

TORINO PROCESS SYSTEM MONITORING REPORT: UKRAINE (2024 update)



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ACKNOWLEDGEMENTS

This 2024 Torino Process monitoring update was prepared by the European Training Foundation (ETF) using the most recent internationally comparable data from the ETF database of key indicators on education, skills, and employment (KIESE), with a cut-off date of August 2024.

The report builds on the 2023 edition of the Torino Process monitoring, which was carried out in close partnership with national authorities, experts, and stakeholders in Ukraine under the coordination of Ms Viktoriya Karbysheva, Head of the Expert Group of the Directorate of Vocational Education at the Ministry of Education and Science of Ukraine, who is also the national coordinator of Ukraine for the Torino Process.

The European Training Foundation (ETF) wishes to thank the national authorities of Ukraine, Ms Viktoriya Karbysheva, Ms Iryna Shumik, Director General of the VET Directorate at the Ministry of Education and Science of Ukraine, Ms Olena Kolesnikova of the Federation of Employers of Ukraine, Ms Natalia Vasylenko from the Ministry of Economy of Ukraine, Ms Larysa Lisogor of the National Institute for Strategic Studies, Mr Yuriy Rashkevych and Ms Alla Lysachok of the National Qualifications Agency of Ukraine, Ms Alina Dzhurylo of the Institute of Vocational Education of the National Academy of Educational Sciences of Ukraine, as well as all national stakeholders for their invaluable contribution and the provision of the accurate and extensive information in support of this monitoring exercise.

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Disclaimer

This version of the report is preliminary. While it encapsulates the collaborative efforts and inputs from various counterparts at various stages, it awaits final verification by the participating country. Therefore, the report is released as “work in progress” which may be subject to refinement and subsequent endorsement in the future.

KEY TAKEAWAYS

- **Scope of system performance monitoring:** The Torino Process monitoring covers three major areas of commitment to lifelong learners: access to learning (Area A), quality of learning (Area B), and system organisation (Area C). These areas are divided into eight monitoring dimensions: access and participation in Area A; quality, relevance, excellence, and innovation in Area B; and system management/administration and resources in Area C. In addition, the monitoring tracks how well policies and systems deliver to specific groups of learners: learners by age, female learners, young and adult learners at risk, and learners with a migrant background.
- **Scope of the 2024 update:** This monitoring report relies primarily on system performance indices derived from combining individual indicators from the ETF KIESE database. In 2023, the first year of the biennial monitoring cycle of the Torino Process, the data for calculating the SPIs included both KIESE indicators and self-assessments from countries to fill gaps where KIESE indicators were missing. In the second year of the cycle, 2024 – which is in focus of this report – only quantitative data from the KIESE database was collected and used to calculate the SPIs, without additional qualitative input from country self-assessments. Consequently, this monitoring report is intended as a selective, targeted update to the 2023 edition rather than a new, standalone report.
- **Access and attractiveness:** The monitoring results suggest that the VET system could improve in supporting lifelong learning, particularly through the subsystem of IVET as access to initial VET continues to be a challenge. Although improvements have been made, further efforts are needed to increase the attractiveness of initial VET programmes.

Ukraine has seen progress since 2023 in providing access to CVET and other opportunities for adult learning and now outperforms the international average in these areas. Performance in this domain is supported by a favourable legislative framework and greater collaboration with private businesses. New measures, including amendments to the Law on Vocational Education and initiatives for war-affected groups have been introduced, although at the time of the 2024 update their full impact was not yet visible. Challenges remain also in horizontal transitions between general and vocational education, while the VET system has become more supportive of transitions to higher levels of education (tertiary).

- **Quality and relevance:** Since 2023, Ukraine has improved system performance in providing foundational skills and key competences to youth. It has also advanced with the integration of themes related to the green transition and digital skills in VET curricula. Despite this, the alignment of learning content with immediate labour market demands remains difficult.

In 2024, VET in Ukraine still outperforms the international average in providing foundational skills and competences to adults, but performance in this area has declined since 2023. On the other hand, there is sizeable progress in ensuring better employability for VET graduates and in supporting the digital transition, particularly in the form of increased availability of computers for educational purposes and the expansion of online instruction in response to the war. The links of VET programmes to the labour market could nevertheless be stronger. Although Ukraine has policies for on-the-job training, more progress in this aspect is essential for even smoother and more efficient transition from learning to employment.

- **Excellence and innovation:** The VET system performs relatively well in promoting excellence in programme development and implementation, but such initiatives tend to leave the teachers and trainers behind. The participation of VET teachers in professional development remains low, and the availability of training for CVET instructors is still considered inadequate.

There is also commitment and openness to innovation in the VET system, especially in support of access, quality, and digital and green transitions. The benefits of these innovations are yet to reach all learners.

- **System management and organisation:** The VET system in Ukraine faces significant challenges in key areas of system performance. Participatory governance has become less effective, financial and material resources allocated to VET have become more limited, and concerns about the adequacy of teaching materials and infrastructure have been growing. These issues are increasingly seen as major obstacles to effective VET delivery. Additionally, Ukraine is facing difficulties in ensuring sufficient and qualified human resources for VET. These developments are largely attributed to the ongoing wartime context, which has strained the capacity of the VET system to address needs
- **Quality and reliability of monitoring evidence:** Ukraine's monitoring results have become more internationally comparable since 2023, placing the country in the second-best group for international comparability of its VET and lifelong learning data. This improvement is largely due to substantial efforts over the past decade to improve capacity in Ukraine for the collection and use of data, as well as its active participation in international data collection initiatives, such as those by UNESCO and the OECD through PISA. However, the monitoring results of Ukraine remain susceptible to bias, as nearly 80% of the findings in this round rely on self-assessment responses. Despite this, Ukraine tends to evaluate the performance of its VET system in a relatively balanced manner, avoiding extremes in its ratings and providing more neutral self-assessment results compared to other countries participating in the Torino Process monitoring.
- **Impact of the war on VET in Ukraine:** The full-scale Russian invasion of Ukraine continues to profoundly affect VET in Ukraine. The war has led to significant loss of human capital, destruction of infrastructure, and economic instability. As of September 2024, the number of VET institutions has decreased from 694 before the invasion to 541. At least 12 institutions have been completely destroyed, while 180 have suffered varying degrees of damage. Internally displaced persons and refugees further challenge system stability, with enrolment declining from 225,200 in 2023 to 219,300 in 2024. Wartime security conditions restrict access to internships and in-person education in many areas, further complicating the delivery of VET.
- **VET sector responses to the war:** In response to these challenges, Ukraine has prioritised resilience and transformation in VET to support human capital development and economic recovery. Ensuring access remains a key objective, facilitated by the full digitalisation of admissions, including an electronic applicant office launched in 2023. The government has simplified regional training directives, enabling a more adaptive approach to workforce demands. Digital learning tools have been expanded, including the Vocational Education Online platform, which offers over 129 courses across 37 categories.

To maintain learning continuity, an internal academic mobility programme enables students from conflict-affected areas to continue training at alternative institutions. Graduates from affected regions and those residing abroad receive state-standard VET documents. Additional efforts target employability, including vocational training programmes for the unemployed, retraining initiatives under the "money follows the person" principle, and expanded voucher eligibility for professional development. Short-term courses, developed with international support, focus on critical sectors such as construction, mechanical engineering, and energy.

The quality and relevance of VET are being strengthened through the expansion of dual education and the harmonisation of the National Qualifications Framework with the European

Qualifications Framework. In 2024, Ukraine established 136 qualification centres across 21 oblasts, which facilitate recognition of both formal and non-formal learning outcomes. The country has also updated its National Classifier of Occupations to better align with European labour market needs. Additionally, efforts are underway to integrate VET with tertiary education, supporting a lifelong learning approach and increasing pathways for learners.

To enhance safety in educational institutions, significant investments have been made in equipping shelters. In 2024, a UAH 5 billion subvention was allocated for constructing shelters in frontline oblasts, covering 24 VET institutions. The government has also issued new guidelines for VET institutions to operate in-person only if properly equipped with civil protection facilities.

The internationalisation of VET remains a priority. Ukraine is advancing its EU accession efforts in alignment with the European Commission's recommendations under the 2024 EU Enlargement Package. The government is also implementing a new Law on Vocational Education to modernise VET governance, strengthen institutional capacities, and establish fair regulations for VET institutions.

- **Prospects for VET in Ukraine:** The long-term recovery of VET is embedded in a broader national strategy for human capital development. The Strategic Plan of the Ministry of Education and Science until 2027, "Education of Winners," outlines five key goals: modernising VET infrastructure, ensuring quality education, enhancing attractiveness, promoting institutional autonomy, and fostering strong partnerships with businesses. The plan envisions an integrated system where VET and tertiary education function cohesively, offering diverse learning opportunities while aligning education with labour market needs.

In line with EU practice, Ukraine continues to expand Centres of Vocational Excellence, supported by the European Investment Bank. Additionally, significant progress has been made in the field of digital transformation, including the development of a VET Management Information System (EMIS) to modernise data management. Ukraine's VET system is evolving towards a model that not only supports war-affected learners but also builds a skilled workforce essential for national reconstruction and EU integration. Despite the challenges posed by the war, the VET sector remains committed to transformation and resilience, ensuring its role in the country's recovery and long-term economic stability.

1. INTRODUCTION

1.1 Focus of monitoring and scope of reporting

This ETF report summarises the results of monitoring VET system performance in Ukraine for 2024 in the context of the Torino Process initiative.¹ It updates the previous edition of the monitoring report, which covered the period up to 2023.

To allow for tracking country progress over time, this new edition retains the themes selected for monitoring and reporting in 2023. As in 2023, it discusses the performance of the education and training system in Ukraine, particularly VET, in providing opportunities for lifelong learning which are accessible, of good quality, and well-managed (Chapter 2). The report also assesses the equity of these opportunities for learners of different backgrounds, genders, origins, and ages (Chapter 3).

The focus of monitoring in 2024 remains on the contribution of initial and continuing VET (IVET and CVET) to the learning activities of youth and adults undertaken to improve their knowledge, skills, competences, and qualifications for personal, social and/or professional reasons. The monitoring of Ukraine also covers the impact of the Russian invasion on VET policy and system performance in the period until December 2024. As before, the purpose of the Torino Process monitoring exercise is to provide decision-makers, practitioners, and stakeholders with a reliable basis for informed decisions about policy improvement, resource allocation, strategy design, and follow-up analysis in support of lifelong learning.

"Performance," in this context, refers to the extent to which the VET system delivers on a targeted selection of commitments to learners and other stakeholders in support of lifelong learning (LLL). The term "VET system" encompasses the network of institutions, people, policies, practices, resources, and methodologies in a country and the way they are organised to provide individuals of any age with the practical skills, knowledge, and competencies needed for specific occupations, trades, or professions.²

As in 2023, the monitoring framework which underpins this report covers three major **areas of commitment** to lifelong learners: access to learning (Area A), quality of learning (Area B), and system organisation (Area C). These areas are divided into **eight monitoring dimensions**: access and participation in Area A; quality, relevance, excellence, and innovation in Area B; and system management/administration and resources in Area C. The dimensions are described at the beginning of Section 2.1 of this report.

To bring these dimensions of VET performance closer to real-world contexts, they were further broken down into **30 specific policy and system outcomes**. Here, 'outcomes' refer both to the commitments made by the education system—pledges to achieve specific results for defined groups of learners and stakeholders—and to the measurable results that demonstrate how successfully these commitments have been met in each country. For instance, an outcome such as "access to initial VET" indicates the presence of a commitment to provide access, and it also identifies an area of measurement of system performance in fulfilling this commitment. The 30 outcomes are described at

¹ The Torino Process is a multiannual review of vocational education and training (VET) in countries in East and South-East Europe (including Turkey), Central Asia, and the South and East Mediterranean region, which the ETF is carrying out in partnership with countries in these regions on a regular basis since 2010. For more information see <https://www.etf.europa.eu/en/what-we-do/torino-process-policy-analysis-and-progress-monitoring>

² For a full overview of the Torino Process system performance monitoring framework and its conceptual underpinnings, see <https://bit.ly/47YGA6I>.

the beginning of the corresponding section and subsections in this report (Section 2.2, Subsections 2.2.1 to 2.2.4).

At the final step of disaggregation in the Torino Process monitoring framework, the 30 outcomes are broken down into specific, measurable targets (**monitoring targets**) that reflect how the 30 outcomes apply to the different groups of learners they are intended to serve. These groups include youth and adults, female learners, socio-economically disadvantaged youth, adults at risk of exclusion (long-term unemployed, adults with low or no education, economically inactive adults), and first-generation migrants. In 2023 and 2024 the Torino Process monitoring framework tracks a total of 82 monitoring targets: 30 core targets that reflect the outcomes irrespective of who the learners are (outcomes for the general learner population, so to speak), and 52 additional targets focused on specific groups of learners. A selection of results related to these additional, learner-specific targets is discussed in Section 2.3 of this monitoring report.

The impact of the war on VET providers and learners in Ukraine, and the efforts of national and regional authorities to remedy that impact and plan for the post-war future of the country are documented in the third section of this report under the heading “VET in times of war”. The fourth and final section provides an overview of methodological limitations, links to the data used for calculation of the performance indices for Ukraine, and links to the Torino Process technical report which describes the monitoring framework and how the monitoring data was collected and processed.

1.2 Monitoring metrics

In the context of Torino Process monitoring, performance is measured through a system performance index (SPI). The index is available for each of the monitoring targets in the Torino Process framework. The SPIs can range from 0 to 100, where 100 indicates maximum or best performance.

These SPIs are aggregate metrics which combine multiple administrative or big data indicators to provide a more comprehensive and realistic picture of what policies and systems are delivering across countries. Although such synthetic indices are more fragile and unstable than individual data points, they are necessary, as many of the outcomes in the Torino Process monitoring are complex and multifaceted and therefore cannot be fully captured by a single indicator. The diversity of learners within countries also limits how effective a single indicator can be in representing performance across various populations or settings.

To address this, the ETF monitoring combines conceptually coherent sets of indicators from its database of key indicators on education, skills, and employment (KIESE) to create the SPIs.³ This approach produces one index for each of the 82 outcomes monitored through the Torino Process.

The SPIs are intuitive and user-friendly way of presenting system performance even in areas that are otherwise difficult to monitor with traditional administrative measures. The single score they provide simplifies the interpretation of the otherwise complex data and is easier to use for planning and decision-making purposes. Therefore, in 2024, these indices, along with the KIESE data used for their calculation, continue to serve as key information source for the updated monitoring reports of all countries participating in the Torino Process.

³ The full list of KIESE indicators and the selection of indicators used as proxies in constructing the Torino Process SPIs (KIESE SPI indicators) can be found at <https://bit.ly/4exAkF0>.

This report showcases a selection of key monitoring results based on those indices, as follows: overall performance by broad monitoring dimension (Section 2.1), performance by specific area and system deliverable (Section 2.2 and subsections), and performance in support of specific groups of learners (Section 2.3). The report also provides an international average score⁴ for these results for reference purposes, and, where relevant, it showcases disaggregated data used to calculate the system performance indices and information provided by national authorities through the monitoring questionnaire. Links to the full dataset for Ukraine and to the Torino Process monitoring framework and methodology can be found in the third and final section of this document.

1.3 Scope of update in 2024

As in 2023, this monitoring report relies primarily on system performance indices derived from combining individual indicators from the ETF KIESE database. In 2023, the first year of the biennial monitoring cycle of the Torino Process, the data for calculating the SPIs included both KIESE indicators and self-assessments from countries to fill gaps where KIESE indicators for certain monitoring targets were missing.

In the second year of the cycle, 2024 – which is in focus of this report – only quantitative data from the KIESE database was collected and used to calculate the SPIs, without additional qualitative input from country self-assessments. This lighter approach was adopted to reduce the reporting burden on countries by removing the need to provide detailed questionnaire responses every year. In addition, to maintain consistency in the types of data used to calculate system performance indices across years, the 2024 update of monitoring results included only those SPIs for which quantitative data was available in both 2023 and 2024.

Since the 2024 update of performance indicators relies solely on internationally comparable KIESE data, without supplementary qualitative inputs from countries, SPI values for which such data was not available for Ukraine in 2024, or for which it was not available consistently in both years, have remained unchanged from 2023. In some instances, this also means that some sections of the report may have remained the same as in 2023.

Where that happens, it does not necessarily indicate a lack of progress or stagnation; it may simply reflect the absence of new internationally comparable data beyond what was collected in 2023, or that data is available for only one of the two reference years (2023 or 2024). This may also result in fewer noticeable shifts in the landscape of system performance in 2024 as reflected by the SPIs. Consequently, this monitoring report is intended as a selective, targeted update to the 2023 edition rather than a new, standalone report.

Considering that each SPI refers to a specific monitoring target which tracks policy and system performance across a wide range of learner groups and areas in education and training, any change in the SPIs indicates a corresponding shift in performance in support of learners in those areas. Therefore, the proportion of monitoring targets with updated SPI values in a country shows, on average, how much the performance of education and training in that country has changed from one year to the next.

How many of the 82 system performance indices available for Ukraine have shifted between 2023 and 2024? In other words, what was the scale of changes in policy and system performance in the country over that period? Table 1 shows the total number of monitoring targets with validated SPI

⁴ “International average” refers to the average for countries participating in the Torino Process.

changes by country participating in the Torino Process monitoring, as well as the percentage of all monitoring targets in the framework that have changed between 2023 and 2024.

TABLE 1. AVERAGE SCALE OF CHANGE IN POLICY AND SYSTEM PERFORMANCE, UKRAINE AND ETF PARTNER COUNTRIES (2023-2024)

Country	Monitoring targets with validated change (total number)	Monitoring targets with validated change (share of all targets)
UKR	30	36.59%
ALB	24	29.27%
ARM	12	14.63%
AZE	12	14.63%
BIH	33	40.24%
DZA	1	1.20%
EGY	28	34.15%
GEO	32	39.02%
JOR	32	39.02%
KAZ	27	32.93%
KGZ	12	14.63%
LBN	11	13.41%
MAR	31	37.80%
MDA	15	18.29%
MKD	33	40.24%
MNE	33	40.24%
PSE	10	12.20%
SRB	43	52.44%
TUN	21	25.61%
TUR	46	56.10%
XXK	25	30.49%

Source: Torino Process database

System performance in Ukraine has seen more noticeable shifts since 2023 compared to many other countries in the Torino Process monitoring. The data indicates that 30 of the 82 monitoring targets (36.6%) were affected by an SPI change between 2023 and 2024, with many of the changes occurring in the domain of system management and organisation, as will be discussed later.

This places Ukraine on the upper-middle range of the spectrum of change, alongside countries like Egypt and Morocco, which experiences performance changes of similar intensity. Like for other countries, however, it is important to note that the table includes only targets with validated, data-driven changes. They likely present a more conservative estimate of overall shifts in system performance in Ukraine since 2023 than may actually be occurring, particularly given the ongoing war and the inherent reporting and validation lag in internationally comparable data which the Torino Process monitoring relies on, which often reflects conditions from years prior.

1.4 Comparability and reliability of monitoring data in Ukraine

In addition to messages about system performance, the Torino Process monitoring methodology foresees keeping accurate records about the availability, origin and type of evidence used to calculate the 82 performance indices and corresponding results for each country, including Ukraine. In 2023, this mix of KIESE and self-assessment data led to the creation of three supplementary indices to help interpret the robustness of country results: an index of their international comparability, an index for the risk of bias in the results, and a self-assessment index which tracks the degree to which countries tend to be self-critical.

The international comparability index tracks the proportion of internationally comparable KIESE indicators available for calculating the system performance indices of each country. The higher the share of indicators available, the more internationally comparable the monitoring results. The risk of bias index, on the other hand, measures how many of the 82 SPIs per country are based on quantitative data versus self-assessment responses; a greater reliance on self-assessments increases the risk of bias. Finally, the self-assessment index reflects whether a country tends to be self-critical in reporting its policy and system performance through the self-assessment questionnaire.

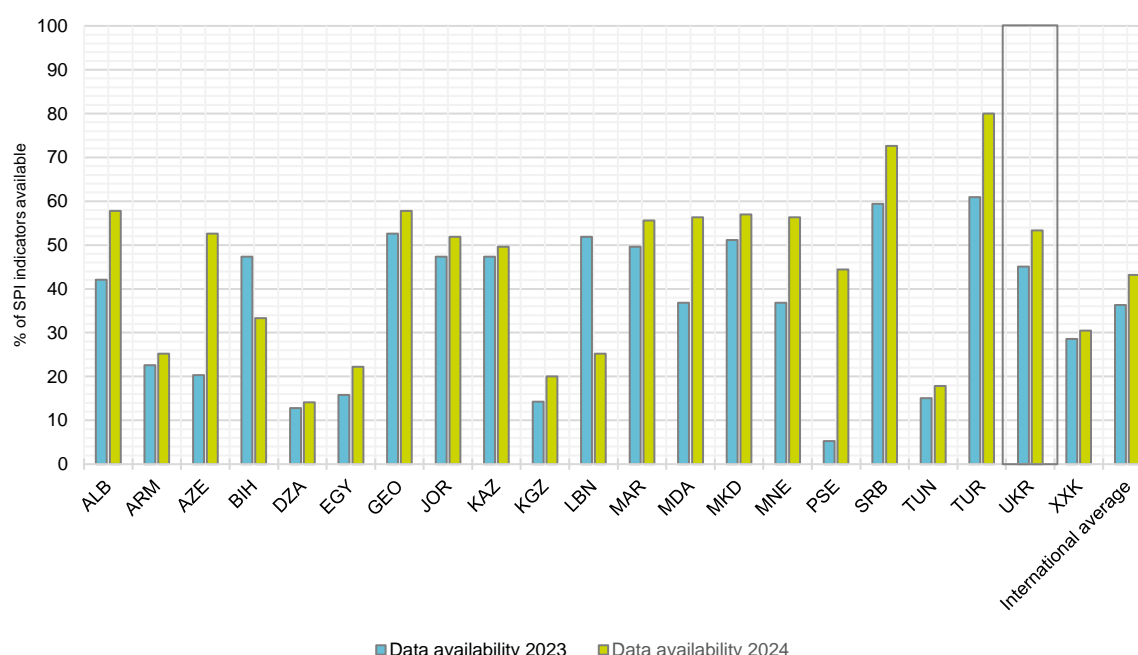
In 2024, two of these indices remain unchanged, but still relevant: the risk of bias index and the self-assessment index, both of which are carried over from 2023. The risk of bias index remains relevant because it reflects the proportion of SPIs based on quantitative data versus self-assessment responses. This mix, which was established in 2023, continues to define the data composition of the 2024 results, as no new self-assessment evidence was collected from countries and thus, the proportion of SPIs which in 2023 relied on self-assessment responses by countries has remained the same for all of them.

The self-assessment index remains unchanged as well. Its relevance stems from the fact that it provides insights into how countries tend to report within the self-assessed portion of the results. Since no new self-assessment responses were collected in 2024, this index still continues to reflect tendencies toward positive or critical self-reporting within the self-assessed data from 2023.

In the group of countries covered by Torino Process monitoring in 2023 and 2024, Ukraine is in the second-highest group for the international comparability of its monitoring results. For over a decade, Ukraine has made substantial efforts to improve its capacity to collect and use data on education and training and to participate in international data collection initiatives and surveys, such as those carried out by the UNESCO Institute of Statistics (UIS) or the Organisation for Economic Co-operation and Development (OECD) through the Programme for International Student Assessment (PISA). These efforts likely contributed to the improvement of performance in Ukraine in this area of monitoring (Figure 1). This result does not mean that evidence is always available where it is most needed. However, it does indicate that Ukraine is less affected by a lack of internationally comparable data on the performance of its VET and lifelong learning systems compared to other countries in the Torino Process.

Despite a better-than-average availability of data, the monitoring results for Ukraine still face a significant risk of bias, as nearly 80% of the findings in this round nevertheless rely on self-assessment responses. These self-assessments, gathered through a supplementary monitoring questionnaire, suggest that Ukraine evaluates the performance of its VET and lifelong learning systems in a relatively balanced manner, avoiding extremes of overly positive or negative ratings.

FIGURE 1. AVAILABILITY OF INTERNATIONALLY COMPARABLE DATA FOR SYSTEM PERFORMANCE MONITORING, UKRAINE AND ETF PARTNER COUNTRIES (2023-2024)



Source: Torino Process database

If the risk of bias in the monitoring results depends on the availability of internationally comparable evidence, and if Ukraine has more of this data in 2024 than in 2023, why has this not improved the reliability of monitoring results regarding risk of bias?

As noted earlier, to ensure consistency in the types of data used for calculating system performance indices across years, the 2024 update of monitoring results included only those SPIs for which quantitative data was available in both 2023 and 2024. Consequently, the mix of SPIs by data type (quantitative or self-assessment) in 2024 remained unchanged from 2023. Since the number of SPIs based on self-assessment responses in Ukraine also remained the same, the risk of bias remains consistent. Moreover, even if this methodological limitation were set aside, simply increasing the volume of internationally comparable data would not necessarily reduce this risk, as additional data might primarily enrich SPIs already based on quantitative evidence in 2023.

2. MONITORING RESULTS: UKRAINE

2.1 Policy and system performance in 2024: overall results

The Torino Process monitoring draws on multiple, often disparate, information sources and data. To facilitate a quick, efficient, and focused communication of key messages despite the diversity of information collected, the reporting of monitoring results aggregates the evidence in ways which facilitate a quick overview of system performance without sacrificing too much detail.

The eight monitoring dimensions mentioned in the previous section are the top layer of reporting in this respect. They capture VET system performance in various domains, the selection of which is

aligned with national and international country commitments and reform and development priorities concerning learning. These eight dimensions are described in Table 2.

This chapter of the monitoring report presents the performance of the VET system in Ukraine across the eight dimensions of Torino Process monitoring, and the evolution of that performance since 2023. Since data is currently available for only two years (2023 and 2024), it is too early to determine whether a consistent pattern or direction of change – a trend – exists over time, both in Ukraine and in other countries participating in the Torino Process monitoring.

TABLE 2. DIMENSIONS OF POLICY AND SYSTEM PERFORMANCE MONITORING THROUGH THE TORINO PROCESS

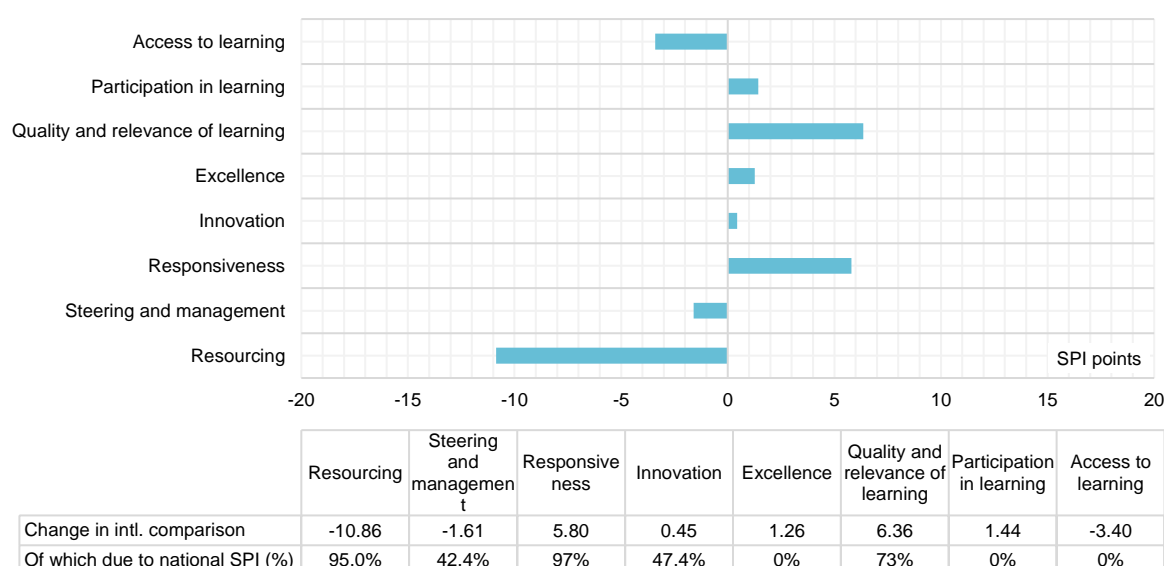
Code	Dimension	Description
A.1	Access to learning	This dimension captures the degree to which initial VET (IVET), continuing VET (CVET), and other adult learning opportunities to which VET could contribute, are accessible and attractive for learners irrespective of who they are and why they wish to engage in learning.
A.2	Participation in learning	This dimension captures the likelihood of VET learners to survive and thrive in the education and training system by looking at its vertical and horizontal permeability, that is whether learners can switch between general and vocational pathways and between formal and non-formal learning, as well as whether they complete their learning.
B.1	Quality and relevance	This dimension captures the extent to which learners in IVET and CVET are provided with basic skills and key competences, whether their learning has exposure to, and is relevant for, employment, and also whether they are provided with adequate career guidance.
B.2	Excellence	This dimension captures the presence of system-wide policies and measures to promote highest quality practices and results in teaching and training, content design and provision, governance and VET provider management, and equity and social inclusion.
B.3	Innovation	This dimension captures the presence of innovative practices and priorities on system level in the areas of access to learning, support for successful completion of learning, and quality of learning and training outcomes.
B.4	System responsiveness	This dimension captures the extent to which curricula for youth and adults consider themes of significance for sustainability, climate change awareness, and digitalisation, as well as whether the IVET and CVET systems are responsive to labour market needs, demographic changes, and socio-economic developments.
C.1	Steering and management	This dimension captures the availability of evidence for informed decision-making, the degree to which governance of VET is participatory, the presence and transparency of quality assurance arrangements, the quality and capacity of staff in leadership positions, and the degree of internationalisation of IVET and CVET.
C.2	Resourcing	This dimension captures the adequacy and efficiency of human and financial resources in IVET and CVET, and the extent to which the material base for learning and training is adequate, that is – conducive to effective teaching, training, and learning.

One way to address this temporary limitation is to track the relative standing of the country against the international average instead of looking at the national data in isolation. This approach allows for a more meaningful assessment of progress by placing the national monitoring results within a broader context, to show not only if performance in a given domain of monitoring is improving or declining, but also how that compares to developments elsewhere.

Looking at relative changes in performance, specifically the difference between national and international monitoring results, can be a useful proxy for the evolution of policy and system performance in a country even when a limited number of data points, or data points which lack update, restrict the ability to establish longer term performance trends. The approach also draws attention to the changing average performance of countries, which allows for a discussion of the broader context and how shifts in the average might reflect trends or challenges shared by countries participating in the monitoring.

Figure 2a provides a snapshot of how the performance of VET in Ukraine has evolved in the eight dimensions of monitoring since 2023, viewed through the lens of the average level of performance of other countries participating in the Torino Process. It presents the SPI point changes for each area – how much the results have diverged or converged relative to the international average since 2023 in each category – and it also distinguishes whether these changes stem from a shift in national SPIs and/or shifts in the broader landscape of cross-country performance. Keeping track of this information is important to avoid the appearance of progress or decline in cases where there is no change in national performance but only an evolution in the international context.

FIGURE 2A. CHANGE IN SYSTEM PERFORMANCE BY MONITORING DIMENSION: UKRAINE AND INTERNATIONAL AVERAGE (2023-2024)



Source: Torino Process database

Some of the sizeable changes since 2023 are a positive. The VET system has become more responsive to external developments (+5.8 SPI points), and it has improved its results in the dimension of quality and relevance of learning (+6.4 SPI points). The improvement in the latter, however, is also due to a decline in the average results of other countries participating in the Torino Process.

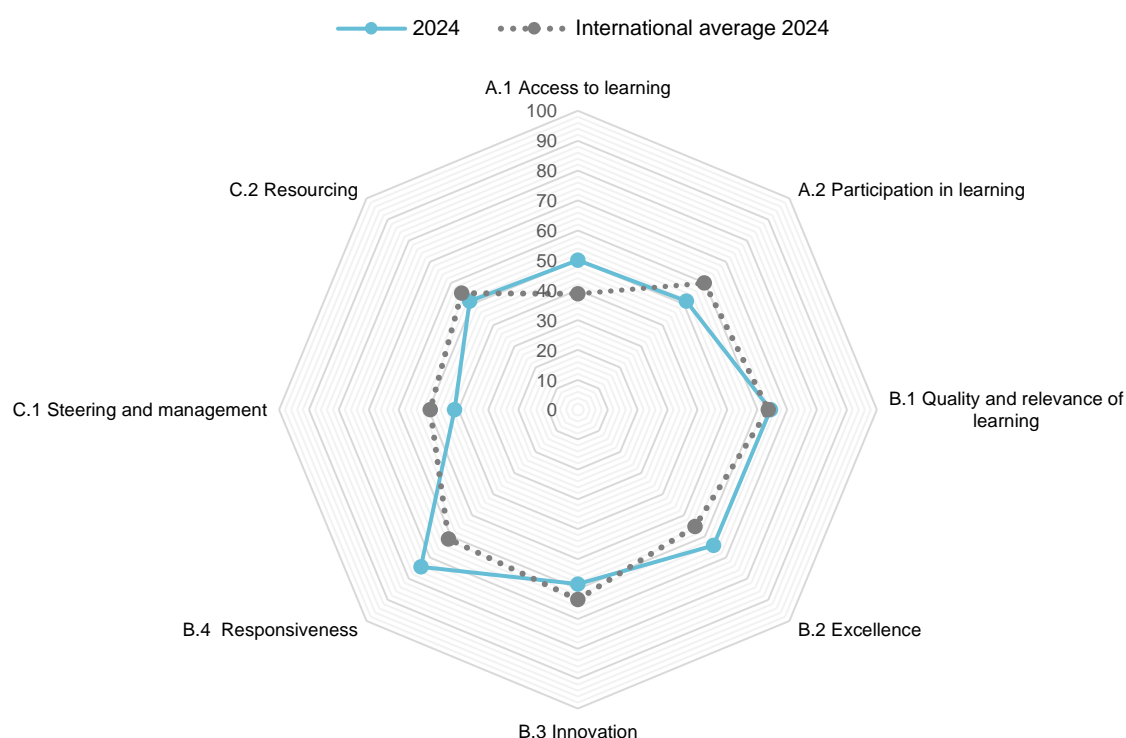
On the other hand, declines of 3.4 SPI points and 1.61 SPI points can be observed in the domains of access to learning and steering and management, respectively. The decline in access to learning since 2023 was shaped predominantly by international developments, while the negative change in the effectiveness of steering and management reflected a combination of national and international factors. The most substantial decline, largely due to negative developments on national level, affected the domain of resourcing (-10.9 SPI points). Conversely, Ukraine's relative standing improved

somewhat in the dimensions of excellence and participation in learning, although this was solely due to declines in the international performance context.

Important findings emerge also beyond comparisons with 2023. In 2024, VET in Ukraine has retained its focus on excellence despite the challenging circumstances (Dimension B.2). With an SPI of 64 versus 55 for the international average in 2024, Ukraine outperforms other countries in this dimension of monitoring by a wider margin than in 2023 (Figure 2B).

In 2024, the VET system of Ukraine also became more responsive to external developments and needs (SPI of 74 in 2024 in Dimension B.4, up from 69 in 2023). The VET system performs better than the international average also in providing access to learning (Dimension A.1), but it lags behind in securing human and financial resources (Dimension C.2). Performance in support of quality and relevance of learning improved to an SPI of 64, which in 2024 puts Ukraine on par with the average for other countries participating in the Torino Process monitoring.

FIGURE 2B. INDEX OF SYSTEM PERFORMANCE BY MONITORING DIMENSION, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical⁵ index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

For those enrolled in VET, successful participation and graduation are not always a given (Dimension A.2). This is an area of somewhat weaker performance results, both compared to other

⁵ The Torino Process makes a distinction between theoretical (full) index range and index range used for reporting purposes. For reporting purposes, rare instances of extreme values on the low end (SPI < 10) and on the high end (SPI > 90) of the index scale are truncated at the upper (10) and lower (90) decile end. This means that the reporting does not discriminate SPI values below 10 and above 90. The international average, on the other hand, is calculated using the full range of the index.

dimensions and in international comparison. This suggests that some learners may find it more challenging to complete their learning and progress to other levels and pathways in education.

VET in Ukraine remains below the average of other countries in the Torino Process also in terms of openness to innovation (Dimension B.3, SPI of 58 for Ukraine compared to an international SPI of 64). The introduction of groundbreaking solutions which address the disruptions caused by the war, on the other hand, has likely helped improve performance in support of the effective steering and management of VET (Dimension C.1, SPI of 41 in 2024, up from 37 in 2023). At the same time, the international average increased by a larger margin during this period, resulting in a slight decline in Ukraine's relative standing in this dimension of monitoring.

2.2 Policy and system performance in specific areas of monitoring and against specific outcomes

VET performance in Ukraine in the eight monitoring dimensions presented above is driven by 30 policy and system outcomes. It is through these outcomes that the IVET and CVET subsystems work to meet the needs and expectations of stakeholders, particularly of youth and adult learners. This section of the monitoring report presents findings about system performance on the level of these deliverables. To facilitate reading and the navigation of content, the section groups the presentation of the 30 outcomes by the three major areas of commitment to learners, which were introduced in the first section of this report: access to learning (Area A), quality of learning (Area B), and system organisation (Area C). Reporting in Area B, the largest by the number of outcomes, is divided into B (1) and B (2).

2.2.1 Area A. Opportunities for lifelong learning: access and participation

In Area A (Access and participation in opportunities for LLL), the Torino Process tracks the first two monitoring dimensions presented in Section 2.1 – access/attractiveness and participation, with six system outcomes (Table 2). These outcomes include access to IVET, CVET, and other opportunities for lifelong learning, the vertical and horizontal permeability of the VET system, as well as the prospects of learners in IVET and CVET to graduate and - where relevant – progress to subsequent levels of education and training. The outcomes included under Area A are defined as follows:

TABLE 3. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING AREA A: ACCESS AND PARTICIPATION

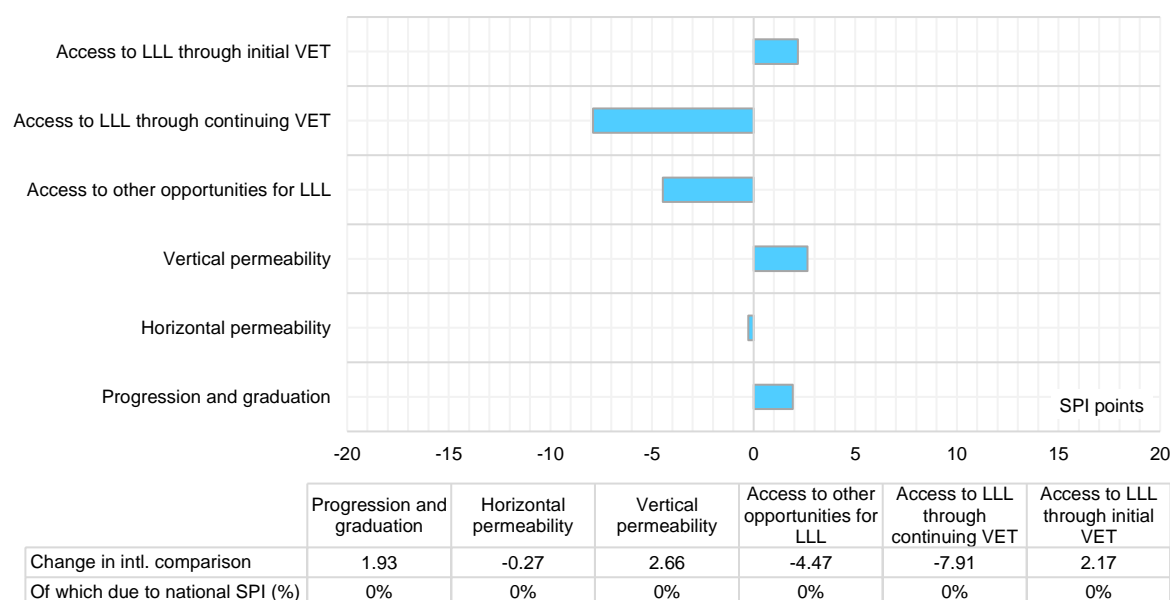
Code	Deliverable (outcome)	Description
A.1.1	Access and attractiveness: initial VET	This outcome captures the degree to which initial VET is an attractive educational choice in comparison with other learning alternatives, and whether that choice is accessible to various target groups of learners.
A.1.2	Access and attractiveness: continuing VET	This outcome captures the degree to which continuing VET is an attractive choice in comparison with other skills development alternatives, as well as whether that choice is accessible to various target groups
A.1.3	Access to other opportunities for LLL	This outcome captures access to other opportunities for lifelong learning not covered by outcomes A.1.1 and A.1.2 and VET, such as active labour market policies (ALMPs)
A.2.1	Flexible pathways: vertical permeability	This outcome strives to capture the vertical permeability of the education and training system vis-à-vis initial and continuing VET, understood as possibility for transition between consecutive tracks of education and training (general and vocational).

A.2.2	Flexible pathways: horizontal permeability	This outcome strives to capture the horizontal permeability of the education and training system vis-à-vis initial and continuing VET, understood as the possibility for transition between parallel tracks of education and training (general and vocational), and between formal and non-formal learning settings
A.2.3	Progression and graduation of learners	This outcome refers to the degree of success (graduation, progression) of learners in VET, for instance in comparison with other education and training alternatives

Figure 3a provides an overview of how the relative performance of VET in Ukraine has evolved since 2023 in comparison to the international average in delivering access and participation to learners. The data indicate a decline in international comparison in delivering two outcomes related to adult education: access to CVET and access to other opportunities for lifelong learning. The weakening of results in both areas is due to the improvement in average performance of other countries in the Torino Process sample since 2023, especially in delivering access to CVET.

Conversely, Ukraine's results have improved in international comparison in domains in which the monitoring tracks first-time access to IVET, vertical permeability to higher levels of education, and support for progression and graduation. However, the increases are due to the declining performance of other countries and not due to better national-level results. The 2024 update monitoring update suggests that other ETF countries may be encountering greater challenges than in 2023 in maintaining the capacity of their education and training systems to ensure access, facilitate upward mobility, and support learners in completing their programmes, on average.

FIGURE 3a. ACCESS AND PARTICIPATION - CHANGE IN SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2023-2024)



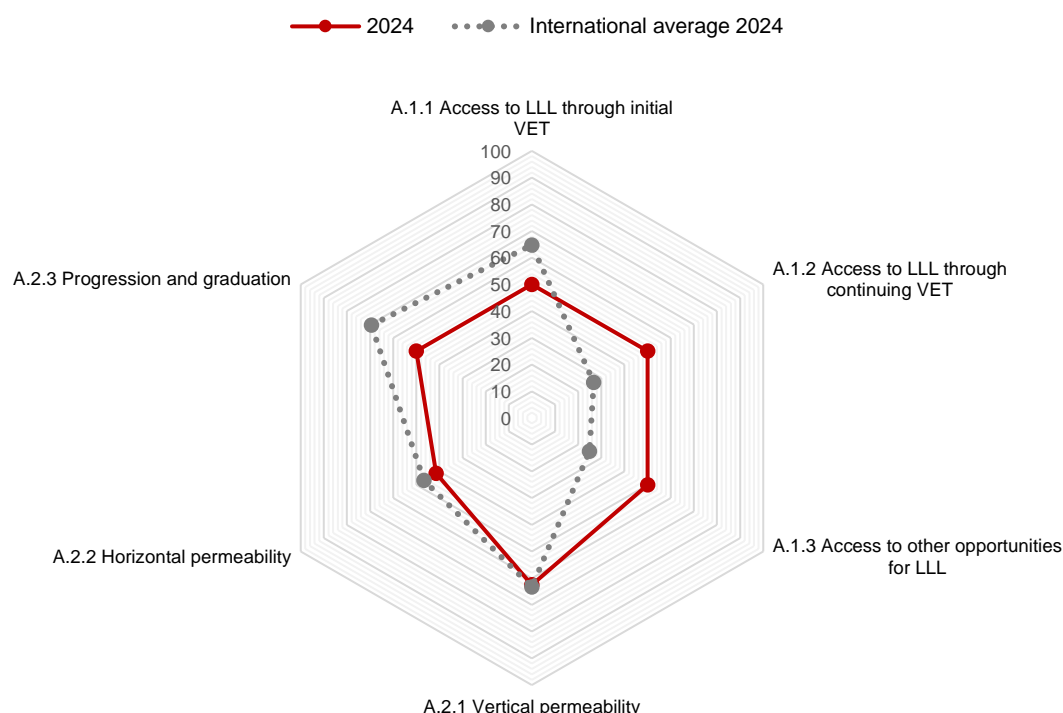
Source: ETF Torino Process database

The results presented so far, are interesting in a comparative perspective. They show that Ukraine's VET system underperforms in areas where other countries excel, such as access to initial VET, but outperforms in areas where other countries face greater challenges, such as access to

CVET and other learning opportunities for adults beyond VET, including active labour market measures (Outcome A.1.3).

A closer look at the evolution of these results on national level shows that VET in Ukraine delivers average performance against most outcomes included under Monitoring Area A (Figure 3b). Despite some variations in performance between outcomes, the results in this area indicate that both the IVET and CVET subsystems could do more to support lifelong learning. With an SPI of 50, access to initial VET programmes is an area in which Ukraine underperforms visibly compared to other countries in the Torino Process sample (Outcome A.1.1).

FIGURE 3b. ACCESS AND PARTICIPATION IN OPPORTUNITIES FOR LLL: INDEX OF SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

In response to the disruptions caused by the war, Ukraine introduced new measures to support access to VET for youth and adults, including amendments to its Law on Vocational Education and targeted initiatives such as vouchers, professional development opportunities, and free VET programmes for groups affected by the war. While these measures are gaining traction, their full impact may take time to materialise. At the time of the 2024 monitoring update, internationally comparable evidence of that impact was not yet readily available.

National authorities report average results in providing access to CVET programmes (Outcome A.1.2) and other opportunities for adult education (Outcome A.1.3). However, since the performance of other countries against these two outcomes remains considerably lower than that of Ukraine in both 2023 and 2024, these average results are still high enough to place the performance of Ukrainian VET well above the international benchmark in these two domains of monitoring.

Authorities report of different reasons for the stronger performance in providing access to adult education. They include a favourable legislative framework, a growing social responsibility movement among private businesses – many of which have begun operating their own training centres in cooperation with public VET providers – and the availability of short-term courses offered by donors, civil society organisations, and businesses to equip adults with skills anticipated to be in demand for the reconstruction of the country.

Despite these positive developments, VET participants in Ukraine—like in other countries but to a greater extent—face limitations in transitioning between parallel general and vocational education pathways (Outcome A.2.2, horizontal permeability). However, system performance in supporting vertical transitions to general or academic education—progression to higher levels of general or academic education after VET—is relatively stronger. This does not mean that all VET graduates make this transition; many choose to enter the labour market directly after completing their programmes, as barriers to further study are primarily driven by individual preferences rather than structural obstacles (Outcome A.2.3).

2.2.2 Area B (1). Lifelong learning outcomes: quality and relevance

In the first part of Area B (Quality and relevance of LLL outcomes), the Torino Process follows another two of the dimensions presented in Section 2.1, namely quality/relevance and responsiveness of VET, with a total of eight policy and system outcomes.

These outcomes cover the quality of learning of youth and adults in VET in terms of key skills and competences, the exposure of learners in VET to the world of work, the employability of graduates from IVET and CVET, the availability of career guidance for them, as well as the relevance of learning and training content in VET. Under relevance, the monitoring records the responsiveness of the VET programme offering to demographic, labour market, and socio-economic developments, as well as the inclusion in VET curricula of themes pertaining to the green and digital transition. The outcomes included under Area B (1) are defined in Table 4.

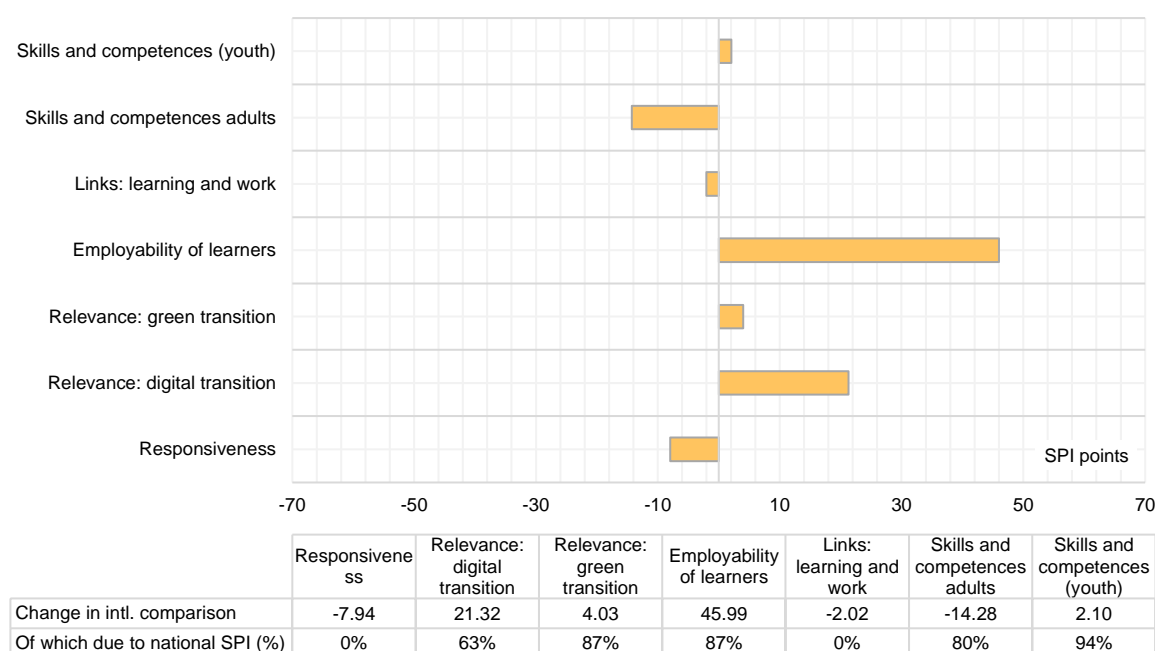
TABLE 4. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING AREA B (1): QUALITY AND RELEVANCE

Code	Deliverable (outcome)	Description
B.1.1	Key competences for LLL, quality of learning outcomes	This outcome captures the extent to which the education and training system succeeds in the provision of basic skills and key competences for learners in formal education (including IVET), as defined in regular international surveys and international assessments
B.1.2	Adult skills and competences	This outcome captures the extent to which adults in working age dispose of basic skills and key competences, as captured by regular international surveys.
B.1.3	Links between learning and the world of work	This outcome reflects the pragmatic relevance of IVET and CVET programmes through the lens of participation in work-based learning (WBL) and the share of programmes with outcomes/objectives that include a WBL component
B.1.4	Employability of learners	This outcome refers to the labour market relevance of opportunities for LLL as captured through evidence of labour market outcomes of graduates from IVET, CVET, and other forms of LLL with a VET component
B.1.5	Opportunities for career guidance	This outcome strives to capture the timely availability of up-to-date information about professions and education programmes, which information allows prospective and current students in VET to take informed decisions concerning their education and employment paths

B.4.1	Relevance of learning content: green transition	This outcome captures the extent to which curricula for youth and adults consider themes of significance for sustainability and climate change awareness, including “green skills” for sustainable economies
B.4.2	Relevance of learning content: digital transition	This outcome tracks the extent to which curricula for youth and adults incorporate themes concerning digitalisation, and the extent to which learners are provided with basic digital skills as a result
B.4.3	Responsiveness of programme offering	This outcome captures the degree and speed of responsiveness of initial and continuing VET systems to the needs of the labour market and to other changes concerning demography and socio-economic developments

Figure 4a provides an overview of how the relative performance of VET in Ukraine in delivering quality and relevance to learners has evolved since 2023 in comparison to the international average. The data indicate that performance has shifted across all outcomes covered in this monitoring area. However, while Ukraine’s relative standing has changed in all domains, these shifts result from a combination of national-level changes and movements in the international average. In the domains of work-based learning and responsiveness of VET, the changes in relative standing are solely attributable to shifts in the international average, as there were no recorded changes at the national level in these areas.

FIGURE 4A. QUALITY AND RELEVANCE - CHANGE IN SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2023-2024)



Source: Torino Process database

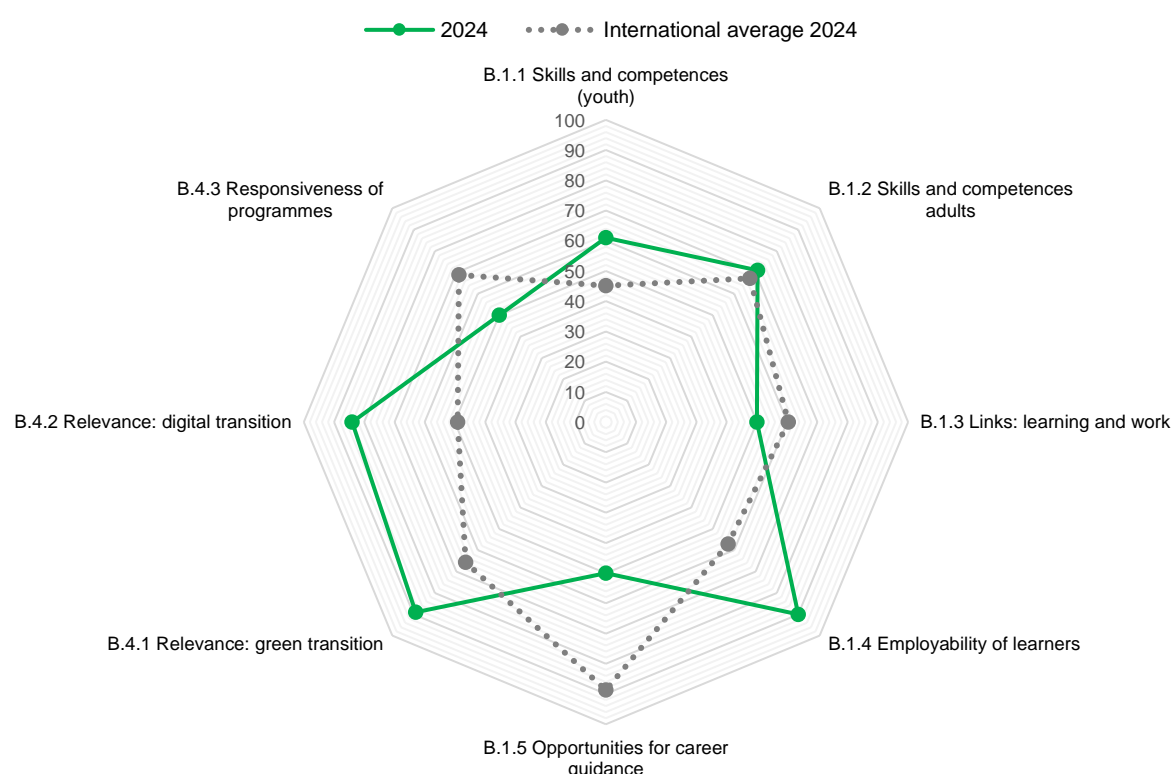
Figure 4A suggests that since 2023, it has also become more difficult to maintain the quality of adult skills and competences, in Ukraine as well as in other countries participating in the Torino Process. The decline in performance in this domain between 2023 and 2024 in international comparison is sizeable (-14.3 SPI points). The relative standing of Ukraine dropped in international comparison also in the degree to which its VET system is responsive to labour market needs (-7.9 SPI points) and supports work-based learning (- 2 SPI points). In both areas, the decline is due to an

increase in the average performance of other countries in delivering these outcomes rather than due to negative developments on national level.

In all other domains included under “quality and relevance”, the performance of VET in Ukraine has improved since 2023. The largest gains were in support of the employability of VET graduates (+46 SPI points) and in facilitating the digital transition (+21.3 SPI points). More modest increases were recorded in the delivery of foundational skills to young learners (+2.1 SPI points) and in the integration of green transition themes into VET curricula (+4 SPI points).

A check of the 2024 data shows that VET in Ukraine outperforms other countries in the Torino Process, on average, in providing young learners with basic skills and key competences (Outcome B.1.1, SPI of 61 compared to an international SPI average of 45). Performance in this area has improved slightly since 2023.

FIGURE 4b. QUALITY AND RELEVANCE OF LLL: INDEX OF SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

New evidence from the 2022 round of OECD’s PISA, which replaced the 2018 data used in the 2023 Torino Process monitoring cycle, helps explain this improvement. The results show that Ukraine reduced the share of underachievers by 2% in mathematics and science (KIESE SPI Indicators 31 and 32). Although the share of underachievers in reading increased (KIESE SPI Indicator 30), the overall gains were sufficient to contribute to the higher SPI result for Outcome B.1.1.

Despite these improvements, performance gaps remain across different types of educational institutions within Ukraine, in particular between VET and general education. Students from colleges,

technical schools, and vocational-technical institutions score, on average, 5 points lower than their peers in general secondary schools and educational complexes. Students from general secondary schools and educational complexes, in turn, score slightly less but still significantly lower – by almost 2 points – compared to students attending lyceums, gymnasiums, and specialised schools, who in 2022 achieved the highest scores overall.

Ukraine's performance also lags when compared to a broader international context. Students included in the OECD PISA sample for Ukraine in 2022 (some 14% of whom were enrolled in VET—a share limited by the war and the inclusion of only 18 out of 27 regions)⁶ performed below their peers in OECD countries, on average. Ukrainian students scored below the OECD average in all three PISA domains, with a gap of 31 points in mathematics (Average for Ukraine: 441 vs OECD average: 472), 48 points in reading (428 vs 476), and 35 points in science (450 vs 485). These differences correspond to significant learning gaps, equivalent to 1.5 years of schooling in mathematics and science, and 2.5 years in reading, based on PISA standards.

What about the quality of skills and competences of adults? Adults in Ukraine are more likely to have foundational skills and competences than their peers in other countries, on average (Outcome B.1.2). However, performance in this domain has declined significantly since 2023 (see also Figure 4a), both in Ukraine and internationally. Data from 2023 from UNESCO GRALE4 highlighted the effectiveness of adult education arrangements in Ukraine in establishing a strong overall framework for developing foundational skills through broader cultural and educational outcomes. In contrast, data from UNESCO GRALE5 used in the 2024 monitoring update (KIESE SPI Indicator 39) show that, while the VET system continues to perform well in ensuring a comprehensive framework for foundational skills, it faces challenges in embedding specialised competences within that framework, such as those needed for functioning in diverse social and cultural contexts.⁷

The employability of VET graduates, on the other hand, has improved substantially since 2023 (Outcome B.1.4). The change is driven by an improvement in how policymakers evaluate the impact of CVET on employment and productivity (KIESE SPI Indicator 50, sourced from UNESCO GRALE5). According to that, CVET in Ukraine is increasingly seen as an important contributor to employment outcomes and its role in supporting individuals to secure jobs or advance in their careers is being increasingly acknowledged.

The monitoring data does not provide an insight into the possible reasons for the shift in views. However, better links between VET programmes and the world of work are unlikely to be among them. The learning opportunities offered through VET seem populated with programmes which still have relatively weak links to the labour market in terms of availability of work-based learning (Outcome B.1.3). Despite recent efforts to improve access to and the quality of career guidance for learners (Outcome B.1.5). e.g., through various campaigns, the introduction of a digital platform about professions, and the operation of a career guidance portal, career guidance too remains a domain of weaker system performance.

As reported already in 2023, to strengthen links to the labour market and to provide work-relevant experiences, national authorities in Ukraine have devised policies concerning on-the-job training for students in IVET programs. The training is in a format providing compulsory industrial practice. In the

⁶ Source: *Національний звіт за результатами міжнародного дослідження якості освіти PISA-2022* at https://pisa.testportal.gov.ua/wp-content/uploads/2023/12/PISA-2022_Nacjonalnyj-zvit_povnyj.pdf

⁷ Effects of adult learning and education programmes on access to education based on the answer to the question: To what extent does the ALE practice in your country cover the following topics? Intercultural dialogue and communication: not at all, little, somewhat, a great deal, do not know (UNESCO GRALE5).

CVET system, the Employment Centre is responsible for organising on-the-job training directly at the premises of employers. According to official information provided in the course of monitoring, more progress in this area is essential and needed for a smoother and more efficient transition from learning to the labour market.

The Torino Process monitoring framework considers the relevance of learning content also in a longer-term perspective by looking at the extent to which curricula consider forward-looking, emerging themes such as the digital and green transitions. VET in Ukraine is doing rather well with the incorporation into the curricula of themes concerning the green transition (Outcome B.4.1, SPI of 89 in 2024, up from an SPI of 86 in 2023). The data used in 2023 suggests that adult education specifically had a strong contribution to environmental sustainability as a broader cultural and social goal (KIESE SPI Indicator 89, sourced from UNESCO GRALE4). The latest data for that indicator suggests that there is an ongoing process of embedding environmental priorities into the curriculum by gradually formalising and integrating a focus on sustainability within adult education.

Since 2023, Ukraine has made progress also in supporting the digital transition (Outcome B.4.2). The monitoring results in that domain are higher than the average for other countries in the Torino process, by a wide margin. This improvement reflects a positive change in a KIESE indicator used to calculate the SPI for Outcome B.4.2: availability of computers for educational purposes (KIESE SPI Indicator 88). The computer-student ratio decreased from 72 to 65 students per computer during the reporting period. This means that at the time of monitoring, more computers were made available for students in the modal grade.

An even more critical, contextual driver of this positive change (albeit one not captured by the Torino Process indicator framework), is Ukraine's widespread adoption of online instruction solutions to maintain access to education under the challenging conditions of war. These measures have provided practical alternatives for students in VET and general education to continue their education despite the disruptions caused by the Russian aggression.

The VET system in Ukraine appears more responsive to emerging themes and long-term challenges, such as greening and digitisation, than to immediate labour market and economic demands. System performance in aligning programme offerings with short-term expectations and demand (Outcome B.4.3) is only mid-range (SPI of 50) and falls below the international average of 69.

2.2.3 Area B (2). Lifelong learning outcomes: excellence and innovation

In the second part of Area B (Excellence and innovation in support of lifelong learning), the Torino Process monitors two performance dimensions – excellence and innovation, which accommodate a total of eight system outcomes. These outcomes include excellence in pedagogy, learning content, governance, and inclusion into learning, as well as systemic innovation supporting access, participation, quality, and relevance of learning and training. The outcomes included under Area B (2) are defined in Table 5.

The Torino Process defines excellence as the presence of system-wide policies and measures that promote the highest quality practices and results across key domains of policy and provision of programmes and services in VET. These domains include pedagogy and professional development, programme content and implementation, governance and provider management, and social inclusion and equity. Innovation, by contrast, reflects the adaptability, creativity, and forward-thinking approach of the VET system in addressing evolving labour market and learner needs.

TABLE 5. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING
AREA B (2): EXCELLENCE AND INNOVATION

Code	Deliverable (outcome)	Description
B.2.1	Excellence in pedagogy and professional development	This outcome captures the extent to which excellence in teaching and training is an acknowledged policy priority, as well as the extent to which its implementation is bearing fruit across the education and training system, including in the domain of professional development of teachers
B.2.2	Excellence in programme content and implementation	This outcome captures the results of efforts to promote excellence in the content and implementation of VET programmes, with a specific focus on bringing them closer to the world of work (i.e. through work-based learning), on prioritising greening in curricula and teaching, as well as on promoting excellence in learning.
B.2.3	Excellence in governance and provider management	This outcome captures the results of efforts to promote excellence in the domains of financing, leadership, and governance, as well as the extent to which these examples are systemic or not
B.2.4	Excellence in social inclusion and equity	This outcome captures the results of efforts to promote excellence in the domain of equity and social inclusion in education and training, as well as the extent to which these examples are systemic or not
B.3.1	Systemic innovation: access to opportunities for LLL	This outcome captures the presence of innovative practices and policy solutions in the domain of access to opportunities for lifelong learning.
B.3.2	Systemic innovation: participation and graduation	This outcome captures the presence of innovative practices and policy solutions in the provision of support for participation in (and graduation from) opportunities for lifelong learning, and the extent to which they are systemic (or not)
B.3.3	Systemic innovation: quality of learning and training outcomes	This outcome captures the presence of innovative practices and policy solutions for raising the quality of learning and training in terms of the knowledge, skills, and abilities acquired by learners
B.3.4	Systemic innovation: relevance of learning and training	This outcome captures the presence of innovative practices and policy solutions for raising the labour market relevance of knowledge, skills, and abilities acquired by learners

The Torino Process defines excellence as the presence of system-wide policies and measures that promote the highest quality practices and results across key domains of policy and provision of programmes and services in VET. These domains include pedagogy and professional development, programme content and implementation, governance and provider management, and social inclusion and equity. Innovation, by contrast, reflects the adaptability, creativity, and forward-thinking approach of the VET system in addressing evolving labour market and learner needs.

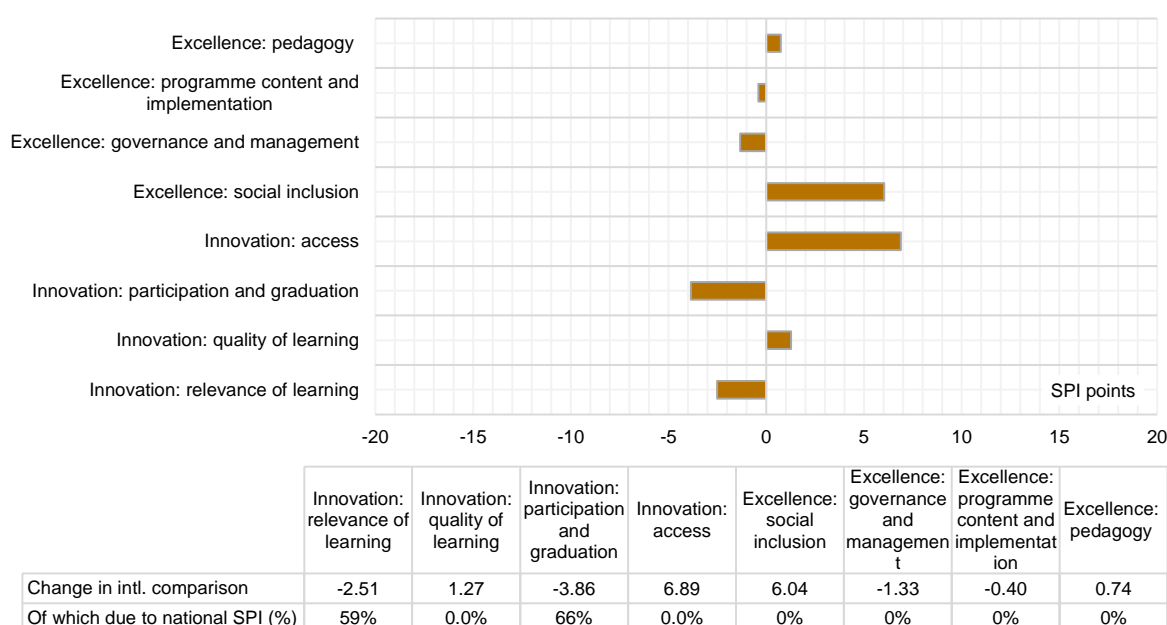
Figure 5a presents a comparative overview of changes in the performance of VET in Ukraine between 2023 and 2024 relative to the average of other countries in the Torino Process in these domains. It shows that Ukraine's performance in delivering excellence and innovation has evolved unevenly in international comparison since 2023.

The most notable positive shifts occurred in the domains of innovation in support of access to learning, which increased by 6.89 SPI points, and excellence in support of social inclusion, which increased by 6 SPI points. However, both changes reflect a decline in average international performance rather than an improvement in the performance of VET in Ukraine.

Changes can also be observed in all other domains related to excellence. However, here too, the shifts are entirely driven by developments in the international context rather than by specific improvements or setbacks in Ukraine's VET system. While international averages may mask the results of individual countries that have improved or worsened during this period, the shifts suggest

that several countries are experiencing context-specific changes significant enough to affect their ability to maintain or advance high-quality practices in their VET systems.

FIGURE 5a. EXCELLENCE AND INNOVATION - CHANGE IN SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2023-2024)



Source: ETF Torino Process database

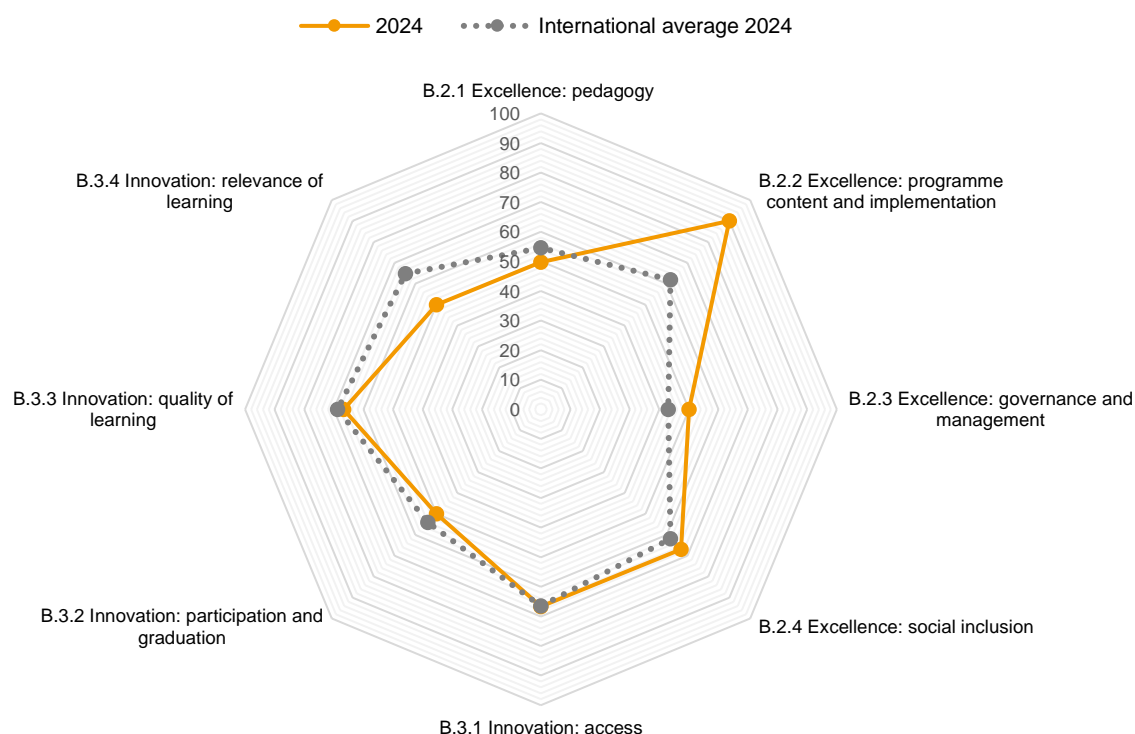
The decline in the international average has also boosted the relative standing of Ukraine in the domain of innovation in support of quality, albeit to a much lesser extent than was the case with the outcomes discussed previously. In contrast, innovation in support of participation and graduation declined by 3.86 SPI points – a drop driven by an improvement in the international average. The relative standing of VET in Ukraine in the domain of innovation in support of the relevance of learning outcomes also declined, though in this case, the result was partly due to a decrease in national performance.

What are the specific performance results for 2024 behind these shifts?

The first set of indicators relates to excellence in pedagogy and the professional development of teachers and trainers (Outcome B.2.1). Ukraine's average score in this domain remains unchanged from 2023, at a mid-range level (SPI of 50) and below the international average. In contrast, the promotion of excellence in programme content and implementation (Outcome B.2.2) is one of the strongest areas of VET system performance in Ukraine and stands well above the international average (Figure 5b).

Taken together, these two results suggest that there may be a degree of disbalance between the attention paid to the content of VET programmes and the expectations on how they should be taught on one hand, and the capacity of teachers and trainers in VET to live up to these expectations on the other. The data behind the system performance index for Outcome B.2.1 (KIESE SPI Indicators 56 and 62) show that only about a fifth of teachers in VET and general education participate in regular professional development and that the availability of professional training for teachers in CVET is considered inadequate.

FIGURE 5b. EXCELLENCE AND INNOVATION: INDEX OF SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

As already noted, excellence and innovation represent distinct yet interconnected domains in the context of system performance monitoring within the Torino Process. While excellence refers to the pursuit of highest quality practices and outcomes in various, mainstream domains of vocational education and training policy and delivery, innovation focuses on the presence of pioneering practices and policy solutions within these and related domains. Innovation in the context of monitoring is a proxy for the adaptability, creativity, and forward-thinking approach in the VET system in responding to the evolving needs of learners and labour markets.

The Torino Process monitoring gauges systemic innovation regarding access to lifelong learning opportunities (Outcome B.3.1), participation and graduation (Outcome B.3.2), quality of learning and training outcomes (Outcome B.3.3), and relevance of learning and training (Outcome B.3.4).

In terms of monitoring results, the emphasis Ukraine places on innovation is more consistent between these four outcomes. The regulation and legislation surrounding the area of innovation in education are manifold. The priorities in the policies and actions undertaken by the government include the creation of an innovative learning environment, the introduction of innovative teaching technologies into the educational process, and financial support for students. Identifying and considering the improvement of education and training is seen as a priority within state policies in VET is already an important achievement and relevant for the VET performance in support of labour market needs.

Efforts to innovate in support of access to VET (Outcome B.3.1) and the quality of VET (Outcome B.3.3) appear to be more effective than innovation in other areas, such as participation, graduation, and relevance of learning outcomes. This pattern of effectiveness is consistent with the overall satisfactory performance in delivering systemic innovation outcomes, even as the international average has declined in both domains since 2023. However, it is important to recognise the challenges and acknowledge that the current state of VET does not fully support the quality of educational services needed to train competitive graduates who meet employers' skill demands. This awareness is reflected in the current strategy for developing Professional (Vocational and Technical) Education.

The new set of data included in the 2024 monitoring update, on the other hand, suggests that capacity for effective, innovative solutions in support of successful participation in learning (Outcome B.3.2) has declined somewhat since 2023. This aligns with a broader downward trend in performance in other countries in that domain of monitoring.

The reasons for the decline may differ from country to country. In Ukraine, they are mostly related to the war which has limited the ability of schools to provide dedicated spaces for students to complete homework or study, potentially reducing the support students receive in terms of a conducive study environment (KIESE SPI Indicator 76, sourced from OECD PISA 2022). Also, fewer schools can offer opportunities for peer-to-peer tutoring, which is a form of support that can help students academically by allowing them to learn from their peers (KIESE SPI Indicator 78, also sourced from OECD PISA 2022).

2.2.4 Area C. System organisation

In Area C (System organisation), the monitoring framework accommodates the last two dimensions presented in Section 2.1 – steering/management and resourcing, in which the Torino Process tracks a total of eight system outcomes. These outcomes include the availability and use of data for informed decision-making, the involvement of stakeholders in VET policy, provider management, and resourcing, quality assurance and accountability, the internationalisation of VET providers, as well as the availability and use of human and financial resources in VET. The outcomes included under Area C are defined in Table 6.

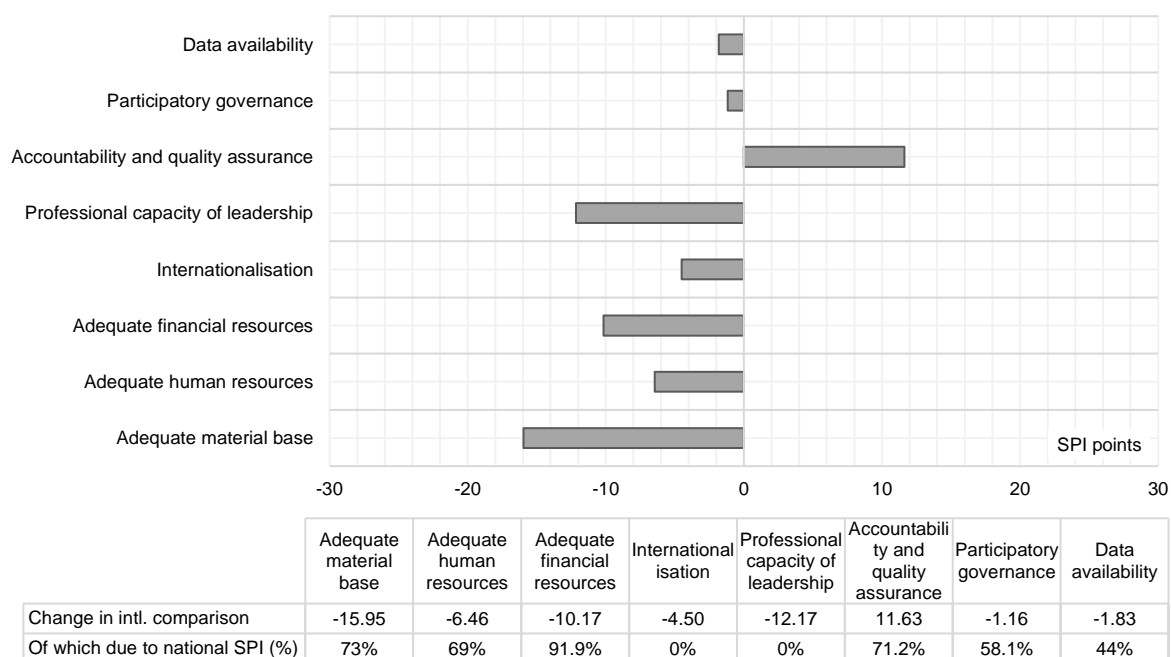
TABLE 6. POLICY AND SYSTEM OUTCOMES INCLUDED UNDER MONITORING AREA C: SYSTEM ORGANISATION

Code	Deliverable (outcome)	Description
C.1.1	Data availability and use	This outcome refers to the availability of administrative and big data as covered by Level 1 of the monitoring framework, participation in large scale international assessments, as well as technical capacity to generate/manage evidence to support monitoring and improvement
C.1.2	Participatory governance	This outcome captures the degree of involvement of the private sector and other external stakeholders in consultations and decisions concerning opportunities for LLL through initial and continuing VET
C.1.3	Public accountability and reliable quality assurance	This outcome tracks the extent to which reliable and trustworthy quality assurance (QA) mechanisms and accountability arrangements are in place which cover learners, teachers, and providers, as well as the extent to which the QA results are publicly available
C.1.4	Professional capacity of staff in leadership positions	This outcome monitors the availability and professional capacity of qualified staff in leadership roles and in other key administrative roles on provider level

C.1.5	Internationalisation	This outcome monitors the degree of internationalisation in IVET and CVET, such as internationalisation of QA arrangements, curricular content, qualifications (i.e. recognition of international credentials, awarding bodies being active beyond their country of origin, etc.)
C.2.1	Adequate financial resource allocations and use	This outcome captures the adequacy of financial resources invested in IVET and CVET in terms of level of investment and allocation, as well as the degree of diversification of funding between public and private sources
C.2.2	Adequate human resource allocation and use	This outcome captures the efficiency of human resource management in terms of availability of teachers and trainers, and the adequacy of their deployment and career management
C.2.3	Adequate material base	This outcome captures the extent to which the material base for learning and training is adequate, including learning and training materials which are supportive of and promote effective teaching, training, and learning

The monitoring data reveal that system organisation is the domain with the highest number of areas that recorded changes since 2023 in Ukraine. Unfortunately, most of these changes are negative. The largest decline in national performance took place in the availability of adequate material base for VET, as well as funding for VET. The results of Ukraine in these domains have worsened in international comparison by 15.6 SPI points and 10.1 SPI respectively (Figure 6a).

FIGURE 6a. SYSTEM MANAGEMENT AND ORGANISATION - CHANGE IN SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2023-2024)



Source: ETF Torino Process database

The decline in other monitored areas was more moderate. In the domain of data availability, results appear weaker because progress in Ukraine has been slower than the average improvements in other countries. Since 2023, Ukraine's relative standing has dropped by 1.83 SPI points, as discussed later in this section. The data suggest that Ukraine has not strengthened its capacity to provide internationally comparable data at the same pace as other countries. Given the challenges posed by the war and the inability to extend data collection efforts—both national and international—

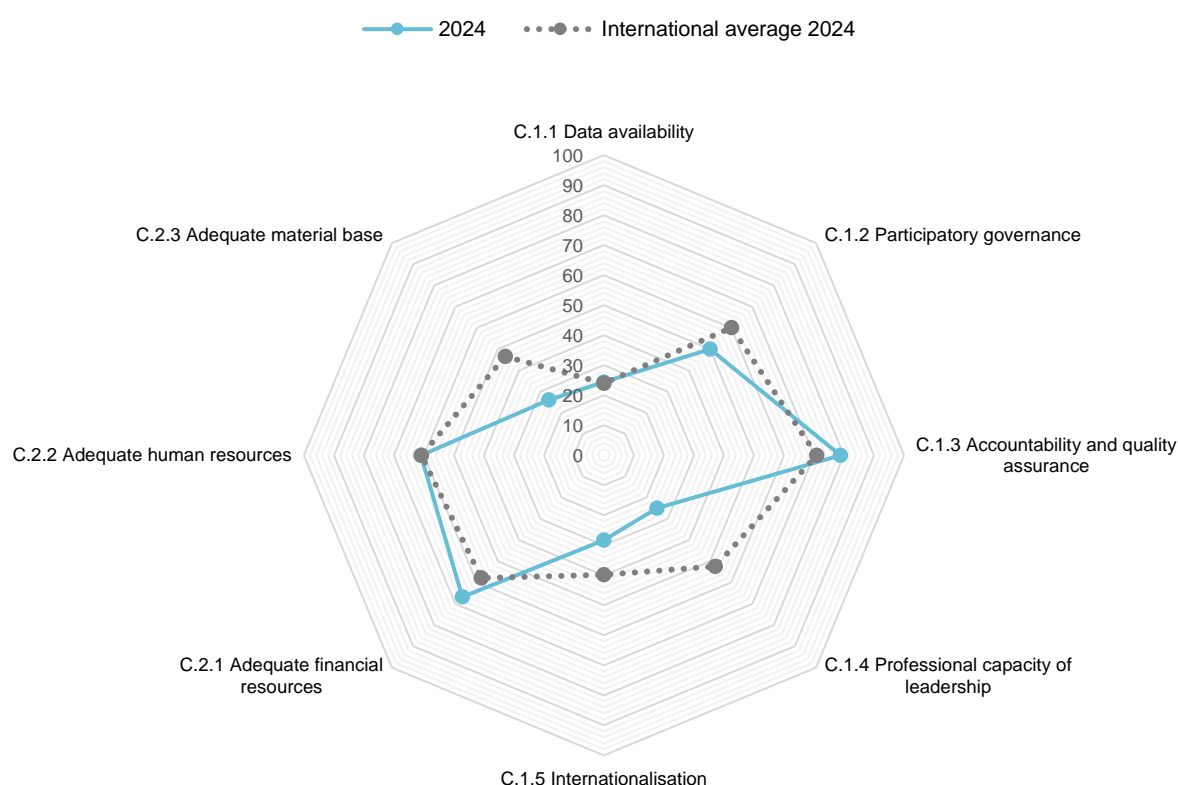
to all parts of the country, this finding is understandable. System performance has also declined in the domain of 'participatory governance,' largely due to shifts in performance at the national level.

Not all changes are negative, however. As a result of concerted efforts, the provision of an adequate material base has improved compared to 2023, along with progress in accountability and quality assurance. In terms of material base, Ukraine stands out among Torino Process countries, most of which have seen declines in these areas since 2023.

By contrast, declines have occurred in the adequate provision of human resources and in the professional capacity of leadership, where the largest relative decline (-12.17 SPI points) has been recorded. This change is entirely due to improvements in the international average, while no internationally comparable evidence suggests progress in the performance of Ukraine on national level.

Figure 6b presents national VET performance in 2024 as an independent measure, without comparison to 2023. The findings indicate that Ukraine, like other countries, faces its greatest challenges in data availability for planning, policy analysis, and decision-making (Outcome C.1.1). While VET has made progress through participation in key evidence-collection initiatives such as PISA and UNESCO GRALE, it still falls below the international average in evidence availability in 2024. This is not because other countries have provided more data in this monitoring round, but because the number of countries participating in international initiatives has increased. As a result, the international average in this domain has risen, even though the amount of data available within Ukraine has not changed.

FIGURE 6b. SYSTEM MANAGEMENT AND ORGANISATION: INDEX OF SYSTEM PERFORMANCE, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical index range: min/low performance=0, max/high performance=100

Source: [Torino Process monitoring database](#)

As in 2023, the internationalisation of VET providers and their teachers (Outcome C.1.4) remains a greater challenge in Ukraine than in other countries in the Torino Process monitoring sample, as does performance in support of participatory governance (Outcome C.1.2).

In contrast, accountability and quality assurance (Outcome C.1.2) stand out as a domain of system operation that VET participants describe as performing at a satisfactory level, presumably due to a tradition of consultation and peer involvement. The SPI for this area has increased from 59 in 2023 to 79 in 2024. The VET system is considered sufficiently accountable to stakeholders, and the messages it communicates about its own performance and results are publicly accessible

The improvement results from incremental progress in implementing accountability and quality assurance practices in schools and VET providers. These changes reflect a growing emphasis on transparency, with more school principals reporting the public sharing of achievement data (KIESE SPI Indicator 101, sourced from PISA 2022). There is also a shift toward more participatory approaches to quality assurance, including greater use of student feedback (KIESE SPI Indicator 110) and strengthened mechanisms for continuous development, such as regular consultations for school improvement (KIESE SPI Indicator 112).

While the increases are modest, they collectively indicate a positive trend toward embedding accountability and quality assurance as integral elements of school governance. This suggests that school leaders are becoming more aware of the value of these practices, even though full implementation requires sustained effort and remains hindered by the challenges of the wartime context in which providers operate.

Performance in the sufficiency and management of human resources in the VET system has declined, and unlike in 2023, it is no longer above the international average (Outcome C.2.2). The data used to calculate the system performance index in this domain suggest that Ukraine is facing growing challenges in ensuring adequate human resources for VET (KIESE SPI Indicator 126). Compared to the OECD average, more school principals perceive staff shortages or lower staff quality as obstacles to instruction. This is most likely a consequence of difficulties in attracting and retaining qualified teaching and support staff due to wartime conditions. KIESE SPI Indicator 127 (share of fully certified teachers and teachers with Level 5A degrees) also points to a decline in the proportion of qualified teachers in both VET and general education.

Similarly, VET in Ukraine has seen a decline in performance in the availability and allocation of financial resources (Outcome C.2.1). This decline is linked to reduced public spending on adult education programmes (KIESE SPI Indicator 122) and the reallocation of resources to sectors directly supporting the country's defence efforts.

Even greater challenges arise in the adequacy of the material base for teaching and learning (Outcome C.2.3). New values for KIESE SPI Indicators 131 to 135, sourced from PISA 2022, reflect growing concerns among school principals about the availability and quality of educational materials and infrastructure in both general and VET schools. Insufficient or poor-quality resources, along with inadequate physical facilities, are increasingly seen as obstacles to effective instruction.

2.3 How did policies and systems benefit specific groups of learners?

In this 2024 update, the Torino Process monitoring continues to track not only the deliverables of national VET policies and systems in general but also into the degree to which they address the needs and expectations of present and prospective lifelong learners. The monitoring framework traces how well and equitably system outcomes are distributed to these learners depending on their age and gender, and by features which can be influenced by policy, such as socio-economic disadvantage, labour market status, migration status and learning setting/pathway.

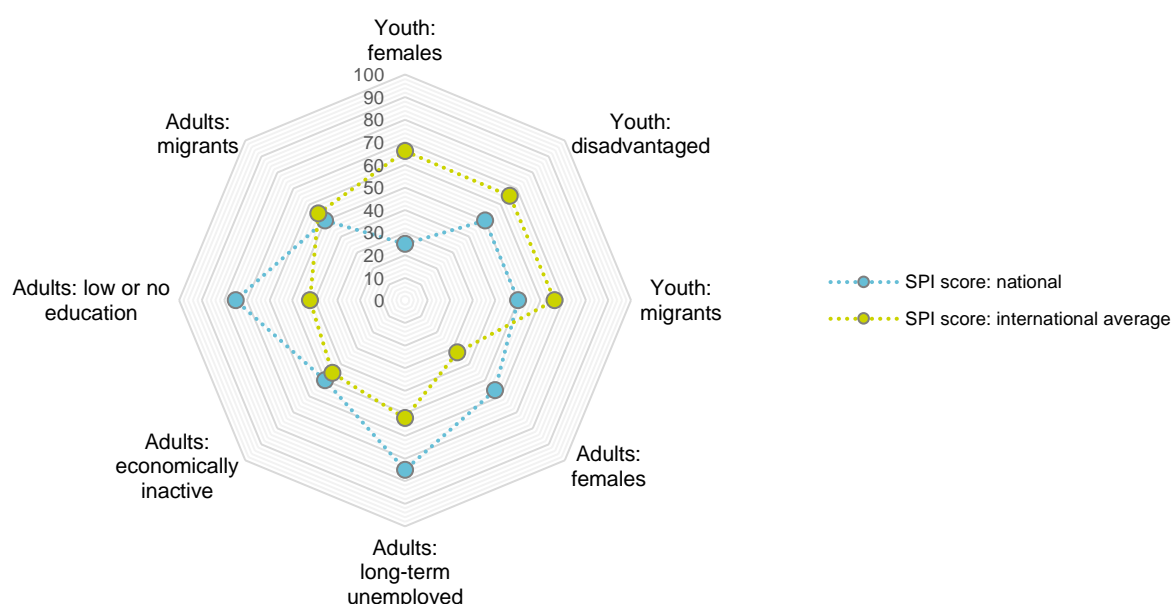
The next sections provide an overview of how the IVET and CVET subsystems in Ukraine perform in a key selection of monitoring dimensions – access and participation, and quality and relevance – for the following key selection of learner groups: youth and adults, female learners, socioeconomically disadvantaged youth, adults at risk of exclusion, and first-generation migrants.

2.3.1 Access and participation

Overall results

The data presented in Figure 7 provides an overview of system performance in 2024 regarding access to learning opportunities for various vulnerable populations in Ukraine and internationally. The figure indicates that performance in supporting access to VET for young learners of strategic interest varies by gender. Females are significantly less likely to benefit from VET opportunities compared to other groups, and their SPI score is well below the average for other countries in the Torino Process.

FIGURE 7. SYSTEM PERFORMANCE IN SUPPORT OF ACCESS FOR SPECIFIC GROUPS OF LEARNERS, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

For adult learners at risk, the SPI scores of Ukraine vary not only by gender but also by the type of disadvantage. Adults with a migrant background, women, and economically inactive individuals are less likely to enrol in VET and other adult education programmes. In contrast, policy and system arrangements are more effective in delivering learning opportunities to adults who are at risk of exclusion due to long-term unemployment or low educational attainment. However, for all these groups, the results of Ukraine in 2024 are higher than the corresponding international averages.

Table 7 shows the evolution of monitoring results between 2023 and 2024 for Ukraine and for the international average, by broad age group (youth and adults), by gender, and by socioeconomic background of learners. The data shows a decline in the international benchmark of system performance regarding access for all youth learner groups since 2023. However, the results of Ukraine for youth remain below the international average across all groups covered in this section.

As to adults at risk, since 2023 the international performance context in support of access to learning has improved across all groups represented in Table 7, particularly for adults with low or no education and economically inactive individuals. There is no international data that would evidence a change in the level of Ukraine's support for any of these groups since the last round of monitoring, but the country still outperforms the average of other ETF partner countries, especially in supporting long-term unemployed adults and adults with low educational attainment.

TABLE 7. ACCESS - CHANGE IN SYSTEM PERFORMANCE, SPECIFIC GROUPS OF LEARNERS, UKRAINE AND INTERNATIONAL AVERAGE (2023 – 2024)

Population of learners	SPI score: national	Change from 2023 to 2024: national	SPI score: international average	Change from 2023 to 2024: international average
Youth: females	25	0	66	-1.04
Youth: disadvantaged	50	0	66	-0.29
Youth: migrants	50	0	66	-0.91
Youth: average	50	0	65	-2.17
Adults: females	56	0	33	0.73
Adults: long-term unemployed	75	0	52	0.15
Adults: economically inactive	50	0	45	2.00
Adults: low or no education	75	0	42	4.91
Adults: migrants	50	0	54	1.00
Adults: average	50	0	26	6.19

Theoretical index range: min/low performance=0, max/high performance=100

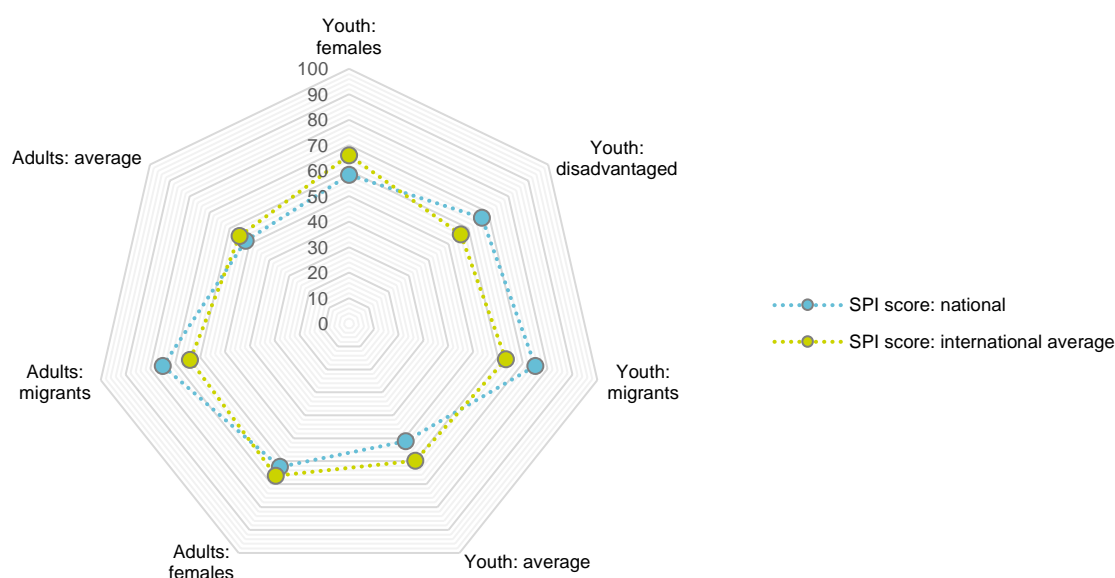
Source: [Torino Process monitoring database](#)

Complementary to the SPIs that track access, several SPIs in the Torino Process monitoring framework assess the effectiveness of policies and systems in supporting the progression and graduation of learners. Once enrolled, are learners – particularly those at risk – provided with the support they need to progress and achieve their educational goals?

The data on VET system performance in support of progression and graduation in Ukraine (Figure 8) shows that, among youth, support is strongest for those who are socioeconomically disadvantaged or have a migrant background. In Ukraine, the latter category can be interpreted to

include internally displaced learners as well. Performance in support of young female learners is slightly above the national average but remains well below the average for other countries in the Torino Process. Overall, the only groups benefiting from above-average VET performance in terms of participation and progression are youth and adults with a migrant background, as well as disadvantaged youth (Figure 8).

FIGURE 8. SYSTEM PERFORMANCE IN SUPPORT OF PARTICIPATION OF SPECIFIC GROUPS OF LEARNERS, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

Like in 2023, in 2024 adult learners of special interest in Ukraine are more likely to complete their training programmes than the average adult learner. The SPI for adults with a migrant background is reported as 75, while for adult females, it is considerably lower, at 63. This does not necessarily mean that adult female learners are more likely to drop out, but rather that they are presumably less targeted by support measures for successful progression and graduation compared to other adult learners, on average.

Table 8 shows the evolution of monitoring results between 2023 and 2024 for Ukraine and for other countries in the Torino Process on average, by broad age group and specific learner characteristics. The data indicates no change in Ukraine's SPI scores across all groups, while the international average has shown some variability across all domains of monitoring.

For youth, policies and systems in other countries participating in the Torino Process have become slightly more effective in supporting socioeconomically disadvantaged youth (+0.8 SPI points) and learners with a migrant background (+0.9 SPI points) between 2023 and 2024. While these are small increases, they indicate progress in advancing inclusiveness agendas in other ETF partner countries. However, the absence of documented improvements in Ukraine does not imply that there has been

no progress; it may also reflect that any changes in the country have not been recorded in ways that align with international standards for assessing and comparing policy developments.

TABLE 8. PARTICIPATION - CHANGE IN SYSTEM PERFORMANCE, SPECIFIC GROUPS OF LEARNERS, UKRAINE AND INTERNATIONAL AVERAGE (2023 – 2024)

Population of learners	SPI score: national	Change from 2023 to 2024: national	SPI score: international average	Change from 2023 to 2024: international average
Youth: females	58	0	66	1.24
Youth: disadvantaged	67	0	56	0.84
Youth: migrants	75	0	63	0.89
Youth: average	51	0	60	-1.44
Adults: females	63	0	66	0.39
Adults: migrants	75	0	64	-0.35
Adults: average	52	0	55	-1.19

Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

For adults, the international average shows uneven progress among Torino Process countries across different groups of adult learners. The SPI for adult females increased by 0.4 SPI points, indicating modest improvements in how some countries are supporting female adults' participation and progression in education and training. In contrast, there is a slight decline of 0.4 SPI points for adults with a migrant background, suggesting that, on average, countries are facing more challenges in meeting the needs of this group.

The decrease of 1.2 SPI points in the international average for adults points to broader difficulties in supporting adult learners in other countries. This suggests challenges in retaining adult participants in education and training, with some VET and adult education systems struggling to maintain engagement. While performance in Ukraine in support of adults remains stable, the overall decline in the international average SPI suggests that other countries are encountering increasing difficulties.

Female learners

The VET system in Ukraine is more attractive and relevant for adult females than for young females. Once enrolled, female learners have a better-than-average chance to participate and progress successfully, regardless of their age.

Explaining the reasons behind this result goes beyond the scope of this report and the data collected. However, it is worth noting that national authorities report policies and efforts aimed at ensuring equal rights for citizens to access professional education in line with their abilities and interests. Examples include qualification centres, which help increase the attractiveness of the professional qualifications system. These centres are authorised to evaluate and recognise individuals' achievements, including those gained through non-formal or informal education, confirm full or partial professional qualifications, and recognise qualifications obtained in other countries.

Disadvantaged learners: youth

The VET system in Ukraine clearly supports disadvantaged youth and is equally accessible to them as it is to any other group of learners. Once enrolled in VET programmes, disadvantaged youth are more likely than the average learner to participate and successfully complete these programmes. The socio-economic background of learners in IVET and CVET does not serve as a barrier to progressing through successive stages of education or to switching between parallel paths in VET and general education.

The findings on participation and progression highlight the socially oriented focus of VET in Ukraine. These results also align with the implementation of innovative practices designed to support access and participation for this group of learners. This alignment underscores the commitment of the VET system to fostering inclusivity and creating opportunities for a broader range of learners. By integrating innovative approaches, the system aims to facilitate the participation and progression of those who might otherwise face barriers to educational success.

Learners at risk: adults

Data collected by the Torino Process indicates that long-term unemployed adults and those with low or no education have similar prospects for accessing learning opportunities. National authorities report that adult education is the focus of many dedicated policies in the country, including the laws on 'Adult Education,' 'Employment of the Population,' and 'Professional Education,' as well as the active involvement of the Ministry of Education and Science. The State Employment Service also plays a significant role. In comparison, the economically inactive population appears more disadvantaged in terms of access to learning.

Various policies and actions are aimed at introducing new forms of vocational training centred on the learner, including distance learning technologies, to improve efficiency and flexibility. While there are no significant biases against any of the categories described in this subsection, there is still room for improvement for each of these learner groups, as well as for adult learners overall.

Learners by country of origin

Ukraine has a well-established tradition of implementing policies, such as the Law on 'Vocational Education,' that ensure learners with a migrant background have the same rights and opportunities as other learner groups in VET and beyond. These policies aim to promote equity and inclusivity within the education system.

In certain areas of system performance, these measures appear to be effective. Continued efforts to uphold and strengthen these policies can further enhance the educational experience for migrant learners, ensuring their access to quality education and training opportunities on par with those of their peers. First-generation migrants access VET and are even more likely than the average learner in the country to participate and graduate successfully.

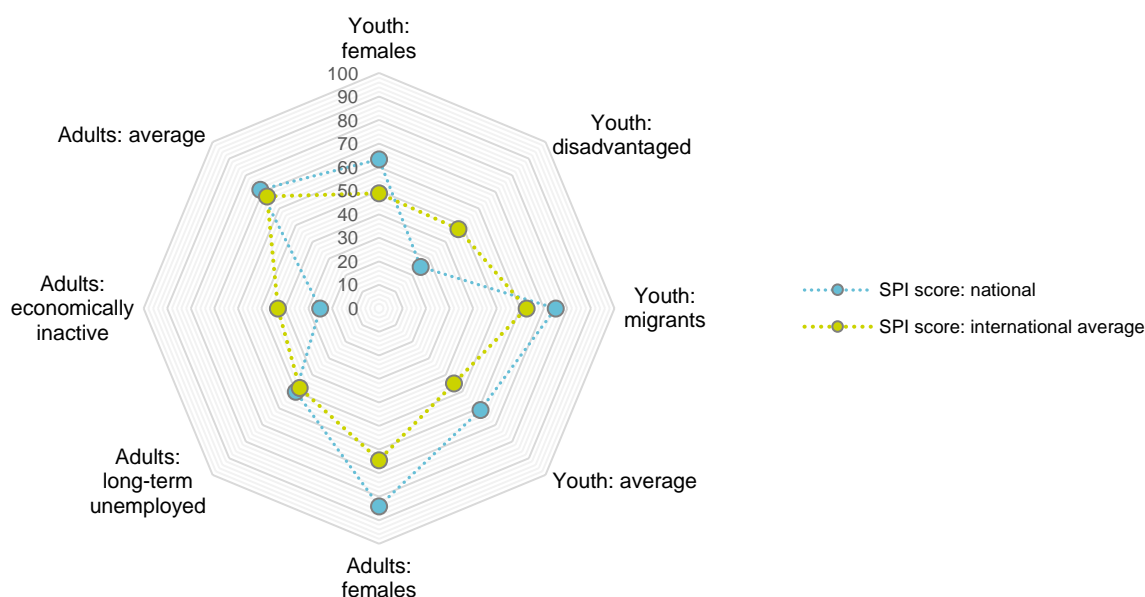
2.3.2 Quality and relevance

Overall results

The success of VET in Ukraine in delivering foundational skills and competences varies across learner groups. For most learners, both youth and adults, system performance exceeds the average of other countries participating in the Torino Process, but for a few others, it falls well below (Figure 9).

System performance is above the international average for all young learners in the categories covered in this section. The quality of skills and competences provided to female and migrant youth in VET (SPIs of 51 and 75, respectively) is somewhat higher than the international averages of 48.9 and 62.7. However, VET learners from socio-economically disadvantaged backgrounds are much less likely to benefit from high-quality skills and competences than other groups of young learners.

FIGURE 9. SYSTEM PERFORMANCE IN SUPPORT OF QUALITY AND RELEVANCE FOR SPECIFIC GROUPS OF LEARNERS, UKRAINE AND INTERNATIONAL AVERAGE (2024)



Theoretical index range: min/low performance=0, max/high performance=100

Source: [Torino Process monitoring database](#)

For adults, policies and systems in Ukraine provide effective support for developing skills and competences across most groups, with notable strengths in some areas. Female adults benefit from relatively strong system performance, well above the international average. Support for long-term unemployed adults is as effective as in other countries participating in the Torino Process, on average. However, economically inactive adults are the least likely to benefit from system support in terms of foundational skills and competences.

Adults overall have a national SPI of 71, which is slightly above the international average of 67. While the VET system in Ukraine performs relatively well for the wider adult population, there is still room to ensure more uniform support in delivering high-quality skills and competences across all adult groups.

The analysis of changes from 2023 to 2024 reveals a shifting national and international landscape of performance, offering more granularity in the interpretation of Ukraine's VET performance both nationally and relative to other countries (Table 9).

For youth, Ukraine's results in delivering skills and competences for females (national SPI of 63 vs. international average of 49, with a 38 SPI-point increase nationally and a 6.5 SPI-point decrease

internationally) now appear even stronger in relative terms than in 2023. The improved results for young female learners in this area are driven by a reduction in the share of low achievers among them in two PISA domains: mathematics and science (KIESE SPI Indicators 31 and 32). This development also contributes to the more modest improvement in the average SPI results for youth more broadly.

For youth with a migrant background (national SPI of 75 vs. international average of 63, with a 2.3 SPI point increase internationally), Ukraine remains well above the international average, although the relative advantage has slightly narrowed due to improvements in the international context. Relative performance for disadvantaged youth has also improved, largely due to a decline in average performance internationally. However, VET in Ukraine continues to underperform in this area.

TABLE 9. QUALITY AND RELEVANCE - CHANGE IN SYSTEM PERFORMANCE, SPECIFIC GROUPS OF LEARNERS, UKRAINE AND INTERNATIONAL AVERAGE (2023 – 2024)

Population of learners	SPI score: national	Change from 2023 to 2024: national	SPI score: international average	Change from 2023 to 2024: international average
Youth: females	63	38.33	49	-6.54
Youth: disadvantaged	25	0	48	-1.24
Youth: migrants	75	0	63	2.29
Youth: average	61	2.25	45	0.15
Adults: females	84	34.00	64	-1.37
Adults: long-term unemployed	50	0	48	1.94
Adults: economically inactive	25	0	43	0.40
Adults: migrants	m	m	51	-0.78
Adults: average	71	-18.65	67	-4.72

Theoretical index range: min/low performance=0, max/high performance=100

Source: Torino Process monitoring database

For adults, the international context reveals greater variation. Performance in delivering skills and competences to female adults (national SPI of 84 vs. international average of 64, with a 34 SPI points increase nationally and a 1.4 SPI points decline internationally) now appears much stronger in international comparison. Recent improvements reflect a growing recognition of the role of CVET in enhancing employment outcomes and productivity for adult female learners. Policymakers are increasingly acknowledging the contribution of CVET to facilitating women's entry into the workforce and supporting career progression, positioning it as an important factor in improving employment outcomes in Ukraine.

The same is true for the results in support of quality for long-term unemployed adults, which remain somewhat stronger compared to the average of other countries in the Torino Process. However, there is a notable gap in performance in favour of VET in Ukraine for economically inactive adults, despite the incremental progress observed in other countries. Performance in delivering skills and competences to adults more broadly has also declined, as discussed in Section 2.2.2 of this report.

Female learners

When assessing other aspects of the VET system, such as quality, the system appears to favour adult female learners over their younger peers. This is reflected in the relatively stronger performance of VET policies and systems in providing foundational skills and competences to adult female learners compared to their youth counterparts. However, despite this advantage, the overall quality of VET provision for both youth and adult female learners remains below the international average.

While adult female learners seem to benefit from slightly better system performance in terms of access and quality, particularly in providing foundational skills, the VET system still falls short in ensuring that all learners, regardless of age or gender, receive training that fully meets the demands of the labour market. The reduction in the share of low achievers among younger learners in other education sectors, such as mathematics and science, has not been mirrored in the quality of VET delivery.

Going forward, the strengthening policies that support the development of foundational skills and competences for all learner groups – both adult and youth – will remain an important task to ensure that all learners, regardless of background, are equipped with the skills necessary for career progression.

Disadvantaged learners: youth

Despite promising outcomes in terms of access and participation, youth from disadvantaged backgrounds do not experience the same quality and relevance of education as other learners in VET. This disparity is particularly noticeable in the delivery of foundational skills and competences, where disadvantaged youth often face additional challenges that affect their ability to fully benefit from vocational education. While these learners may have access to VET programmes, the support systems, resources, and tailored approaches necessary to help them succeed are often insufficient.

This gap in quality and relevance points to an area of the VET system that requires attention in order to provide more equitable learning opportunities. It suggests that, although progress has been made in including disadvantaged youth in education and training, the content and delivery of education may not always address their specific needs or align with labour market requirements.

Learners at risk: adults

The long-term unemployed, and particularly economically inactive individuals, face significant challenges when transitioning into employment. Issues related to the quality and relevance of education and training persist, even with support tools such as the State Employment Service Platform for Career Guidance and Development, which offers career guidance to registered users.

To address these challenges, efforts should focus on improving the alignment of training programmes with specific labour market needs and expanding the availability of career guidance services. Enhancing the accessibility and effectiveness of such tools, especially for economically inactive individuals, could better equip these groups with the skills and support necessary for a successful return to the workforce.

3. VET IN TIMES OF WAR: IMPACT AND MEASURES IN SUPPORT OF ITS RESILIENCE AND RECOVERY

Overview

Challenges and priorities

The development of education during wartime presents both a significant challenge and an urgent necessity. In 2024, Ukraine continued to implement initiatives to ensure the resilience and innovative transformation of vocational education and training (VET) to support economic recovery and human capital development.

A key focus has been on creating a safe educational environment, including the construction of civil protection facilities and improvised shelters, the adaptation of VET institutions for full-time education depending on regional conditions, and the restoration of destroyed and damaged institutions. Reconstruction efforts are supported by projects implemented by the Reconstruction Agency and international partners. At the same time, ensuring access to VET for all learners remains a priority. Digital tools play a central role, with online applications for VET institutions now fully operational, including electronic applicant offices, which have been in place since July 2023.

Efforts to improve the quality of education are also underway, ensuring that graduates' skills align with labour market needs. State standards for specific professions continue to be developed using a modular-competency approach, while the National Qualifications Framework is being harmonised with the European Qualifications Framework for Lifelong Learning. Additionally, the National Classifier of Occupations of Ukraine is being updated, and the National Qualifications Agency and qualification centres are strengthening their role in developing professional standards and qualifications that meet EU requirements and global trends.

The VET system is evolving towards a lifelong learning approach, expanding flexible learning opportunities to provide multiple pathways for all population groups. This includes short-term courses, online learning, micro-qualifications, partial vocational qualifications, vouchers, and recognition of non-formal learning outcomes. Greater synergy between initial and continuing VET (IVET and CVET), as well as VET and tertiary education, is fostering a broader human capital development perspective. Key initiatives include vocational training for women in underrepresented fields, retraining for the registered unemployed under the “money follows the person” principle, and professional development programmes supported by vouchers. Special attention is given to combatants and people with disabilities, who receive vocational training at State Employment Service VET centres. Meanwhile, short-term courses for adults are being developed with the support of international organisations. Institutional capacity for VET management is also being strengthened, alongside the modernisation of educational content for youth and adults in line with EU best practices.

Key guidelines for VET development in Ukraine

Ukraine is working towards a unified network of VET and tertiary education institutions, in line with the European Commission's recommendations in the Progress Report of Ukraine under the EU Enlargement Package 2023 (Chapter 26: Education and Culture), while also adapting to structural changes resulting from Russia's full-scale invasion. New legislation, particularly the Law of Ukraine “On Vocational Education”, is being introduced to establish fair regulations for VET institutions, strengthen their capacity to provide formal and non-formal VET, and define their relations with national and local stakeholders. These efforts align with the European Commission's

recommendations in the Progress Report of Ukraine under the EU Enlargement Package 2024 (Chapter 26: Education and Culture).

At the core of this transformation is the integration of VET and tertiary education, ensuring wider access to high-quality vocational education, a diverse range of learning opportunities, and a strong link between education and labour market needs. These objectives underpin the Strategic Plan of the Ministry of Education and Science of Ukraine until 2027, “Education of Winners”, which sets the foundation for strengthening the workforce and supporting the country’s recovery and reconstruction.

A. Background of a country in a full-scale war

Impact of the war

The ongoing full-scale Russian-Ukrainian war, launched by Russia on 24 February 2022, continues to have a devastating impact on Ukraine’s economy and the lives of its citizens. The population of Ukraine has declined significantly, driven by civilian and military casualties as well as the mass displacement of women and children. In 2024, Ukraine’s population stands at 37.9 million, down from 43.5 million in 2021. According to the Office of the High Commissioner for Human Rights (OHCHR), since the start of the full-scale invasion, 11,662 civilians have been killed, including 639 children, while 24,207 civilians have been injured, among them 1,577 children. These figures reflect the profound human toll of Russia’s war, which has been waged in blatant violation of the UN Charter and international law.⁸

The war has caused the largest population displacement crisis in Europe since World War II, with nearly a third of Ukraine’s population forced to flee their homes. By the end of July 2024, at least 6.168 million Ukrainian refugees⁹ were registered across Europe, according to the United Nations High Commissioner for Refugees (UNHCR). Another 571,000 Ukrainians have sought refuge outside of Europe, bringing the total number of displaced Ukrainians abroad to 6.74 million.¹⁰ Meanwhile, within Ukraine’s borders, the number of internally displaced persons (IDPs) reached 4.6 million by November 2024, according to the Ministry of Social Policy of Ukraine, with almost 900,000 of them children under 18.¹¹

Beyond its humanitarian toll, the war has devastated Ukraine’s economy, reversing years of development progress and pushing nearly 25% of the population into poverty.¹² The mobilisation of volunteers into the Armed Forces of Ukraine has further exacerbated labour shortages, as between 700,000 and over 1 million individuals previously employed in key economic sectors have joined the military. This shift has placed additional strain on Ukraine’s skilled workforce at a time when economic recovery is critical.

Ukraine and the EU: donor support and European integration

In 2024, the European Union provided extensive support to Ukraine, amounting to over €130 billion, including €1.5 billion from the proceeds of immobilised Russian assets. This assistance

⁸ <https://press.un.org/en/2024/sc15803.doc.htm>

⁹ <https://data.unhcr.org/en/documents/details/110975>

¹⁰ <https://data.unhcr.org/en/situations/ukraine>

¹¹ <https://www.ioc.gov.ua/analytics/2>

¹² https://ukraine.un.org/sites/default/files/2024-04/UNUkraine_20240415_AnnualRecoveryResultsReport_2023.pdf

covered economic, military, financial, and humanitarian aid, as well as support across various sectors.¹³

On the fifth day of Russia's full-scale invasion, Ukraine applied for EU membership, seeking to safeguard its European integration gains in a time of existential threat. In a historic decision, the European Council granted Ukraine EU candidate status on 23 June 2022. The next major step followed on 14 December 2023, when the European Council opened accession negotiations with Ukraine.

2024 marked a year of further progress in Ukraine's European integration. On 25 June 2024, accession negotiations officially began, representing another milestone on the country's path towards EU membership and the reduction of Russian influence.

B. Overview of VET under martial law

Impact of the war on VET

The war continues to have a severe impact on Ukraine's education and training system, creating multiple challenges for VET institutions, students, and employers. In 2024, VET in Ukraine faced three key challenges:

1. Reduction of the VET network and destruction of infrastructure¹⁴

The war has significantly reduced the number of VET institutions. As of 1 September 2024, there were 541 VET institutions in Ukraine, compared to 670 on 1 January 2023 and 694 before the full-scale invasion in 2022.

The physical destruction of institutions remains a major issue. By the end of 2024, 12 VET institutions had been destroyed, while 180 others suffered varying degrees of damage. The full extent of destruction in temporarily occupied areas or regions with active hostilities remains unknown.

2. Loss of human capital

The war has led to a decline in student enrolment, along with shifts in the gender and age composition of VET students. At the same time, labour market demand for skilled workers continues to grow.

According to the Ministry of Education and Science of Ukraine, the total number of VET applicants in 2024 was 219,300, down from 225,200 in 2023. This includes:

- 211,100 graduates of general secondary education (217,600 in 2023)
- 1,600 unemployed individuals (1,200 in 2023)
- 6,600 economically active individuals (7,800 in 2023)

3. Disruptions to the education process

¹³ https://commission.europa.eu/topics/eu-solidarity-ukraine/standing-ukraine-every-step-way_en

¹⁴ <https://mon.gov.ua/storage/app/media/news/2023/03/21/Transition.book.2023.pdf>

The organisation of full-time education remains challenging due to wartime security restrictions, particularly in non-combat zones. Several key obstacles include:

- Limited access to internships – Many employers face security and economic constraints that prevent them from offering internship opportunities to VET students.
- Destroyed or damaged institutions – Students in affected regions lack access to in-person educational services.
- Limited resources for distance learning – Many institutions lack the necessary infrastructure and technology to provide high-quality remote education.
- Inadequate technical infrastructure – Existing facilities do not fully support modern training that meets labour market demands.¹⁵

VET Sector responses

Improving accessibility and attractiveness in 2024

In 2024, Ukraine continued to operate a simplified procedure for approving regional orders for training specialists and workers. This measure, introduced under martial law, ensures compliance with the constitutional provision on VET accessibility. Under this procedure, regional education departments—including those in Kyiv—form regional orders without requiring approval from regional VET councils.¹⁶

Despite the challenges of wartime, the regional order was fulfilled by 92% in 2024, compared to 88% in 2023. This improvement reflects a positive trend in institutions adapting to local business needs. Among applicants, the most popular professions in 2024 included cooks, car mechanics, electric and gas welders, pastry chefs, drivers, and tractor drivers.

Digitalisation of VET admissions

To ensure uninterrupted access to VET, the government has placed a strong emphasis on digital tools. On 30 August 2024, the Ministry of Education and Science of Ukraine approved the Procedure for Submitting and Reviewing Applications in Electronic Form for VET (Order No. 1232), which was officially registered with the Ministry of Justice on 16 September 2024 (No. 1401/42746). This regulation simplifies the VET admission process, making it more accessible for applicants.¹⁷

The electronic application system has been in place since 1 July 2023, following the adoption of Order No. 716 (12 June 2023), registered on 27 June 2023 (No. 1068/40124, as amended).¹⁸ In 2024, 19,323 applications were submitted via the electronic applicant portal, marking an increase from 16,055 applications in 2023.

Implementation of eDocuments for VET graduates

To support VET students in successfully completing their training, the Cabinet of Ministers of Ukraine approved a pilot project on the use of eDocuments on Education (Resolution No. 1242, 4

¹⁵ [https://mon.gov.ua/static-](https://mon.gov.ua/static-objects/mon/sites/1/Docs%20Kampania%20Priyom%2024/Strateh.plan.diyalnosti.MON.do.2027.roku.pdf)

[objects/mon/sites/1/Docs%20Kampania%20Priyom%2024/Strateh.plan.diyalnosti.MON.do.2027.roku.pdf](https://mon.gov.ua/static-objects/mon/sites/1/Docs%20Kampania%20Priyom%2024/Strateh.plan.diyalnosti.MON.do.2027.roku.pdf)
¹⁶ <https://www.kmu.gov.ua/npas/pro-vnesennya-zmin-do-metodichnih-rekomendacij-shchodo-formuvannya-ta-rozmishchennya-regionalnogo-zamovlennya-na-pidgotovku-fahivciv-ta-robitnichih-kadriv-329-290422>

¹⁷ <https://zakon.rada.gov.ua/laws/show/z1401-24#Text>

¹⁸ <https://zakon.rada.gov.ua/laws/show/z1068-23#Text>

November 2022). This initiative provides graduates with digital verification of their educational qualifications, enhancing accessibility and security.

The eDocument system allows for the electronic display of educational credentials, which are stored in the Unified State Electronic Database on Education. Each document includes a unique electronic identifier (QR code, barcode, or digital code) for verification via the Unified State Web Portal of Electronic Services.¹⁹ For VET graduates, available eDocuments include:

- Certificate of complete general secondary education
- Certificate of assignment (or upgrade) of working qualification
- Diploma of a skilled worker
- Diploma of a professional junior bachelor

Promoting VET and improving its standing

To enhance the attractiveness of vocational education and skilled trades, the Ministry of Education and Science of Ukraine launched a new website, [Профтех онлайн](#) (VET Online), in 2024.

The platform was developed with support from the Swiss Ukrainian DECIDE Project, implemented by NGO DOCCU and the Zurich University of Education with backing from Switzerland, the EU, and its member states (Germany, Finland, Poland, and Estonia) under the EU4Skills: Better Skills for Modern Ukraine programme.

The VET Online website helps applicants quickly find a suitable institution by region and profession. It provides comprehensive information on:

- Study areas at VET institutions
- Career prospects and benefits of skilled trades
- FAQs on admissions, dormitories, and available benefits

Ensuring the safety of the educational process

The safety of participants in the educational process remains a key priority for the state. In the 2023/2024 and 2024/2025 academic years, the Ministry of Education and Science of Ukraine recommended that VET institutions operate in a full-time format wherever possible. However, regional military administrations had the authority to decide on distance or blended learning, depending on local security conditions.

Full-time education was recommended only for institutions with properly equipped shelters. The proposed learning format included:

- Theoretical training delivered via distance learning technologies.

¹⁹ <https://zakon.rada.gov.ua/laws/show/1242-2022-%D0%BF#Text>

- Practical training and internships conducted in workshops, laboratories, training grounds, or partner enterprises. If in-person training was not feasible, distance learning technologies could be used. Any practical training that could not be completed remotely was postponed until after the end of martial law.²⁰

As of 1 September 2024, according to the Ministry of Education and Science of Ukraine:

- 282 VET institutions operated full-time.
- 191 institutions used a blended learning format.
- 68 institutions operated fully online.

To further improve safety, the Cabinet of Ministers of Ukraine approved a UAH 5 billion subvention (Resolution No. 954, 20 August 2024) for the construction of shelters in eight frontline and border oblasts, including 24 VET institutions.²¹ The Ministry of Education and Science determined shelter needs using more than 10 indicators, such as risk zone classification, student population size, and transport accessibility.

Restoring damaged and destroyed VET institutions

The destruction of educational infrastructure remains a major challenge. As part of the Strategic Plan until 2027, the Ministry of Education and Science is working with regional military administrations to ensure that damaged and destroyed VET institutions are included in reconstruction projects implemented by the Reconstruction Agency.²²

Advancing inclusion and accessibility in VET

To align with European approaches to inclusion, the Ministry of Education and Science of Ukraine approved the Roadmap for the Development of VET for Persons with Disabilities and Other Low-Mobility Groups until 2030 (Order No. 717, 20 May 2024).²³ This initiative, developed as part of the National Strategy for Creating a Barrier-Free Space in Ukraine,²⁴ focuses on:

- Ensuring compliance with State Building Standards for accessibility.
- Training teachers to work with students with disabilities and low-mobility groups.
- Creating supportive learning environments for these students.
- Enhancing access to digital and informational resources.
- Encouraging social participation of students with disabilities, their families, and guardians.

²⁰ https://nmcpto.sumy.ua/wp-content/uploads/2022/04/%D0%9B%D0%B8%D1%81%D1%82_%D0%9C%D0%9E%D0%9D_1_3377_22_%D0%BE%D1%80%D0%B3%D0%B0%D0%BD%D1%96%D0%B7%D0%B0%D1%86_%D0%BE%D1%81%D0%B2%D1%96%D1%82_%D0%BF%D1%80%D0%BE%D1%86%D0%B5%D1%81%D1%83.pdf

²¹ <https://zakon.rada.gov.ua/laws/show/954-2024-%D0%BF#Text>

²² <https://mon.gov.ua/static-objects/mon/uploads/public/66c/5f0/f4b/66c5f0f4b0feb421885464.pdf>

²³ <https://zakon.rada.gov.ua/rada/show/v0717729-24#Text>

²⁴ <https://zakon.rada.gov.ua/laws/show/366-2021-%D1%80#Text>

- Strengthening cooperation between VET institutions, employers, NGOs, and international organisations.

International partners actively support inclusive education. The United Nations Development Programme (UNDP), with financial backing from the Republic of Korea and Germany, is implementing the project “Support for the Rehabilitation of Persons with Disabilities as a Result of War.” In four pilot VET institutions across Vinnytsia, Dnipro, Kyiv, and Lviv oblasts, accessibility spaces were developed, new equipment was purchased, premises were renovated, and training was provided for VET teachers. Training sessions included:

- Psychological aspects of teaching people with disabilities.
- Methods of teaching students with disabilities.
- A webinar on inclusiveness and diversity.
- Veteran retraining in the “System Administrator” profession.

Expansion of digital and distance learning

The war has accelerated the adoption of distance learning technologies.

- Since December 2022, the Vocational Education Online [Професійна освіта онлайн](#) platform has been in operation. Developed by order of the Ministry of Education and Science with support from the International Labour Organization (ILO), it provides free, high-quality Ukrainian-language training materials for VET students, teachers, and qualification applicants. The platform offers 129 online courses in 37 categories, with over 58,000 registered users, 32,000 course participants, and 2,800 certificates issued as of 2024.
- On 4 December 2024, the Ministry of Education and Science launched the Education for Veterans ([Освіта для ветеранів](#)) platform. Developed under the Skills4Recovery programme funded by the German government, it aims to support Ukraine’s 1.3 million veterans, of whom 70% had prior employment and over 50% will require retraining. The platform provides veterans with personalised educational opportunities for training and career transition.²⁵

Digital transformation of VET management

The digital transformation of VET management in Ukraine includes the automation of processes for collecting, verifying, analysing, storing, and disseminating data, ensuring more efficient and evidence-based decision-making. A key focus is the shift from aggregated paper-based statistics to a modern, real-time electronic system that enables the use of disaggregated data at the level of individual respondents.

In 2024, with support from the EU4Skills: Better Skills for Modern Ukraine project, a VET Management Information System (EMIS) was developed as a VET module within the Automated Information Complex of Educational Management. This system significantly improves data reliability

²⁵ <https://mon.gov.ua/news/mon-i-skills4recovery-prezentuvaly-platformu-osvita-dlia-veteraniv>

and accessibility, eliminating outdated practices such as manual data entry and the use of paper-based statistical tables.

A critical feature of the new system is data visualisation in the field of post-compulsory education (PCE), allowing stakeholders to access and interpret information in formats suitable for sector planning and policy development. By facilitating real-time supply and demand analysis, the system provides a valuable tool for informed management decisions in the VET sector while ensuring free access to statistics for all interested individuals and legal entities.

At the end of 2024, the pilot phase of statistical data collection within VET was launched at PJSC "AICOM" in Zhytomyr and Dnipro oblasts, marking an important step toward full-scale implementation.

In 2024, Ukraine continued its reform efforts to improve the quality of VET and its relevance to labour market needs. According to employers, universal skills remain the most in demand across all occupational groups, with their share in the overall skills structure ranging from 55% for skilled workers to 62% for unskilled workers. Cross-cutting skills are in second place in terms of demand for senior staff, including managers, specialists, and administrative staff, while professional skills are more in demand for both skilled and unskilled workers.

Among the most sought-after skills and competencies, Ukrainian employers highlight the following: responsibility, which is rated at 92.3 points out of 100; stress resistance; teamwork; attentiveness; result orientation; computer skills; foreign language proficiency; and learning ability.²⁶

In line with the strategic goal of the Ministry of Education and Science of Ukraine to develop educational and professional competencies for personal growth and career success among VET students, work has begun on introducing a compulsory multi-level English for Professional Purposes course.²⁷

The digital transformation of **VET institutions** is confirmed by the results of the SELFIE pilot project, which was implemented in Ukraine in 2021-2024. SELFIE is an online tool created by the Joint Research Centre (JRC) of the European Commission to assess the digital readiness of educational institutions. The SELFIE project involved 90 educational institutions, including 30 VET institutions from 10 oblasts of Ukraine. The results of the SELFIE research in Ukraine confirm progress in the implementation of digital technologies in educational institutions. According to the study, 226 VET institutions used SELFIE in 2024, compared to 15 tertiary education institutions.²⁸

Qualifications, standards, recognition

To align VET content with labour market needs, the Ministry continues to update state standards for specific working professions based on a module-competency approach. In 2024, 21 state educational standards for specific working professions were approved.²⁹ As for professional standards, according to the National Qualifications Agency, 400 professional standards have been developed in Ukraine by the end of 2024.³⁰

²⁶ Лісогоп Л. Судаков М. Ринок праці України 2022-2023: стан, тенденції та перспективи. 2023.

https://solidarityfund.org.ua/wpcontent/uploads/2023/04/ebrd_ukraine-lm-1.pdf

²⁷ <https://mon.gov.ua/static-objects/mon/uploads/public/66c5f0f4b/66c5f0f4b0feb421885464.pdf>

²⁸ <https://mon.gov.ua/news/rezultaty-doslidzhen-selfie-v-ukraini-20212024-roky>

²⁹ <https://mon.gov.ua/osvita-2/profesiyno-tekhnichna-osvita/reforma-profesiynoi-osviti/zmist-profesiynoi-osviti-osvitni-standarti-programi-informatsiya-dlya-uchniv-ta-pedagogiv/osvitni-standarti-navchalni-plani-ta-programi/zatverdzeni-standarti-profesiynoi-osviti-2024>

³⁰ <https://register.nqa.gov.ua/profstandarts>

In the context of the EU Council Recommendation on the European Qualifications Framework (2017),³¹ a comparison of the Ukrainian NQF with the EQF was conducted in 2023 with the support of the European Commission and the European Training Foundation. The Report on the Comparison of the European Qualifications Framework and the National Qualifications Framework of Ukraine (2023)³² describes the NQF as European-oriented. Like the EQF, the NQF promotes broad employment opportunities, educational reforms, learning outcomes-based approaches, transparency, transferability, comparability of qualifications, and the recognition of non-formal learning outcomes.³³

In 2024, a working group was established to align the National Qualifications Framework (NQF) with the European Qualifications Framework (EQF) for lifelong learning, and an action plan was approved to define the relationship between the levels of the Ukrainian NQF and the EQF.³⁴ Additionally, the National Coordination Centre for the European Qualifications Framework in Ukraine was launched to support the harmonisation of the NQF with the EQF and to strengthen international cooperation in the field of qualifications.³⁵

An important aspect of providing the Ukrainian labour market with skilled workers during wartime is the assessment and recognition of learning outcomes, including those obtained through non-formal or informal education. This process is carried out by qualification centres accredited by the National Qualifications Agency, which have been operational since 2022. According to regulations, these centres are responsible for the assessment and recognition of learning outcomes, the awarding and confirmation of professional qualifications, and the recognition in Ukraine of professional qualifications obtained abroad.³⁶

In 2024, the National Qualifications Agency established itself as the primary authority in the field of qualifications and the development of the National Qualifications System, leveraging a comprehensive portfolio of modern communication tools to engage with stakeholders. By the end of the year, 136 qualification centres were operating across 21 oblasts and the city of Kyiv, providing confirmation services for 466 professional qualifications. The number of accreditation experts within the Agency grew from 345 to 570, reflecting the system's expanding capacity.

Since their establishment, qualification centres have issued 4,843 certificates of professional qualifications, with 2,575 of these awarded in 2024. All certifications are registered in the National Register of Qualifications, ensuring transparency and recognition within the system.

In 2024, the confirmation of full or partial VET qualifications remains the most common form of employee training. Micro-qualifications are increasingly recognised as an effective tool for career transitions, enabling individuals to quickly enter the labour market with minimal training costs, adapt to new technologies and equipment, and enhance workforce flexibility. They also play a critical role in expanding adult learning opportunities and fostering stronger cooperation between educational institutions, the labour market, and employers—all of which are particularly important for Ukraine's recovery.

³¹ <https://op.europa.eu/en/publication-detail/-/publication/cee970-518f-11e7-a5ca-01aa75ed71a1/language-en>

³² <https://europa.eu/europass/en/node/2036>

³³ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0091&qid=1646384923837>

³⁴ https://neighbourhood-enlargement.ec.europa.eu/document/download/1924a044-b30f-48a2-99c1-50edeac14da1_en?filename=Ukraine%20Report%202024.pdf

³⁵ https://ncp.nqa.gov.ua/?fbclid=IwZXh0bgNhZW0CMTEAAAR2rmslw61_iHkG_zqXLWYgTF-9s_KXqCmMBtQUoxGmivUuH1cAY8aifcZl_aem_EO3a2r6c5HNOEE3dWa1WVQ

³⁶ <https://zakon.rada.gov.ua/laws/show/z0804-21#Text>

In response to the growing demand for partial and micro-qualifications, professional standards are being actively developed to accommodate partial professional qualifications, while learning outcomes are being structured to support the formulation of micro-qualifications. Educational institutions have the autonomy to determine the duration, content, and delivery of training, while qualification centres oversee the confirmation and awarding of professional qualifications.

The National Qualifications Agency, in collaboration with VET institutions, actively participates in projects—including those under the European Union’s Erasmus+ programme—to develop a unified approach to micro-credentials.

- Under the Erasmus+ project “MOOC-based Micro-Credentials for Teacher Professional Development (CRED4TEACH),” the National Qualifications Agency and its project partners developed a framework document outlining recommendations for the implementation of micro-credentials in Ukraine.³⁷
- The Erasmus+ project “Beyond Europe with Micro-Credentials (BEM)” brings together VET providers from eight countries to develop micro-credentials tailored to specific sectors and target groups that are underrepresented in traditional education systems. In 2024, VET institutions from each partner country developed 10 to 12 micro-credentials (MCs), which will be used as standalone qualifications, additional qualifications (advanced training), or as tools for reskilling and validating non-formal learning outcomes. The project also analysed existing legislation in partner and EU countries, as well as practices related to learning outcomes, the European Qualifications Framework (EQF), and the European Credit System for VET as a foundation for developing micro-credentials.
- In the ACE-EX – Agriculture Circular Economy-Expert project, the National Qualifications Agency is working alongside institutions from eight EU member states to develop a modern educational product that will enable individuals to obtain the micro-credential of a Circular Economy Expert, a qualification that aligns with global development priorities.

Dual training

Dual training remains a key mechanism for integrating VET institutions with businesses. In the 2023/2024 academic year, 169 VET institutions implemented dual training, with 9,925 students enrolled across 83 working professions. A total of 831 companies partnered with VET institutions to provide practical training. The most common professions covered under this system include cook, electric and gas welder, confectioner, wheeled vehicle repairman, plasterer, agricultural tractor driver, waiter, hairdresser (hairdresser-model), seamstress, and tailor.

To address the shortage of skilled workers in key economic sectors, the Ukrainian government is modernising training infrastructure in fields such as mechanical engineering, energy, production automation, robotics, welding and metalworking, electrical and electronics engineering, construction, transport, and logistics. As part of this effort, the government launched the 100 Workshops Project in 2024, aiming to establish modern workshops and laboratories in VET institutions. The priority fields for these workshops include agriculture, catering, industry and engineering, construction, and road transport.

In 2024, 88 new workshops were created in VET institutions, supported by UAH 549 million from the state budget. These workshops are designed to provide state-of-the-art training environments,

³⁷ <https://cred4teach.eu/results/national-frameworks-for-micro-credentials/>

ensuring that VET students gain hands-on experience with modern technologies and industry standards, making them better prepared for the evolving labour market.

Employment support

The war has resulted in a shrinking labour force and an increased demand for skilled workers in the labour market. According to the Ministry of Economy of Ukraine, the labour market needed 494.3 thousand specialists and workers in 2024 with their number expected to grow in the future: 553.2 thousand people in 2025, 619.3 thousand people in 2026, and 681.1 thousand people in 2027. An equally global challenge is the transformation of the gender and age composition of the workforce. Ukraine's response is to **reorient its vocational education towards a broader perspective of human capital development**. To this end, the following initiatives are being implemented:

- Vocational training for women to increase their competitiveness in the labour market and provide the economy with skilled workers.
 - The Procedure for Implementing a Pilot Project on Organising Vocational Training for Women for Employment in Areas Where They Have Traditionally Been Underrepresented, approved by the Cabinet of Ministers of Ukraine on 15.11.2024, No. 1302, defines the mechanisms of training on the basis of regional employment centres³⁸. The coordinators of the pilot project are the Ministry of Economy of Ukraine, the Ministry of Education and Science of Ukraine, the State Employment Centre. The list of professions includes: carpenter, joiner, milling operator, operator of machine tools with program control, electrician, mechanic-repairman, driver of motor vehicles (categories C, D, CE), forklift driver, tram/trolleybus driver, crane driver, excavator driver, boiler room operator, tractor driver, etc.
- Vocational training for the registered unemployed based on the principle “money follows the person”.
 - In 2023, the Resolution of the Cabinet of Ministers of Ukraine dated March 24, 2023 No. 264 approved the Procedure for Vocational training, Retraining and Advanced Training of Registered Unemployed Persons, which provides vocational training of the unemployed according to the “money follows the person” principle. The approval of the Procedure contributed to an increase in the number of persons who underwent VET to 39.4 thousand people in January-November 2024 compared to 32.9 in 2023. In accordance with the Procedure, the unemployed may choose VET institution and, if necessary, a place of residence during the period of study. Enrolment in VET institutions as well as provision of housing will be based on a certificate of education and a certificate of residence during the period of study. The unemployed have the opportunity to choose a place of study from the employer directly at the workplace under an individual form of training or through an internship.³⁹
- Advanced training and retraining in a skilled labour profession based on a voucher.
 - In 2023, the Law of Ukraine “On Social and Legal Protection of Persons Deprived of Personal Liberty as a Result of Armed Aggression Against Ukraine, and Their Family Members” expanded the categories of persons entitled to receive a voucher for training and advanced training, including persons discharged from military service,

³⁸ <https://zakon.rada.gov.ua/laws/show/1302-2024-%D0%BF#n102>

³⁹ <https://zakon.rada.gov.ua/laws/show/264-2023-%D0%BF#Text>

internally displaced persons of working age, persons who, during the period of martial law in Ukraine or in certain of its territories, while performing military service, performing official duties, or staying in the relevant territory in another way, received injuries, contusions, mutilations, or diseases caused by armed aggression⁴⁰. The voucher is used to carry out: retraining in a working profession; training in a specialty for obtaining a master's degree on the basis of a bachelor's or master's degree obtained in another specialty; training at the next level of education (except for the third (educational-scientific/educational-creative) and scientific level of higher education); specialization; advanced training. The list of professions and specialties for which a voucher may be issued was approved by the order of the Ministry of Economy of Ukraine dated 11.04.2023 No. 2040 (registered with the Ministry of Justice of Ukraine on 12.05.2023 under No. 793/39849.)⁴¹ The list includes 60 specialties and 95 working professions. In 2023, 18,000 people received training vouchers, and in 2024 – 22,500 people.

- Vocational training for combatants and people with disabilities in State Employment Service VET centres.
 - In order to increase the competitiveness of combatants and persons with disabilities as a result of war, the Cabinet of Ministers of Ukraine, by its resolution No. 984 dated September 15, 2023, approved the Procedure for implementing a pilot project on organizing professional training for combatants and persons with disabilities as a result of war in VET institutions of the State Employment Service.⁴² Combatants and persons with war-related disabilities can undergo vocational training, retraining and advanced training, including choosing one of 97 working professions or taking advantage of more than 400 educational programmes to develop professional competencies. Training is provided by the State Employment Service in the cities of Lviv, Ivano-Frankivsk, Rivne, Odesa, Poltava, Dnipro, Sumy, Kharkiv. During January-November 2024, 2,311 people (2,174 participants in hostilities, 137 persons with disabilities as a result of war) were sent for professional training to 8 Vocational Education Centres of the State Employment Service. As of 01.10.2024, 2,211 people completed their training, 100 people continued. The most popular professions are: driver of various categories of motor vehicles, tractor driver of agricultural production, electrician for repair and maintenance of electrical installations, cook, welder; Training programs: drone maintenance, hotel and restaurant business and business planning, social and psychological assistance, IT-direct.

Short-term courses for adults have become an effective way to train and retrain skilled workers. Educational institutions are supported by international partners in organizing such courses, including: the Ukrainian German project “Promoting Energy Efficiency and Implementing the EU Energy Efficiency Directive in Ukraine”; the EU Program “VET in Ukraine/ “Skills4Recovery”; the UN Development Program in Ukraine (the project “Transformational Restoration of Human Security in Ukraine”); the USAID Project “Economic Support to Ukraine”. The partners’ assistance is focused on purchasing consumables, paying teachers, mentors at workplaces, etc. According to the Ministry of Education and Science of Ukraine, more than 3,500 people have completed the training. Priority areas are construction, mechanical engineering, production, services, agriculture.

⁴⁰ <https://zakon.rada.gov.ua/laws/show/3181-20#Text>

⁴¹ <https://zakon.rada.gov.ua/laws/show/z0793-23#Text>

⁴² <https://zakon.rada.gov.ua/laws/show/984-2023-%D0%BF#Text>

Another form of employment support for VET graduates is provided by **career centres**, the development of which continued in 2024. The main functions of the career centres are to coordinate the work of VET institution to facilitate the employment of VET students, to exercise the right of VET graduates to work, to find a first job, to assist in improving their professional skills, obtaining additional qualifications, and to promote VET in VET institutions. Providing consultations to the adult population is gaining popularity. In 2024, 45 career centres were established. Since 2021, a total of 379 career centres have been established in Ukraine on the basis of VET institutions.

To improve the efficiency of achieving the state policy benchmarks in VET, the Ministry of Education and Science of Ukraine has proposed **new opportunities for VET institutions**. Amendments to the Standard Staffing Standards for VET Institutions, approved by Order No. 1410 dated 02.10.2024, provide for the adaptation of institutions to modern challenges in education and improvement of management processes. The changes include:

- More support for children with special needs: the institutions will have teaching assistants and VET masters to help teaching children with special educational needs
- Involving new professionals in the educational process, including career guidance specialists, marketers, HR inspectors and public procurement specialists
- Strengthening cooperation with business: large institutions (over 500 students) will have a deputy director for educational and production work who will be responsible for partnerships with enterprises
- Digitalisation, which involves the introduction of an IT specialist position to support VET institutions implement modern technologies and distance learning.⁴³

Legislative changes

As part of Ukraine's European integration process, the European Commission published the working document "Ukraine 2024" on 30 October 2024, alongside the Communication on EU Enlargement Policy in 2024. In Chapter 26: Education and Culture, the European Commission issued key recommendations for VET,⁴⁴ including the development of new legislation to:

- Establish fair regulations for the functioning of VET institutions.
- Strengthen institutions' capacity to provide both formal and non-formal vocational education.
- Regulate relationships between VET institutions, national and local stakeholders, ensuring sustainable human capital development.

In response to this recommendation, the Ministry of Education and Science of Ukraine published a draft of the new Law of Ukraine "On Vocational Education" in April 2024, opening it for public discussion from 2 April to 2 May 2024. By September 2024, the draft was submitted for approval to central executive authorities and other key stakeholders. The feedback received is currently under

⁴³ <https://zakon.rada.gov.ua/laws/show/z1735-24#Text>

⁴⁴ https://neighbourhood-enlargement.ec.europa.eu/document/download/1924a044-b30f-48a2-99c1-50edeac14da1_en?filename=Ukraine%20Report%202024.pdf

review, with coordination meetings ongoing between government authorities and employer representatives.

The draft law introduces several European integration-focused reforms, including:

- Establishing a single level of VET (educational qualification level) and multiple levels of VET qualifications (ranging from NQF levels 3 to 5) based on professional standards. This framework enables integration into the European education area by facilitating international academic mobility, cooperation, and recognition of prior learning outcomes.
- Modernising educational programmes by introducing short-term training options to allow learners to acquire partial qualifications for faster employment.
- Expanding the involvement of employers in the educational and training process to improve alignment with labour market needs.
- Introducing new terminology, including changing the educational qualification level from “skilled worker” to “specialist” and adopting “vocational college” as the unified name for VET institutions.
- Optimising the network of educational institutions to strengthen the sustainability and quality of VET.⁴⁵

The development of a sustainable and high-quality VET network has been an ongoing priority. Methodological recommendations for forming a VET institution network were originally approved by the Ministry of Education and Science of Ukraine (Board minutes dated 29 September 2021, No. 9/3-3).⁴⁶ Between October 2021 and January 2022, these recommendations were tested in pilot oblasts (Vinnytsia, Poltava, Rivne, Zaporizhia, Chernivtsi, Lviv, Mykolaiv) under the EU4Skills: Better Skills for Modern Ukraine programme.

Following Russia’s full-scale invasion of Ukraine, significant changes in education and labour market needs required a revision of these recommendations. The need for a unified network of VET and tertiary education institutions, as outlined in the European Commission’s 2023 Progress Report on Ukraine (Chapter 26: Education and Culture), further reinforced this necessity.⁴⁷

On 7 February 2024, the Ministry of Education and Science of Ukraine approved Order No. 130, launching a pilot project to optimise the network of academic lyceums, VET institutions, and tertiary education institutions. Supported by the Swiss Ukrainian DECIDE project “Decentralization for Democratic Education”,⁴⁸ the project was implemented in nine pilot oblasts: Ivano-Frankivsk, Kyiv, Lviv, Mykolaiv, Odesa, Poltava, Rivne, Sumy, and Chernihiv. The results led to an update of the criteria and indicators for network formation, which were subsequently tested nationwide in May–June 2024.

⁴⁵ https://neighbourhood-enlargement.ec.europa.eu/document/download/1924a044-b30f-48a2-99c1-50edeac14da1_en?filename=Ukraine%20Report%202024.pdf

⁴⁶ <https://mon.gov.ua/static-objects/mon/sites/1/kolegiya-ministerstva/2021/11/02/Rish-9.3-3.vid.21.09.2021-Pro.Met.rekom.optym.zakl.profosv.pdf>

⁴⁷ https://neighbourhood-enlargement.ec.europa.eu/system/files/2023-11/SWD_2023_699%20Ukraine%20report.pdf

⁴⁸ https://osvita.ua/legislation/Ser_osv/91406/

As a final step, on 24 December 2024, the Ministry of Education and Science of Ukraine submitted for public discussion a draft of the updated Methodological Recommendations for the formation of a unified VET and tertiary education network.⁴⁹

Centres of professional excellence

The Concept of Implementation of State Policy in VET “Modern VET” for the Period Until 2027”, approved by Cabinet of Ministers Resolution No. 419-r on 12 June 2019, provides for the creation of a network of Centers of Professional Excellence (CoVEs) based on VET institutions. Work on establishing these centres is progressing through several key projects.

Under the project “VET in the Eastern Partnership Countries – Phase I”, a Grant and Project Agreement was signed on 4 August 2022 between the Cabinet of Ministers of Ukraine, the Ministry of Education and Science, the Ukrainian Social Investment Fund (USIF), and KfW, providing €20 million in funding. The participating institutions are Kvasyliv Vocational Lyceum in Rivne oblast and Higher Vocational School No. 41 in Tulchyn, Vinnytsia oblast.

Building on this, Phase II of the project was launched under a Grant and Project Agreement signed on 11 June 2024, with an increased budget of €20.5 million. This phase includes the Lviv Interregional Higher Vocational School of Railway Transport and the Chernivtsi Professional Machine-Building Lyceum as participants.

Another major initiative, the Financial Agreement “Programme to Support VET in Ukraine”, was signed between Ukraine and the European Investment Bank (EIB) and ratified by Law No. 2947 on 29 July 2022. With an implementation period from 2022 to 2027, this programme supports the development of Centers of Professional Excellence in multiple institutions across the country. The participating institutions include Kolkiv Higher Vocational School in Volyn oblast, Dnipro Center for Vocational Education in Dnipropetrovsk oblast, Higher Vocational School No. 7 in Kalush, Ivano-Frankivsk oblast, Kyiv Professional College of Art Design, Uzhhorod Center for Vocational Education in Zakarpattia oblast, Odessa Center for Vocational Education, and Chortkiv Higher Vocational School in Ternopil oblast.

The concepts for Centers of Professional Excellence are being developed in close collaboration with educational institutions and key stakeholders, ensuring they align with modern educational standards and labour market demands.

C. Prospects for VET in Ukraine

The development of education during the war presents a significant challenge but remains a vital necessity for Ukraine. The need for innovative transformations in education is clear, to strengthen the potential of every individual. Only changes like these can provide a stable foundation for the economic growth of the country and for its human capital development. This vision underpins the Strategic Plan of the Ministry of Education and Science until 2027, “Education of Winners,” which was approved by Order No. 276 of the Ministry of Education and Science of Ukraine on 3 July 2024.⁵⁰

The Strategic Plan identifies the transformation of vocational education as a key priority for the Ministry of Education and Science of Ukraine until 2027, positioning VET and tertiary education as an integrated system. The ultimate goal of this transformation is to provide Ukrainian citizens with access

⁴⁹ <https://mon.gov.ua/news/mon-proponuie-dlia-hromadskoho-obhovorennia-proiekt-metodychnykh-rekomendatsii-shchodo-formuvannia-merezhi-zakladiv-p-p-t-o-ta-fpo>

⁵⁰ <https://mon.gov.ua/static-objects/mon/uploads/public/66c/5f0/f4b/66c5f0f4b0feb421885464.pdf>

to high-quality VET and tertiary education, offering a wide range of learning opportunities while ensuring a supply of competitive workers to support the country's recovery and reconstruction.

To achieve this, five strategic goals have been set, ensuring that:

- The network of VET and tertiary education institutions is efficient and equipped with modern infrastructure.
- Institutions enable learners to acquire both educational and professional competences for personal development and career success.
- VET and tertiary education are recognised as attractive and prestigious pathways for study and work.
- Institutions effectively utilise their organisational, academic, and financial autonomy while receiving results-based funding.
- Strong partnerships between educational institutions and businesses are established and sustained.

The effectiveness of achieving strategic goals is reinforced by alignment with Ukraine's European integration guidelines, the Sustainable Development Goals, and key government programme documents that shape the country's development prospects, including the Human Development Strategy, the National Economic Strategy 2030, and the National Strategy for Promoting the Development of Civil Society in Ukraine (2021–2026).

As part of this broader strategic vision, VET is undergoing modernisation to align with EU standards. This transformation is embedded within a lifelong learning framework, fostering synergy between VET and tertiary education. The emphasis on lifelong learning reflects a shift towards a broader human capital development perspective, recognising the urgent need to rebuild Ukraine.

To ensure the effective implementation of the Strategic Plan, a dedicated Action Plan has been developed, outlining specific goals and indicators that guide its execution.⁵¹

⁵¹ <https://mon.gov.ua/static-objects/mon/uploads/public/66c/5f0/f4b/66c5f0f4b0feb421885464.pdf>

4. SUPPLEMENTARY SOURCES AND INFORMATION

4.1 Links to background information and data

The full collection of quantitative indicators collected for Ukraine for this 2024 round of monitoring can be found here:

<https://docs.google.com/spreadsheets/d/19ItaDScMQMu3e-geowIBdrixWV1YAoV/edit?usp=sharing&ouid=110154518834912853011&rtpof=true&sd=true>

The full collection of qualitative responses to the country-specific questionnaire for Ukraine can be found here:

<https://docs.google.com/document/d/1BabfKq-LbgXPcLeQOdfv2kz-K6ewOmkY/edit?rtpof=true&sd=true&pli=1>

General information for the Torino Process as well as the reports and data of other participating countries, can be found here: <https://www.etf.europa.eu/en/what-we-do/torino-process-policy-analysis-and-progress-monitoring>.

4.2 Definitions and terminological clarifications

This section provides an overview and definition of key terms in the Torino Process monitoring framework.

- **Youth:** Population in the official age of entrance and participation in initial VET programmes.
- **Adults:** Population of working age (15+ years of age) not enrolled in initial VET programmes.
- **Disadvantaged youth:** This refers to socio-economic disadvantage and describes youth with access to below-average levels of financial, social, cultural, and human capital resources.
- **Long-term unemployed:** Long-term unemployment refers to the number of people who are out of work and have been actively seeking employment for at least one year.
- **Inactive populations:** Adults of working age who are outside of the labour force, meaning that they are neither employed nor registered as unemployed (that is, seeking employment)
- **Lifelong learning:** any learning activity undertaken throughout life, to improve knowledge, skills/competences and/or qualifications for personal, social and/or professional reasons.
- **System performance:** describes the extent to which the VET system delivers against a targeted selection of national and international obligations (commitments) to learners and other stakeholders in support of learning through life (lifelong learning - LLL).
- **Initial VET:** Vocational education and training carried out in the formal system of initial education (usually upper or post-secondary) before entering working life.
- **Continuing VET:** Formal or non-formal vocational education and training carried out after initial VET and usually after the beginning of working life.
- **Adult education:** Adult education or learning may refer to any formal, non-formal, or informal learning activity, both general and vocational, undertaken by adults after leaving initial education and training.