners are adults, who cannot be accommodated in dormitories. More distance learning in combination with face-to-face education is a possibility.

Azerbaijan is planning to increase participation in vocational education through its VET roadmap. Attainment levels are still much lower than in the other countries, but with the education development strategy participation has improved, in particular in general and higher education. The question is whether current efforts are sufficient to raise the attractiveness. In 2018, Azerbaijan's public expenditure on education remained at 2.5% of GDP. This is the lowest share of the six countries. VET expenditure as a percentage of total education expenditure is very low and has decreased over the past five years from 2.1% to 1.4%.

### Too much focus on declining youth numbers; no systematic lifelong learning

People are the most important resource for the development of the six countries. The number of graduates is declining and many aging workers will have to work longer. Many people of working age are unemployed, inactive or in vulnerable jobs. Evidence shows that those most in need of upgrading their skills are barely represented in continued learning. The lack of lifelong learning opportunities creates a low-skills trap, especially for adults without an upper secondary education, who are most in need of upskilling – but increasingly, too, for those with only general education or initial VET.

SMEs are seen as a possible driver for employment. The countries have created legal frameworks that make it much easier to start your own business (see section 2) and have made credit more accessible. But SMEs need to become more productive to generate growth. Training is not the solution, but it is part of the solution to make better use of the available resources. Green skills will become more important to make the countries more energy-independent and efficient, to ensure sustainable and affordable housing in growing urban areas, to make agriculture and forestry more sustainable, and to improve waste management and reduce industrial pollution. These issues are all converging. The platform economy is growing and could be a way of keeping skilled labour in the countries, but the expansion capacity requires that existing workers are retrained to work in IT. We have already seen that there are urgent skills gaps among adults and skill shortages have started to appear as well. These problems will only get worse if people are not retrained.

The truly urgent issue for the region in terms of human capital development is therefore lifelong learning. Education systems that focus on the youth alone cannot resolve the most pressing human capital challenges. Educational solutions currently address mainly the people who are still to enter the labour market. The number of people who have already been lost is much higher than those that are in education and training; let alone in the relatively small VET systems. People who have left the education system are unlikely to return unless there is a very different approach to learning. Countries therefore have to act within, as well as outside, the education system to address the skills deficiencies, and must involve other training providers, organisations and businesses. It would take too long to



address these issues solely through the education systems and would require considerable adjustments to the systems.

Learning solutions need to be flexible and learner-focused to provide tailor-made training that addresses immediate needs. This means much shorter training programmes than those run by VET schools and universities, and programmes that are much better embedded in real life, and therefore have a much stronger involvement from businesses. It also means different ways of learning, in which learners are active and teachers or trainers support them, rather than lecturing them. Functional ways of validating non-formal and informal learning become important pathways to upskilling. This is key to avoiding participants repeating what they have already learnt. It saves time and money and keeps learners more focused and motivated.

Funding adult learning is critical for enabling access to lifelong learning opportunities. Part of these funds could come from the private sector, such as for the retraining of IT workers, as with EPAM in Belarus, which offers free courses. But it is important that public funds are made available too. More e-learning provision can bring down the costs of training and make it more flexible, but e-learning alone is not a solution for everyone. Most people will need blended solutions and receive additional support from trainers or coaches. It is important that quality learning is accessible in rural areas and smaller cities.

We generally lack information on adult learning. We do not know enough about providers and participation patterns, but we do know that participation is low. We know there are many different adult-learning providers in all countries outside the formal education system, but we lack a systematic mapping and an overview that could help assess their quality and expansion capacity. The EU benchmark for lifelong learning is that 15% of the workforce is participating in lifelong learning at any one time, and this is measured through labour-force surveys. At the time of writing we only had data for three countries. Data from Ukraine show that 0.8% of the workforce participated in lifelong learning in 2017 and 2018. In Georgia the participation rate in 2018 was 1%, including 40% studying in public VET schools and 20% in private VET schools. The admission rules in publicly financed VET programmes have favoured the enrolment of learners over 20 years old at the cost of young people aged 15-19, who typically enrol in initial VET. From Azerbaijan's labour-force survey of 2014 we have a higher share of 6.5%, but we do not have any trend data. All the countries for which we have data are significantly below the EU benchmark and the EU average, let alone the levels of continuing training among the most competitive economies.

Adult learning is relatively well-developed in Belarus. A distinctive feature of the system is the inclusion of other organisations, as well as individual entrepreneurs, in addition to specialised providers of continuing education. The state programme for Education and Youth Policies 2016-2020 aims at 15% of the population benefiting from adult education at any one time. Only formal training for public employees, financed by the government or region, is monitored. These data show that among those who participated in retraining and upgrading, 44.1% had completed higher education, 16.1% secondary specialised education and only 7.7% VET. This is coherent with OECD research, which found that better-educated people are more likely to be involved in adult learning. Belarus has many organisations that provide non-formal training that are not considered in these figures.

In Moldova, the Education Development Strategy (EDS) and the Strategy for the Development of VET 2020 (SDVET) envisage the development and implementation of measures that should safeguard

access to education including lifelong learning opportunities for adults.<sup>29</sup> Public and private providers offer short training courses for adults and specifically for the unemployed. The number of participants is particularly high among the youth. There is currently no coordination between the providers and no mechanism to measure and evaluate the impact of the training.

In Armenia, active labour-market measures do account for a large part of the unemployment budget, Adult learning is also provided by NGOs, line ministries and private companies. The National Training Fund has been established to undertake labour-market research and identify skills needs, and to organise continuing VET for different categories of job-seekers including employed and unemployed adults. The National Training Fund is also responsible for implementing the validation of non-formal and informal learning, which has not yet been formally launched.

The development of validation of non-formal and informal learning (VNFIL) in Armenia started with support from ETF in 2013/2014, which developed an assessment guide and tested validation mechanisms for the profession of cook. This was followed by regulatory documents allowing validation for partial recognition, but they were blocked as this was seen as an unwelcome back door to qualifications – a fear that is often expressed by the education sector. In the meantime, the National Training Fund (NTF) was established and tasked with providing appropriate training programmes for assessors. The ‘EU4Youth – SAY YES Skills for Jobs’ programme is assisting the NTF and selected VET colleges to develop their capacities to carry out validation and testing for four agricultural professions. The experience will be used to develop recommendations on refining the VNFIL regulations.

VNFIL can be a life-changing experience for individuals, as it opens the door to jobs and further learning that would be previously considered unthinkable for people without the right qualifications. VNFIL is being developed in all the countries apart from Belarus. Ukraine was the first country to establish a regular system. In Ukraine VNFIL has been implemented since 2016 in training/assessment centres in Rivne, Kyiv and Odessa. Originally it was planned for three occupations but so far it has only been implemented for cooks. As of 1 May 2019, 181 candidates had received a certificate – two of them partial certificates – as a result of the process. Candidates are supported financially by the employment services in Ukraine, and are predominantly women that are mid-career who need to change jobs or return to the labour market and who want to work as a professional cook but lack a qualification. Feedback from candidates has been overwhelmingly positive. There are plans to widen the list of professions initially to 15 and then to 50. The National Agency for Qualifications will be responsible for this system, which has until now been implemented by the Ministry of Social Policy and the employment services.

In Moldova, a VNFIL regulation was adopted in 2019, based on the EU Recommendation for Validation of Non-Formal and Informal Learning (2012) and the European Guidelines (2015). It describes the process of identifying, documenting, evaluating and certifying learning outcomes. VET providers have been designated as the appropriate institutions to carry out validation. Four providers (two colleges and two Centres of Excellence) have been selected to start the process.

In Georgia, VNFIL is integrated into the new VET Law. The focus is not only on full VET qualifications, but specifically on recognising partial qualifications. This will complement the modular programmes, giving individuals more flexibility and options to continue lifelong learning. Overall, the system is

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<sup>29</sup> EDS, Section V, Strategic Direction No.1 and SDVET, Objective 6.

expected better to support the lifelong learning of individuals and increase adult education in the country.

### Insufficient involvement of the private sector

Many employer surveys show that employers are concerned about the skills of graduates and in particular about key competences, i.e. workers lack 'soft skills'. A stronger involvement of companies in the training of students and teachers could bring VET much closer to what employers want. But it is difficult to attract employers to play a more active role in education. Gradually we have seen a better representation at the national level. Employers have been engaged in developing occupational standards to replace the outdated qualification characteristics. In most countries sector skills councils in one form or another have been established. None of the countries has a system that really functions well across the board, but there are some companies and sectors that are setting examples. We have also seen examples of clusters at the regional level that have a strong focus on skills. Employers and trade unions are starting to participate in national or regional VET councils. Qualifications is an area where social partners are more active. The National Agency for Qualifications in Ukraine is a collegial body in which three ministries (education, social policy and economy) collaborate with social partners, and where social partners occupy half the seats on the board and play a very active role. Work-based learning is another area that has started to develop recently. In Armenia, Moldova and Ukraine dual forms of education have been introduced in VET and in higher education.

In Belarus every year training plans are made after consultation of line ministries and companies, but real demands for labour force are not sufficiently articulated. VET providers in Belarus are trying to increase their role in the training and retraining of workers, but the private sector ignores agreements for staff training with VET providers and shows little interest in providing funding to train qualified workers. RIPO (the national institute for vocational education) is therefore conducting studies investigating employers' requirements for employees and their competences. RIPO is trying to involve more organisations, educational and governmental institutions in the process.<sup>30</sup>

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<sup>30</sup> UNEVOC



## 4. VET POLICY RESPONSES, ACHIEVEMENTS AND CHALLENGES

This chapter looks at the policy and legislative developments in the six countries and to what extent they address the human capital challenges described in the previous chapter. Since these challenges were identified looking at the trends for the coming years, there will be a time gap with current policy responses, which build mainly on strategies that were defined earlier to address imminent needs. Responses are therefore often more focused on VET systems than on lifelong learning and address problems within current systems rather than emerging challenges.

Looking back at the previous Torino Process Report for Eastern Europa (ETF 2017), we can see that specific attention was being paid to initial VET, with governments recognising the potential of VET as a contributor to economic development. Policies emphasised the relevance and quality of VET systems and gradually making systems more flexible. Countries demonstrated a better understanding of skills demand by working more across institutions and with stakeholders from the world of work. There was special attention paid to developing key competences and entrepreneurial learning, career guidance services and employability. The rationalisation of VET networks had started. Standards and curricula had been updated, and qualifications modernised based on learning outcomes. WorldSkills had also started to play a significant role in integrating the VET systems internationally and we saw the influence of European initiatives around qualifications, work-based learning and entrepreneurship. Access was mainly viewed as an issue for the youth, and policies included initial VET for learners who were unlikely to complete full secondary education, short courses for unemployed people and special-needs education. The report ended with an appeal to give more attention to continuing vocational training and to involve the private sector in its development.

Many of the trends described in the previous report are still very evident today. From the key human capital challenges it is clear that continuing vocational training remains a concern. But today this is viewed in a wider context of lifelong learning. The context for the policies, too, has changed in recent years, with the impact of global challenges – demography and technology in particular – on education systems and labour markets. New and emerging economic realities emphasise the need to make better use of available resources. Gradually attention is moving towards more integrated approaches to VET, looking beyond existing VET providers and creating more opportunities for work-based learning.

The Torino Process cycle of making assessments every two to three years is too short to see important policy shifts. As in the European Union, 2020 has been the year in which many of the policy cycles of the six countries reach completion and most countries are now in the middle of defining new strategies. The national Torino Process reports describe elements of these new draft strategies in the making. In this chapter we therefore consider draft concepts and strategies as well as newly adopted ones, and key legislation as the consequence of policies defined at an earlier stage.

We have tried to group the policy and legislative initiatives of the countries thematically to show the current trends. A detailed analysis of the policy response in each country can be found in the national Torino Process reports and the ETF assessments. The most important trends are:

1. new national development strategies with a link to the UN Sustainable Development Goals, with a redefinition of the scope of educational, lifelong learning and VET policies for the next decade;

2. active employment policies aiming at immediate measures to reduce unemployment and informal employment, promote entrepreneurship, better match jobseekers with vacancies, and provide short inputs for reskilling towards more in-demand occupations and skills;
3. pro-business initiatives aiming to enhance the involvement of the private sector in lifelong learning and employment policies and to promote the growth of SMEs;
4. redistribution of responsibilities for policies and implementation.

## 4.1 New national strategies and modern approaches to VET

Human capital development requires an integrated approach beyond the education and training sectors. National development strategies offer a medium and long-term perspective in which different policy areas are integrated. Moreover, the time frame of national development strategies is more appropriate for structural adjustments than governmental programmes, which are generally too short. The UN Sustainable Development Goals as well as the EU Eastern Partnership 2020 strategy have inspired national development strategies in the different countries, and each of these strategies is a unique response to the structural challenges the countries are facing. They all address the issue of human development at their core. Most of the 2020 strategies are now coming to an end, and new strategies are in the making. The National Development Strategy Moldova 2030 embeds the UN's Agenda 2030 and the Association Agenda, aimed at sustainable and inclusive growth. Belarus, in 2017, adopted a National Strategy to 2030 for sustainable socio-economic development, and is already elaborating a new long-term strategy towards 2035. This long-term strategy emphasises the need for innovation, investment in technologies and human capital, strengthening the export capacity of Belarus, moving towards a green economy, stimulating the development of businesses and enabling citizens to become more autonomous and less dependent on government, while improving welfare, health and the birth-rate and maintaining social stability and full employment. We can observe a trend to promote more employment growth in the private sector, but it is mainly focused on microenterprises with limited productivity and growth capacity – with the exception of the booming ICT sector. In 2014, Azerbaijan adopted the Azerbaijan 2020 Look into the Future strategy, aiming to diversify away from dependence on the oil and gas sector by improving the competitiveness of other sectors. This was followed by sectoral strategic road maps in 2016 that go beyond 2020. However, Azerbaijan does not have a new national development strategy beyond 2020. Education and, in particular, VET are high on the agenda and there is a cross-sectoral VET road map.

VET systems and education systems in general are at a crossroads. The number of students, and hence the number of teachers and education providers, is dropping, while at the same time the need for adult learning, retraining, upgrading and upskilling pathways is increasing. This requires a rethink of the existing VET systems. These changes can build on ongoing trends to modernise VET. In the table below we have tried to capture the main characteristics of traditional VET systems in the Eastern Partnership and the emerging modern VET systems:

**FIGURE 19: TRADITIONAL VET SYSTEMS VS MODERN VET SYSTEMS**

TRADITIONAL VET SYSTEM	MODERN VET SYSTEM
Centralised approach – VET providers told what to do	VET providers with autonomy & responsibility for quality
State funding	Various sources of funding
Standardised VET providers serving one type of student and issuing one type of diploma	Lifelong learning: different types of VET provider – can have different types of learners and train for different purposes and qualifications
Training provided from a set menu	Training on demand and individualised programmes
Teacher-centred learning	Student-centred learning – learners have to be active
Small role for social partners and companies	Extended role for social partners and companies
School-centred learning with some training in companies	Learning at different locations – in schools, companies, at home
Only formal learning	Formal, non-formal and informal learning
Age limit for learners	No age limit for learners
Practical teachers (masters) work full-time in schools	Possibility of part-time work in schools for masters from industry
Qualification characteristics inform state education standards	Occupational standards inform education & qualification (assessment) standards
State education standards multi-purpose documents	Education standards to define learning framework
Fixed curriculum	Flexible curriculum, alternative pathways possible
Subject-based curriculum	Modular curriculum
No assessment standards – normative assessment based on curriculum	Assessment standards to assess competence
Curriculum defines qualifications	Qualifications define curriculum
Qualification awarded after completing programme	Qualification awarded after demonstrating competence (learning outcomes)
Either full qualification or nothing	Full and partial qualifications
No validation of non-formal and informal learning	Integrated validation of non-formal and informal learning
Quality is mainly determined by inputs	Quality is mainly determined by outcomes
Theory & practice separated – approach by subjects	Theory & practice are integrated – modular approach
Separate general education subject teachers, special subject teachers and masters	More integrated teacher/trainer profiles, dealing with both theory and practice

Source: Arjen Deij, *Towards VET for sustainable development in Ukraine*, Presentation November 2017

The countries are moving at different speeds from the first to the second column, but these changes take time. The paradigm shift from a controlled system where the contents is determined centrally to a more flexible system based on outcomes and performance needs to settle in at the policy and implementation levels. These policy shifts are reflected in new VET concepts and laws that some of the countries have recently adopted. Below three examples from Azerbaijan, Georgia and Ukraine:

The [Road Map for the Development of Vocational Education and Training in Azerbaijan](#) is based on an incremental model with visions for 2020, 2025 and beyond. The aim is to build an internationally recognised VET system that involves talented youth and equips priority sectors with an innovative workforce with high labour productivity. The VET system should provide initial vocational education and training and continuing vocational education in very close collaboration with enterprises and employers.

[Phase 1 until 2020](#) aims to ensure that the VET system is optimised with competent staff and new educational programmes, and that occupational standards are developed. During this phase a new VET Law is adopted, the network of providers is optimised (institutions are merged and some new institutions established where needed), starting with the bigger urban centres and moving towards the regions. An active dialogue with the private sector is developed to widen its involvement in VET and to ensure that educational programmes will meet its needs. Teachers are retrained, partially in companies together with company staff. The validation of non-formal and informal learning is developed.

[Phase 2 until 2025](#): the VET system will become fully functional and train a qualified workforce based on occupational standards, in close cooperation with companies. During this phase, the links between the VET system and other parts of the education and training system will be strengthened. Progressively, more and more students will be able to access higher education and the best performers will not need to go through the university entrance exam. Gradually VET qualifications will become a mandatory requirement for the employment of skilled workers in companies. The VET network will be supported by an online infrastructure.

[Phase 3 after 2025](#): due to an improved guidance and counselling system, participation in VET will increase. More and more students will find employment in the enterprises where they have done part of their training. VET providers will participate in the training of youth but also, increasingly, of adults. The participation of adults in CVT will reach international benchmark levels. Employers participate in every aspect of VET, including the definition of needs and training programmes; training, assessment and quality assurance; and the management and funding of institutions. Funding will be more diversified and centralised. VET exams will be operational. Private provision of VET will grow and some providers will obtain international accreditation.

The [VET Law in Georgia](#) (2018) creates the legal basis for many innovations and has three clear axes:

- (1) '[relevant VET](#)' through private-sector participation in VET programme design and delivery and systematic application of work-based learning as well as stronger quality assurance mechanisms;
- (2) '[accessible VET](#)' through increasing and diversifying provision, introducing modular VET and integrating VET into upper secondary education; through creating incentives for adult education and short-cycle VET programmes; and through validation of non-formal and informal learning
- (3) '[attractive VET](#)' through eliminating dead-ends by merging VET and upper secondary education; creating flexible pathways between general, VET and higher education; improving quality in teaching/learning; and public promotion of VET.



The [New Ukrainian School](#) aims to give pupils the ability to apply knowledge in real life. Prospective school graduates are innovators and citizens capable of making responsible decisions and respecting others. Key competences and cross-cutting skills such as communication skills, critical and systemic thinking and problem-solving are central in the curriculum. Education is learner-centred and students are expected to play an active role. Teachers get more freedom and responsibilities. Secondary education is extended to 12 years in line with international practice. The last three years are for profiled education, allowing pupils to choose suitable subjects including VET.

The Modern VET Concept builds on the New Ukrainian School but has a clearer career and lifelong learning focus. VET graduates should be competent autonomous professionals equipped for career management and further learning for wage or self-employment. There are three strategic objectives:

- (1) [decentralisation](#), making regions responsible for managing, planning and funding VET and giving more autonomy to VET providers to set VET contents in line with individual and local labour market needs;
- (2) [social partnership](#) with partners actively involved in VET reform implementation, through setting occupational standards and qualifications, learning in companies for students and retraining of teachers, independent assessment of learning outcomes, managing schools and updating the VET infrastructure;
- (3) [quality and quality assurance](#): learning will be much more flexible, with more individualised learning and work-based learning. VET will be more integrated: with full and partial qualifications, short courses and longer programmes at different levels as part of one system. Teachers will deal with theory and practice. The VET Network will be optimised, regional excellence centres established. Qualification centres will ensure independent assessment and VNFIL. The implementation plan will require 10 years, divided into three phases.

## Policy gaps

The main challenges for these new policies are the implementation capacities at the grassroots level and the available resources. The VET strategy in Azerbaijan has helped to create new conditions at the policy level and for a number of VET providers, but spending on VET is still very low and in general teachers lack the skills to successfully translate new policies into new practices. In Georgia the law is introducing some very interesting new concepts, such as the provision of VET in general education schools, more flexible pathways and more systematic work-based learning. These complex changes are not easy to implement, and budgets are limited. Moreover, the strategy does not propose any special approaches for regions, where the population is particularly in need of better training and employment opportunities. There is often no VET provision available in the regions as most of the VET providers are concentrated in three cities. In Ukraine, the modern VET concept is focused on secondary VET and does not (directly) include colleges, which are part of professional pre-higher education, thus making it difficult to implement effectively.

Governments in all the six countries want to create stronger VET providers that can adapt better to changing needs. VET providers are gradually gaining autonomy. In Armenia schools can now hire their own staff. But although schools have more power to spend their budgets rationally, they often lack basic means. Many schools are poorly equipped, and even if they are restructured they may lack the funds to pay for heating, and presumably consumables. In Azerbaijan the new VET law also

promises VET institutions more autonomy over what services they provide and over their finances, but funding is low. Autonomy can be more effective when institutions have room to manoeuvre and have acquired a certain size. Moldova merged its VET providers on the basis of those with the most potential, but the other countries have not advanced very much in optimising the networks. Armenia is using donor support to optimise the VET network – both VET schools and colleges – and is investing in improving the infrastructure of a considerable number of colleges. The system seems to be moving gradually towards a more compact, upgraded system. Some colleges are integrated with universities. The establishment of Centres of Excellence has been mentioned in the previous chapter. There are still too few of them in the countries to have a role within the system. Centres of Excellence are of limited value if they are functioning in isolation: they need to be connected with other providers, communities and companies to have a real added value. Another interesting model is in Belarus, which invested in technology and equipped Resource Centres in 48 leading colleges with a view to sharing their well-equipped workshops with other providers.

## Ensuring the quality of VET providers

Countries are moving from centralised systems that focused on conformity and control towards quality management of the autonomous providers. New quality assurance systems are being established. These build on systematic quality improvement measures to deliver better results within the provider and add external quality assurance systems that use accreditation and monitoring tools to validate quality assurance processes implemented by providers. Higher education institutions that have been autonomous for a longer period are clearly ahead of VET with their quality assurance systems, but VET is catching up. In Georgia, Armenia and Moldova the quality assurance agencies deal with both VET and higher education.

**ANQA in Armenia** is the structure responsible for **quality assurance** for both higher education and VET. As such, it deals with quality from different angles. For VET providers, ANQA defines quality as Fitness for the set purpose, which is formulated as ‘a concept that focuses on the defined objectives and mission of the institution or programme. Fitness of purpose evaluates whether the quality-related intention of an organisation is adequate’. The extent to which education services or learning outcomes achieved by students are in concord with defined objectives is determined. This definition urges institutions to define clear-cut aims and objectives in their missions, whose level of fulfilment will be assessed and rated. External quality assurance gives primary focus to the achievement of the objectives set by educational institutions, determine the level of their compliance with the government-established quality assurance criteria and education development priorities as well as public demand.

## The move towards competence-based training

Although VET providers in Belarus and Georgia deal with adult learning, and occasionally VET providers in the other countries are involved in training unemployed people and job seekers, we do not really observe a shift towards a demand-driven flexible system that closely works with the private sector in delivering retraining, upgrading and upskilling opportunities. Cooperation between different types of providers (schools, colleges, universities, specialised training centres and companies) is rather the exception than the rule, which makes it more difficult to address specific sectoral and regional or local skill demands that do not fit the mould of initial VET, post-secondary VET or higher education.

The countries are all moving to competency-based VET systems, but they are at different stages. In Armenia courses have been updated and modularised, with special attention to basic and key competences, yet these modules cannot be used flexibly. With support from the EU-funded VET reform technical assistance project the VET Agency in Azerbaijan has developed new competency-based curricula from occupational standards in partnership with employers and schools. Georgia already has wide experience with modular programmes including those for short-cycle adult training. It plans to use the validation of non-formal and informal learning as a tool to offer more tailored upskilling programmes.

**Modern VET in Ukraine** is going to be competence-based. This requires a new approach with more attention to assessment and integration of theory and practice. Outdated qualification characteristics are being replaced by occupational standards developed by employers and sectoral organisations. Since 2006 more than 300 education standards have been prepared that combine characteristics of the old and the new system. In the new system, occupational standards are the basis for modular education standards for VET. Education standards set the framework for education programmes that cover the whole curriculum and modular training programmes for specific modules that are developed in regions by VET providers in cooperation with local stakeholders. The change from a subject-oriented to a modular approach is a challenge. The learning and teaching process will also need to change. Modular curricula should integrate theoretical and practical parts of the curriculum. There will be more learning in the workplace. ICT will be used more in learning. Learners will be activated, including more project work and group work. Key competences are central in the curriculum. There is more room for locally viable solutions. This requires different roles for teachers, practical instructors and trainers, beyond instruction, including more teamwork with colleagues in schools and companies and the integration of theory into practice. Assessment standards developed from occupational standards are the basis for independent summative assessment. ETF has helped clarify the processes for developing new standards and curricula. The EU4Skills programme will assist in putting the new processes into practice for 100 profiles.

Key competences, or 21<sup>st</sup>-century skills, have gained importance, in particular digital skills. But although digital skills are used more frequently than before in education and most schools are connected to the internet, there is still a limited use of digital and online learning (e-learning). Rather than developing centralised e-learning solutions for the whole education system, it is often the initiative of individual staff members or voluntary groups online that bring innovations. Unfortunately, there are no systematic approaches to capitalise on these practices and disseminate them further.

Entrepreneurial skills have been introduced in all countries. More about this under the pro-business policies.

A key competence that is really important in the modern age is career management. There are many positive examples of strengthening career guidance in the countries, including the creation of portals with career information and vacancies. In Armenia career guidance units with at least one trained career specialist are functioning in 95 public VET institutions. Career consultants deal with information and consulting work; development of career competences; assistance to job placement and administrative work. Over the period of 2013-2018 143 guidance experts were trained. Monitoring showed that more than 50% of the VET graduates in the monitored VET institutions had received personalised guidance services.

A career is more than just a job. Armenia has developed a career guidance system that targets learners in all sectors of education, and also workers and adults using employment centres. The Armenian experience shows that a sustainable career guidance system takes time to establish. Beyond methodology and capacity development, trained counsellors need to be embedded and given visibility to reach the users. [www.mycareer.am](http://www.mycareer.am)

While learners are expected to develop career management skills in order to maximise the opportunities that are made available to them, guidance counsellors continue to play a key role, as is shown in the next example from Georgia.

**Outstanding initiatives to improve career guidance in Georgia:** career guidance manager Fati Jikidze of Community College 'Iberia' connects with employers to increase scholarship and employment opportunities for her students. She talks with employers about their businesses and tells them about the college. This creates a win-win situation, because employers go to her when they have vacancies, and college graduates can start their working careers and improve their skills. Watch the film prepared by ETF <https://www.youtube.com/watch?v=0Mxk1aHWUNk>

Some 1,800 students from Tbilisi State University (TSU), Georgia, get training in career guidance and go back to their communities, often in remote and minority regions, to give secondary school pupils and their parents career guidance and professional orientation. The student envoys develop social values and competences, acting as role models for youngsters.

In Azerbaijan a new Youth Employment Program launched in 2019 aims to assist young people in successful career development (finding a job), creating additional jobs (especially in the regions) and increasing competition in the labour market. From career guidance it is a small step to better information about vacancies. In 2018, the Georgian government's Division of Labour Market Analysis joined forces with private agency HR.GE to collect, analyse and structure job vacancies over the period 2012-2017. The resulting Job Compass is available online for users [www.lmis.gov.ge](http://www.lmis.gov.ge).

**Diversity of online job vacancies in Belarus:** employers and jobseekers benefit from diversification of information sources on job vacancies. The Belarus Republican Vacancy Database (<http://gsz.gov.by/>) displays the largest number of vacancies and the smallest number of candidates. Information on the tasks and skills required is more refined in vacancies published by the larger private portals, such as (<https://jobs.tut.by/>; <https://praca.by/> ; <https://rabota.by/>). Competition for skills is visible in career guidance portals of technical universities too.

Work-based learning is one of the most effective ways to improve the transition from VET providers to work. It gives the opportunity to students to gain experience in authentic circumstances and develop the skills that are important for employment. It also gives employers the opportunity to get to know the students better, which supports the recruitment process. Work-based learning has always been part of

VET, but it has been difficult to find meaningful placements in companies in the countries where the number of large enterprises is limited. Centralised curricula have made it difficult to adapt placements to the peak periods of individual enterprises in different sectors, and placements have often been carried out in groups under supervision of VET teachers. Under the influence of a boost in work-based learning in the EU, countries have all started to make bigger efforts to find new and more appropriate arrangements for work-based learning. Azerbaijan, Armenia, Moldova and Ukraine all developed concepts for work-based learning and started testing and implementation. In Ukraine dual education is being piloted in 100 VET schools as well as in many universities. In Armenia the concept for work-based learning 2019-2025 starts with placing more students in enterprises in the form of placements and internships, while schools are developing or linking with real companies adjacent to schools to develop practical experience. In the long run apprenticeships and dual education programmes should be developed in which the apprentice is a legal employee of the company. Subsidies and fiscal benefits are planned as incentives for employers.

In Moldova, work-based learning (WBL) is seen as essential for acquiring practical skills that are relevant for the labour market. It is mandatory at all levels of VET: secondary, post-secondary and non-tertiary post-secondary VET as well as in continuous VET. The main types of WBL include 'on-site learning – in-school practical training' (2-3 days per week), carried out mostly in VET institutions (workshops, labs, production sites, mini-factories, greenhouses, etc.), 'on-the-job training – internships in companies' (12-14 weeks), and dual education, organised in companies (about 70% in-company practical training and about 30% theoretical training). As a new model of WBL, dual VET emerged in 2014. The Ministry of Education, Culture and Research, the Ministry of Agriculture and Regional Development, the Chamber of Commerce and Industry, VET institutions, GIZ (German International Development Agency, through a €2 million project, 'Structural Reform in VET in Moldova' for the period 2015–18), the Austrian Development Agency, LED and Swiss Cooperation Office (SDC) joined their efforts to promote the implementation of dual VET. It now includes 8.5% of all students in secondary VET. Dual VET depends on the companies' desire and readiness to assume a high level of responsibility and on their technical and human capacity. VET institutions still face difficulties in establishing long-term relations with companies and the latter often lack mechanisms for ensuring the quality of learning processes and efficient training methods.

## Changing roles for teachers

Teachers are a key factor in the modernisation of VET systems. The shift from a centralised, subject-oriented curriculum to a learner-centred, modular, outcome-based curriculum creates many challenges, making the job of teachers more complex. It requires more collaboration between colleagues in VET schools, integration of theory and practice, more initiative from teachers in the design of learning and the willingness to step back in the learning process and let learners learn more independently or in groups without the teacher directly leading this. Work-based learning and more on-line learning imply that teachers will have to monitor and coach their students at a distance and manage the learning across different locations. The gradual increase in adult learners also requires a different style of teaching. Belarus has therefore developed a new profile for 'andragogues', or adult trainers.

These changes are taking place while the number of teachers is gradually going down (with the exception of Georgia, which has a lot of part-time teachers). Salaries for teachers are in general not

very competitive, which makes it difficult to attract new blood into the profession. In Armenia a considerable number of teachers are part-time, teachers are overwhelmingly female and are poorly paid. There are no statistics on practical instructors, so it is difficult to establish how many teachers are dealing with practical training, but most have a higher education background. Retraining efforts focus on reforms but not enough on improving the quality of teachers in their own domain. A recent survey in Belarus shows that teachers are seen as the most important factor in the quality of education and are generally appreciated. Continuing professional development is taking place regularly and most teachers value these retraining opportunities. Although most schools are connected to the internet, its use in the classroom varies from school to school and many teachers experience skill gaps in the area of digital skills.

School directors, too, are very important in making VET providers more effective and efficient. Donor projects include special programmes for school directors and twinning between VET schools. The degree of autonomy differs quite a lot between the countries, but the trend to give VET providers more autonomy is constrained by the current regulatory environment on managing public finances and institutions. Exchanging more experience between directors in the countries could be really useful. In the ETF survey on continuing professional development of teachers conducted in Belarus, school directors indicated that they have limited possibilities for making adjustments and would like to get more autonomy.

Teachers are the focus of many donor projects and countries are planning more systematic approaches to continuing professional development. Only a few countries have dedicated institutions for VET teacher training. Pre-service training and continuing professional development is often carried out by different players, including universities. Teacher networks are an effective way for swapping experiences, which has become easier through social media. There are a number of voluntary teacher networks in the countries, but overall collaboration between teachers across institutions does not seem to be widespread.

There is a need to rethink the teacher profession in the light of the modernisation of the VET systems. With the widening of work-based learning in VET, the role of in-company trainers is becoming more critical to ensure the quality of the learning experiences. Many countries struggle with the recruitment of production masters or instructors, as the salaries for these are much lower than for teachers of theory (general education subjects and specialised subjects). Moving over to one integrated profile of VET teacher who deals with theory and practice, as in Estonia, could be a solution. Independent assessment of learning outcomes requires more assessment expertise. In view of the growing need for adult learning, adult training skills are also becoming more important. Moreover, the learner-centred approach is much closer to training methods for adults than traditional teaching. Ukraine is developing a sector qualifications framework for all types of teachers to support training, attestation of teachers and career development and remuneration schemes.

## 4.2 Active employment policies for better use of labour resources

The labour force in many of the countries is underutilised. The activity rate in most countries is below the EU average, and many people are inactive (especially in Moldova), unemployed or in vulnerable jobs (in Armenia, Azerbaijan, Georgia, Moldova and Ukraine). Many people have stable employment work in jobs that are not in line with their abilities. Self-employment is growing and this often means people end up in vulnerable jobs. The countries are increasingly aware of these issues and are developing strategies, policies and mechanisms to improve employment opportunities. Armenia has developed an Integrated Social Service Model that is outcome-based and addresses individuals rather



than offering off-the-shelf solutions. The number of people involved in active labour-market measures in Armenia has grown but still affects only a small fraction of those that could benefit. Azerbaijan has adopted a new employment strategy for 2017-2030 with clear targets to reduce the number of NEETS and unemployment among women and youth. It has adopted a strategy to combat informal employment and has widened access to training at the request of employers. It has improved access to social services through a dedicated online service. Funding for active labour-market measures has been increased thanks to the Unemployment Insurance law. The country has launched a large-scale self-employment programme and a youth employment scheme. There is a special focus on job creation in the regions. In Ukraine the government's action plan 2019-2023 introduces new mechanisms for youth employment and for disseminating information among young people about job opportunities in Ukraine. Moldova has a special programme, 'Start for Young People', and the action plans of the public employment services pay special attention to improving work-based learning and career guidance. Belarus has almost full employment, but has developed a nationwide data bank of vacancies, with background information on the professions and specialisms needed.

Migration is aggravating demographic decline. Migration policies are more focused on incoming migration than on people at risk of leaving or reintegrating those re-entering the country. Platform economies can offer some alternatives for migration, allowing citizens to work abroad while staying at home. The Hi-Tech Park IT cluster in Belarus is an interesting model for supporting the development of a platform economy. Moldova is addressing the reintegration of returning migrants and supporting self-employment among returnees but the scope of these activities is too limited to attract larger numbers of migrants to return home. Azerbaijan is trying to attract international talent for its higher education sector.

### 4.3 Pro-business policies

The private sector is seen as a driver for economic growth and employment. Real participation of the private sector in shaping and delivering training is a requirement for making education and training provision more relevant. There is a strong wish to involve representatives of the world of work at all levels. Cooperation is stimulated at a national level by involving social partners in consultations and strategic decision-making; at sectoral level by identifying emerging training needs, the development of occupational standards and qualifications; and at the local level with employers directly involved in providing opportunities for work-based learning to students and teachers, in the assessment of graduates and on the boards of VET providers. Sometimes employers establish their own VET providers or donate equipment and sponsor individual students.

Although all employers are interested in better skilled employees, involvement in education and training is not a core task of enterprises and it is difficult to widen involvement, particularly when most companies are SMEs. Cooperation with business in Armenia includes career guidance, work-based learning in multiple formats, and social partnership. In Azerbaijan the Ministry of Labour and Social Protection of the Population has given a stronger role to representatives from sectors and line ministries in the development of occupational standards, providing them with expert support. All policies developed by the ministry are discussed in a tripartite setting. The VET Agency has initiated tailored cooperation agreements with different companies, including training for traditional trades and modern approaches to agriculture. In Belarus educational institutions are strengthening their cooperation with enterprises with for anticipating skill needs, arranging work-based learning, introducing teachers to new technologies, and participating in the organisation of employees' training, retraining and further training. In order to meet its demand for workers, the private sector works on a

contractual basis with state educational institutions, arranging for certain disciplines and special courses to be taught by company experts, establishing branch departments in IT companies, setting up labs in cooperation with educational institutions and making employees available to teach cutting-edge IT disciplines.

To facilitate structural cooperation with actors from the world of work in improving the relevance of education and training provision, new entities have been created in which social partners play a leading role, supported by government. Below are two examples from Moldova and Ukraine:

In November 2017, the [Law on Sectoral Skills Committees \(SSCs\) in Moldova](#) provided the legal framework for SSCs to cooperate with other institutions. SSCs are set up at the level of industries or branches. Their aim is to serve as agents for general consultations and increasing linkages between VET and the labour market. The envisaged functions include:

- (1) to improve communication/cooperation between social partners, public authorities and VET providers;
- (2) to contribute to the VET regulatory framework;
- (3) to participate in development and updating of qualifications and occupational standards;
- (4) to assist in the NQF development;
- (5) to promote participation of employers and employees in initial and continuing VET;
- (6) to facilitate collaboration between social partners and other players in VET promotion and development;
- (7) to participate in examination, certification and VNFIL;
- (8) to engage in skills needs analysis and anticipation;
- (9) to make proposals for updating the Occupational Classifier.

So far, only six SSCs have legally registered, and they still lack capacities in strategic planning, project development and facilitating processes such as occupational standards development and conducting skills needs anticipation. Sectoral cooperation has also started in the formation of enterprise clusters. On 11 September 2018, the SORINTEX Textile Cluster was launched, bringing together 38 members. Association models applied by clusters in Soroca and Cahul have the potential to be replicated in other industries and will serve as examples for regional bottom-up initiatives.



One of the strategic directions of the [Modern VET Concept in Ukraine](#) is social partnership. Employers have been fighting for reforms leading to professional and new VET qualifications since 2008. Trade unions have become more active since 2017. The Law on Education, 2017, has a very strong focus on competences. It also laid the basis for the National Agency for Qualifications (NAQ) and Qualification Centres, designed to independently assess the learning outcomes of candidates for professional qualifications based on assessment standards developed from occupational standards. On 5 December 2018 the Cabinet of Ministers adopted the NAQ as a collegial body with a board equally representing government (Ministry of Education and Science, Ministry of Social Policy and Ministry of Economic Development) and social partners (Joint Representative Body of Employers' Organisations; Joint Representative Body of Trade Unions). The NAQ coordinates the development of occupational standards and assessment standards and will accredit qualification centres. It will manage the national register of qualifications, advise on policy and legislative developments, and promote VNFIL.

In most EaP countries the private sector consists mainly of small and medium-sized enterprises (SMEs). In order to stimulate the growth of SMEs all the countries have developed legislation to make it easier to open a business. Georgia and Azerbaijan are also globally leading countries in access to credit for SMEs (see chapter 3.2). But skills play an increasingly important role in establishing and growing your own business. There is a network of SME development agencies and business training centres in all countries. Belarus has recently adopted a new Strategy for SMEs and established its own SME Development Agency. It wants to bring all SME training under one web platform to make it more accessible. Entrepreneurial learning is integrated at all levels of education, including primary and secondary. There is a specific focus on boosting entrepreneurship at a regional level. The state-owned development bank conducts training and provides educational services for women, who receive concessional loans under the programme 'Support of the Regions and Women's entrepreneurship'. In 2019/2020 in both Armenia and Georgia a compulsory entrepreneurship module was introduced for all VET students, which provides them with the basic skills including how to develop their own business initiative in the form of a project. In the framework of the 'EU4Youth SAY YES Skills for Jobs' project, 15 SKYE youth empowerment clubs have been established in different VET colleges. Students learn to be active citizens and gain leadership, entrepreneurship and employability skills through activities and from each other. In Azerbaijan, the SME Agency established a Committee for Lifelong Learning including all key stakeholders and has started to provide entrepreneurial learning to all students. In spite of all these initiatives, SMEs in all countries are not yet able to compete with bigger companies in terms of profitability and productivity. In general, education and training systems are still more focused on wage employment. Identification of the skills needs of SMEs is often weak and existing anticipation systems often favour the needs of larger companies.

#### 4.4 Redistribution of policy and implementation responsibilities

Ingrained hierarchies and familiar ways of working can often slow progress in rolling out policy reform and implementing new systems. Changes in policy and implementation responsibilities across the region's administrations are therefore a positive step towards creating education, training and skills development systems that prioritise human capital development.

In Ukraine, Moldova and Georgia, policy functions have been realigned as ministries merged or ministerial tasks were transferred. In Ukraine and Georgia, wider public administration reforms have aimed at making ministries more agile and policy-focused, reducing day-to-day micromanagement. In

the Ministry of Education in Ukraine policy directorates have been established that have attracted new staff based on externally managed competition, supported with competitive salaries.

Agencies are gaining importance in supporting more operational functions. They partially replace work performed in ministries, and partially that performed in scientific institutes. In Ukraine, the newly established independent National Agency for Qualifications is gaining importance, as are sectoral and regional bodies, while the methodological support and research functions of the Institute for the Modernisation of the Contents of Education and the VET Research Institute of the Pedagogical Academy of Sciences are losing importance. In Moldova, there is now quite a complex system of ministries, departments and agencies involved in VET and lifelong learning. In the Ministry of Education, Culture and Research, there is a TVET department, NQF department and lifelong learning department, while methodological support is provided by the TVET Centre. The Ministry of Health, Labour and Social Protection deals with education in health care, skills anticipation, career guidance, and adult learning for job seekers, together with the public employment service, and provides funding for sector committees and the development of occupational standards. The Ministry of Agriculture and the Methodological Centre deal with VET for agriculture and rural development. The National Agency for Quality Assurance in Education and Research provides external quality assurance to higher education and VET providers. The SME Agency (OSMED) and the Chamber of Commerce and industry are involved in entrepreneurial learning and apprenticeships. There are six functional sectoral committees, dealing with skills identification. The National VET Coordination Council brings all the stakeholders together.

In Armenia, there are four key agencies that deal with VET and lifelong learning, including the National Centre for VET Development, the National Centre for Professional Training Quality Assurance, the National Centre for Educational Technologies and the National Training Fund. The VET policy department in the Ministry of Education deals with both preliminary and middle vocational education, reflecting the traditional division of PTUs and colleges/technikums but addressing both together. In Azerbaijan, the Agency for Vocational Education is leading the modernisation of the VET system, working closely with stakeholders and providers. Although there is a deputy minister dealing with VET in the Ministry of Education, there is no separate VET department.

The [State Agency on Vocational Education in Azerbaijan](#) was established by presidential decree in April 2016. It prepares and implements programmes to improve the efficiency of VET system in cooperation with companies. The agency is responsible for coordinating new competence-based curricula, the training activities of initial VET providers, development of VET in accordance with the needs of the labour market, improving the material and technical base of initial VET institutions, developing and overseeing VNFIL. It also coordinates international VET programmes and projects.

## OVERVIEW OF STRATEGIES, CONCEPTS AND KEY LEGISLATIONS IN EaP COUNTRIES

### National Development Strategies

Azerbaijan 2020, a Look to the Future, and 11 sectoral road maps  
Georgia 2020  
Belarus 2030, Draft Strategy Belarus 2035  
Moldova 2030

### New strategies, concepts and laws on education, VET and LLL

Armenia Draft Education Development Strategy  
Azerbaijan Strategic Roadmap for VET (2016)  
Azerbaijan Law on Vocational Education (2018)  
Azerbaijan National Qualifications Framework (2018)  
Belarus State Programme on Education and Youth Policy 2016-2020  
Belarus Strategy for improving the National Qualifications System 2018  
Georgia Law on Vocational Education and Training (2018)  
Georgia Unified Strategy on Education 2017  
Moldova government decisions on continuous training of adults (2017)  
Moldova NQF (2017) and National Qualifications Register (2018)  
Ukraine New Ukrainian School Concept 2017  
Ukraine Law on Education 2017  
Ukraine Modern Vocational Education Concept 2019  
Ukraine Draft Law on Vocational Education  
Ukraine Law on Pre-Tertiary Vocational Education 2019  
Ukraine Concept on Dual Education 2018  
Ukraine National Agency for QA of Higher Education 2018  
Ukraine National Agency for Qualifications 2019  
Ukraine Law on Secondary Education 2020

### Employment policies

Armenia Draft Employment Strategy 2020-2024  
Azerbaijan Employment Strategy 2019-2030  
Azerbaijan Action Plan on the prevention of non-formal employment 2017  
Azerbaijan Unemployment Insurance Fund 2017  
Georgia Labour Market Strategy 2019-2023  
Georgia Employment Service Act  
Moldova National Employment Strategy 2017-2021  
Moldova Law on promotion of the labour force and unemployment insurance  
Ukraine Draft Law on Support to Jobseekers and Unemployed

### Public-private partnerships and SME development

Armenia Concept on Social Partnership in VET 2018  
Azerbaijan Entrepreneurial training in VET, organised by SME Agency 2019  
Belarus SME Development Strategy 2030, established by SME Development Agency 2018  
Moldova Law on Sector Skills Committees 2017  
Moldova Start for Young People, Home Business Programme 2018  
Moldova tax benefits for companies participating in work-based learning 2018



## 5. EU AND OTHER DONORS' SUPPORT TO HUMAN CAPITAL DEVELOPMENT IN THE REGION

### Lessons learned from past experience

The External Evaluation of the European Neighbourhood Instrument (ENI) 2014-mid 2017 indicated: “ENI programmes support political and policy dialogues and significantly contribute to the special relationship with partner countries.” However, there is “a constant discrepancy between ambitions/objectives, the EU’s particular interest in its Neighbourhood and available resources”. This has led to a focus on tangible results, embodied in the 20 deliverables for 2020. The evaluation also stated that there is scope for reinforcing EU added value by increasing incentives for coordination and division of labour with EU member states and donors, after efforts on Joint Programming did not succeed. However, there is evidence that donors are starting to cooperate better than in the past.

EU country interventions in the region have focused on support to the adoption and development of national qualifications frameworks (aligned with the EQF), quality-assurance mechanisms for the education and training system (through support to the establishment of accreditation agencies and procedures), labour market information systems, and investment in school and training centre infrastructure and equipment. Entrepreneurial learning models and the insertion of key competences in the curricula are more recent themes introduced into EU interventions. Youth is often the priority, while adult learning is being supported as part of sectoral projects or as part of inclusion measures, but often without creating sustainable lifelong learning opportunities and pathways within the existing formal education and training systems. Social aspects, i.e. the development of inclusive human capital development systems, has received less attention.

While in Georgia and Armenia the education, training and employment sector strategies have been backed up by EU budget support actions (through three consecutive programmes in both countries), in Azerbaijan and Belarus the classic “technical assistance project” approach prevails. In the case of Ukraine, the EU4Skills programme is an example of how EU and bilateral support from different member states can be combined in a single initiative that brings together technical assistance and investment. In Moldova, after a partially unsuccessful budget support programme, VET is receiving support through a Twinning project. Countries have tended to show less ownership of regional programmes. The internal monitoring process of the 20 deliverables by 2020 emphasised the importance for strengthening existing efforts to address quality education and challenges for youth employment and young people not engaged in education, employment or training in the EU4Youth actions and Erasmus+. This requires a strong connection with national priorities and initiatives. The necessity to define common objectives for several countries in the same region may lead to uneven interest or relevance for some countries. In future programming the detachment of regional programmes from the national agendas should be avoided.

### More understanding of impact needed

Moving forward requires a better understanding of the impact of past EU support. Within ENI, the EU has implemented or programmed €113 million through budget support programmes (Armenia, Georgia, Moldova) and an estimated €117 million through technical assistance projects in the Eastern Neighbourhood. The €340 million Youth and Education package under the Eastern Partnership

initiative covers Erasmus +, European School, eTwinning, Young European Ambassadors and the EU4Youth programme (€66 million). Total ENI support for human capital development over the period is thus €570 million.

DG NEAR has carried out evaluations of the ENI instruments and some country evaluations (Azerbaijan), as well as thematic evaluations in Enlargement and Neighbourhood regions (social protection, economic governance, public administration reform, SME competitiveness, security-sector reform). However, no overall evaluation has been carried out focusing on the human capital development domain (i.e. education, training or employment sectors).

## Complex cross-country donor coordination

It is difficult to coordinate with other donors in cross-country initiatives. There are many international actors active in different fields and at different levels in the six countries of the EaP Region. Each actor has their own definition of a region, not necessarily identical to the EU's EaP region. For example, the World Bank defines a "Europe and Central Asia (ECA) region" that encompasses EU Member States of Eastern Europe, Western Balkans to Russia, Turkey, the EaP and Central Asian countries. Similarly, ILO has a 'Central Eastern Europe' regional office based in Budapest and another 'Eastern Europe and Central Asia' regional office based in Moscow. While the former covers 18 countries – mainly the Western Balkans, Moldova, and Ukraine – the latter covers 10 countries including the four remaining EaP and six Central Asian countries. These vastly different geographical scopes make regional coordination complex. GIZ (the German development agency) has a long-term 'private sector development programme' for three South Caucasus countries, which has included a dual education VET component for some time. This is also the case for USAID, UN agencies (such as UNICEF, UNESCO, UNDP), ADB, EBRD, EIB, Swiss Aid, the British Council, Austrian Cooperation, LED, OECD, Eurasian Economic Union and Shanghai Cooperation Organisation (observer and dialogue partners). They are all present in the Eastern Neighbourhood region with different operational modalities: treaty, conference, regional or bilateral technical assistance projects, or research-based actions. International agencies and EU member state bilateral cooperation agencies are increasingly implementing EU projects in these six countries. In general, the international organisations have a country activity-based work plan agreed with the respective countries.

For example: in Azerbaijan, GIZ and the UNDP support country-based social interventions and implement EC grants for multifunctional training centres. In Georgia, the German government supports a dual VET project, with pilot tests in various economic sectors; the Swiss Agency for Development and Cooperation approved follow-up funding for the UNDP to continue an agricultural skills development project; the World Bank works on continuing professional development for VET teachers and managers and grants for VET school-industry partnerships. In Moldova, GIZ, the Swiss Agency for Development and Cooperation, the Austrian Development Agency and the Liechtenstein Development Service support dual education. UNDP assisted the Youth Skills Observatory, while the ILO supports the National Employment Agency. In July 2018, the World Bank approved an Economic Governance Development Policy Operation for Moldova (\$30 million) to support structural reform, higher education development and the NEA. In Ukraine, GIZ supports Vocational Integration of Internally Displaced Persons in Ukraine with short training courses and/or internships to increase employability. In the agriculture sector, GIZ helps develop food-processing training programmes and teacher training with instructors from German companies. Polish Aid has VET and education projects for youth, entrepreneurship, education reform and business incubators. Estonia Development Cooperation assists vocational colleges in Volyn Oblast and the Ministry of Education and Science

(MES) as part of the Ukrainian Education Strategy until 2021. Finland will support (€10 million) the New Ukrainian School. Building a common database of the projects and dissemination of their deliverables could better support exchange of information and cooperation in the absence of other coordination mechanisms.

## Cooperation between Commission services and ETF to support effectiveness

There are a number of operational challenges that limit the effectiveness of EU external assistance. Different EU instrument processes are implemented without countries necessarily meeting requirements, including in sector governance, public finance management, etc. (Sector Reform Performance Contracts or Erasmus +). In some of the countries there are quite a number of donors acting in the human capital development area while donors' coordination mechanisms are not effective (e.g. without agreement on common methodologies and principles, creating competing approaches) and there is weak progress in Joint Programming. The policy dialogue mechanisms (bilateral and regional) and EU interventions are not really linked. The diversity of country contexts within the region (EU regional construct for external assistance) sometimes hampers the relevance of regional programmes. The distinction between countries with Association Agreements and those without can undermine common solutions. The limited (thematic) capacity of the EU Delegations as the lead representative of the EU in the dialogue with the country can weaken a meaningful sector policy dialogue. There is often limited complementarity between regional and country interventions. ETF's role in assisting Commission services to address some of these issues has been growing.

Regarding regional cooperation on human capital development in the EaP Countries, ETF works closely with the Commission to provide inputs for the EaP platforms. EU4Digital deals with knowledge gathering on progress in Digital Skills and Competence and Digital and Online Learning in VET. It started in Georgia, Moldova and Ukraine, followed by Armenia, Azerbaijan and Belarus in 2020. This information gathering is accompanied by multilingual webinars to share findings and experiences with a large group of stakeholders. The SELFIE tool, which assesses the digital readiness of VET providers, students and teachers, is being piloted in Georgia, Moldova and Ukraine. Work-based learning is gaining importance in all countries. ETF organises the Work-Based Learning Annual Forums in the framework of EaP Platform 4, focusing specifically on the engagement of SMEs in work-based learning and quality assurance of work-based learning. The Forum meetings aim at comprehensive capacity building, knowledge and experience sharing and discussing common priorities. ETF has been supporting the development of skills anticipation initiatives through the Make it Match contribution to EAP Platform 4. Recently, the focus has been on methods, data analytics, advantages and experiences of Big Data for Labour Market Intelligence. The newly published ETF introductory guide on Big Data for labour market intelligence was translated into Russian to facilitate wider dissemination.





## 6. CONCLUSIONS AND PRIORITIES FOR ACTION

We have seen in this report that the human capital challenges of the countries are influenced strongly by global challenges. Vast changes in the employment landscape mark the end of the 'transition' phase and the beginning of 'transformation' as the countries embrace the platform economy, growth of the service sector and entrepreneurial activity replacing state-subsidised jobs for life. Some countries – notably Ukraine and Belarus – are already making their mark globally as IT providers; others, such as Azerbaijan, are seeking to diversify economies too dependent on raw materials, while growing trade, collaboration and migration to EU member states indicates that historic links with Russia are giving way to stronger links with European neighbours.

The economic transformation that the countries are going through urgently requires a transformation in their education systems and a much more systematic approach to lifelong learning. Aging populations and migration have made a better use of existing human resources a priority. But outdated and rigid education systems that prioritise theoretical learning and university education over VET has resulted in a skills gap. All the countries have invested over the past five years in modernising their initial vocation education and training and their higher education systems to make them more appropriate for the needs of the 21st century. These changes are ongoing and include a gradual shift towards learners of different ages, but lifelong learning goes beyond existing education and training systems, including non-formal and informal learning, learning on the job, individual and collective learning. Qualification systems need to go beyond formal qualifications to recognise prior learning. And systems for the recognition of non-formal and informal learning need to be part of upskilling pathways to address skill gaps of individuals.

Governments in all the six countries want to create stronger VET providers that can adapt better to changing needs. VET providers are gradually gaining autonomy but they often lack basic needs. Optimisation of existing educational resources is happening through a merging and integration of VET and higher education establishments, but at various paces and not without resistance. Resource Centres in Belarus and Centres of Excellence in Azerbaijan are trying to maximise VET learning outcomes. Teacher training and retraining is crucial to these evolutions.

All the countries are trying to establish new qualifications system that are outcome-based and developed in close cooperation with stakeholders. The use of modular approaches can facilitate the links between initial education and adult learning. Peer learning and sharing experience can help to find more appropriate solutions and strengthen both bottom-up and top-down processes. The next phase is building on on-going reforms and initiatives in the countries that have often been inspired by European developments and supported by European and bilateral projects.

Following on from the 20 Deliverables for 2020, the European Commission is in the process of outlining priorities for 2021-2027. These will include more opportunities for bottom-up initiatives. The new Erasmus+ can be used for more impactful practice in the EU Neighbourhood through mobility of teachers, partnerships and perhaps also VET-learner mobility. Skills and lifelong learning policies will remain a priority as the on-going reforms take time. It is important to continue governance and institutional reforms, support quality assurance and facilitate mutual recognition of qualifications. But beyond these policy reforms the Commission has said it wants to support more interventions at the level of teachers and providers, empowering them to initiate innovative pedagogies and support change in education processes. Ministers of Education from the Eastern Partnership countries met in

November 2019 to discuss priorities and stressed the need to make teaching careers more valued and attractive and to continuously develop the competences of teachers.

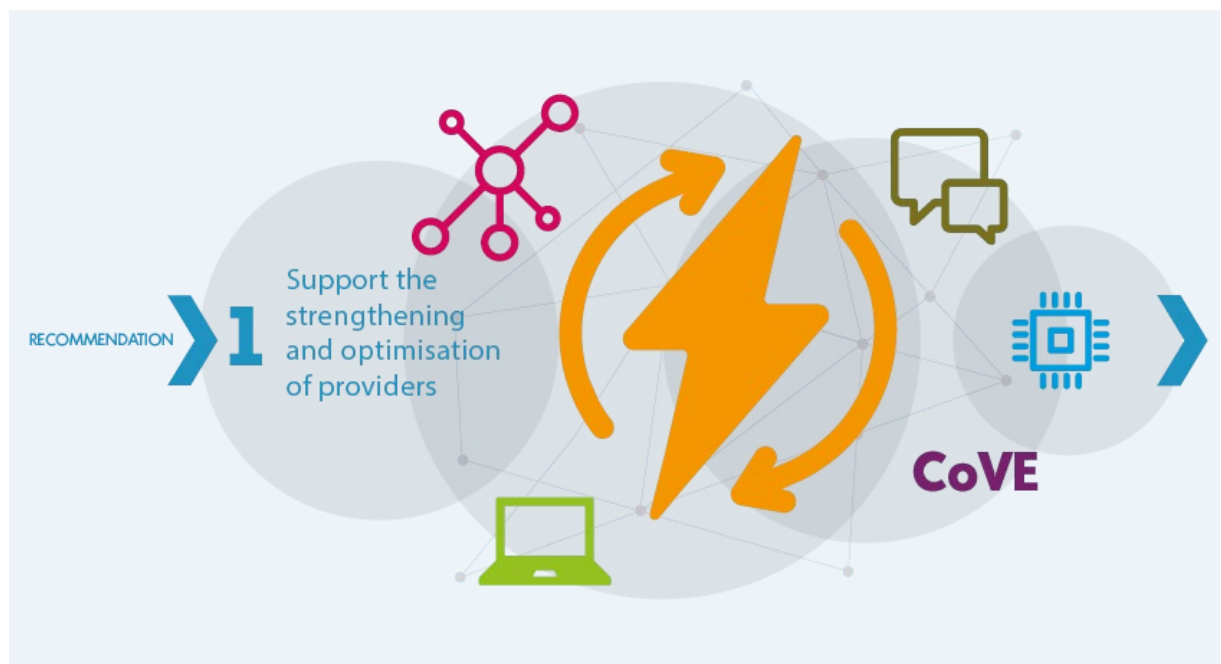
The Commission proposes to make digital skills a transversal priority. In line with the Commission's green deal, there is also a focus on supporting greening of the economies in the Eastern Partnership countries. Young people should remain an important focus, empowering them to become agents for transformational change and further promote creativity, new thinking, active citizenship and social responsibility. Education providers need to become better connected with society through innovation-driven teaching and learning which involves strengthening cooperation between education institutions, and deeper engagement beyond academia, including with regional and national authorities, businesses, employers, research institutions and civil society.

This report confirms the importance of these priorities, but also emphasises the need to move more towards creating more systemic capacities for lifelong learning and in particular adult learning, as more and more people need access to lifelong learning in order to contribute to sustainable growth.

The recommendations in this report do not aim to summarise the recommendations of ETF country assessments but are complementary, focusing on communalities as suggestions for regional cooperation for the period 2021-2027. In summary, and based on this analysis, ETF identifies the following avenues for further reflection and action, including donor support to the Eastern Partnership countries:

## 6.1 Support the strengthening and optimisation of providers

Countries need to strengthen and diversify their provision of VET and lifelong learning. This offers many opportunities for peer learning and capacity building. Existing networks of providers will need to play an important role in providing more opportunities for lifelong learning, as has started, for example, in Belarus and Georgia. Due to demography the number of providers is decreasing in all countries, with the exception of Georgia. Many providers lack up-to-date facilities and equipment, but resources for investment are very limited, while technology is developing rapidly. The proper response is not simply closing down schools with very few students or poor facilities and merging them with others to ensure efficiency. VET systems need to be more flexible to respond to the changing needs of a diverse group of learners and companies. The size of providers on average is small by international comparison, with the exception of Moldova, making it difficult to concentrate investment, open new programmes including adult learning provision, innovate the provision and provide more tailor-made courses to companies. Countries have started to optimise the network of providers. They can learn from each other on how to strengthen their networks and map and evaluate existing provision. They can learn from merging colleges and VET schools in Moldova, from diversified solutions such as the teaching of VET in secondary education establishments in Georgia so that access to VET will not be undermined by having only VET provision in the major cities, the issues around supporting private provision in Armenia and Georgia, combining resources through resource centres in Belarus, hi-tech VET Centres of Excellence in Azerbaijan and decentralised funding in Ukraine.



The effectiveness of lifelong learning systems depends very much on the capacities of individual providers to respond to the needs of stakeholders and learners. Countries and selected providers can learn from each other about gradually extending institutional autonomy to manage their resources more efficiently and to cooperate closer with local authorities and companies. They can develop appropriate quality assurance systems, developing the capacity of providers to enhance their offer through a stronger focus on learning and employment outcomes and systematically improving their effectiveness by gathering feedback. All these developments require stronger provider-management capacities. Countries can share experience on how they are improving the management of VET providers and share best practices. This can include an active role of stakeholders and experiences with smart specialisation and clusters of SMEs. All countries are in the process of establishing Centres of Vocational Excellence that address the needs of different groups of learners at different levels, and should be networked with other providers. In order to address the local and/or sectoral development needs providers are pooling resources and forming networks, with different types of providers and with industries, integrating R&D with regional development. Providers could also play a role in developing digital and online learning for migrants outside the country.

## 6.2 Support the changing role of teachers and trainers

Teachers have already been mentioned by the Commission and the Ministers of Education, and without doubt teachers and trainers are very important in modernising VET, innovating learning and improving capacities for lifelong learning. We agree that the main focus should be bottom-up, and we support innovation through targeted Erasmus+ projects, and addressing new roles such as coaching, more individualised learning, more use of new technologies, teaching and learning in modules, experimenting with integration of roles, allowing teachers to mix theory and practice, and mentoring of students across different locations beyond the classroom. We also would plead for a more structured regional cooperation initiative in this area, which could have more focus on defining new standards for teachers reflecting the new roles and addressing pre-service and in-service teacher-training systems and aspects that address the status and motivation of teachers. Special attention could be paid to

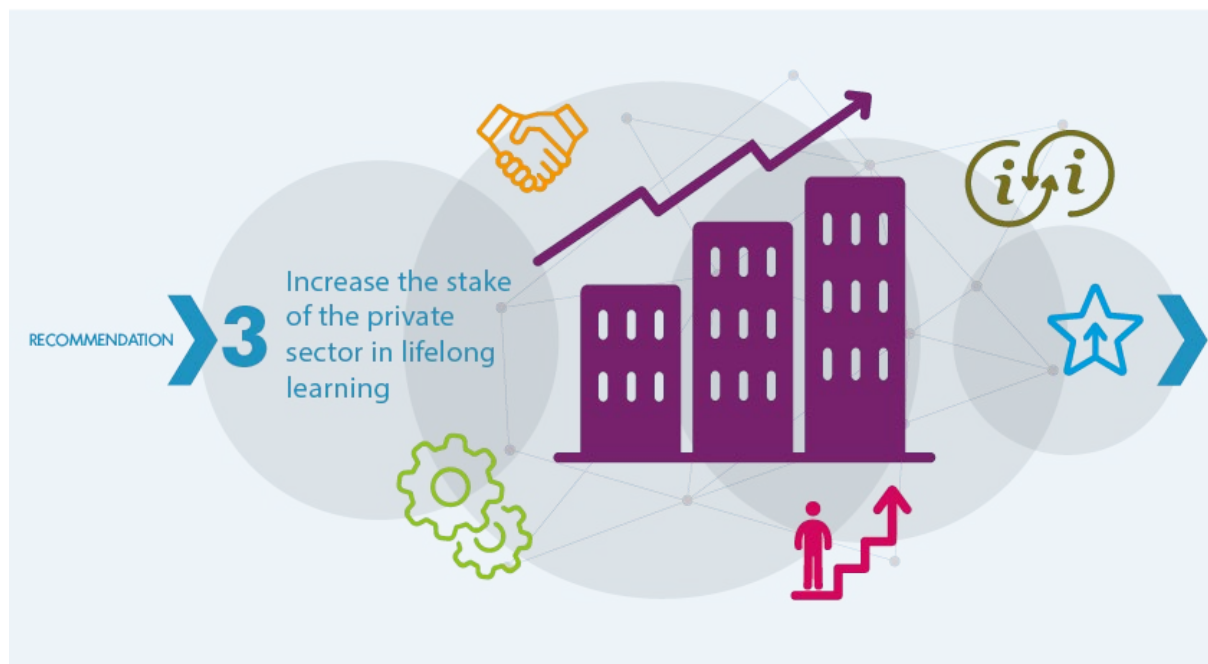


structural introduction of digital and online learning and adult learning, and the development of key competences by teachers. The initiative could include policy-makers, teacher-training institutions and teacher and trainer organisations. It could also serve as a platform to discuss how the bottom-up developments supported through Erasmus + could be disseminated and institutionalised.

## 6.3 Increase the stake of the private sector in lifelong learning

The private sector is the motor for sustainable growth and employment in the Eastern Partnership. The private sector provides about two out of three jobs on average in the Eastern Partnership with big differences between countries but employment increasing across the board. The development of skilled human capital is very important in supporting companies to remain competitive and to grow. Human capital development and lifelong learning requires a stronger involvement of the private sector. It is not only an issue of consultation, cooperation and sharing, but also of transferring responsibilities

to the private sector. The private sector is encouraged to participate in cooperation bodies at a national, sectoral or regional level when the decision-making processes are clear and simple, including the legal systems, regulatory frameworks and other mechanisms. Private actors including professional associations and sectoral organisations are involved in the development of occupational



standards. Work-based learning can only grow when it meets the needs of both learners and companies. The private sector is often ahead of training providers with the introduction of new technologies and needs training systems to follow these innovations. Continuing training is critical to improve productivity and to modernise production processes and services. The capacities of social partners and companies to contribute to lifelong learning are diverse but generally weaker in the Eastern Partnership countries than in the EU. The vast majority of private companies are SMEs but they are difficult to involve as they have limited capacities and are not always organised. There is a need for more intensive work with actors from the private sector in the countries to explore how their capacities to contribute to lifelong learning could be strengthened. This could have a strong empirical approach based on exchanging best practices in the countries and exploring how these could be replicated successfully.

## 6.4 Monitor and support increased capacities and opportunities for lifelong learning

In order to effectively support the transformation from VET to lifelong learning systems, we need a better understanding of the lifelong learning opportunities in the countries, within and beyond the education and training systems. We therefore propose to start with a Human Capital Development Review that will help to map provision, capacities, needs and demand, and funding for lifelong learning, considering formal, non-formal and informal learning.

The Review could, for example, map who are the potential and existing providers of lifelong learning, how are they distributed over the countries, to what extent are providers of initial education training involved in adult learning, what is the role of private providers and companies? What capacities exist to provide blended solutions, including digital and on-line learning? What are the capacities of institutions, companies, employers and NGOs to engage in lifelong learning? How far on are the countries in developing and planning validation systems and upskilling pathways?



What do we know of current demand for lifelong learning? We have very few data on the participation of lifelong learning in only few countries, and these do not provide intelligence that can help us to shape lifelong learning opportunities. Beyond existing demand and supply we are looking at the emerging needs considering the global challenges, such as what is the impact of demography on the health and education sectors, what is the impact of greening on the skills of people, what are the needs for different segments of the population given their backgrounds, in particular those with low levels of education or who are outside the labour market? Given the fact that many people are sidelined, could we estimate what kind of efforts would be required to activate them or improve access to decent jobs?

The best-educated are most likely to be involved in lifelong learning. Access to lifelong learning is for many people in need unaffordable. It is therefore important to analyse available and potential funding for lifelong learning and how funding for education, training and lifelong learning can be used more effectively by focusing more on performance-based funding than on supporting providers to cover the costs of training.

New provision also needs to build on a better understanding of emerging needs as a result of global challenges, and particularly the greening of economies that is predicted in the coming years. Most of the countries are working or starting the development of new National Development Strategies for

2030 or 2035, and the baseline study could look at how countries are integrating lifelong learning strategies into National Development Strategies. The study could also be used to harvest best practices of lifelong learning for human capital development, the results of which can be shared.

The Review could be followed by measures that can address specific gaps in the form of country-specific projects, accompanied by peer learning and experience sharing between practitioners and policymakers at a regional level.

After five years the Human Capital Development Review could be repeated to measure progress.





# ANNEX

Bilateral relations with Armenia are based on the EU-Armenia Comprehensive and Enhanced Partnership Agreement (CEPA) signed on 24 November 2017. This agreement provides for collaboration in the areas of strengthening democracy and human rights, creating more jobs and business opportunities, fairer rules, more safety and security, a cleaner environment and better education and opportunities for research.

The EU's relations with Azerbaijan are based on the EU-Azerbaijan Partnership and Cooperation Agreement in force since 1999. In February 2017, the EU and Azerbaijan began negotiations on a new framework agreement.

The bilateral relationship with Belarus is being negotiated in the framework of the EU-Belarus Partnership Priorities that will set the strategic framework for cooperation in the coming years.

Bilateral EU relations with Moldova, Georgia and Ukraine are based on Association Agreements. These Association Agreements signed in 2014 explicitly aim to achieve gradual economic integration into the EU Internal Market, in particular through establishing a Deep and Comprehensive Free Trade Area and by bringing relevant legislation of the three countries in line with that of the EU. The Deep and Comprehensive Free Trade Agreement (DCFTA) is at the heart of these Association Agreements. In signing this, the countries committed themselves to adopting within a 10-year time frame approximately 350 EU laws in trade, consumer protection and environmental regulation. In return, the countries are granted access to the EU's 500 million consumers and a market with a combined economy of €12.9 trillion.

The three Association Agreements include education chapters specifying the domains of cooperation and approximation. The annexes to the education chapters include the list of Acquis to be considered in the context of approximation. These can touch upon a stronger focus on the labour market and learning outcomes, key competences, credit systems and QA arrangements, validation of non-formal and informal learning, and qualification frameworks and mutual recognition in higher education, VET and lifelong learning.

In the field of human capital development the EU has implemented or programmed €113 million through budget support programmes (Armenia, Georgia, Moldova) and an estimated €117 million through technical assistance projects in the Eastern Neighbourhood. The Youth and Education package of €340 million under the Eastern Partnership initiative covers Erasmus+, European School, eTwinning, Young European Ambassadors and the EU4Youth programme (€66 million), EU4Digital, EU4Business, etc. This adds up to €570 million.

The Eastern Partnership Youth Programme (2017-2020) aims to boost regional cooperation in youth policy development and addresses the needs of youth, with a focus on (a) youth employability and participation of young people in the economy; (b) preparing youth to become active citizens and entrepreneurs and to develop skills; (c) enabling youth organisations to participate in the policy dialogue and to cooperate with public and private institutions; and (d) supporting disadvantaged youth and women.

The six countries can also participate in common programmes and instrument initiatives such as Erasmus+, TAIEX, Twinning, SIGMA, and the Neighbourhood Investment Facility and Cross-Border Cooperation programmes.

In addition to the bilateral agreements mentioned above the EU has signed mobility partnerships with Moldova, Georgia, Armenia, Azerbaijan and Belarus. These agreements focus on regulating legal circular migration and combatting illegal migration. They are an instrument of the Global Approach to Migration and Mobility. They address issues such as border crossing, the return of illegal migrants and visa facilitation. Each have a skills component that focuses on returning migrants or legal migrants. All of them make reference to improving the recognition of skills and qualifications and have multiple references to qualifications. Mobility partnerships are normally signed by a selection of member states and the European Commission and have an implementation plan that includes bilateral activities and activities funded by the EU.

## LIST OF ACRONYMS

ADB	Asian Development Bank
AM	Country code Armenia
ANQA	National Agency for Quality Assurance of Higher Education and VET in Armenia
AZ	Country code Azerbaijan
BY	Country code Belarus
Cedefop	European Agency located in Thessaloniki, Greece, supporting development and implementation of European VET policies
CEPA	EU-Armenia Comprehensive and Enhanced Partnership Agreement
CVT	Continuing Vocational Training
DCFTA	Deep and Comprehensive Free Trade Agreement
DG NEAR	European Commission's Directorate-General for Neighbourhood and Enlargement Negotiations
DOST	Government portal for social services in Azerbaijan
E&T	Education and Training
EaP	Eastern Partnership
EaP Platform 4	Platform of the European Partnership programme dedicated to mobility and people to people contacts
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EDS	Education Development Strategy Moldova
EIB	European Investment Bank
EMN	European Migration Network
ENI	European Neighbourhood Instrument
EPAM	Global software engineering services company and academy based in Belarus
EQF	European Qualifications Framework for Lifelong Learning
Erasmus+	EU's programme to support education, training, youth and sport in Europe and beyond
ETF	European Training Foundation
EU	European Union
EU28 average	Average of the 28 EU Members States before Brexit
EU4Business	EU4Business is an EU initiative that helps SMEs in the six countries of the Eastern Partnership region to realise their full potential and boost economic growth.
EU4Digital	European initiative to support the digital economy and society in the Eastern Partner countries, fostering the harmonisation of digital markets in the region, in order to deliver integrated online services for citizens, public administrations and businesses
EU4Skills	EU4Skills is a programme to support the reform of vocational education and training in Ukraine
EU4Youth	EU4Youth fosters the active participation of young people in society and their employability, by developing youth leadership and entrepreneurship.

Eurostat	Statistical office of the European Union.
EY	Ernst & Young Consultancy
GDP	Gross Domestic Product
GE	Country code Georgia
GIZ	German International Development Agency
HBS	Household Budget Survey
ICT	Information and Communication Technology
IDP	Internally Displaced Person
ILO	International Labour Organization
IOM	International Organization for Migration
IT	Information Technology
IVET	Initial Vocational Education and Training
LED	Liechtenstein Education Development Agency
LFS	Labour Force Survey
LLL	Lifelong learning
MD	Country code Moldova
MES	Ministry of Education and Sciences of Ukraine
MoESD	Georgia Ministry of Economy and Sustainable Development
MTEF	Medium Term Expenditure Framework
NAQ	National Agency for Qualifications in Ukraine
NEA	National Employment Agency in Moldova
NEETs	Youth not in education, employment or training
NGO	Non-governmental organisation
NQF	National Qualifications Framework
NR	National Torino Process Report prepared on the basis of the National Reference Framework
NRF	National Reference Framework basis for national Torino Process Reports
NTF	National Training Fund Armenia
OECD	Organization for Economic Cooperation and Development
OSMED	SME Agency of Moldova
PIAAC	OECD survey on Adult Skills
PISA	OECD Programme for International Student Assessment
PTU	Professionalno-tehnicheskoye uchilische, Soviet type of VET school
QA	Quality Assurance
R&D	Research and Development
RA	Republic of Armenia
RIPO	National institute for vocational education in Belarus
SBA	Small Business Assessment of the OECD with participation of ETF
SDC	Swiss Cooperation Office
SDVET	Strategy for the Development of VET 2020 Moldova

SEET	South Eastern Europe and Turkey region
SIGMA	SIGMA (Support for Improvement in Governance and Management) is a joint European Commission and OECD initiative focuses on strengthening public management in administrative reform, public procurement, public sector ethics, anti-corruption, and external and internal financial control.
SME	Small and Medium Enterprise
SSC	Sectoral Skills Committees or Sector Skills council
SSSU	State Statistical Service of Ukraine
Statbank Moldova	Statistical databank of the National Bureau of Statistics of the Republic of Moldova
STEM	Science, Technology, Engineering and Mathematics skills
STEP Survey	Skills Measurement Program of the World Bank
TAIEX	European Technical Assistance and Information Exchange instrument to support public administrations with study visits, expert advice and events
Technikum	Soviet type of post-secondary education institutions for vocational education and training
TSU	Tbilisi State University
TVET department	Department for vocational education and training in Moldova
Twinning	European Union instrument for institutional cooperation between Public Administrations of EU Member States and partner countries, bringing together public sector expertise from EU Member States and beneficiary countries for achieving concrete mandatory operational results through peer to peer activities
UA	Country code Ukraine
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO- UNEVOC	Network for for Technical and Vocational Education and Training Development of UNESCO with more than 250 member organisations, under the coordination of the UNEVOC Institute in Bonn and 8 regional centres
UNICEF	United Nations Children's Fund
VET	Vocational Education and Training
VNFIL	Validation of non-formal and informal learning
WBL	Work based learning
WorldSkills	Global Organisation for skills excellence and development, organizes the WorldSkills competitions





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