SUMMARY

ETF Skills Lab Network of Experts Regional Webinar

SKILLS ANTICIPATION METHODOLOGIES AND INSTITUTIONALISATION OF LABOUR MARKET INTELLIGENCE SYSTEMS IN CENTRAL ASIA

27 October 2026, 10.00 – 12.00 CET

This regional webinar of the ETF Skills Lab Network of Experts explored skills anticipation methodologies and the institutionalisation of labour market intelligence (LMI) systems, focusing on the tools, data sources and governance arrangements needed to identify emerging skills needs and translate labour market evidence into education, training and employment policies. The webinar brought together experts from the European Training Foundation (ETF), the European Commission's Joint Research Centre (JRC), Kazakhstan, the Kyrgyz Republic and Ukraine to share methodological approaches and country experiences.

Cristiana Burzio (ETF) opened the webinar by welcoming participants and outlining the upcoming activities. She announced an online peer learning session with the European Network of Regional Labour Market Monitoring (EN RLMM) on 9 November 2026 and the final webinar of the year on 'Enhancing the employment of persons with disabilities: from research to action', scheduled for 18 November 2026. She also reminded of the call for papers on *"Holistic approaches to youth transitions in times of disruption"*, launched jointly with EN RLMM in early October, with a deadline to submit abstracts on 1 December 2026.

The webinar's moderator **Begench Yazov**, Skills Lab regional coordinator for Central Asia, presented the first speaker, **Mirela Gavoci (ETF)**, who provided an overview of skills anticipation methodologies and the role of LMI in responding to changing skills needs. She explained how technological change, digital transformation, the green transition and demographic developments are reshaping occupations and skills requirements, increasing the need for timely and reliable labour market evidence. Gavoci emphasised that no single source or method can capture the complexity of these changes. Instead, effective skills intelligence requires combining official statistics, administrative records, employer and graduate surveys, online job vacancies and qualitative evidence with appropriate analytical approaches, including statistical analysis, forecasting, foresight and emerging data science techniques. Referring to the ETF's Skills Anticipation and Matching e-Toolkit, she highlighted the importance of selecting methodologies according to specific policy questions rather than relying on a single approach. She then examined the complementary contributions of administrative data and big data, particularly online job vacancies. While administrative records provide regular information and opportunities to analyse education-to-employment transitions, online vacancies offer timely insights into employer demand, emerging occupations and skills requirements. However, she cautioned that both sources have limitations, including differences in national administrative definitions, incomplete coverage of informal employment, uneven online recruitment practices and duplicated job advertisements.

Gavoci then addressed the challenges of producing comparable labour market intelligence across countries, emphasising the need for common concepts, occupational and skills classifications, harmonised indicators, transparent data processing and quality assurance. She explained that differences in national legislation, statistical systems and data collection practices can undermine comparability, making it essential to distinguish genuine labour market differences from those arising from methodological inconsistencies. Drawing on ETF experience in analysing online job vacancy data,

she referred to the Ukraine online job vacancy dashboard as an example of how detailed occupational and skills information can be made accessible for analysis. Turning to the institutionalisation of LMI systems, Gavoci stressed that methodological improvements alone are insufficient without sustainable institutional arrangements. She identified four interconnected functions required for an effective system: clear governance and institutional responsibilities, regular data cooperation and shared standards, sustainable technical and analytical capacity, and the integration of labour market intelligence into policy processes. She concluded that the objective should be to move beyond isolated studies and temporary projects towards continuous systems capable of transforming complementary data sources into actionable evidence for education, training and employment policies.

During the Q&A, participants raised questions about the reliability of online job vacancy data and the institutionalisation of labour market intelligence systems in Central Asia. Gavoci explained that online vacancies do not provide a representative picture of the entire labour market and should be complemented by administrative records and survey data. Regarding Central Asia, she emphasised that there is no single institutional model suitable for all countries and recommended to assess existing data sources, identify policy priorities, strengthen institutional coordination and establish regular data-sharing arrangements to support sustainable labour market intelligence systems.

The second speaker, **Davide Villani (European Commission's Joint Research Centre – JRC)**, presented a study conducted with colleagues on the impact of innovation on workers' tasks, focusing on how work changes for employees who remain in their jobs following the introduction of new technologies or organisational practices. Drawing on evidence from France, the research examined whether process and organisational innovations increase the routinisation of work and whether their effects differ across occupational groups. Villani explained that the analysis distinguished between three dimensions of work: repetitiveness, technical control, and bureaucratic control, including computerised monitoring and performance targets. The study combined longitudinal data from the French Working Conditions Survey for 2013, 2016 and 2019 with employer and employee administrative records to assess changes in tasks over time. He highlighted the methodological challenges of linking different data sources, particularly inconsistencies in identifiers that reduced the available sample and limited the use of administrative records primarily to robustness checks.

Villani then presented the study's findings, showing that both process and organisational innovations tend to increase the standardisation and routinisation of work, with the strongest effects observed in bureaucratic control through greater use of performance targets, reporting requirements and computerised monitoring. These effects were particularly pronounced among managers, professionals and technicians, while more limited changes were observed in middle-level occupations and no statistically significant effects were identified among lower-level occupations. He emphasised that technological and organisational change can alter tasks and skills requirements within existing occupations, challenging forecasting approaches that assume occupational tasks remain fixed over time. For skills anticipation and training, this highlights the importance of monitoring changes in workers' autonomy, responsibilities and working practices, rather than focusing exclusively on occupational demand. Villani also stressed the need for regularly collected worker-level task data and improved links between surveys and administrative records to better understand these transformations. He concluded that, although the findings were specific to France, they illustrated the value of task-based evidence for developing more responsive skills anticipation systems.

In the Q&A session, participants raised questions about the choice of France as a case study, the availability of comparable data in other countries and the potential use of online job vacancy data for similar research. Villani explained that the French Working Conditions Survey provided detailed, longitudinal information on workers' tasks, making it particularly suitable for the analysis. He highlighted limited access to administrative records and difficulties in linking datasets as major obstacles to replicating the study elsewhere. He also clarified that online job vacancy data could not support the same analysis, as they lack information on innovation and individual workers.

The third speaker, **Volodymyr Sarioglo (National Academy of Sciences of Ukraine)**, presented Ukraine's experience in developing labour market intelligence and workforce forecasting systems under the challenging conditions created by the ongoing war. He outlined the significant disruptions affecting the Ukrainian labour market, including the destruction and relocation of enterprises, changes in the geographical and sectoral structure of employment, migration and internal displacement, mobilisation, demographic decline and growing mismatches between workforce qualifications and labour market

needs. Sarioglo highlighted the difficulties caused by the absence of up-to-date official population and labour force statistics, emphasising the importance of combining administrative records, survey findings and alternative data sources to assess labour market developments. He then introduced recent policy initiatives, including Ukraine's Employment Strategy to 2030 and its implementation plan for 2026–2028, adopted on 7 January 2026, which aim, among other objectives, to align education and vocational training outcomes with current and projected employer demand. He also referred to the introduction of the unified information and analytical system Obrii, designed to support digital interaction between employers, workers and public authorities, alongside an experimental government mechanism for forecasting workforce requirements.

Sarioglo then described Ukraine's proposed multi-component model for medium-term labour demand and supply forecasting, developed through research supported by international cooperation, including the European Training Foundation (ETF). The model combines sectoral employment projections, demand arising from economic development, replacement demand linked to workforce exits and migration, labour supply estimates and an assessment of imbalances between demand and supply. He explained how this approach could provide a more comprehensive understanding of future workforce needs than projections based primarily on historical trends, particularly in the context of substantial migration flows and demographic uncertainty. Turning to the policy implications, Sarioglo emphasised the importance of establishing reliable and integrated data systems, institutionalising forecasting methodologies and using their findings to inform education and training provision, workforce mobility and labour market participation measures. He also highlighted the need to strengthen coordination among government institutions, employers, education providers and other stakeholders, ensuring that labour market intelligence supports decision-making at national, regional and local levels. He concluded that developing a sustainable and adaptable forecasting system would be essential for addressing Ukraine's workforce shortages and supporting its longer-term economic recovery.

During the Q&A session, the discussion focused on the relevance of Ukraine's experience for Central Asian countries, particularly in monitoring labour migration and returning workers. Sarioglo emphasised the importance of integrating information from multiple sources, including labour force surveys and administrative records, and recommended using microdata and microsimulation approaches to better assess migration flows and their implications for labour supply. He highlighted how these methods can help capture the occupational profiles, qualifications and skills of migrant workers, supporting more accurate labour market forecasting.

The fourth speaker, **Ainura Umetova (Ministry of Labour, Social Security and Migration of the Kyrgyz Republic)**, presented the findings of a nationwide study on labour demand and skills needs conducted in 2024 with support from the ETF's DARYA project. Covering all seven regions of the Kyrgyz Republic and the cities of Bishkek and Osh, the study aimed to identify occupational shortages and surpluses, assess employers' skills requirements and examine the alignment between vocational education and labour market needs. Ainura explained that the methodology combined three sources of evidence: employer surveys covering formal and informal economic activities, data on registered jobseekers from district employment services, and information on graduates from initial, secondary and higher vocational education. The survey involved 3,005 legal entities and 1,002 individual entrepreneurs, representing enterprises employing more than 112,000 workers. She highlighted several challenges encountered during the research, including outdated employer records, difficulties reaching respondents, insufficient graduate tracking in secondary and higher education, and inconsistencies between occupational titles used by education institutions and employers.

Ainura then presented the study's main findings, highlighting employers' demand for practical experience, professional and transversal skills, digital literacy, communication and adaptability. Although employers generally reported high satisfaction with their existing employees' skills, the analysis revealed significant mismatches between labour market demand and the supply of qualified workers. Shortages were particularly evident in garment manufacturing, logistics and services, while registered jobseekers included substantial numbers of people with general secondary education and graduates in occupations with limited demand. She also drew attention to the imbalance between young people's educational preferences and employers' needs, noting that enrolment was heavily concentrated in higher education despite strong demand for skilled trades and vocational qualifications. Referring to graduate employment outcomes and regional differences in occupational demand, Ainura explained how the findings informed recommendations for education providers at different qualification levels. These recommendations included maintaining, increasing or reducing the number of graduates

in specific occupations, as well as introducing new training programmes where necessary. She concluded by emphasising the importance of aligning vocational education provision more closely with labour market needs through evidence-based planning.

During the Q&A session, a question was raised about the policy implications of the study's findings. The response highlighted that the methodology had been revised and formally institutionalised through a government resolution, establishing a three-year cycle for future research, with the next nationwide study planned for 2027. Recommendations also included improving data coordination between the Ministry of Labour, the National Statistical Committee and potentially the State Tax Service. The main recommendations, however, focused on the vocational education and training system, with specific measures proposed for individual occupations and specialisations.

The fifth speaker, **Almira Zakiyeva (World Bank)**, presented Kazakhstan's experience in linking labour market information with evidence on skills requirements and adult skills proficiency to support more informed policy design. She structured her presentation around three questions: where labour demand is changing, what skills jobs require and workers use, and what is known about the skills proficiency of the adult population. Zakiyeva outlined Kazakhstan's labour market information architecture, which combines official statistics from the Bureau of National Statistics, vacancy and jobseeker data from the Enbek digital employment ecosystem, and regional information collected through employment and labour mobility centres. These sources feed into short-, medium- and long-term workforce forecasting, the National Qualifications System, employment services and education planning. She highlighted the growing importance of the Digital Skills Bank, which contained more than 12,000 professional and cross-cutting skills in 2026. By establishing a common vocabulary across occupations, qualifications and training programmes, the system aims to improve the identification of skills needs, facilitate skills recognition and strengthen connections between labour market demand and education provision.

Zakiyeva then examined how evidence from the Organisation for Economic Co-operation and Development's (OECD) Programme for the International Assessment of Adult Competencies (PIAAC) could complement Kazakhstan's existing labour market intelligence systems. Drawing on the country's participation in the 2017–2018 assessment, she emphasised the importance of foundational skills, particularly literacy, numeracy and problem-solving, in enabling workers to adapt to changing job requirements. The findings showed that better-paid jobs, expanding firms and technology-intensive occupations involve greater use of complex mathematics, reading, information technology and interpersonal skills, demonstrating that demand for advanced capabilities extends beyond narrowly technical expertise. She also highlighted the distinction between formal qualifications and demonstrated skills proficiency, noting that approximately 40% of adults in the assessment had tertiary education, while only around 25% reached Level 3 or above in literacy. This illustrated why educational attainment alone cannot provide a complete picture of workforce capabilities. Zakiyeva concluded that combining labour market statistics, occupational skills requirements and direct measures of adult proficiency offers a more comprehensive understanding of workforce readiness and skills gaps. Such an integrated approach can support forward-looking education and skills policies, including greater emphasis on foundational skills from the earliest stages of education.

In the following discussion, **Komron Hidoyatzoda (Research Institute of Labour, Migration and Employment of the Population of Tajikistan)** shared Tajikistan's experience in strengthening labour market analysis and skills anticipation. He highlighted the work of the Labour Market Analysis Centre, established in January 2026, which conducts short- and medium-term occupational demand forecasting twice a year. The Centre combines online vacancy monitoring, administrative data and employer surveys to identify emerging skills needs, regional labour market differences and mismatches between employer demand and jobseeker interest. He also referred to the evaluation of employment and vocational training programmes, including the Asian Development Bank's Skills and Employability Enhancement Project. Highlighting challenges related to data availability, institutional coordination and the coverage of informal employment, he emphasised the importance of developing sustainable labour market intelligence systems and strengthening regional cooperation on skills anticipation methodologies and applied research.

Cristiana Burzio (ETF) closed the webinar by highlighting two key messages from the discussions. First, she emphasised the importance of labour market and skills intelligence in understanding changing occupational and skills demand. Second, she stressed the need to translate skills intelligence into policy action to ensure that skills policies are informed by reliable evidence. She thanked the speakers,

moderator, interpreters and participants for their contributions, and confirmed that the presentations and webinar recording would be made available on ETF OpenSpace. She concluded by inviting participants to join the upcoming Skills Lab activities in November and to stay connected through the ETF Skills Lab Network of Experts' LinkedIn group to follow future activities and exchange knowledge.

Resources

All presentations and materials presented at the event can be found at:

https://openspace.etf.europa.eu/events/regional-webinar-skills-anticipation-methodologies-and-institutionalisation-labour-market