NEWSLETTER #6, December 2025

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From the Editors:

As 2025 draws to a close, Project SkiLMeeT is nearing the end of its second year. Over the past four months, work has progressed on several fronts, with new research results and data tools released, as engagement with the research community and policymakers broadens and deepens.

Key activities during this period included our midterm conference in Sofia, which brought together more than 70 researchers and policymakers to discuss how digitalisation and climate policy are reshaping jobs, firms, and skills across Europe. SkiLMeeT also held three research webinars. Two focused on ongoing SkiLMeeT research, covering automation and students' educational choices and presenting the European Labour Market Dashboard. The

third featured guest speaker Armando Miano, who discussed workers' perceptions of occupational mobility. Together, these events fostered an active exchange of ideas among researchers and policymakers and prompted in-depth discussion on skills gaps, labour shortages, and occupational mobility across Europe.

SkiLMeeT researchers also presented their findings at external events, including the European Commission's *Education and Skills – Horizon Europe Feedback to Policy* event and a seminar jointly organised by the central banks of Poland and Switzerland.

This issue of our Newsletter also features the latest SkiLMeeT paper, *Expertise at Work: New Technologies, New Skills, and Worker Impacts*, which analyses how technological change is reshaping vocational training curricula.

More papers, policy briefs and events are coming in 2026. Until then, follow our work at www.skilmeet.eu, and on LinkedIn and Bluesky.

The SkiLMeeT Team sends our best wishes for a restful holiday season and a happy New Year! 🎄

– The Editors

SkiLMeeT Events:

Project SkiLMeeT Conference: Workers, Firms, and Skills in the Digital and Green Transition

The SkiLMeeT mid-term conference brought together more than 70 researchers and policymakers to examine how rapid digitalisation and the green transition are reshaping Europe's labour markets: what workers do, how firms are organised, and which skills are rising in value. Held at the Bulgarian Academy of Sciences on 2 – 3 October 2025 in Sofia, the two-day event featured 28 papers across 10 sessions, with a headline keynote by Matias Cortes (York University, Toronto) and policy keynotes by Simone Rosini (DG EMP) and Mariya Mincheva (Bulgarian Industrial Association). Across two days, participants engaged in thematic sessions including skills in the green transition; education and

occupational choice; worker mobility; green jobs; firms; job quality; artificial intelligence; workers coping with technology; and skills & competences.

For more details please see the story about the conference on our website.

SkiLMeeT webinar examines how automation shapes teens' educational choices

Piotr Lewandowski (IBS) presented preliminary findings from a study co-authored with Karol Madoń (IBS) on the impact of automation on students' educational choices, during a SkiLMeeT research webinar held on 28 October.

Using student-level data from Norway (2006–2018) and regional data on robot adoption, Lewandowski and Madoń examined whether industrial automation discourages young people from pursuing vocational tracks that lead to acquiring those skills that are increasingly substituted by robots.

The preliminary results show that in regions more exposed to robots, students are less likely to choose automation-prone vocational tracks. The effect is strongest among boys and among students whose fathers work in robot-exposed sectors. Lower-achieving students are more likely to select these tracks, revealing negative selection that may widen future inequalities.

The event drew 26 participants and sparked discussion about robotisation and future skills demand.

SkiLMeeT webinar on occupational mobility with Armando Miano

Armando Miano (University of Naples Federico II) outlined joint work with Pascal Heß (IAB) showing that workers tend to misjudge how easily they could switch occupations, during a SkiLMeeT research webinar held on 13 November.

Their study examines how workers think about moving between occupations, how well-informed they are about opportunities elsewhere, how transferable they believe their skills are, and how they assess the costs of switching.

Drawing on an online survey of around 4,500 employees and rich administrative data, the researchers found that workers often underestimate how similar other occupations are to their own and the wage gains they could achieve by switching. At the same time, they tend to overestimate licensing and retraining requirements. They also understate the share of tasks in their job that could be automated or affected by climate policy and the green transition.

The team also ran an experiment to test how information shapes workers' decisions. Early evidence suggests that when employees receive concrete details about viable alternative occupations, they become more open to changing jobs and more likely to search for opportunities in those fields.

The webinar attracted 25 participants.

SkiLMeeT team showcases European Labour Market Dashboard

SkiLMeeT researchers from TNO showcased a new interactive European Labour Market Dashboard, developed within the project to analyse labour-market dynamics across countries, occupations and sectors, in a series of presentations to both research and policy audiences.

The tool, which integrates LinkedIn data provided by Revelio Labs with the European Skills, Competences, Qualifications and Occupations (ESCO) framework, was presented at the European Commission's *Education and Skills – Horizon Europe Feedback to Policy* event in Brussels (14 October 2025), at a SkiLMeeT research webinar (3 December 2025), and at a meeting with the EU's Directorate-General for Employment, Social Affairs and Inclusion (15 December 2025).

TNO researchers demonstrated the functionalities of the dashboard's five modules. The ESCO Ontology Exploration section allows users to navigate the ESCO framework, visualise skills linked to occupations and compare overlaps between job profiles. The Job Transitions Analysis module highlights common career pathways using Revelio Labs data and provides insight into occupational mobility. An occupation comparison module lets users compare the skill sets of the same occupation across two countries or between a country and the ESCO definition, using metrics such as skill set distance. The Geographical Distribution of Jobs section shows where specific occupations are concentrated, their share of the regional workforce and associated skills trends over time. The final module, Skills Analysis, examines local labour-market demand by focusing on the prevalence and use of specific skills. It helps users identify occupations that require specific competencies and explore potential job matches based on their individual skill profiles.

The database draws on large-scale labour market data. The underlying Revelio Labs database covers more than 1 billion job profiles, 20 million companies and over 3,000 distinct skills; the current version of the dashboard focuses on more than 26 million unique job profiles in six countries: the Netherlands, Italy, Poland, Bulgaria, Germany and Luxembourg. For now, it reflects the supply side of the labour market. In the next phase, the TNO team plans to add vacancy data to also capture skills demand.

If you want to access the Dashboard, contact Sadegh Shahmohammadi at:
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SkiLMeeT Researchers at Events:

SkiLMeeT researchers share work at Polish and Swiss central banks' seminar on productivity and AI

SkiLMeeT researchers Piotr Lewandowski (IBS) and Ulrich Zierahn-Weilage (Utrecht University School of Economics) took part in "Seminar on Scenarios of Productivity Growth and Structural Change in a World with Rapidly Advancing AI", organised jointly by the National Bank of Poland (NBP) and the Swiss National Bank (SNB).

The event gathered researchers and policymakers from across Europe to discuss how rapid technological change and artificial intelligence are reshaping productivity, skills, and economic structures.

Ulrich Zierahn-Weilage contributed with a keynote presentation based on his SkiLMeeT research "Expertise at Work: New Technologies, New Skills, and Worker Impacts," co-authored with Cäcilia vom Baur (ifo Institute) and Anna Salomons (Utrecht University). The study analyses how technological change is transforming vocational training systems and labour market outcomes in Germany. It finds that occupations most exposed to emerging technologies are also those where training curricula are evolving the fastest, shifting the focus toward digital and social skills that complement automation rather than competing with it.

The research further shows that workers who benefit from technology-aligned training are more likely to stay in their trained occupations and experience wage gains, while older workers with outdated skills face growing risks of displacement. Firms, in turn, respond to these shifts by increasing investment in capital and technology when hiring workers trained for high-tech environments. You can read the paper here.

Piotr Lewandowski presented findings from his paper "Workers' Exposure to AI Across Development Stages," co-authored with Karol Madoń (IBS) and Albert Park (HKUST). The study measures the extent to which workers worldwide are exposed to artificial intelligence (AI).

The research shows that workers in more developed and digitalised economies are much more exposed to AI. Approximately 49% of the variation in AI exposure across countries is explained by differences in the tasks performed. The study attributes the remaining differences mainly to varying levels of ICT (information and communication technology) use, human capital, and other firm characteristics related to globalisation. You can read the paper here.

SkiLMeeT Research:

Vocational training is keeping up with technology - but older workers risk being left behind

As digitalisation accelerates across Europe's workplaces, vocational education systems are racing to adapt. A new SkiLMeeT research paper finds that training curricula for non-university professions have been steadily updated over the past decades to include more digital and social skills and fewer routine tasks. The changes boost job prospects for younger workers but raise the risk of skill obsolescence and wage decline for older employees.

In Expertise at Work: New Technologies, New Skills, and Worker Impacts, researchers analyse how Germany's vocational training curricula evolved between 1971 and 2021 in response to major technological shifts, combining this with detailed employer – employee data. The study focuses on workers in middle- and lower-paid occupations, who make up around 70% of the German workforce and are at the forefront of digitalisation and automation.

The paper finds that training curricula in these occupations have increasingly emphasised software use, digital tools and interpersonal and teamwork skills, while repetitive, routine activities have been scaled back.

These changes translate into tangible labour market gains for new cohorts. Young workers who complete training after curricula are modernised earn about 3.3% higher wages on average in the first years of their careers, with gains rising to around 5.5% in occupations where updates are closely linked to new technologies. They are also more likely to remain in the occupation they trained for and gradually move into somewhat better-paying firms.

"At the point where new technologies enter the workplace, they also change what people need to learn," said Ulrich Zierahn-Weilage of Utrecht University and ZEW. "Our findings show that updating the content of vocational training helps new labour market entrants benefit from technological change rather than be displaced by it."

However, the study also highlights a growing divide within occupations. Older workers who trained under previous curricula and stay in the same jobs increasingly compete with “new-skilled” colleagues whose qualifications are better aligned with current employers’ needs. The report finds that the oldest workers, aged 55 to 65, can see their wages fall by as much as 10% in the years after a curriculum update, while younger incumbents often respond by changing jobs or sectors.

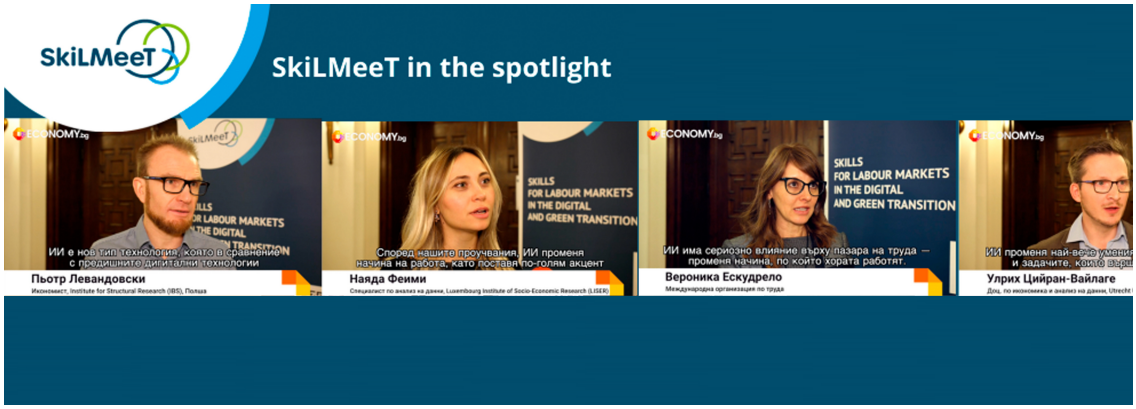
“We see a tale of two generations sharing the same occupation,” Zierahn-Weilage adds. “For younger workers, updated training opens doors; for older workers, the same technological shifts can close them unless they get real opportunities to refresh their skills.”

The authors conclude that curriculum reform is a powerful tool for making labour markets more resilient, but it must be complemented by inclusive lifelong learning policies.

Anna Salomons, Cäcilia vom Baur, and Ulrich Zierahn-Weilage (2025). Expertise at Work: New Technologies, New Skills, and Worker Impacts, SkiLMeeT Deliverable 2.6.

Read the paper here.

SkiLMeeT in the Media:



SkiLMeeT featured in Bulgarian media

The SkiLMeeT Conference “Skills for Labour Markets in the Green and Digital Transition” attracted the attention of the Bulgarian media, with coverage by ECONOMY.bg, the country’s leading online business publication, and the Bulgarian Telegraph Agency (BTA).

On the sidelines of the conference, which took place in Sofia on 2-3 October, Piotr Lewandowski (IBS), Najada Feimi (LISER), Verónica Escudero (ILO), and Ulrich Zierahn-Weilage (Utrecht University) discussed how artificial intelligence is transforming the world of work in interviews with ECONOMY.bg. They emphasised that AI is reshaping tasks rather than replacing entire jobs, redefining how people perform their work and which skills will be most valuable in the future.

The researchers also highlighted the urgent need to adapt education and training systems to equip workers with evolving skills and ensure inclusive labour-market transitions in the green and digital economy.

The conference was also featured by the Bulgarian Telegraph Agency, which included remarks from SkiLMeeT researcher Vassil Kirov (IPS-BAS), who noted that skills and labour shortages remain among the most pressing challenges facing European economies today.

SKILLS FOR LABOUR MARKETS IN THE DIGITAL AND GREEN TRANSITION

SkiLMeeT is a research project carried out by eight research institutions, exploring how the digital and green transformation of European economies are changing the demand for skills. We analyse the scope of skills shortages and mismatches, identify their drivers and propose innovative ways to reduce skills gaps.

PARTNERS:

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